

Published Date: 1998-11-24 23:50:00
Subject: PRO/AH/EDR> Japanese encephalitis, suspected - Malaysia
Archive Number: 19981124.2269

JAPANESE ENCEPHALITIS, SUSPECTED - MALAYSIA
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
<http://www.fas.org/promed/ahead>
Date: Mon, 23 Nov 1998 11:17:57 -0500
From: Dorothy Preslar <dpreslar@fas.org>
Source: Agence France-Presse, 22 Nov 1998 ex The Sunday Star

Japanese encephalitis is suspected in an [disease] outbreak among pig breeders in a town in northern Perak state, Malaysia. There have been 6 deaths, and another 15 persons infected. The Perak health and environment committee chairman Lee Chee Leong said 20 cases of the disease had been reported in three areas since October, including the six fatalities. Of the 20, one was a pork wholesaler and the rest were workers in pig farms.
According to a preliminary report, Lee said the victims showed similar symptoms of high fever and headaches for five to seven days, followed by drowsiness and coma a day or two later before their sudden deaths.
"The Institute of Medical Research is still investigating and the full report will be made public soon," Deputy Health Minister Siti Zaharah Sulaiman was quoted as saying.
The health ministry disease control division's deputy director, Tee Ah Sian, said the disease, believed to be the Japanese encephalitis, is spread by mosquitoes.
According to the ministry's data, between nine and 82 similar cases have been reported each year since 1985, mainly in the states of Perak, Penang and Sarawak. The fatality rate is between 0.3 and 60%. Some 142 pig farm workers in Perak had been vaccinated since Monday, with fogging carried out in the affected areas.
Although data shows that the virus is not transmitted by consumption of pork, pork sellers and hawkers in the state were quoted as saying they suffered a "noticeable drop" in business amid fears the fatalities were linked to the meat. In predominantly Moslem Malaysia, pork is only sold in certain sections of wet markets and sale is restricted to non-Moslems.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[So, without laboratory confirmation of the affected individuals' illnesses, vaccination with JE vaccine has been done. We await further information as to the correct diagnosis, i.e., confirmation as JE or evidence for another disease. - Mod.CHC]
.....dp/chc/es
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any



Published Date: 1998-11-27 23:50:00
Subject: PRO/AH> Japanese encephalitis - Malaysia
Archive Number: 19981127.2293

JAPANESE ENCEPHALITIS - MALAYSIA
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
<http://www.fas.org/promed/ahead>

See Also

Japanese encephalitis, suspected - Malaysia 981124010759
Date: Wed, 25 Nov 1998 09:22:38 -0600
From: Clyde Markon <docmarkon@worldnet.att.net>
Source: New Straits Times, Wednesday, November 25, 1998

The Japanese encephalitis (JE) outbreak, which has claimed five lives in Perak, has been brought under control with no new cases reported during the last few weeks, Health Minister Datuk Chua Jui Meng said on Tuesday. He said concerted efforts by State health officials to eliminate the breeding grounds of the _Culex_ mosquito, the carrier of the virus, which breeds in dirty pools of water especially in pig farms, had succeeded in curbing the outbreak.
He further said that the disease was confined to the vicinity of pig farms in Tambun, Ulu Piah and Ampang in the Kinta district in Perak but that state health officials had been instructed to monitor the situation. The illnesses were confirmed as having been caused by Japanese encephalitis virus by the Institute for Medical Research after analyzing fluid samples taken from four victims. The disease is also not new to Malaysia; nine cases were detected in 1989 and 82 cases in 1992. So far this year 18 cases have been reported, of which seven were treated at the Ipoh Hospital and the others at private hospitals. Of these, five people died between February and last month.
Of the 18 cases, one was a pig buyer and the rest were pig farm workers, their family members or owners [of the farms, not of the people - Mod.CHC.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[Meryl Dorey ("Healthy Families...Naturally") was kind enough to let us know that the Australian Federal Minister for Health has announced free JE vaccination for all Australian children. There has been a total of 5 cases of JE in Australia to date - 4 in the Torres Strait and 1 in Cape York at the Top End. One wonders on what basis the decision was made to make this vaccine available on the Australian mainland. - Mod.CHC
.....chc/es
--
##
ProMED-mail makes every effort to verify the reports that
are posted, but the accuracy and completeness of the
information, and of any statements or opinions based
thereon, are not guaranteed. The reader assumes all risks in



Published Date: 1998-12-18 23:50:00
Subject: PRO/AH> Japanese encephalitis - Malaysia (03)
Archive Number: 19981218.2404

JAPANESE ENCEPHALITIS - MALAYSIA (03)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
<http://www.fas.org/promed/ahead>

See Also

Japanese encephalitis - Malaysia 981127001800
Japanese encephalitis - Malaysia (02) 981130211248
Date: Fri, 18 Dec 1998 11:49:46 -0600
From: Clyde Markon <docmarkon@worldnet.att.net>
Source: DEC 18 1998 - The Straits Times - Interactive, edited

KUALA LUMPUR -- Some 70,000 people living near pig farms in seven states are at risk if there is an outbreak of viral encephalitis in their areas. This is based on an initial report on a survey conducted to identify the areas and people at risk, said Health Minister Datuk Chua Jui Meng. Among the preventive steps being undertaken by the ministry are fogging and educating residents about the disease, a report in The Sun newspaper said.

Datuk Chua said he would ask the members of the Federation of Livestock Farmers' Association to pay for vaccination for their workers and farm inhabitants, adding that the ministry will take care of high-risk groups outside the farms. Each state had been told to initiate its own programme. "The Cabinet has recently approved an additional allocation for the purchase of the vaccine against viral encephalitis." He added that the amount would be worked out between the ministry and the Treasury.
[although not state in this news clip I am assuming this is JE virus that they talking about. - CM
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....mhj/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org



Published Date: 1998-12-21 23:50:00
Subject: PRO/AH> Japanese encephalitis - Malaysia (04)
Archive Number: 19981221.2424

JAPANESE ENCEPHALITIS - MALAYSIA (04)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
<http://www.fas.org/promed/ahead>

See Also

Japanese encephalitis - Malaysia 981127001800
Japanese encephalitis - Malaysia (02) 981130211248
Japanese encephalitis - Malaysia (03) 981218210537
Date: Mon, 21 Dec 1998 22:46:42 -0200
From: GPHIN 19 Dec 1998
Source: Bernama The Malaysian National News Agency, Thu 17 Dec 1998 [edited

[Final count: 11 cases, including 4 deaths
Authorities have contained the outbreak of an endemic viral disease called Japanese Encephalitis (JE) in Kinta [Perak, which has claimed four lives over the last two months.
No new cases have been reported this month and based on this the Health Ministry decided to declare that the outbreak was over, said the minister Datuk Chua Jui Meng. The ministry had not received any further report of JE cases since 30 Nov 1998 or over the past fortnight, he said.
"The disease has an incubation period of five to 15 days, and once the incubation period ended and no new cases are reported, the [outbreak is considered to be over," he said.
Despite declaring the outbreak was over, Chua had directed the Perak Health Department to continuously monitor the situation and enforce regulations on cleanliness and hygiene especially in pig farms in Tambun, Ampang and Ulu Piah. Since the outbreak in the three areas last October and November, 11 JE cases were confirmed.
The disease is spread from animals such as horses and pigs to humans through the culex mosquito which breeds in dirty and stagnant pools.
Chua said viral encephalitis, an endemic disease in the Asian region, occurs sporadically in Malaysia but the current case was unusual since a large number of people were affected at one locality.
He said the government would continue giving free vaccination to residents in the affected areas and the ministry had sent a back-up medical team from Kuala Lumpur. This was to ensure that all the 6,864 people identified as the high risk group were vaccinated simultaneously rather than in stages, since so far only 2,442 had been given the jabs. Those in the high risk group are pig farm workers and residents in areas within a two kilometre radius from the pig farms.
"More than 10,400 houses and 189 pig farms have been fogged following the outbreak, 5,123 people were given talks on the disease and 3,742 pamphlets distributed," he said.
Chua was also asked whether the ministry would penalise doctors under the Prevention and Control of Infectious Diseases Act 1988 for not reporting

the JE outbreak. Initial feedback to the ministry showed that there was a communication breakdown between the Ipoh City Council and the state Health Department. He said doctors handling the case had in fact reported the outbreak to the Ipoh City Council health authority but this was not conveyed to the Perak Health Department. Chua directed all medical practitioners to directly inform the department of any confirmed disease outbreak for preventive steps to be taken immediately.
He said he had asked the Veterinary Research Institute here to come up with a cheaper local vaccine especially to protect pigs against the encephalitis virus. The vaccine currently used is imported from Japan costing RM12 for two doses per pig. Chua said pig farm owners had complained that this was very costly.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....jw/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1998-12-30 23:50:00
Subject: PRO/AH> Japanese encephalitis vaccinations - Malaysia
Archive Number: 19981230.2459

JAPANESE ENCEPHALITIS VACCINATIONS - MALAYSIA
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
<http://www.fas.org/promed/ahead>

See Also

Japanese encephalitis - Malaysia 981127001800
Japanese encephalitis - Malaysia (02) 981130211248
Japanese encephalitis - Malaysia (03) 981218210537
Japanese encephalitis - Malaysia (04) 981221211909
Date: Tue, 29 Dec 1998 09:30:15 -0600
From: Clyde Markon <docmarkon@worldnet.att.net>
Source: Borneo Bulletin

The Health Ministry will give mandatory vaccinations to 10,000 residents in a town outside Kuala Lumpur to prevent the outbreak of Japanese encephalitis (JE), a news report said Monday.
Health officials have been monitoring a rise in cases of JE. Twenty cases have been reported in the past year, including seven deaths.
Some 10,000 people living and working in the vicinity of 16 pig farms in the town of Shah Alam have been told to register for vaccinations in the next two weeks or face legal action, said Izhar Kadarman, the head of the municipal council's health department. "Those who refuse can be charged under the Communicable Disease Prevention and Control Act," he was quoted as saying in the Star newspaper. The penalty is a maximum fine of 2,000 ringgit (US$530).
Izhar said no cases of the disease had been reported in Shah Alam, 25 km west of the capital, Kuala Lumpur. But the Health Ministry considers it a high risk area due to the number of pig farms. Most cases of the disease have been reported in the western state of Perak and in Sarawak state on Borneo island.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....chc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.

[2 L H Tan 1995. Japanese encephalitis in Malaysia. In: Regional Workshop on Control Strategies for Japanese Encephalitis (edited S Rajanasuphot and T F Tsai), Southeast Asian Journal of Tropical Medicien and Public Health, vol 26 Suppl 3, 1995.
****
[2
Date: Tue, 19 Jan 1999
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: Nando Times, 18 Jan 1999 [edited

An outbreak of Japanese encephalitis [JE in Malaysia claimed its 14th victim Monday after a pig farmer suspected to be suffering from the illness died, a news report said. The 28-year-old man died at Ipoh Hospital after suffering from symptoms associated with the mosquito-borne virus, state-run Bernama news agency said. He was admitted to the hospital on Wednesday after complaining about a prolonged fever.
Health authorities have been monitoring a rise of JE, which is believed to be passed to humans by certain mosquitoes that have bitten infected pigs. The disease claimed three lives in 1997, and seven last year, mostly in the northern state of Perak and Sarawak state on Borneo island.
To keep the disease contained, state veterinary departments in the affected states have banned the movements of pigs between farms. A few thousand people have been given free vaccinations since the outbreak began in areas considered high-risk.
******
[2
Source: BERNAMA, 18 Jan 1999 [edited
Part of the 125,000 pigs here [Ipoh will be vaccinated against the deadly JE to prevent a recurrence of an epidemic of the mosquito-borne disease which had claimed nine [ten, with the 14th reported fatal case above lives here thus far.
Veterinary Research Institute Director Dr Abdul Aziz Jamaluddin, who led the vaccination exercise today, said under the first phase, some 5,000 pigs in Tambun, Ampang and Ulu Piah areas would be injected with the "Tai Shu" vaccine imported from Taiwan. Blood samples were also collected at random for antibody tests and virus separation.
"We can see the effect of the vaccine in a month. An 80 per cent response is enough to protect the pigs from succumbing to the disease," he told reporters.
Dr Abdul Aziz said although the virus strain here had been just discovered, it had some similarities with the strain imported from Taiwan. Hence, the imported vaccine could provide the desired protection against the disease spread by culex mosquitoes which breed in dirty water in pig farms.
Dr Abdul Aziz said 50,000 doses of the "Tai Shu" vaccine would be imported from Taiwan after the Hari Raya holidays to be injected into pigs in 28 pig farms hit by the disease which was first detected here in October last year. He said pig farm owners would have to pay for the vaccine costing RM7 a jab.
Meanwhile in Seremban, the second anti-JE vaccination exercise for more than 600 residents at Kampung Wong Seng Chow and Kampung Baru Sikamat, the two worst-hit areas in Negeri Sembilan, kicked off on Saturday. Children below 12 years from Bukit Pelandok in Port Dickson were also given the jabs, State Health Committee Chairman Datuk Goh Siow Huat said today.
A total of 2,447 people from the three places were given the first dose of the vaccination when the disease first struck the state on Jan 2.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....es
--
##
ProMED-mail makes every effort to verify the reports that
are posted, but the accuracy and completeness of the
information, and of any statements or opinions based



Published Date: 1999-01-23 23:50:00
Subject: PRO/AH> Japanese encephalitis - Malaysia (07)
Archive Number: 19990123.0110

JAPANESE ENCEPHALITIS - MALAYSIA (07)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
<http://www.fas.org/ahead>

See Also

Japanese encephalitis - Malaysia 981127001800
Japanese encephalitis - Malaysia (02) 981130211248
Japanese encephalitis - Malaysia (03) 981218210537
Japanese encephalitis - Malaysia (04) 981221211909
Japanese encephalitis - Malaysia: update 990115131133
Japanese encephalitis - Malaysia (05) 990117185804
Japanese encephalitis - Malaysia (06) 990118215209
Date: Tue, 19 Jan 1999 14:44:47 -0600
From: Clyde Markon <docmarkon@worldnet.att.net>
Source: News agency (edited)

Veterinary Research Institute (VRI) director Dr Abdul Aziz Jamaluddin said that destroying the pigs infected with the Japanese B Encephalitis (JE) might only minimise, not eliminate, the number of cases or chances of people being infected.
"Research by the institute has found that people would not be infected by the virus if they consumed pork. There are many other better steps that can be taken to solve the problem such as reducing the population of pigs, vaccinating them and monitoring cleanliness at pig farms."
"The main problem here is the _Culex_ sp. mosquito and we have to look into ways to get rid of mosquito breeding spots and take steps to protect the animals from being infected by it. It is not the pigs that are spreading the virus," he told reporters after vaccinating pigs at Ampang near here yesterday. [His suggestion is that the mosquito is transmitting or spreading the virus, thus being the vector. - Mod.TG
Dr. Aziz was commenting on a statement by Perak Malay Chamber of Commerce chairman, Datuk Mohamed Hamdan Hazizi, who urged the relevant authorities to destroy all JE-infected animals in the country.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....tg/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held



Published Date: 1999-02-14 23:50:00
Subject: PRO/AH> Japanese encephalitis - Malaysia (08)
Archive Number: 19990214.0195

JAPANESE ENCEPHALITIS - MALAYSIA (08)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
<http://www.fas.org/ahead>

See Also

Japanese encephalitis - Malaysia (06) 990118215209
Date: Sun 14 Feb 1999
From: GPHIN 11 Feb 1999
Source: Agence France Presse English Thu 11 Feb 1999 [edited

KUALA LUMPUR, Feb 11 (AFP) - Malaysia has stopped all its state health departments from making statements about the fatal Japanese encephalitis [JE virus which has claimed 14 lives in four months, a report said Thursday.
The Sun newspaper cited officials as saying the order by Health Minister Chua Jui Meng was issued earlier this month.
"The minister does not want the public to be unnecessarily alarmed. If everyone makes statements, there will be confusion. This way, information will be centralised," one official reportedly said.
Chua reportedly told local editors not to overplay the issue as their reports could adversely affect the economy if picked up by foreign media.
The Malaysian media faced similar problems in obtaining information in 1997 when an outbreak of the Coxsackie B virus killed 30 children in the eastern state of Sarawak state on Borneo island.
Malaysian Medical Association president Lee Yan Sang reportedly agreed information should be centralised. "If too many people speak up, there would be contrasting statements and this would cause the public to panic," he was quoted as saying, urging the health ministry to set up a homepage to educate the public on the virus.
--
ProMED-mail
<promed@usa.healthnet.org>
[There are 3 important points to be made here:
1. There is an urgent need for an official statement that there is nothing unusual about seeing cases of JE at this time of year, and no need for panic a web page giving daily updates, such as Sarawak had during the Coxsackie B virus outbreak quoted would be a good idea.
2. Bitter experience has taught many countries that reporting some diseases, such as cholera, has a bad effect on trade & tourism. This is all the more reason why there should be frequent official updates of the situation, to curb rumors, put the outbreak in context, & explain what the country is doing to control the disease & prevent further cases.
3. As our Regional Moderator for Asia, Dr Chan Yow Cheong, pointed out

in his comments on the posting referenced above, the epidemiology of this outbreak is different from the usual, since the cases reported are mainly in adults, and serological confirmation that most of them are due to JE virus is lacking. Either JE virus has changed its characteristics this year, or there is a second virus involved. Malaysia has highly competent virologists who should be able to give an answer to this question soon Mod.JW
.....jw
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-02-24 23:50:00
Subject: PRO/AH> Japanese encephalitis - Malaysia (09)
Archive Number: 19990224.0251

JAPANESE ENCEPHALITIS - MALAYSIA (09)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Japanese encephalitis - Malaysia 981127001800
Japanese encephalitis - Malaysia (02) 981130211248
Japanese encephalitis - Malaysia (03) 981218210537
Japanese encephalitis - Malaysia (04) 981221211909
Japanese encephalitis - Malaysia (05) 990117185804
Japanese encephalitis - Malaysia (06) 990118215209
Japanese encephalitis - Malaysia (07) 990123233705
Japanese encephalitis - Malaysia (08) 990214190815
Japanese encephalitis - Malaysia: update 990115131133
Date: Tue, 23 Feb 1999 01:21:51 +0800>
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: New Straits Times, Mon, 22 Feb 1999 [edited

[The Deputy Director-General (Public Health), Datuk Dr Abdul Aziz Mahmood, of the Ministry of Health, Malaysia, in his reply to a reader's letter concerning the "Health Ministry's handling of the [recent JE outbreak" has provided some information on the outbreak and the government's action to control it. He also stated that the so-called "gag order" mentioned in an article published by another newspaper on Feb 11, 1999 (see ProMED-mail post 990118215209) was "based on misinformation." The Deputy Director-General's letter also answers, at least partly, the points raised by Mod. JW in the above posting. - Mod.CYC
JE is endemic in Malaysia and cases occur sporadically throughout the year. Outbreaks of the disease occurred in 1974 in Langkawi (10 cases and two deaths), in 1978 in Penang (nine cases, four deaths) and in 1992 in Sarawak (10 cases and three deaths).
The recent outbreak in Ipoh involved 25 cases and claimed 13 lives and in Seremban it claimed five lives out of seven cases.
When the Health Ministry was informed that patients were admitted to the hospital due to viral encephalitis, immediate action and investigation were carried out by health officers in Ipoh to determine the causative agent and how it spread. A medical team comprising physicians, virologists, epidemiologists, veterinary experts as well as entomologists was also involved in the investigations.
Laboratory investigation done by experts at the Institute for Medical Research (IMR) has confirmed the outbreak was caused by JE virus. Almost all victims of this outbreak were workers at pig farms and those who handled the animals.
The outbreak, up until now, has been controlled. It is confined only to the pig farms in Ulu Piah, Tambun and Jalan Ampang in Ipoh, Perak and a farm in

Sikamat, Seremban.
Local experts in epidemiology, veterinary and virology have met and had several meetings to formulate an integrated plan of action to control and prevent the spread of the disease. Other departments such as Department of Veterinary Services, Ministry of Housing and Local Government, together with the Health Ministry were also involved in formulating the plan.
Some of the Health Ministry's actions include monitoring the incidence of JE, vector control activities to reduce the population of _Culex_ mosquitoes in pig farms and their surrounding areas, vaccinating people in high-risk areas and disseminating health information to the public. More than 150,000 pamphlets in various languages have been distributed.
Information about the disease has also been publicised in the mass media through numerous statements from the State Department of Health and the Health Ministry in television, radio, newspapers and magazines. Health education has also been given to those working in pig farms and to the high-risk group.
Fogging has been carried out in 2,307 pig farms and 68,401 houses situated near the farms. About 110,000 doses of JE vaccine have been given to workers, farmers, their family members, those handling pigs and some from the high-risk group staying within two kilometres from pig farms.
The Department of Veterinary Services is responsible for ensuring pigs are not moved out except to abattoirs. It is also taking steps to reduce the pig population in the affected farms before they are relocated. Studies on JE vaccination for pigs to protect them from harbouring JE virus are being carried out by the department.
The Ministry is aware the country is facing the challenge of emerging zoonotic diseases through the expansion of the livestock industry. Surveillance of zoonotic diseases will be stepped up. The Ministry has strengthened the capability and expertise of the IMR laboratory to detect zoonotic diseases. Studies on zoonotic diseases have been carried out with the co-operation of the Japan International Co-operation Agency (JICA).
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....jw/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-02-26 23:50:00
Subject: PRO/AH/EDR> Japanese encephalitis - Malaysia: update (02)
Archive Number: 19990226.0267

JAPANESE ENCEPHALITIS - MALAYSIA: UPDATE (02)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Japanese encephalitis - Malaysia (05) 990117185804
Japanese encephalitis - Malaysia (06) 990118215209
Japanese encephalitis - Malaysia (07) 990123233705
Japanese encephalitis - Malaysia (08) 990214190815
Japanese encephalitis - Malaysia (09) 990224214508
Japanese encephalitis - Malaysia: update 990115131133
Date: Thu, 25 Feb 1999 01:56:44 +0800
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: BERNAMA, 24 February 1999 [edited

Japanese encephalitis (JE), which claimed 13 lives since its outbreak in Kinta [in Ipoh in October last year, affected mainly adults who have been staying in the vicinity of pig farms for a period of time.
The outbreak in Negri Sembilan which recorded five deaths out of nine cases and in Selangor which recorded one death during the same period, also affected adults who have stayed in the vicinity of pig farms.
This reflected a change of scenario, based on previous data between 1989 [and 1993 victims of JE reported in the country were mostly children aged under 15, a University of Malaya senior virologist, Prof Dr Lam Sai Kit, said in his paper, "JE - A Global Perspective", at a one-day regional conference on latest advances in the diagnosis and control of JE, here [Ipoh, today.
He said based on the Ministry of Health's report, between 1989 and 1993, about 52% of the reported cases comprised children aged between seven and 15, 31% comprised children aged under four, 9% comprised those between 15 and 24 and only 8% were adults, aged above 25.
Prof Lam said based on the ministry's report, there were 531 JE cases between 1989 and 1998. The 33 deaths recorded reflected a fatality rate of about 6.2%. Last year, he said, 91 cases were reported with 10 deaths, reflecting a fatality rate of about 11%.
Prof Lam's views were shared by Dr Marina Abdul Hamid, a health officer from the Kinta District Health Office in her paper, "An Overview of JE Outbreak: The Kinta Experience".
She said based on the Kinta outbreak, all the 24 cases reported were adults except for a 10-year-old boy who stayed in one of the affected farms, with 87.5% males and the majority of them engaged directly in porcine-related activities.
Out of the 13 victims who died, six had been vaccinated during the campaign period, and this raised several questions including that they had already carried the virus or they had [been exposed to bites [by infected

mosquitoes before their body was allowed to build up an immune [response, she said.
However, until today, out of the 24 cases of suspected JE, only nine have been confirmed to carry the JE virus while others have viral encephalitis.
[The New Straits Times reported on 24 Feb 1999 that a 14-year-old boy from Kuala Terengganu on the east coast was confirmed to have had JE. The State Health Department director Dr Abdul Razak Kechik said, "There are no pig farms in Terengganu but I suspect the virus could have been carried by wild boar, cattle or horses." - Mod.CYC
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[Or bird. - Mod CHC
.....chc/es

##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-03-01 23:50:00
Subject: PRO/AH/EDR> Japanese encephalitis - Malaysia: update (03)
Archive Number: 19990301.0285

JAPANESE ENCEPHALITIS - MALAYSIA: UPDATE (03)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Japanese encephalitis - Malaysia (05) 990117185804
Japanese encephalitis - Malaysia (06) 990118215209
Japanese encephalitis - Malaysia (07) 990123233705
Japanese encephalitis - Malaysia (08) 990214190815
Japanese encephalitis - Malaysia (09) 990224214508
Japanese encephalitis - Malaysia: update 990115131133
Japanese encephalitis - Malaysia: update (02) 990226212633
Date: Mon, 1 Mar 1999 20:10:59 +0800
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: New Straits Times, 1 Mar 1999 [edited

More than 20,000 pigs in Kampung Sungai Nipah, Bukit Pelandok, are expected to be killed over the next few days to check the spread of Japanese encephalitis [JE in the area. State Executive Councillor and Lukut State Assemblyman Datuk Dr Yeow Chai Thiam said the move followed the death of four men, aged between 32 and 60, involved in the trade since last Friday.
"The pigs to be killed belonged to victims who died as well as those admitted to hospital for suspected encephalitis," he said after meeting with pig breeders today [Sunday, 28 Feb.
He said a victim died at the Seremban Hospital this morning, two others died at the Tawakal Hospital in Kuala Lumpur yesterday while another 49-year-old man died at the Tawakal Hospital on Friday. Three of the victims were from the village while the fourth was from Seremban.
Dr. Yeow said 13 others, including a 45-year-old woman, involved in the business had also been admitted into various hospitals in Seremban and Kuala Lumpur for suspected encephalitis.
"I had two meetings with the breeders [who agreed that pigs belonging to those who died or were admitted into hospital would be destroyed.", he said. He also said piglets brought in from other States would also be destroyed.
He said that there were about 100 families involved in pig breeding in Kampung Sungai Nipah with its pig population estimated at between 30,000 and 40,000. Bukit Pelandok is the biggest pig farming area in the country and Southeast Asia with a population of 800,000 pigs reared by some 850 breeders.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[I assume that the decision to destroy pigs to control the spread of JE in the human population was made after last week's conference on the diagnosis

and control of JE held in Ipoh, Malaysia, which was attended by several JE experts from the region as well as Dr. Ted Tsai from CDC, USA.
According to Jane Cardosa of the University of Malaysia Sarawak (see ProMED-mail post 990117185804) "JE is largely seasonal in Malaysia and normally occurs during the months of Nov/Dec/Jan. The fact that we are seeing an increase in JE cases during this period is therefore nothing new nor particularly unusual. What is unusual about the fatal cases is that they are young adults and they are dying."
Prof Lam Sai Kit of the University of Malaya at the above Ipoh conference presented data showing that between 1989 and 1993. about 52% of the reported cases were in children aged between 7 and 15 years and only 8% were in adults older than 25 years. [[80% of patients in the recent Perak outbreak were adults. - Mod CHC
It should be noted that in the current JE outbreak in Malaysia, not all the reported cases have had their diagnosis confirmed by laboratory tests.
Health Officer Dr Marina Abdul Hamid, who reported on the outbreak in Kinta district in Ipoh, said that out of the reported 24 cases of suspected JE, only 9 "have been confirmed to carry the JE virus [not sure what test was used while others have viral encephalitis."
Mod.JW (ProMED-mail post 990214190815) has suggested that "Either JE virus has changed its characteristics this year, or there is a second virus involved." and that "Malaysia has highly competent virologists who should be able to give an answer." (I endorse that.) I hope there will be a scientific report of the above Ipoh conference and be available soon to update us on what is actually happening. - Mod.CYC
[This sounds to me as though it is an exceedingly complex situation. Data are needed (and may already have been obtained, I simply do not know) regarding vaccine coverage of the human population, vaccine coverage of the pig population, prevalence of JEV in wild and domesticated birds in the area, laboratory confirmation of clinical suspicions, evidence that killing infected pigs (which do not have persistent infections) is a reasonable choice and tool for virus control, molecular data regarding sequence differences between the currently circulating strains and prototype/historic strains, infection rate in children and adults with a "history of vaccination against JEV", etc. This is a remarkable research opportunity. - Mod.CHC
.....chc/es
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-03-02 23:50:00
Subject: PRO/AH/EDR> Japanese encephalitis - Malaysia: update (04)
Archive Number: 19990302.0298

JAPANESE ENCEPHALITIS - MALAYSIA: UPDATE (04)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Japanese encephalitis - Malaysia (05) 990117185804
Japanese encephalitis - Malaysia (06) 990118215209
Japanese encephalitis - Malaysia (07) 990123233705
Japanese encephalitis - Malaysia (08) 990214190815
Japanese encephalitis - Malaysia (09) 990224214508
Japanese encephalitis - Malaysia: update 990115131133
Japanese encephalitis - Malaysia: update (02) 990226212633
Japanese encephalitis - Malaysia: update (03) 990301225310
Date: Tue, 2 Mar 1999 20:56:24 +0800
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: New Straits Times, Tuesday 2 March 1999 [edited

The Health Ministry reported that three more people had died of suspected Japanese encephalitis (JE) in Negri Sembilan. A 40-year old man, who was the owner of a pig farm in Kampung Sungai Nipah, Bukit Pelandok, Port Dickson, died at the Tawakal Hospital in Kuala Lumpur yesterday while two others, also from the village, died on Sunday night at the Seremban Hospital and the Tawakal Hospital, respectively. This brings to seven the number of people who have died from suspected JE since Friday 26 February.
As a precautionary measure, three primary schools were closed in Negri Sembilan yesterday. Another two schools will also be closed today.
At a press conference, Deputy Director-General of Health Datuk Dr Abdul Aziz Mahmood said that since October last year, there were 4 confirmed JE deaths out of 25 encephalitis-related deaths in the country. All the 4 confirmed JE deaths were in Perak.
Perak had 26 suspected JE cases of which 12 were confirmed while Negri Sembilan had 16 suspected cases of which two were confirmed to be JE.
The Ministry of Health Department of Public Health's home page (<http://dph.gov.my/>http://dph.gov.my) now includes update news on JE in the country.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....cyc/chc/es
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID



Published Date: 1999-03-04 23:50:00
Subject: PRO/AH/EDR> Japanese encephalitis - Malaysia: update (05)
Archive Number: 19990304.0309

JAPANESE ENCEPHALITIS - MALAYSIA: UPDATE (05)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Japanese encephalitis - Malaysia (05) 990117185804
Japanese encephalitis - Malaysia (06) 990118215209
Japanese encephalitis - Malaysia (07) 990123233705
Japanese encephalitis - Malaysia (08) 990214190815
Japanese encephalitis - Malaysia (09) 990224214508
Japanese encephalitis - Malaysia: update 990115131133
Japanese encephalitis - Malaysia: update (02) 990226212633
Japanese encephalitis - Malaysia: update (03) 990301225310
Japanese encephalitis - Malaysia: update (04) 990302213536, 990303233343
Date: Thu, 4 Mar 1999 20:03:42 +0800
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: BERNAMA, 3 March 1999 [edited

The Cabinet [of the Malaysian government wants all pigs to be vaccinated to curb the spread of Japanese encephalitis (JE) in the country, Health Minister Datuk Chua Jui Meng said today. He said the Veterinary Services Department had been directed to advise pig farmers on the proper way to carry out the job.
The Cabinet which discussed the JE outbreak at today's meeting wanted the relevant authorities and parties involved to discharge their responsibilities fully, he told a news conference after attending the Cabinet meeting. Chua said the Health Department would enforce the law empowered under the Destruction of Disease Bearing and Insects Act to ensure that the farmers protect their lives and those under their care.
"The Veterinary Services Department must also ensure that the farmers implement good farming practices with proper sanitation," he said.
A total of 28 JE-related deaths had been reported from October last year to yesterday with 15 deaths in Kinta, Perak and 13 in Sikamat and Bukit Pelandok, Negri Sembilan.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....chc/es
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID



Published Date: 1999-03-06 23:50:00
Subject: PRO/AH/EDR> Japanese encephalitis - Malaysia: update (06)
Archive Number: 19990306.0322

JAPANESE ENCEPHALITIS - MALAYSIA: UPDATE (06)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Japanese encephalitis - Malaysia (05) 990117185804
Japanese encephalitis - Malaysia (06) 990118215209
Japanese encephalitis - Malaysia (07) 990123233705
Japanese encephalitis - Malaysia (08) 990214190815
Japanese encephalitis - Malaysia (09) 990224214508
Japanese encephalitis - Malaysia: update 990115131133
Japanese encephalitis - Malaysia: update (02) 990226212633
Japanese encephalitis - Malaysia: update (03) 990301225310
Japanese encephalitis - Malaysia: update (04) 990302213536, 990303233343
Japanese encephalitis - Malaysia: update (05) 990304221915
[1
Date: Thu, 04 Mar 1999 09:57:18 -0600
From: Clyde Markon <docmarkon@worldnet.att.net>
Source: Media

About 300 residents of Kampung Sungai Nipah in Bukit Pelandok here have moved out of their homes since Sunday following an outbreak of a disease, suspected to be Japanese encephalitis [JE, which has so far claimed six lives.
Three vernacular [? schools, SRJK(C) Sungai Nipah, Chua and Bukit Pelandok, were closed by the school authorities when pupils failed to turn-up yesterday. Commercial centres at Kampung Sungai Nipah and Bukit Pelandok towns were also closed and only a handful of people were seen moving about in the area.
A resident said her husband, 40 years old, who owns a pig farm, had been admitted to a hospital in Kuala Lumpur with a "peculiar" illness and complaints of headache, loss of appetite and high temperature. "His condition is serious.", she said. Her brother-in-law 49 years old, succumbed to the disease the same day," she said. She also said that she is unsure whether the outbreak was due to JE as other animals, such as cats and dogs, were also affected, adding her neighbours had moved in with relatives in other places.
A 35-yer-old pig farm owner said animals including pigs died after coughing blood and breeders were afraid to enter their farms. "At first we assumed it was a normal viral infection. Now we have no alternative but to kill our pigs if the situation worsens," one of the owner said.
State Executive Councillor and Lukut Assemblyman Datuk Dr Yeow Chai Thiam said five people died so far--all pig-breeders and farm workers from Sungai Nipah and Bukit Pelandok. He said 19 others from the nearby areas were admitted over the last two weeks at hospitals in Kuala Lumpur, Seremban and

Port Dickson. Dr Yeow said a 60-year-old former village headman at another pig-rearing area in Kampung Wong Seng Chow also succumbed to the disease on Sunday. "Preliminary investigation revealed that the outbreak is suspected to be encephalitis. We are not taking chances and the authorities are conducting further tests by taking blood samples from pigs at affected farms."
Dr Yeow said 3,500 pigs at four pig farms in the area would be killed by today to contain the disease, adding that another 20,000, mostly piglets, would be killed in two weeks with the supervision of the State Veterinary Department. "We have also advised residents, particularly breeders to obtain their third JE vaccinations immediately from nearby Government clinics," he added.
[2
Date: Fri, 5 Mar 1999 20:42:24 -0500
From: George A. Robertson <grobertson@erols.com>
Source: Media

Pork consumption in Malaysia has fallen between 30 and 40 percent since the outbreak of a deadly virus carried by pigs, prompting authorities to reassure consumers that the meat is safe. "The pork itself is not the issue or the disease because it is safe to be eaten," Veterinary Services director-general Mohd Nordin Mohd Nor was quoted by the official Bernama news agency as saying late on Thursday. "The pig issue and the pork issue are two different issues."
Authorities say 28 people are believed to have died after contracting JE virus, which is transmitted from infected pigs to humans by _Culex_ sp. mosquitoes. There have been 52 suspected cases of JE in two states in Peninsular Malaysia since October. Only 13 of the 52 cases have been confirmed by laboratory tests to be instances of JE, and four of the deaths have been officially attributed to the virus.
The cabinet on Wednesday ordered authorities to vaccinate the estimated 2.4 million pigs in the country, and hundreds have been slaughtered. Nordin said demand for pork had dropped between 30 and 40 percent since the outbreak of the virus, and he appealed to consumers not to panic. He said the department had slaughtered about 500 pigs in the central state of Negri Sembilan as a last resort as the animals had been abandoned by their owners. "It is not the department taking the pigs and destroying them. We are not even in favour of destroying the pigs in the first place. We find ways to handle it in a humane way," he said. Nordin said that before all of the pigs could be vaccinated, it would have to be determined who would bear the overall cost estimated at 33 million ringgit ($8.7 million). He said his department currently had 30,000 doses of the vaccine, which is manufactured in Taiwan, and 300,000 more doses would be available in seven to 10 days.
--
ProMED-mail
e-mail: promed@ysa.healthnet.org
[It is still confusing to me as to exactly how many case-fatalities have been attributed to JE virus infection and how many of these have been laboratory-confirmed. Killing large numbers of pigs sounds heroic at best.
- Mod.CHC
.....chc/es
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org



Published Date: 1999-03-07 23:50:00
Subject: PRO/AH> Japanese encephalitis - Malaysia: update (07)
Archive Number: 19990307.0331

JAPANESE ENCEPHALITIS - MALAYSIA: UPDATE (07)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Japanese encephalitis - Malaysia (05) 990117185804
Japanese encephalitis - Malaysia (06) 990118215209
Japanese encephalitis - Malaysia (07) 990123233705
Japanese encephalitis - Malaysia (08) 990214190815
Japanese encephalitis - Malaysia (09) 990224214508
Japanese encephalitis - Malaysia: update 990115131133
Japanese encephalitis - Malaysia: update (02) 990226212633
Japanese encephalitis - Malaysia: update (03) 990301225310
Japanese encephalitis - Malaysia: update (04) 990302213536
Japanese encephalitis - Malaysia: update (05) 990304221915
Japanese encephalitis - Malaysia: update (06) 990306190230
Date: Sun, 7 Mar 1999 22:51:18 +0800
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: New Sunday Times, 7 Mar 1999 [edited

Foreign experts, including those from the United States' Centers for Disease Control, may be called in to help tackle the outbreak of Japanese encephalitis. Chief Secretary to the Government Tan Sri Halim Ali, who will chair the joint action committee to tackle Japanese encephalitis [JE on Tuesday, said he would consider seeking foreign help.
Ten people living near or associated with pig farms have died from suspected JE in Negri Sembilan.
Since October [1998, there have been four confirmed JE deaths out of 27 encephalitis-related deaths. All the four confirmed JE deaths were in Perak.
Following the outbreak in Negri Sembilan, the decimation of pigs was considered to check the spread of the disease. In another measure to control the outbreak, the Cabinet decided to have more than two million pigs vaccinated.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[This outbreak appears to be gaining quite a bit of attention locally. Recent editions of Asian newspapers have carried stories in which the government of Malaysia has been heavily criticized for a variety of actions and perceived inactions. Mostly, the complaints center on the government's perceived lack of completeness with regard to epidemiologic studies, case updates, and a lack of planning and coordination. Some comments have been made in public regarding an apparent Health Ministry governmental "gag order", which we had heard about during the coxsackie B virus epidemic of 1997. This is difficult to believe as it is clear to everyone that the

more information the easier it is to attain a solution to the problem, notwithstanding the policies of various dictatorships. Absent accurate information about an epidemiologic situation, the rumor mill goes into high gear, which is, in the end, self-defeating for those who would rather suppress information. The general public deserves better than that and, if this report is correct, it appears that the Malaysian government now is doing the right thing. Keep in mind, however, that the CDC has never been allowed (ostensibly by the Malaysian government) to release the data it obtained during the coxsackie B virus epidemic of 1997. - Mod.CHC
.....chc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-03-08 23:50:00
Subject: PRO/AH/EDR> Japanese encephalitis - Malaysia: update (08)
Archive Number: 19990308.0338

JAPANESE ENCEPHALITIS - MALAYSIA: UPDATE (08)
****
A ProMED-mail post
http:www.healthnet.org/programs/promed.html

See Also

Japanese encephalitis - Malaysia (05) 990117185804
Japanese encephalitis - Malaysia (06) 990118215209
Japanese encephalitis - Malaysia (07) 990123233705
Japanese encephalitis - Malaysia (08) 990214190815
Japanese encephalitis - Malaysia (09) 990224214508
Japanese encephalitis - Malaysia: update 990115131133
Japanese encephalitis - Malaysia: update (02) 990226212633
Japanese encephalitis - Malaysia: update (03) 990301225310
Japanese encephalitis - Malaysia: update (04) 990302213536,
Japanese encephalitis - Malaysia: update (05) 990304221915
Japanese encephalitis - Malaysia: update (06) 990306190230
Japanese encephalitis - Malaysia: update (07) 990307203918
Date: Mon, 8 Mar 1999 20:41:22 +0800
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: BERNAMA, 8 Mar 1999 [edited

Sarawak will vaccinate all pigs within a two-kilometre radius of areas with confirmed cases of Japanese encephalitis (JE) as part of its preventive measures, State Agriculture and Food Industries Minister Datuk Adenan Satem said today.
He said that in principle, the state government would adopt a policy of vaccinating the pigs to reduce infection and carriers in the pig population. "For commercial pig farms, the owners are encouraged to vaccinate their pigs at their own cost," he said.
Sarawak has a 220,000 pig population with 80% of them in the Kuching and Samarahan divisions.
[So far, there have been five confirmed JE cases (human) reported in Sarawak but no deaths, according to an earlier Bernama report. - Mod.CYC

--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....chc/es
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held



Published Date: 1999-03-11 23:50:00
Subject: PRO/AH> Japanese encephalitis - Malaysia (09)
Archive Number: 19990311.0364

JAPANESE ENCEPHALITIS - MALAYSIA (09)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Japanese encephalitis - Malaysia: update (05) 990304221915
Japanese encephalitis - Malaysia: update (06) 990306190230
Japanese encephalitis - Malaysia: update (07) 990307203918
Japanese encephalitis - Malaysia: update (08) 990308224319
Date: Wed, 10 Mar 1999 09:53:53 -0800
From: Dorothy Preslar <dpreslar@fas.org>
Source: Deutsche Presse Agentur

An immediate mass vaccination of 300,000 people and 500,000 pigs has been ordered by the Malaysian government in order to halt the spread of Japanese encephalitis [JE. The epidemic has killed 34 people since October.
The government will pay for the vaccinations which will cover about 30,000 pig farmers, their families and workers, as well as another 262,500 children under the age of 15 years living within two kilometres of a piggery. The government's decision follows a public outcry over the mounting deaths of mostly pig farmers and farm hands from JE virus, which is spread from an infected pig to humans [via mosquitoes - Mod.CHC. Health authorities blame unhygienic pig farms with stagnant pools for allowing the _Culex_ sp. mosquito, which transmits the virus, to breed unchecked.
The government also ordered weekly sprayings of pig farms in infected areas to kill the mosquitoes, and directed police and the civilian guard to enforce a ruling banning the illegal transfer of pigs except to licensed abattoirs.
Chief Secretary to the government, Abdul Halim Ali, said health authorities decided to vaccinate young children first as they were the most susceptible to the virus.
Malaysia will import more doses of the vaccine from Taiwan and Japan, which have expertise in combating the virus. [From other reports: the Malaysia pork industry has summoned experts of JE from Taiwan to assist in controlling the disease in pigs.
So far 3,500 pigs have been slaughtered after they were found infected with the virus. Another 4,000 are also due to be killed as they were abandoned by frightened farmers. A public awareness campaign of the virus and its prevention will also be aired on television and radio to allay fears that the disease was spread through the consumption of pork.
The issue is politically sensitive in Moslem Malaysia, as almost all pig breeders are Chinese Buddhists. Pork, which is considered unclean to touch or to eat by Moslems, is sold in separate sections at supermarkets. Most restaurants and hotels in Malaysia are pork-free.
****
[2

[Additional information about this situation.
Date: Thu, 11 Mar 1999
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: Bernama, 10 Mar 1999 [edited

The Cabinet today directed immediate vaccination to be conducted on residents and hogs in areas confirmed to be infected by the JE virus, Chief Secretary to the Government Tan Sri Abdul Halim Ali said. He said RM35.5 million had been allocated for the vaccination exercise, one of five immediate measures taken by the Cabinet to deal with outbreak of the disease. [The number of fatal cases now stands at 30.- Mod.CYC
Some 500,000 pigs in Ipoh, Bukit Pelandok (Port Dickson) and Seremban-Sikamat would be immediately vaccinated at a cost of RM7.5 million, he told a news conference here [Kuala Lumpur. He said that the vaccination would be conducted by the Veterinary Services Department, which will provide the vaccine and logistics.
Abdul Halim said residents in the affected areas had been divided into two groups for the exercise. The first group comprises some 30,000 pig farmers, their workers and family members at affected farms, and the second some 262,500 residents aged between one year and 15 years who are staying within a two-kilometre radius of the affected farms. [The flight range of the vector _Culex_ mosquito is believed to be two kilometres. - Mod.CYC The vaccination for these two groups is to cost RM28 million.
Abdul Halim said local authorities had been instructed to fog the affected areas once a week for at least the next four weeks. The Cabinet had also banned the movement of pigs except to abattoirs, and the police and Rela [? would be asked to help enforce this, he said. Abdul Halim said the Information Ministry was required to disseminate information on ways to control and prevent the spread of the disease. The radio and television will also be used to inform the public that the disease is spread by mosquitoes and not by eating pork. On the destruction of pigs at farms in affected areas, he said the Cabinet decided not to give any compensation.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[Although we know the number of "fatal cases", we have yet to hear how many have been confirmed as having been due to JE virus infection. I would hate to think that all these efforts, all this money, and all this time is being spent on JE virus eradication when the epidemic is either of mixed etiology or principally due to something other than JE virus. I suppose we will know soon. - Mod.CHC
.....chc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

Published Date: 1999-03-19 23:50:00
Subject: PRO/AH/EDR> Hendra-like virus - Malaysia, Singapore (02)
Archive Number: 19990319.0436

HENDRA-LIKE VIRUS - MALAYSIA, SINGAPORE (02)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Hendra-like virus? - Malaysia (02) today
Hendra virus - Malaysia, Singapore: Fact sheet today
[We regret that, due to technical reasons, we can't give you archive numbers for today's posts, but those of you with web access can see them on our website above; click on 1999/03 - Mod.JW
Date: Sat, 20 Mar 1999 [yes, it's already Saturday in Malaysia!
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: Bernama, Fri 19 Mar 1999 [edited

The Health Ministry [Malaysia today confirmed that a new strain of the "Hendra encephalitis" virus has been found in people from pig farms in Negri Sembilan, who had been admitted to hospital for Japanese encephalitis (JE).
To date, 33 people had died in Negri Sembilan which the authorities earlier said was due to JE virus which [is spread by mosquitoes. Director-General of Health Tan Sri Abu Bakar Suleiman said the new deadly virus had been detected in 19 of the 98 cases admitted to hospital. "In addition to the JE outbreak, a new virus has been isolated from some of the patients in Bukit Pelanduk and this virus is a member of the family of paramyxovirus," he told reporters here [Kuala Lumpur. The JE virus was also present in the pig farms, he said. He said the new paramyxovirus was related to the Hendra encephalitis virus which was detected in Australia in 1994 and 1995, and it killed two people and 15 horses there.
"This isolation was done in the Department of Medical Microbiology, University Hospital, Kuala Lumpur, with the help of the Center for Disease Control and Prevention (CDC) in Atlanta, USA," he said. "We do not know about the way it is transmitted and the little information that is obtained is in relation to illnesses in horses and the detection of the virus in bats in Australia," he said. "So far, we have no knowledge that it is transmitted in pigs and we also have no knowledge that it can be transmitted from pigs to humans and vice versa," he said.
He said the probable mode of transmission of this virus was by direct contact with tissue fluids, including urine but research also showed that the virus was not carried on the breath of horses. "We do not know the role of this virus in relation to JE. There is no doubt in my mind that there is an outbreak of JE," he said.
Abu Bakar said due to the isolation of the new virus, additional measures must be taken by the pig handlers such as wearing protective

clothing, boots, gloves, gowns, goggles and face shields and washing of hands and body parts before leaving the pig farms.
Meanwhile, Head of the Department of Medical Microbiology, Universiti Malaya, Prof Laam Sai Kit said paramyxoviruses [are a group of enveloped RNA viruses whose members had been shown to cause animal and human infection. Several new viruses belonging to this family had been isolated in Australia since 1994 including the Hendra virus. "Experimental studies have shown that in horses and cats, the virus causes fatal pneumonia and also in other animals including fruit bats, birds and guinea pigs," he said.
Findings of the patient who died of meningo-encephalitis showed a brief period of aseptic meningitis illness after caring for two infected horses that died from the same disease. He said researchers had shown that infected animals excreted the virus in their urine. The virus is not carried through the breath of horses and is not highly contagious.
--
ProMED-mail
<promed@usa.healthnet.org>
[The finding of Hendra virus or Hendra-like virus in the JE outbreak in Malaysia is unexpected although moderators JW and CHC have hinted at the possibility of mixed aetiologies in the outbreak because of the unusual epidemiology including fatalities occurring almost entirely in those working in pig farms or associated with the pig farm industry and the non-protection of JE vaccine in some of these workers. This is truly an emerging disease and we look forward to more information coming out from Prof Lam's lab. I also understand that a team from CDC will be arriving next week to assist in the investigation. - Mod.CYC
***
[2
Date: Fri, 19 Mar 1999 16:51:57 +0100
From: GUSHULAK Brian <bgushulak@iom.int>
Source: media, Fri 19 Mar 1999

The Malaysian government said Friday a mysterious new virus had been found in a pig-breeding region where dozens of people have died, compounding confusion over a deadly outbreak of disease.
Director-general of health Abu Bakar Suleiman said the new virus was part of the Paramyxo family of viruses, unrelated to the mosquito-borne Japanese encephalitis (JE) which authorities had blamed for an outbreak which has killed at least 53 people.
But officials are convinced Japanese encephalitis is also present in the region, and the military and police will press ahead with a plan to eradicate the disease through the mass slaughter of thousands of pigs and fumigation, authorities said.
Troops and police had planned Friday to cordon off three villages in Negri Sembilan state, southwest of the capital, and begin shooting tens of thousands of pigs. But they postponed the operation until after dawn Saturday.
At least 33 people in the pig-farming area of Negri Sembilan, about 100 km (60 miles) from Kuala Lumpur have died, bringing the death toll since October there and in Perak state to 53, officials said.
All of the victims have lived on or near pig farms.
A slaughterhouse worker who handled live pigs imported from Malaysia died in Singapore Friday. Singapore officials said they had not determined the exact cause of death beyond establishing that it was not Japanese encephalitis.
Malaysian Health Minister Chua Jui Meng said the number of pigs to be slaughtered had soared to 311 000, and 2300 soldiers and police would be pressed into duty, evacuating residents from the affected area of Negri Sembilan before Saturday morning.
"At the rate of 35 000 per day, we are looking at 10 days before the culling can be completed,'' Chua told reporters.
News that a second deadly virus had been identified added to the

confusion which has prompted many panic-stricken residents of an area to flee their homes, abandoning their pigs.
Abu Bakar said "This new virus is probably related to a virus first identified in 1994 in Australia. It comes from a group of viruses called the Paramyxoviruses. It is a new virus, probably related to the Hendra virus, but it is not the same.''
The Hendra virus, named after the Brisbane suburb where the first identified outbreak occurred, is known to have killed two people and 16 horses in Australia, according to the Australian government's Commonwealth Scientific and Industrial Research Organization (CSIRO).

Before it was isolated in 1994, the Hendra virus had never been reported anywhere in the world.
Scientists believe fruit bats, or flying foxes, are the natural host of the virus, the Australian research agency said in fact sheet on its Website (www.ah.csiro.au).
"The transmission rate appears to be very low and the virus is not highly contagious from what we know,'' Abu Bakar said.
But CSIRO said that in 1996, the Hendra virus was classified as requiring Level-4 security, the highest level security procedures.
All people working with the virus are required to wear a "space suit'' with its own air supply.
"We should be cautious in dealing with the pigs and those working in the farms should wear protective clothing,'' Abu Bakar said.
He said the virus was transmitted through direct contact with tissue fluids, including urine.
"We do not know the role of this virus in relation to JE,'' he said.
"There is no doubt in my mind that there is an outbreak of JE.''
--
ProMED-mail
<promed@usa.healthnet.org>
.....jw
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-03-19 23:50:00
Subject: PRO/AH> Japanese encephalitis - Malaysia (10)
Archive Number: 19990319.0435

JAPANESE ENCEPHALITIS - MALAYSIA (10)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Japanese encephalitis - Malaysia: update (08) 990308224319
Japanese encephalitis - Malaysia: update (09) yesterday
Date: Fri, 19 Mar 1999 08:20:37 PST
From: "M. Cosgriff" <mcosgriff@hotmail.com>
Source: The Star Online, Kuala Lumpur, Malaysia, Fri 19 Mar 1999
http://www.jaring.my/~star/current/news.html

More than 11 000 villagers in Kampung Baru Sungai Nipah, Kampung Sawah and Bukit Pelanduk will be evacuated to enable the mass killing of pigs in the three villages. The decision to evacuate villagers was taken by the Cabinet task force on JE which held its first meeting yesterday.
Three more people died yesterday while 17 other suspected Japanese Encephalitis victims were hospitalised as a second wave of panic hit Bukit Pelandok following a rumour that the JE virus had gone airborne.
More than 30 residents fled their homes in Bukit Pelandok near Port Dickson after hearing rumours spread by two foreign television crew members that the disease affecting the area was an air-borne form of Japanese Encephalitis.
The Veterinary Services Department was taken to task yesterday for allowing the clubbing to death of infected pigs.
Some 100 non-governmental organisations yesterday took up the Japanese Encephalitis (JE) issue, saying the Government should speed up actions to check the outbreak.
The Penang Health Department will start vaccinating children aged 15 years and below against the Japanese Encephalitis (JE) virus beginning tomorrow.
Pigs infected by the Japanese Encephalitis (JE) must be put down immediately, said the Chinese business community. Leaders of various Chinese business associations, including those involved in the pig-rearing industry, said the Government should commence the culling exercise immediately to curb the epidemic.
--
ProMED-mail

<promed@usa.healthnet.org>
[It is highly irresponsible to go around telling people that JE virus has "gone airborne." JE is mosquito-borne. As for Hendra virus, all the evidence points to it being spread in urine, & perhaps by exposure to infected blood (pig farmers, slaughterhouse workers) - Mod.JW
.....jw
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.

Published Date: 1999-03-19 23:50:00
Subject: PRO/AH/EDR> Hendra virus - Malaysia, Singapore: Fact sheet
Archive Number: 19990319.0434

HENDRA VIRUS - MALAYSIA, SINGAPORE: FACT SHEET
****
A ProMED-mail post
http://www.healthnet.org/programs/promed.html

See Also

Hendra-like virus? - Malaysia: RFI today
Hendra-like virus? - Malaysia (02) today
Paramyxovirus, new? - Australia 980404074236
Paramyxovirus, pigs - Australia (New South Wales)(02) 980302204901
Japanese encephalitis - Malaysia: update (10) 990316194422
Date: Fri 19 March 1999
Source: Ministry of Health, Malaysia

Fact sheet on deadly new virus in Malaysia
---
1. What is Paramyxo virus?
Paramyxoviruses are a group of enveloped RNA viruses whose members have been shown to cause animal and human infection. Several new viruses belonging to this family Paramyxovirus have been isolated in Australia since 1994. This includes the Hendra virus.
2. What is Hendra virus?
Hendra virus has been shown to affect race horses and three humans in Australia. Two of these Australian patients died, one of respiratory infection and the other of meningo-encephalitis. It is clearly established that Hendra virus is a fruit bat virus. Fruit bat virus can cause infection in other animals; for example, horses.
3. What are the other animals that can be affected with Hendra virus?
Experimental studies have shown that in horses and cats the virus causes fatal pneumonia. Other animals include fruit bats, birds and guinea pigs.
4. What are the signs and symptoms of Hendra virus infection?
Findings of the patient who died of meningo-encephalitis showed a brief period of aseptic meningitic illness shortly after caring for two infected horses that died from the same disease.
5. How is it transmitted?
Researchers have shown that infected animals excrete the virus in their urine. The virus is not carried through the breath of horses and is not highly contagious.
6. How is it prevented?
Good rigorous hygiene practices in horse stables and the

surrounding environment. Hendra virus is an enveloped virus and is susceptible to soaps and detergent solutions.
--
ProMED-mail
<promed@usa.healthnet.org>
[It appears that this fruit bat virus has now got into pigs & humans in Malaysia, including pigs exported to Singapore, where it may have been responsible for deaths in abattoir workers - Mod.JW
.....jw
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.

Published Date: 1999-03-19 23:50:00
Subject: PRO/AH/EDR> Hendra-like virus? - Malaysia (02)
Archive Number: 19990319.0431

HENDRA-LIKE VIRUS? - MALAYSIA (02)
****
A ProMED-mail post
<<http://www.healthnet.org/>http://www.healthnet.org/programs/promed.html>

See Also

Hendra-like virus? - Malaysia: RFI today
Japanese encephalitis - Malaysia: update (10) 990316194422
Date: Fri, 19 Mar 1999
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
[1
The 'rumour' is true. A government press statement has been released from both Malaysia and Singapore. Nine abattoir workers in Singapore have come down with some kind of meningoencephalitis and one has died. JE virus infection is now being investigated. These workers had worked on live pigs from Malaysia.
When official information is received it will be posted.
***
[2
Source: The Straits Times, 19 Mar 1999 [edited

The Malaysian government has called in the army and police to destroy about 65 000 pigs as it steps up the fight to contain a deadly virus that has claimed 47 lives. More than 1000 security personnel will visit [affected farms in Negri Sembilan and use light arms to slaughter pigs which were abandoned after hundreds of farmers and their families fled.
At least 32 people in Negri Sembilan have died of Japanese encephalitis [and another 15 have died in Perak. All the victims lived on or near pig farms.
***
[3
Source: The Straits Times, 19 Mar 1999 [edited

Singapore authorities have suspended pig imports from farms north of Johor state [southernmost state in peninsular Malaysia after two abattoir workers here came down with suspected Japanese encephalitis (JE).
With immediate effect, only pigs from 28 Primary Production Department-accredited farms in Johor will be allowed in the two Singapore abattoirs, the deputy director, Dr Chua Sin Bin, said at a press conference.
The precautionary move to protect abattoir workers and those who work with the livestock came after four abattoir workers were admitted to hospital between March 13 and 16 and the worsening outbreak in Malaysia.
Dr Chew Suok Kai, director for epidemiology and disease control at the Ministry of Health, said that the disease has been ruled out for two men, who were found to be suffering from pneumonia and bacterial meningitis. The other two are suspected of being infected with the virus, he said. They had

been admitted after complaining of fever, drowsiness and shivers -- the symptoms of JE, said Dr Chew, adding that test results ruling out the viral infection would only be known in a few days' time.
The four, all Singaporeans, worked at the Kim Chuan abattoir and had been vaccinated only recently against the disease. No similar incidents were reported at the the Jurong abattoir.
Singapore imports most of its live pigs from farms in Malaysia.
[The significance of the two suspected JE cases among abattoir workers cannot be ascertained at present pending the availability of more information, especially confirmation of the disease by laboratory test. It is understood that the area around the abattoir is subject to stringent mosquito control which includes fogging every week, spraying of insecticide in and around the abattoir twice a day and Environment Ministry officers checking for mosquito breeding. - Mod. CYC
--
Chan Yow Cheong
ProMED-mail Regional Moderator for Asia
Singapore
<chanyowcheong@pacific.net.sg>
[We have never heard of JE virus being acquired by abattoir workers from the process of slaughtering. We suppose Hendra-like virus infection is also now being investigated. We await the results with bated breath! - Mod.JW
.....jw

##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-03-19 23:50:00
Subject: PRO/AH/EDR> Hendra-like virus? - Malaysia: RFI
Archive Number: 19990319.0428

HENDRA-LIKE VIRUS? - MALAYSIA: REQUEST FOR INFO
****
A ProMED-mail post
<<http://www.healthnet.org/>http://www.healthnet.org/programs/promed.html>
Date: 18 March 1999
From: Charles H. Calisher <calisher@usa.healhnet.org>
Source: Rumors

It is difficult trying to do a journalist's work when one is a virologist. When ProMED-mail receives informal messages and is asked to not report them, all we can usually do is to sit on them until a newspaper report, a news service
report, or an official report comes to us one way or the other.
I have heard from four different sources that at least one of the isolates from Malaysia, from a pig that died of suspect Japanese encephalitis (JE), has been
identified as a paramyxovirus closely related to or identical with Hendra virus. Hendra virus has so far been reported (on three occasions) only from Queensland, Australia. It is known to be a human and equid pathogen but
not much more than that; there is no data with regard to porcine pathogenicity, as far
as I know.
Whether these rumors are true remains to be seen (and reported officially). Whether this is one isolate of Hendra-like virus among a larger group of JE virus isolates remains to be seen. Whether the current epidemic in Malaysia is due principally to JE virus or to a Hendra-like virus remains to be seen. Given the age distribution of human cases as well as the occurrence of cases in
people who had received 2-3 doses of JE vaccine, [the attribution of all cases in the current outbreak in Malaysia to JE] has always seemed peculiar to me.
If anyone can and is willing to send us data, denying or confirming these rumors, we would be most appreciative. If these rumors are untrue, it would do no harm to deny them. If they are true, it would do some harm to either refute them or to remain silent.
Given that in the past there were personal recriminations and threats to people who sent information to ProMED-mail without clearing that information with the Malaysian Government, I would not be surprised to hear a great deal of silence in response to my plea. I also would understand it. I also would be underwhelmed.
--
Charles H. Calisher, Ph.D.
Viral Diseases Moderator, ProMED-mail
calisher@usa.healthnet.org
.....jw

##
ProMED-mail makes every effort to verify the reports that
are posted, but the accuracy and completeness of the



Published Date: 1999-03-20 23:50:00
Subject: PRO/AH> Hendra-like virus? - Malaysia (03)
Archive Number: 19990320.0440

HENDRA-LIKE VIRUS? - MALAYSIA (03)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Hendra-like virus? - Malaysia (02) 990319084147
Hendra-like virus? - Malaysia: RFI 990319071030
Date: 19 March 1999
From: Charles H. Calisher <calisher@usa.healthnet.org>

I believe some clarifications and summaries are in order. I have been receiving telephone calls and e-mail messages through the last days and nights and I want to go to bed.
To the best of my knowledge and opinion--
1. The virus causing all the furor in Malaysia should be called a Hendra-like virus, not Hendra virus. The recently isolated virus already has been shown to differ from the prototype Hendra virus (1), isolated in Australia. This seems fairly clear evidence that the Hendra-like virus did not originate in Australia. Likely, the Hendra-like virus is indigenous (probably to flying foxes, _Pteropus_ sp.) to Malaysia.
2. Experimental transmission of Hendra virus has not been conducted with pigs. The virus has been inoculated into horses, rabbits, dogs, cats, and other species. I would expect that the Australian Animal Health Laboratory folks will soon be determining the transmissibility of Hendra virus to pigs.
3. Menangle virus (2), also isolated in Australia, like Hendra and Hendra-like viruses, is a member of the family Paramyxoviridae. There are many genera within the family Paramyxoviridae; Hendra virus and the Hendra-like virus may represent a previously unrecognized genus. Menangle virus and Hendra virus are unlikely to be confused virologically.
4. At present, there is no evidence that Menangle virus occurs outside Australia, but we have heard this story before. I expect it is just a matter of time before such a virus is isolated in Asia.
5. We have not seen reports of stillborn pigs or deformities in newborn pigs in Malaysia or Singapore. Menangle virus causes such aberrations.
6. All isolates of the Hendra-like virus have been obtained from humans. No isolates of the Hendra-like virus have been obtained from pigs. All isolates were obtained using a cell culture isolation system, so there is no concern about Sendai virus as a possible contaminant.
7. Whereas Japanese encephalitis (JE) may be occurring in the Hendra-like virus epidemic areas, it remains to be determined what proportion of the human illnesses are due to JE virus and what proportion to the Hendra-like virus. That characteristic illnesses have occurred in people who had been given 2-3 doses of JE vaccine speaks to a non-JE virus etiology of their illnesses.
8. We have no reports of illnesses in family members of pig farmers or of cases occurring at reasonable distances from pig farms, suggesting that

direct contact, not arthropods, is the principle mode of transmission, likely direct contact with pigs or their excreta.
9. The apparent age distribution of the cases contraindicates JE virus infection.
10. We have seen no data regarding overall or age-specific attack rates.
11. It is not unusual to detect antibody to JE virus in people living in an area where JE virus occurs. As the JE vaccination campaign progresses, it will be increasingly difficult to distinguish between antibody elicited by wild-type virus and by vaccine. IgM antibody in cerebrospinal fluid is an excellent indicator of central nervous system involvement (and perhaps a predictor of negative outcome); IgM antibody in serum alone is not. 12. IgM antibody capture ELISA, no matter what you hear, cannot be used to make a confirmed diagnosis when only a single serum sample is available for a given patient, human or otherwise. IgM antibody usually, but always, decreases in titer and may even become undetectable within a relatively brief period of time (a month or a few months) after infection but in some instances may persist for long periods of time (years). Paired acute- and convalescent-phase serum samples must be obtained in order to make a confirmed diagnosis, otherwise all that can be said when IgM antibody to JE virus is detected, particularly in an area where JE virus is known to occur, is that one has made a "presumptive" diagnosis. In the present situation this is not good enough.
13. The very best people in the world are working on this Malaysian problem, which may have begun last October. Thanks to the Malaysian Government, it is very likely that a first-rate clinical, epidemiologic, and virologic work-up will soon be completed. Most critically, epidemiology-based intervention techniques will be put in place and the epidemic ended.
14. It cannot be any but the Malaysian Government that provides official reports.
15. Insufficient evidence presently is available to indicate the etiology of two cases in humans in Singapore. Both were in close contact with pigs (abattoir workers). Whether these have been definitively diagnosed as having been caused by the Hendra-like virus is unknown to me.

References:
(1) Murray K, Selleck P, Hooper P, Hyatt A, Gould A, Gleeson L, et al. (1995) A morbillivirus that caused a fatal disease in horses and humans. Science 268:94-97.
(2) Philbey AW, Kirkland PD, Ross AD, Davis RJ, Gleeson AB, Love RJ, et al. (1998) An apparently new virus (family Paramyxoviridae) infectious for pigs, humans, and fruit bats. Emerging Infectious Diseases 4:269-271.
--
Charles H. Calisher, Ph.D.
Viral Diseases Moderator, ProMED-mail
e-mail: calisher@usa.healthnet.org
.....chc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a



Published Date: 1999-03-21 23:50:00
Subject: PRO/AH> Hendra-like virus? - Malaysia (04)
Archive Number: 19990321.0449

HENDRA-LIKE VIRUS? - MALAYSIA (04)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Hendra-like virus? - Malaysia: RFI 990319071030
Hendra-like virus - Malaysia, Singapore (02) 990319150639
Hendra-like virus? - Malaysia (02) 990319084147
Hendra-like virus? - Malaysia (03) 990320102717
[Numerous messages on this epizoodemic topic have been received and abbreviated or posted below, with or without comments. - Mod.CHC
Date: Sat, 20 Mar 1999 17:37 MDT
From: Charles H. Calisher <calisher@usa.healthnet.org>

[1
Date: Sat, 20 Mar 1999 08:45:09 +0800
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia

Prof. Lam Sai Kit informed me that the report from Bernama news agency which I posted contains major errors. The figures given by the Director-General of Health were 5 of 30 samples tested (not 19 of 98 as reported) yielded the [Hendra-like virus. "The Director-General also specified in no uncertain terms that the role of this new virus in the present JE outbreak is unknown and CDC has been invited by the government to assist the Ministry of Health and ourselves in quickly establishing this," said Prof. Lam. Prof. Lam will be submitting a correction and an update within the next 2 days.
[Here are some of the basic data needed for understanding this very complex situation:
For humans (Number of males & number of females by age):
Number of suspect cases:
Number of suspect cases with a history of JE vaccination (by number of doses)
Number of cases confirmed by virus isolation as Japanese encephalitis:
Number confirmed by virus isolation as Hendra-like disease:
For pigs:
Number of suspect cases:
Number confirmed by virus isolation as Japanese encephalitis:
Number confirmed by virus isolation as Hendra-like disease:
Although ProMED-mail has not received formal messages providing information regarding signs of illnesses in pigs, informally we have heard that pigs "are dying with this disease" (whatever "this disease is"). Information as to signs of illnesses in pigs would be informative. Many pigs have been abandoned (i.e., not being fed) and for a very brief time some of them were being beaten to death (aerosols?); this was stopped after public outcry.
Ken Lam is in a "hot seat" right now and obviously he and his associates

are working under pressure to obtain results immediately, which is impossible. We wish him the best of good luck in working through this mess.
A media story in today's newspapers (around the world) follows. Remarkably, the Malaysian Government is sticking to the story that this is a Japanese encephalitis (JE) epidemic with, possibly, some Hendra-like virus involvement. As our readers can tell from the change in headers, ProMED-mail is emphasizing the emerging nature of the Hendra-like virus and minimizing the JE factor.
(kindly sent by Craig E. Gibson; source: http://www.spokane.net/news-story-body.asp?Date=032199&ID=s550108&cat=
Soldiers armed with shotguns fanned out across three villages in southern Malaysia on Saturday to begin shooting 65,000 pigs, seeking to control a virus that may have killed as many as 50 people. At a deserted primary school near the villages, more than 1,000 soldiers and 300 health officials drafted a plan to kill every pig in the area -- Southeast Asia's largest hog-breeding region -- because they might carry the Japanese encephalitis virus. The virus, which attacks the brain, causing high fever, vomiting and coma, is transmitted from pigs to humans by _Culex_ mosquitoes that thrive in swamps and open drains. More than 30 people have died in the area, which has a population of 11,000, bringing the nationwide death toll to 53 since October. Nearly all the victims have lived or worked near hog farms.
Hundreds of families have already abandoned the villages, 60 miles southeast of the capital, Kuala Lumpur. Police said the few who remained in the prosperous pig-rearing district of Negri Sembilan state had been evacuated to enable soldiers and police to begin the slaughter. The state veterinary department director, Majid Awang, told the national news agency Bernama that about 65,000 pigs would be shot over two days. Farmers in the region say the pig population totals more than 300,000. There was no immediate explanation of the discrepancy.
The government teams were to use tractors, bulldozers and backhoes to bury the carcasses in an operation expected to last 10 days. "The entire pig population in the affected areas will be wiped out,'' Health Minister Chua Jui Meng said. Pig farmers who lose their livelihood will be compensated from the proceeds of a special lottery, Prime Minister Mahathir Mohamad said Saturday. The government has spent $12million in the battle against the virus, killing pigs and mosquitoes, clearing mosquito breeding grounds and vaccinating people, he said. The government has ordered vaccinations [with JE vaccine for 300,000 people and 500,000 pigs.
****
[2
Date: Sat, 20 Mar 1999 08:25:14 +0800
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: The Straits Times, 20 Mar 1999 [edited

No live pigs will be brought into Singapore from today, following the death of one abattoir worker and the hospitalisation of five others. The move to suspend pig imports from all of Malaysia as well as Indonesia, is aimed at removing the source of infection, the pigs.
The two abattoirs - Kim Chuan and Jurong - will be closed "to be completely disinfected and to remove possibilities of infection," Primary Production Department's (PPD) Dr Chua Sin Bin said yesterday.
The moves are a precautionary measure, as the authorities have yet to determine if Japanese encephalitis (JE) has crossed the border into Singapore.
The abattoir worker who died, [Mr. X, 49, did not suffer from JE. Medical tests, however, have not pin-pointed the cause of death and are still on-going, said Dr Chew Suok Kai, director of epidemiology and disease control at the Health Ministry.
The five new cases from Kim Chuan abattoir where Mr. [X traded in pork, were warded on Thursday night and yesterday afternoon. While they were found to be suffering from encephalitis, doctors have not concluded that it is JE. All the five [patients including a woman, are said to be in stable condition.

[In another development, the PPD has disallowed cross-border crossings of horses as they are also susceptible to [JE} virus. Twenty-four horses which raced last weekend in Ipoh were not allowed to return yesterday.
[The ban on the import of live pigs from Malaysia is a correct move in view of the report of the isolation of [the Hendra-like virus from a fatal human case and the detection of infection in 19 of 98 [corrected above hospitalised patients in Malaysia. No confirmed Hendra virus infection has been found in Singapore yet, but it would not surprise anyone if human infection is detected among abattoir workers who had, before the ban, worked on imported live pigs from affected areas in Malaysia. However, confirmation of Hendra virus infection will be impossible without the test reagents. Hopefully, the CDC team coming to Malaysia will provide the necessary assistance.
On the question of JE virus crossing the border from Malaysia into Singapore, I have yet to see data showing that the virus is not present in Singapore any more after phasing out pig farming here. JE, as I understand it, is not a reportable disease in Singapore as well as in many Asian countries. There is, thus, no serious attempts to identify JE virus infection among the patients who are diagnosed as viral encephalitis. Complement-fixing antibodies to JE virus have also been reported in survey sera from humans in Singapore. As regards horses, both humans and horses (which show clinical disease on infection) are regarded as incidental hosts in the JE virus transmission cycle in nature. However, Hendra virus infects and kills horses and could serve as a source of infection for man. - Mod.CYC
[300,000 pigs x 100 kilo each = 30,000,000 kilos. That's a great deal of protein taken out of the food chain.
I wonder whether the authorities realize that one of the hosts of JE virus is wild birds. Lord knows what would happen if that got out. - Mod.CHC
*****
[3
Date: Sat, 20 Mar 1999 12:44:18 +0800
From: Dr. M. Vadivale <vale@pop.jaring.my>
Recommended:
<http://www.geocities.com/HotSprings/2188/paramyxo.html>http://www.geocities.com/HotSprings/2188/paramyxo.html>
Paramyxoviridae - Vads Corner
****
[4
Perspective of a pig producer
Date: Sat, 20 Mar 1999 04:47:40 -0500
From: Tim Harris <100257.1720@compuserve.com>

I have a customer in peninsular Malaysia near Ipoh to whom I have been sending the ProMED-mail postings on JE. He is a pig producer and has been buying replacement genetic material in UK. Here is his latest news today.
"Thanks for your emails. My family and I are sound and healthy here and so are the pigs. Pig producers are in a dilemma as the JE crisis is very tenseful and frightening due to the high death rate. To date, the disease had claimed 37 lives in the Negeri Sembilan state mostly in Bukit Pelandok. 17 more were warded at various hospitals in the country.
The number of deaths and fatal cases were incorrect while others information provided from the web were acceptable. Different papers provide different statistics. I am puzzled at why pig workers died despite having vaccinated 3 doses anti-JE? Last year the deaths of many pig workers in Ampang, Ulu piah and Tambun were of suspected JE. As far as I know not even one case confirmed JE. Very concerned and worried besides the big sum of money loss everyday. Most importantly, all the people on the farm are safe and healthy.
What shocking news from Singapore. Four pig handlers were warded [hospitalized yesterday and two [of them died this morning. Another two were warded bringing the total to six cases. All exporting pig farms to Singapore had been banned as a result except pigs in Johor state are allowed to be exported. That's all for the time being. Hope you hear your advice regarding this matter."

--
>From Mr. Cheah Mook Lin
Sent by Tim Harris SDA
(AATA European Secretary)
Harris Associates Limited
PO Box 251 REDHILL Surrey RH1 5FU England
Fax: +44 (0)1737 822954
Tel: +44 (0)1737 822249
e-mail: 100257.1720@compuserve.com
http://www.tim-harris.co.uk/
http://www.npscmgmt.com/AATA
****
[5
Date: Sun, 21 Mar 1999
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: Bernama, 20 Mar 1999 [edited

Prime Minister Datuk Seri Dr Mahathir Mohamad today announced there will be a nationwide review of pig rearing activities and farming areas to ensure that the Japanese encephalitis (JE) problem does not recur. The relevant parties including pig farmers had agreed to the reorganisation and for the need to keep farms clean with an efficient effluents disposal system, the Prime Minister said. He said if the farmers had been prepared to spend a little more to maintain cleanliness they would not be facing this JE problem in Bukit Pelandok and Kampung Sungai Nipah, Port Dickson. He said the government had taken all possible measures to counter the outbreak such as killing the source of the virus - the pigs, destroying the transmitter of the disease from the infected pigs to humans - the _Culex_ mosquitoes and their breeding areas and vaccinating the people in and near pig farms.
On the setting up of a permanent crisis management committee to counter infectious diseases, the Prime Minister said it was suffice to have ad hoc committees because of the shortage of doctors in the country and moreover one could never anticipate the timing of a crisis or an outbreak. "Only when a situation like the present one occurs, will we know the appropriate action to take. Before a particular thing occurs, no one will of course know what action to take...no one ever told me before that if there is a JE outbreak we will have to shoot the pigs," he said.
[The last quote of the Prime Minister is of interest. I too did not know that one measure to control a JE outbreak is to shoot the pigs. The other recent control measure taken by countries where JE virus is known to be endemic is the banning of the import of pigs from a country where an outbreak occurs. JE outbreaks occur in countries like Japan, China, Korea and Taiwan. Could the experts from these countries advise me if the above measures are now the recommended control method to prevent the spread of transmission of JE virus, a mosquito-borne virus? - Mod.CYC
[This is what is called "the Remington vaccine" approach to livestock disease control. It works, too. If you do not have the hosts you do not have the virus in them. - Mod.CHC
****
[6
Date: Sun, 21 Mar 1999
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: The Straits Times, 21 Mar 1999 [edited

All abattoir workers and pig traders have been ordered to go for checkups to ensure that no one else has come down with encephalitis. [How will patients with encephalitis get to the hospital for check ups? - Mod CHC.
So far, six have been hospsitalised for encephalitis, the latest being a Kim Chuan abattoir worker who was warded on Friday. One is critically ill, two are in serious condition and three are stable. The seventh victim [Mr. X died on Friday. Another three have also been warded, but for pneumonia, stroke and fever. Test results from three encephalitis victims, including

Mr Lim, have shown that Japanese encephalitis (JE) was not involved. Authorities here are not ruling out encephalitis caused by the Hendra virus, following Malaysia's announcement that the virus could be the cause of some deaths there. Unlike JE virus, which is transmitted by [infected _Culex_ sp. mosquitoes, this [Hendra virus is spread through close contact with infected animals. Tissue samples of the three victims who had tested negative for JE virus have been sent to the Centres for Disease Control in Atlanta, United States, for Hendra virus tests. Results are expected in two or three weeks' time. [sooner, I would expect - Mod CHC. A total of 116 [of 550 pig handlers have been screened at Tan Tock Seng Hospital's Communicable Disease Centre so far. Nine have been warded for observation, none for encephalitis-related symptoms. The nine, who suffer symptoms such as a mild fever, will be warded for a few days, "just to be sure," said Dr Chew Suok Kai, director of Epidemiology and Disease Control at the Health Ministry. National Development Minister Lim Hng Kiang, who chaired yesterday's press briefing, stressed: "The problem is confined to these 550 workers. The rest of us who have not had any direct contact with the pigs are not at risk."

Following the ban on live-pig imports, the PPD [Primary Production Department said yesterday there were no more live pigs in Singapore. [Singapore has no pig farms. All live pigs are imported. - Mod. CYC Their absence removes the source of the infection, but Mr Lim said "we are not out of the woods yet."

Jockeys and those who have close contact with horses may have to go for a medical checkup. Mr Lim said this move might be taken, following Malaysia's announcement on Friday that the Hendra virus could be behind deaths previously associated with JE. The virus, first discovered in horses in the Hendra suburb in Brisbane, Australia, in 1994, killed 15 horses and three people there. Since Friday, the Government has banned cross-border movement of horses between Singapore and Malaysia. Mr Bernard Ang, president of the Association of Racehorse Trainers Singapore said a Hendra viral outbreak would be catastrophic, leading to hundreds of millions of dollars lost from races and investment in horses. He estimated that there are more than 60 trainers, over 100 jockeys and more than 500 other handlers working in the Penang, Kuala Lumpur, Perak and Singapore racing circuit.

[If the National Development Minister's comments are correct, that the problem is confined to these 550 pig handlers and that the remainder of the population, who have not had any direct contact with the pigs, are not at risk, then this ain't JE. - Mod.CHC

****

[7

Date: Sun, 21 Mar 1999

From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>

ProMED-mail Regional Moderator for Asia

Source: Agence France Presse, Reuters ex The Sunday Times, 21 Mar 1999 [edited

Thailand placed an import ban on pork imports from Malaysia yesterday in a bid to prevent a pig virus epidemic from spreading into that country. "The livestock department has banned all pork imports or live pigs from Malaysia and set up an ad hoc patrol unit along the common border," a Ministry of Public Health statement said. Communicable Disease Control Director-General Yooth Bodharamik warned the public not to panic as no cases of the disease had been detected in Thailand. A Thai Customs officer at a Thai-Malaysian border checkpoint told Reuters by telephone that his outpost had asked Thais to stop bringing Malaysian pigs into the country in January, when it first received reports of the virus scare. "Most Malaysian pigs passing through here before the epidemic were for personal consumption, not for trade," said the officer at Takbai checkpoint. "We have since required anyone seeking to import pigs to have them certified virus-free." An official at another checkpoint, at Sungai Kolok, said his virus watch had also been extended to cows and other livestock.

--

ProMED-mail



Published Date: 1999-03-22 23:50:00
Subject: PRO/AH> Hendra-like virus? - Malaysia (05)
Archive Number: 19990322.0453

HENDRA-LIKE VIRUS? - MALAYSIA (05)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
[see also
Hendra-like virus? - Malaysia: RFI 990319071030
Hendra-like virus - Malaysia, Singapore (02) 990319150639
Hendra-like virus? - Malaysia (02) 990319084147
Hendra-like virus? - Malaysia (03) 990320102717
Hendra-like virus? - Malaysia (04) 990321185237]
Date: Mon, 22 Mar 1999 04:41:18 +0800
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: Press statement from the Department of Public Health, Ministry of Health, Malaysia, 19 Mar 1999

To date, there are 133 reported cases of either confirmed or suspected cases of Japanese encephalitis [JE] in the outbreak which first started in Perak, and later in Negri Sembilan. Of these, 54 persons have died. In this outbreak, out of 133 reported cases, 42 have been confirmed to have JE. Many cases may soon be confirmed as the laboratory results become available. Of the fatal cases, patients typically presented with symptoms of high fever, headache for 5 to 7 days, then deterioration of mental status, convulsions and coma before death. A close association has been established between the majority of these patients and pig farming industries in Perak and Negri Sembilan. Many of these patients have direct and close contact with the animals.
Laboratory tests were carried out from the beginning of the outbreak. Besides the Ministry of Health laboratories, others like the University of Malaya laboratory were also involved in the investigation. In December 1998, 19 specimens from patients in the Perak outbreak were sent to the WHO Collaborating Centre for Tropical Diseases in Nagasaki, Japan, 4 of these patients were confirmed to have JE by both the Institute of Medical Research laboratory in Kuala Lumpur and the WHO Collaborating Centre in Nagasaki.
In addition to JE, there is now evidence of a new virus. This virus was isolated from the cerebrospinal fluid of 5 out of 30 patients sent to Professor S K Lam and his team at the Department of Medical Microbiology, University of Malaya. Their finding was subsequently confirmed by the Centers for Disease Control in Atlanta, USA. This virus is a member of the Paramyxovirus [see comments below - Mod.CHC] family. It resembles Hendra virus which was first isolated in Hendra, a suburb of Brisbane in Queensland, Australia. In the outbreak which occurred in 1994, race horses and 3 persons whose work involved close contact with horses were taken ill. 2 of the 3 persons subsequently died, one died of severe respiratory infection and the other of encephalitis after a latent period of 13 months. Little is known about this new virus. We are not sure if the virus is a pathogen. [definitely see comments below - Mod.CHC]
The probable mode of transmission of this new virus is by direct contact with tissue fluids including urine. The importance of droplet transmission

is not known but work done on horses shows that the virus is not carried on the horses' breath. In the Australian experience, the outbreak in Brisbane affected 2 humans including one death. A second incident occurred in Mackay, 1000 km north of Brisbane. In this incident a farmer died from meningoencephalitis. It was felt that the most likely wildlife source linking these two outbreaks would be either birds or fruit bats. But studies also showed that despite the close relationship between bat caregivers and bats, there is no evidence of seroconversion among the caregivers. Thus this virus appears to have low transmissibility.
The Ministry of Health cannot overemphasize the importance of ongoing control measures to check the spread of JE virus. However, in the light of this new virus, additional precautions have to be taken. As the paramyxovirus is a relatively large virus, the practice of universal precaution and use of face masks, goggles and gown is recommended for health care workers when handling patients suspected of JE/Hendra-like virus infection.
The following actions have been taken by the various Ministries in the control of the present JE outbreak:
1. Vaccination of high-risk groups of the human population.
2. Vector control against the _Culex_ mosquitoes by fogging and larviciding including destroying _Culex_ breeding sites by land filling and improving sanitation/drainage.
3. Hospital management of JE patients.
4. Health education through the mass media to inform the public on preventive measures to be taken.
5. Vaccination of pigs.
6. Due to the isolation of the new virus additional measures must be taken by pig handlers such as wearing of protective clothing, boots, gloves, gowns, goggles and face shields; and washing of hands and body parts with soap before leaving the pig farms.
7. Restricting the movement of pigs from infected farms to other areas is done by the Police.
8. Setting up a Central Control Operations Room to coordinate the activities carried out by the various Ministries.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[This seems to be an official report. Some comments are in order.
1. Given previous reports that JE virus was responsible for many infections and deaths and then the communications that the initial tests may have been nonspecific and that some of them were due to a Hendra-like virus, I think I'll just wait for confirmation of these cases before I swallow the data. Clearly, there is little doubt that JEV is circulating in the areas in question and causing some of these illnesses. Even if 42 of 133 cases have been confirmed as due to JEV, 91 have not. Have these 91 been tested for evidence of infection with the Hendra-like virus.
2. Nothing is being reported regarding people NOT in close contact with pigs or piggeries but living in the area. I know of no data that would suggest that JEV is transmitted from infected animals, although this is certainly possible. What isn't?
3. The proper family name for the paramyxoviruses is _Paramyxoviridae_. I do not have all my books at hand but, last I looked, this is one of three families in the Order Mononegavirales. The family has been divided into two subfamilies, Paramyxovirinae (including viruses if the genus _Morbillivirus_ [canine distemper, measles, Phocine distemper, peste-des-petits-ruminants, and rinderpest viruses] and the genus _Paramyxovirus_ [Newcastle disease virus (9 avian paramyxoviruses, mumps, 4 parainfluenza viruses)] and Pneumovirinae (including viruses of the genus _Pneumovirus_ [bovine respiratory syncytial, human respiratory syncytial, pneumonia virus of mice, and turkey rhinotracheitis viruses)]. Other viruses of the family include: Fer-de-Lance, La-Piedad-Michoacan-Mexico, Mapuera, and Narivaviruses.
4. As for the comment that little is known about this new virus and the uncertainty that the Hendra-like virus is a pathogen, as the Ministry said, no definitive information is available about this particular isolate.

ProMED-mail is using the term "Hendra-like" because the virus has already been shown to be not identical to the prototype Hendra virus from Australia. It should be kept in mind, however, that small differences in nucleotide sequence can translate to significant (even if small) differences in expressed polypeptides. It is certain that Hendra virus itself is a humanand equid pathogen. It seems clear that the Hendra-like virus is a pig pathogen and human pathogen as well.
5. Extrapolating the Australian experience, that the infection rate in bat caregivers is low and therefore that the transmissibility of Hendra virus is low, does not take into consideration that Hendra virus has not been shown to infect pigs, so that we know nothing about the transmissibility of this virus from pigs to humans -- at least until the Malaysian outbreak.
6. What the size of this virus has to do with using special precautions eludes me.
7. Many JE control measures are being taken. This seems reasonable in order to control the JE aspect of this epidemic. Vaccination of humans and pigs against JEV, and vector control likely will have little effect on the prevalence of the Hendra-like virus. Depopulating piggeries certainly will remove these animals as vertebrate hosts, for now.
Clearly this is a huge problem but the Malaysian Government appears to be doing all it can at present. More data should be forthcoming this week when the Malaysian authorities have the opportunity to work with the CDC and Australian researchers who are on their way there at this time. - Mod.CHC]
.....calisher/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-03-23 23:50:00
Subject: PRO/AH> Hendra-like virus? - Malaysia (07)
Archive Number: 19990323.0459

HENDRA-LIKE VIRUS? - MALAYSIA (07)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Hendra-like virus? - Malaysia: RFI 990319071030
Hendra-like virus - Malaysia, Singapore (02) 990319150639
Hendra-like virus? - Malaysia (02) 990319084147
Hendra-like virus? - Malaysia (03) 990320102717
Hendra-like virus? - Malaysia (04) 990321185237
Hendra-like virus? - Malaysia (05) 990322001253
Hendra-like virus? - Malaysia (06) 990323085655
[In response to our inquiry as to signs of illnesses, if any, in pigs. We had had no previous reports of illnesses in pigs, only illnesses in humans. These are anecdotes only and should not be considered definitive clinical observation. - Mod.CHC
Date: Tue, 23 Mar 1999 18:08:21 +0800
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>

I have the following anecdotal info on the disease in pigs in the Perak (Ipoh) outbreak from 2 sources:
1. This one is from Singapore vets. The information was given to them in Ipoh by Malaysian pig farmers regarding on-farm pigs. Pigs of all ages were observed to have marked dyspnea with open mouth breathing, epistaxis, marked coughing, "bluishness and malodour" to the carcass at death.
2. This description was given by a Malaysian physician in Ipoh whose parents died of the disease. The pigs first became irritable and started to bite other pigs. They then coughed severely until haemoptysis occurred. They then started fitting and died.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[Signs here of pneumonia as well as central nervous system involvement and bleeding disorder. - Mod.CHC
.....calisher/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.



Published Date: 1999-03-23 23:50:00
Subject: PRO/AH> Hendra-like virus? - Malaysia (06)
Archive Number: 19990323.0458

HENDRA-LIKE VIRUS? - MALAYSIA (06)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Hendra-like virus? - Malaysia: RFI 990319071030
Hendra-like virus - Malaysia, Singapore (02) 990319150639
Hendra-like virus? - Malaysia (02) 990319084147
Hendra-like virus? - Malaysia (03) 990320102717
Hendra-like virus? - Malaysia (04) 990321185237
Hendra-like virus? - Malaysia (05) 990322001253
[1
Date: Sun, 21 Mar 1999 14:21:19 -0500
From: Marjorie P. Pollack <pollackmp@mindspring.com>

Found this on the wires today. Any information on the economic impact of this to Malaysia? Is Malaysia a major pig exporter? Will banning the export of pork impact on possible transmission or have I forgotten basic epidemiology and entomology. Is JE transmitted in the meat of infected pigs? (has the _Culex_ suddenly developed a taste for slabs of raw pork with live virus ingestion from the residual blood in the meat?)
Source: Xinhua News Agency, 21 Mar 1999

Thailand has imposed an import ban on Malaysian pork in a bid to stop the spread of pig-born Japanese encephalitis, a statement of the Ministry of Public Health available Sunday said.
"The livestock department has banned all pork imports and live pigs from Malaysia and set up an ad-hoc patrol unit along the common border," the statement said.
Meanwhile, public health experts warned the public not to panic as no cases of the disease had been detected in Thailand.
Japanese encephalitis, which can cause inflammation of the brain, is spread to humans from pigs by the _Culex_ mosquito. The disease has been reported to cause at least 53 deaths in Malaysia.
The Public Health Ministry warned people to avoid mosquitoes and not to keep live pigs near houses.
Officials manning customs checkpoints on the Thai-Malaysian border had stepped up vigilance to ensure Malaysian pig-virus epidemic did not spread to Thailand.
The Malaysian viral outbreak has killed at least 53 people since October, and troops have begun killing more than 300,000 pigs in a bid to contain it. Almost all of the 53 victims lived or worked near pig farms.
Neighboring Singapore has also suspended the import of live pigs from Malaysia and Indonesia.
--
Marjorie P. Pollack

e-mail: pollackmp@mindspring.com
[And not a mention of the Hendra-like virus. - Mod.CHC
******
[2
Date: Mon, 22 Mar 1999 10:25:12 +1200
From: Mark Bosson <bossonm@maf.govt.nz>

Perhaps some consideration should be given to possible host species of the virus - such as bats. A survey of these animals might isolate the offending organism.
If the Hendra[-like virus is able to be maintained in pigs it should not be assumed that the routes of transmission will be the same as those found in horses in Australia. Additionally the infectivity of the organism may be different - surely serious precautions should be taken in the handling of potentially infected pigs.
--
Mark Bosson
Disease Investigator
National Centre for Disease Investigfation
Wallaceville, New Zealand
PH: 64 (0)4 526 5600
FAX: 64 (0)4 526 5601
e-mail: bossonm@maf.govt.nz
[Correct on both counts. I expect that the epidemiologic studies to be done by Ken Lam and the international team of consultants will soon investigate the flying fox roosts and see what's what there. The appropriate studies cannot all be done in one day or one week. Still, all questions are good one and should be addressed seriously. The first problem to solve is how to stop this epizoodemic.
It is frightening to consider that people recently were beating some of these pigs to death with boards. Surely someone was splattered with blood, and that couldn't possibly be a good thing. - Mod.CHC
****
[3
Date: Sun, 21 Mar 1999 18:51:47 -0500
From: Greg Folkers <GFOLKERS@niaid.nih.gov>
Source: Star (Malaysia), Sunday, March 21, 1999
<http://www.jaring.my/~star/current/news.html>

Doctors at the University Hospital are experimenting treating patients suspected of having contracted the Hendra-like virus with a drug called ribavirin. UH head of Medical Microbiology Department Prof. Lam Sai Kit said the doctors investigating the Japanese Encephalitis (JE) outbreak discovered a Hendra-like virus in laboratory specimens taken from the victims.
"We know it is a Hendra-like virus and we want to determine how important its role is in JE," Prof. Lam told a press conference when asked whether the virus they had found was the Hendra virus. He said the drug, which had long been available, was an effective anti-viral measure against the respiratory syncytial virus (RSV) which causes bronchitis in children.
[RSV is a member of the family Paramyxoviridae, as is Hendra virus. - Mod.CHC
"We do not know enough about the virus but we believe the drug would be effective. Ribavirin inhibits the growth of the RSV and may work for the Hendra-like virus," he said. The hospital, Prof. Lam said, started treating patients with the drug from Friday and would only know whether it worked if the patients' conditions did not deteriorate.
"The seven-day regime treatment with the drug costs about RM3,000 and the hospital is currently footing the bill," he said. Prof. Lam also said the potential side-effects of the drug included anaemia, but the recovery of the patients outweighed the side-effects. He said since the outbreak, 39 victims from the Bukit Pelanduk area had been admitted into the hospital. Of this, six had since died but seven had been sent home after treatment proved successful. [etiology unstated - Mod.CHC
He also said Dr Chua Kaw Bing from the UH, who had isolated the Hendra-like

virus, had gone to the United States to confirm the isolated agent and the result would be known in a few days.
He said experts from Australia and the Centres for Disease Control (CDC) in the United States would be here next week to help study the virus. The experts, said Prof. Lam, had also developed a test kit to determine how common the illness was.
However, he refuted claims that the virus was transmitted from horses, saying a study in Australia which tested 200 people who handled horses infected with the virus showed that they did not get infected. [The first person to die with Hendra virus infection in Queensland had shoved a bolus of food down the throat of a horse that subsequently died of Hendra virus. - Mod.CHC
Pork consumption also does not appear to transmit the virus, while butchers and housewives who handle pork do not get infected, he said [Huh? - Mod.CHC.
"Culling the pigs is a good way of breaking the chain of transmission. However, people should continue taking vaccination for JE," he said.
Meanwhile, Deputy Education Minister Datuk Dr Fong Chan Onn said the ministry was trying its best to help overcome the current crisis. He said he was grateful that hospital staff were able to identify the new strain of the virus within a short time. "We will continue to do our best to help the Health Ministry," he said.
--
Gregory K. Folkers, M.S., M.P.H.
National Institute of Allergy and Infectious Diseases
National Institutes of Health
Bethesda, MD 20892
TEL: 301-496-2263
FAX: 301-496-4409
e-mail: gfolkers@nih.gov
[Administration of ribavirin to protect against a member of the family Paramyxoviridae may not be as expensive as administering that drug to protect against, for example, infection with Lassa virus as the routes of administration may differ. - Mod.CHC
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....calisher/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##



Published Date: 1999-03-24 23:50:00
Subject: PRO/AH> Hendra-like virus? - Malaysia (08)
Archive Number: 19990324.0461

HENDRA-LIKE VIRUS? - MALAYSIA (08)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Hendra-like virus? - Malaysia: RFI 990319071030
Hendra-like virus - Malaysia, Singapore (02) 990319150639
Hendra-like virus? - Malaysia (02) 990319084147
Hendra-like virus? - Malaysia (03) 990320102717
Hendra-like virus? - Malaysia (04) 990321185237
Hendra-like virus? - Malaysia (05) 990322001253
Hendra-like virus? - Malaysia (06) 990323085655
Hendra-like virus? - Malaysia (07) 990323222201
Date: Tue, 23 Mar 1999 18:08:21 +0800
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: Star Online, 20 Mar 1999

The outbreak of Japanese encephalitis [JE has pushed the demand for wild boar meat in Pahang [a state on the east coast of Peninsular Malaysia - Mod. CYC. Checks of the markets [in Kuantan revealed that wild boar meat were being sold out as soon as they were put up for sale.
One pork seller said a kilogram of the meat was being sold between RM6 and RM7, compared with RM3 and RM4 last year. He added that the demand for the meat had been overwhelming, as it was the alternative to [domestic pigs.
"Although we have told buyers that it is safe to eat pork, they are skeptical," he said.
[Are wild boars carriers of any known infectious agents? - Mod. CYC
[Wild boars are hosts of various parasites and may harbor ticks infected with viruses but that could be the least of the problems associated with increased "harvest" of wild animals. - Mod.CHC
****
[2
Date: Tue, 23 Mar 1999 18:08:21 +0800
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: New Straits Times, 22 Mar 1999 [edited

The Health Ministry has advised all persons handling pigs or pork to wear masks, gloves and protective overalls as the new strain of virus [Hendra-like virus is transmitted through direct contact. Deputy Director-General of Health (public health) Datuk Dr Abdul Aziz Mahmood said the virus could be spread through bodily fluids, blood and secretions of the animal. He said the rule should be observed by those involved in transporting pigs or pork, abattoir workers and even those selling pork.
"Those coming in contact with pigs or pork should take the necessary

precautions and play it safe ....this is serious advice," he told a press conference at the Japanese encephalitis operations centre at the Health Ministry [Sunday afternoon.
Also present were University of Malaya's Head of [Medical Microbiology Professor Lam Sai Kit and Director of Epidemiology and Veterinary Medicine at the Veterinary Services Department, Dr Abdul Aziz Mangkat. Although there have been no new JE cases, Dr Aziz said 48 patients were recuperating in hospitals. A total of 136 people have been infected by the virus and 64 deaths reported. [There were laboratory confirmed JE cases among the 136 people as stated by the Health Ministry; thus not all cases were due to Hendra-like virus, as implied here. - Mod.CYC.
"Because it (the new strain) is unknown, we have to treat it with great respect," Lam said. He said the experts [from Centers for Disease Control and Prevention would also bring with them kits to test the virus. He said a biohazardous microbiology laboratory had been upgraded for the tests to be carried out. Lam said the laboratory would comply with international safety standards and would have a safety rating standard of P3.
[Any such protective clothing should either be disposable or sterilizable. By "implied here", Dr. Chan means "in this report", not "in ProMED-mail". Does anyone know whether there have been laboratory infections with this Hendra-like virus? - Mod.CHC
****
[3
Date: Mon, 22 Mar 1999
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: New Sunday Times, 21 Mar 1999 [edited

Experts at University Hospital [on Friday began treating victims of the new Hendra-like virus with a drug which is now being used to treat another virus that attacks the respiratory system. The experts are not sure whether the US drug, called ribavarin, will be effective in treating this new virus but it has been used to effectively treat the respiratory syncytial virus (RSV). "At present, we do not know enough about the Hendra-like virus, therefore we do not know if it will work. We have to try. The new virus we found and the RSV are in the same [virus family. The drug inhibits the growth of RSV and we hope it will do the same for the Hendra-like virus," University of Malaya's Head of Medical Microbiology Department Professor Lam Sai Kit said. The only problem is that the drug has a side effect as it can cause anaemia. "But we thought at this stage where the illness is causing more suffering that we have to try it. The benefits far outweigh the side effects," said Lam.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....calisher/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.



Published Date: 1999-03-25 23:50:00
Subject: PRO/AH> Hendra-like virus? - Malaysia (09)
Archive Number: 19990325.0462

HENDRA-LIKE VIRUS? - MALAYSIA (09)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Hendra-like virus? - Malaysia: RFI 990319071030
Hendra-like virus - Malaysia, Singapore (02) 990319150639
Hendra-like virus? - Malaysia (02) 990319084147
Hendra-like virus? - Malaysia (03) 990320102717
Hendra-like virus? - Malaysia (04) 990321185237
Hendra-like virus? - Malaysia (05) 990322001253
Hendra-like virus? - Malaysia (06) 990323085655
Hendra-like virus? - Malaysia (07) 990323222201
Hendra-like virus? - Malaysia (08) 990324091037
[I have combined a number of disparate messages in one. At most, it can be said that they are all related to the mixed Japanese encephalitis virus/Hendra-like virus epizoodemic in Malaysia. I trust our subscribers will read them as such and not draw any conclusions as to relationships between them. - Mod.CHC
[1
THAI RESPONSE
Date: Tue, 23 Mar 1999 20:14:04 -0500
From: Marjorie P. Pollack <pollackmp@mindspring.com>
Source: Xinhua News Agency, 22 Mar 1999 23:04

Thai officials claimed that the country's southern provinces, bordering Malaysia, are free of the deadly Japanese encephalitis virus, the Bangkok Post reported Tuesday. The newspaper quoted Suwithaya Pollarp, Livestock Department director-general, as saying that no report was received so far about human or animal ailments resulting from Japanese encephalitis [virus infection. But he also said that the country has beefed up its security inspections at border provinces in the south to prevent an outbreak of the disease, which has claimed at least 53 lives in neighboring Malaysia.
The outbreak of the disease has resulted in plummeting prices of live animals in Malaysia. The price of live pig is quoted at 38 baht (1.02 U.S. dollars) per kilogram, compared with 48 baht (1.29 dollars) per kilogram in markets in the southern provinces of Thailand.
The Livestock Department has informed governors in border provinces to keep a close watch, for fear that price differences could entice animal and carcass smuggling to Thailand.
It is reported that although aware of the disease, pork consumption in the southern provinces does not appear to have fallen yet. Some 15,000 live animals are delivered to market in the southern provinces every month.
Last week, Thai authorities banned the import of pork from Malaysia, following a similar decision by Singapore.
[No mention made of the Hendra-like virus. - Mod.CHC

******
[2
PHILIPPINE RESPONSE
Date: Tue, 23 Mar 1999 20:24:05 -0500
From: Marjorie P. Pollack <pollackmp@mindspring.com>
Source: Xinhua News Agency; 23 Mar 1999 01:25

The Philippine government will impose a total ban on the import of pigs and pork from Malaysia and its neighboring countries within the next 21 months. National Meat Inspection Commission (NMIC) Executive Director Edgardo Dimalanta said in an interview the ban will be made effective during the period to protect the local livestock industry and consumers from pig-related Japanese encephalitis (JE) viral disease.
Dimalanta said agriculture regional offices and quarantine officers of the Bureau of Animal Industry will also closely monitor all ports to ensure Malaysian pigs and pork could not enter the Philippines. These measures will be undertaken by the government while Malaysia is addressing the outbreak of the JE disease, including fogging and vaccination of people and pigs, he said.
Dimalanta said Malaysian pigs and pork will be only allowed from coming into the country once there is already an official declaration from International Organization of Animal Diseases these are already safe for consumption.
The official said the government has also to conduct a risk analysis of the disease once Malaysia applies as exporter of pigs and pork in the country. The Philippines so far has no importation of such products from Malaysia. It now only ships in pigs and pork from Europe, Australia, Denmark, France, Holland and Canada.
[Why 21 months and not, say, 20 or 22? Still no mention of the Hendra-like virus. When this is all over, someone surely will have to estimate the economic cost of this epizoodemic, including that cost component resulting from delayed accurate diagnosis. - Mod.CHC
****
[3
MALAYSIAN NEWSPAPER HIGLIGHTS - MARCH 23, 1999
Source: Asia Pulse; 22 Mar 1999 22:04

KUALA LUMPUR: An exercise to vaccinate 360,000 pigs in Negri Sembilan, Selangor and Perak got under way today to curb the spread of the Japanese encephalitis virus as authorities continued culling in the three major outbreak areas of Bukit Pelanduk, Kampung Baru Sungai Nipah and Kampung Sawah.
THE STAR - KUALA LUMPUR: Malaysia and Thailand will launch a joint border patrol operation on Thursday to curb cross-border smuggling. Defence Minister Abang Abu Bakar Abang Mustapa said today the operation would be based at Pengkalan Hulu in Perak. ALOR STAR: Prime Minister Dr Mahathir Mohamad today called on the people to be mindful of "Greeks bearing gifts", saying that foreigners were still trying very hard to undermine the country.
[Personally, I'd be fascinated knowing to what this alludes. Sounds a bit paranoid to me but I do not keep up with internal or external Malaysian affairs. - Mod.CHC
KUALA LUMPUR: Health Minister Chua Jui Meng assures that burial of pigs at designated places in JE-high risk areas will not result in pollution of water resources as they are not water catchment areas. Nevertheless, pig culling squads were told to exercise care when disposing pigs' carcasses to minimise pollution. Meanwhile, Chua also says culling of pigs will be expedited as more army and police personnel will be despatched to speed up the work.
BERITA HARIAN - KUALA LUMPUR: Meanwhile, Chua Jui Meng also says the new Hendra virus will not be easily infected. Consumers and housewives could still handle pork in the normal way. So far there is no report indicates that the new virus could be transmitted [to humans through close contact with pork.
KUALA LUMPUR: As [of 6 p.m, March 21, nine more people from Negeri Sembilan were admitted to hospitals for suspected JE disease. One of the

victims died [at admission. Meanwhile, another pig farmer from Bukit Pelanduk died in the University Hospital yesterday, bringing the death toll to 36.
KUALA LUMPUR: Another 7,625 pigs were killed on the third day of pig culling exercise bringing the total number of animals killed to 13,038 so far.
CYBERJAYA: It is not possible for the government to compensate pig farmers for the pigs destroyed. Nevertheless, arrangement could be made for a special lottery draw to help raise fund for them. Dr Mahathir says the pressing task ahead is to curb the spread of the JE and destroy all infected pigs.
KUALA LUMPUR: Health Minister Chua Jui Meng says work to vaccinate residents from JE-high-risk areas was hampered because pig farmers, farm workers and Muslims in the nearby vicinity were reluctant to have themselves vaccinated. He urges people not to listen to rumours but go for inoculation for their own safety.
KUALA LUMPUR: Dr Mahathir says the government's decision to allow special lottery draw was not to compensate farmers, but merely to help them pull through the current difficult time. He reiterates that it is impossible for the government to compensate farmers for each and every pig killed.
KUALA LUMPUR: Other than Pulau Pinang which had unilaterally banned movement of horses into the state, no other states imposed similar ruling. Director of health and epidemic unit of the Veterinary Services Department Dr Abdul Aziz says the department has no plan to conduct check on horses as it is inadvisable to take hasty action before one knows more about the new strain of virus.
[The Hendra-like virus is one newly discovered, therefore must be a newly discovered strain. It is not a new strain of JE virus because it is not at all related to JE virus. - Mod.CHC
****
[4
Date: Wed, 24 Mar 1999 12:25:28 -0500
From: Marjorie P. Pollack <pollackmp@mindspring.com>

Found this AP release on the NY Times website today. First time it's in the forefront as a top story release on the front page of the NY Times.
<http://www.nytimes.com/aponline/i/AP-Malaysia-Killer-Virus-html>
[This story also confuses JE virus and the Hendra-like virus. - Mod.CHC
****
[5
Date: Thu, 25 Mar 1999 12:06:49 -0300
Source: media, Wed 24 Mar 1999

According to the health ministry, the death toll rose to 58 as of late Tuesday, with another two deaths from a village in southwest Negeri Sembilan. The virus first broke out in pig farms in the northern state of Perak in October and was reported to have killed 15 people there before spreading to Negeri Sembilan two months later.
Up to Sunday, 62,771 people had been vaccinated, 139,571 houses and 7,149 farms disinfected while 5,626 pig farms were inspected. More than 2,000 people have left their homes since the outbreak of JE, which is spread by mosquitoes but harboured in pigs, began.
Health authorities said only 18 of deaths were so far confirmed to have been caused by the JE virus, which causes inflammation of the brain. Another encephalitis strain called "Hendra" -- discovered in 1994 when it struck horses and humans in Brisbane, Australia -- has been found in some patients. The Star newspaper said all 62 patients in hospitals nationwide would be treated with the anti-viral ribavirin drug.
Eight members of the Atlanta-based Centers for Disease Control (CDC) and two Australian experts have been called in to help curb the epidemic. So far, CDC veterinary surgeon Tom Ksaizek and Australian animal health laboratory project leader Hume Field have arrived.
Soldiers Wednesday continued the pig slaughter for a fifth day in three villages in Negeri Sembilan. Around 327,000 animals are to be destroyed. The culling operation resumed on Wednesday morning. Authorities had sent in

more troops on Tuesday and killed 6,770 pigs. This brought to 19,814 the tally of pigs killed since the operation began on Saturday. Authorities had planned to shoot about 35,000 pigs a day over 10 days.
The pig rearing industry, which earns 1.5 billion ringgit (US$395 million) a year and employs some 300 000 people, has been crippled by the epidemic as pork sales have slumped by nearly 70 percent.
[Still confusing JE virus and Hendra virus. My supicion is that this confusion will be resolved within a short period of time, now that the Australian and U.S. consultants have arrived to assist Ken lam and others working on this epizoodemic problem. - Mod.CHC
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....jw/calisher/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-03-27 23:50:00
Subject: PRO/AH> Hendra-like virus? - Malaysia (11)
Archive Number: 19990327.0484

HENDRA-LIKE VIRUS? - MALAYSIA (11)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Hendra-like virus? - Malaysia: RFI 990319071030
Hendra-like virus - Malaysia, Singapore (02) 990319150639
Hendra-like virus? - Malaysia (02) 990319084147
Hendra-like virus? - Malaysia (03) 990320102717
Hendra-like virus? - Malaysia (04) 990321185237
Hendra-like virus? - Malaysia (05) 990322001253
Hendra-like virus? - Malaysia (06) 990323085655
Hendra-like virus? - Malaysia (07) 990323222201
Hendra-like virus? - Malaysia (08) 990324091037
Hendra-like virus? - Malaysia (09) 990325203401
Hendra-like virus? - Malaysia (10) not yet archived
[1
Date: Fri, 26 Mar 1999 11:24:20 -0500
From: Marjorie P. Pollack <pollackmp@mindspring.com>
Source: various Malaysian newspaper highlights (edited), 26 Mar 1999 (many repetitive)

Found this summary of Malaysian Newspaper Highlights from The Asia Pulse.
Will killing of all the pigs in the affected area stop the transmission of both JEV and the Hendra-like virus? What about other intermediary hosts and the population of infected Culex (JEV). The use of CO instead of more blood-splattering techniques should theoretically reduce the potential contact of humans with bodily fluids (Hendra-like virus), but are the pigs the primary hosts?
A buffer zone to contain the spread of Japanese encephalitis virus will be drawn up around the areas affected by the outbreak in Negri Sembilan. All pigs within the zone will be destroyed using carbon monoxide.
****
[Through the kindness of many of our subscribers, ProMED-mail has received numerous newspaper, BBC, and NY Times "reports". Because they are so inaccurate and add nothing to the dialogue, I cannot in good conscience post them. A report from the Philippines compares Japanese encephalitis (JE) with foot and mouth disease, other reports call the Hendra-like virus a "strain" of JE virus, and so on. With such irresponsible and ignorant reporting it is no wonder these stories and the attendant panic are self-propagating. See following message. - Mod.CHC

[2
Date: Sat, 27 Mar 1999 00:20:39 -0500
From: Dan Goldberg <dsgoldberg@mail.wesleyan.edu>
Source: Nando Global News, 26 Mar 1999

Malaysian authorities are expected to expand a pig culling campaign to another state as fears grow over the spread of deadly Japanese encephalitis and a second virus linked to pigs. Health officials said another person has died of suspected encephalitis in the worst-hit central state of Negeri Sembilan, bringing the total number of deaths blamed on the disease to 63. The national Bernama news agency reported some 500 soldiers will begin killing more than 10,000 pigs in Perak state where the outbreak of encephalitis, carried by mosquitoes from pigs to humans, began in October. The soldiers will join a 2,000-strong pig culling team that has been shooting thousands of pigs in Negeri Sembilan daily since last week. Veterinary department officials, with the help of foreign experts, examined dozens of dead pigs in a pig-breeding region in central Selangor state, several miles away from the country's new international Kuala Lumpur airport. Petrified residents have been fleeing the pig-rearing village in Sepang near the airport, fearing that an outbreak of encephalitis and a second mysterious virus may be creeping near the capital. Troops in protective gear and masks killed about 25,000 pigs in Negeri Sembilan on Friday, bringing to 95,124 pigs the total killed so far. It was not clear whether a plan to gas pigs en masse to speed up the planned culling of some 350,000 pigs had materialized on Friday. Officials were not immediately available for comment. Health officials said 11 other people were admitted into hospitals for treatment of suspected encephalitis, bringing the total cases of infections to 182.
Deaths in pig-farming regions had long been linked to encephalitis. But health director-general Abu Bakar Suleiman said on Friday that only 18 people were confirmed to have died from encephalitis, and the rest could have been infected by a second virus that authorities know almost nothing about.
Health experts from the United States, Australia and Taiwan have arrived in Malaysia to help study the second virus, believed to be related to the Hendra virus carried by fruit bats. It killed two people and 15 horses in Australia during outbreaks in 1994 and 1995.
****
[3
Date: Sat, 27 Mar 1999 17:49:07 +0800
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: BERNAMA, 26 Mar 1999

[The following advice was given by the Malaysian Director-General of Health on what to look for in pigs infected by the Hendra-like virus. This is the first official description of the clinical signs of infected pigs. See earlier posting on unofficial descriptions
Pig farmers and pig-farm workers have been advised to watch out for unusual disease signs in pigs like sows with heavy breathing or loud coughing in great distress which can be heard far away, followed by death.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....calisher/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org



Published Date: 1999-03-27 23:50:00
Subject: PRO/AH> Hendra-like virus? - Malaysia (10)
Archive Number: 19990327.0475

HENDRA-LIKE VIRUS? - MALAYSIA (10)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Hendra-like virus? - Malaysia: RFI 990319071030
Hendra-like virus - Malaysia, Singapore (02) 990319150639
Hendra-like virus? - Malaysia (02) 990319084147
Hendra-like virus? - Malaysia (03) 990320102717
Hendra-like virus? - Malaysia (04) 990321185237
Hendra-like virus? - Malaysia (05) 990322001253
Hendra-like virus? - Malaysia (06) 990323085655
Hendra-like virus? - Malaysia (07) 990323222201
Hendra-like virus? - Malaysia (08) 990324091037
Hendra-like virus? - Malaysia (09) 990325203401
From: M. Vadivale <vale@pop.jaring.my>
Date: Sat, 27 Mar 1999 08:18:02 +0800
Source: media reports (edited)

A new virus may be responsible for most of the 62 deaths in a pig-borne encephalitis outbreak in Malaysia, health officials and foreign experts said Friday. They said only 18 deaths were confirmed to be from Japanese encephalitis (JE) while the rest may have been caused by a new virus [related to Hendra virus, named after a suburb in Brisbane, Australia where it was identified in 1994.
"I would assume that the rest of the cases which are JE-negative may be caused by the new virus," health ministry director-general Abu Bakar Sulaiman told a news conference. "We are still investigating."
[Dr. Thomas Ksiazek, veterinary surgeon for the Atlanta-based Centers for Disease Control, described the new virus as a "close relative" but "certainly distinct" from the Hendra strain, which affected both horses and humans in the Australia outbreak. "We are dealing with a new situation. It is a new virus that is not exactly like Hendra," said Ksiazek, who arrived Monday as part of a team of foreign technical advisors invited by the government. The team, which also includes two Australian experts, would help in laboratory investigation and diagnosis of the new strain, he added.
Based on the Australian experience, Ksiazek said the Hendra virus was not a "horse disease" but was spread by fruit bats and rarely transferred to livestock. Abu Bakar said the government was investigating the population and movement of fruit bats but noted that past cases showed that the Hendra virus was relatively difficult to transmit. He said JE virus, which is carried by mosquitoes, was much harder to control than the new [virus, which is spread through direct contact with the faeces of infected animals or their body fluids.
Officials said investigations were being conducted on other livestock to ensure that the virus did not spread beyond pigs.

The World Health Organisation's regional office for Western Pacific said Friday it was ready to provide technical advice and mobilise additional resources to help battle the outbreak. WHO collaborative institutions were conducting "detailed serological and virological investigations (on samples from Malaysia) that will provide a clearer picture of the dynamics of the current outbreak." "New information indicates that both JE and a second virus are circulating," it said in a statement to Bernama news agency.
The epidemic first broke out in pig farms in the northern state of Perak in October and was reported to have killed 15 people before spreading to Negeri Sembilan state in the southwest two months later.
The encephalitis outbreak has prompted a health scare and crippled Malaysia's 1.5 billion ringgit ($395 million) pig-rearing industry.
Soldiers have so far killed more than 70,000 pigs in four villages in Negeri Sembilan, the health ministry said. The mass culling operation, which started Saturday, aims to kill some 335,000 pigs. Another operation to kill 10,871 infected pigs in five farms in Perak state would begin Saturday, officials said.
Veterinary services department director-general Nordin Mohamad Noor said pig vaccination had been suspended amid fears that the new virus may be spread to uninfected pigs and expose workers.
He said the virus could be contained simply by using soap and water immediately after contact with pigs.
Experts were also investigating the mysterious deaths of 12 pigs at a farm in Sepang in central Selangor state, bordering Negeri Sembilan where the worst-affected villages are located. Reports said some families in Sepang, which has 70 farms and some 80,000 pigs, had moved out amid fears that the disease had travelled beyond Negeri Sembilan.
Malaysia, admitting that it was facing an emergency situation, said Thursday it would create buffer zones around infected pig farms and slaughter all pigs in the zones. As of late Thursday, a total of 66,228 people had been vaccinated and 156,065 houses and 7,732 farms disinfected.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[It is gratifying to see that the Malaysians are getting to the heart of the epidemiologic matter. It will not be easier to end this nightmare. No one knows that simple hand-washing will prevent infection but it certainly cannot hurt to maintain a cleanliness barrier and to avoid or eliminate fomites. - Mod.CHC
.....calisher/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##



Published Date: 1999-03-29 23:50:00
Subject: PRO/AH/EDR> Hendra-like virus - Malaysia (12)
Archive Number: 19990329.0495

HENDRA-LIKE VIRUS - MALAYSIA (12)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
[see also
Hendra-like virus - Malaysia, Singapore (02) 990319150639
Hendra-like virus? - Malaysia (11) 990328000057]
Date: Sun, 28 Mar 1999 21:11:18 +0800
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: BERNAMA, 28 Mar 1999 [edited]

Malaysia´s Health Minister Datuk Chua Jui Meng said the Hendra-like virus that has been confirmed by the Atlanta-based Centers for Disease Control and Prevention (CDC) will be given top priority in terms of prevention, control and treatment.
"But we have to be very clear as we approach this problem that there are two problems. Now the main problem to our mind is the Hendra-related virus. At the same time, we must not forget the preventive and control measures for JE," he said today. Two sets of procedures must be maintained to check the viral outbreak, said Chua, a member of the task force.
"We do not know much at this moment about the Hendra-related virus. In terms of public health, in terms of preventing people from getting infected, we assume the worst-case scenario," he told reporters.
The task force has accepted the five Taiwanese experts' recommendations that detergents be spread all over the pig pens in Bukit Pelanduk, Sungai Nipah, Kampung Sawah and Sepang.
"Workers must wash their clothes with detergent, they must wash their hands, bathe themselves with soap... cleanliness is very important because the CDC has confirmed that this virus is killed by soap and detergent," he said.
He said intensive publicity had been given on the steps to control JE and the same was being done for the Hendra-like virus.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....calisher/jw

##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****



Published Date: 1999-03-30 23:50:00
Subject: PRO/AH/EDR> Hendra-like virus - Malaysia (14)
Archive Number: 19990330.0511

HENDRA-LIKE VIRUS - MALAYSIA (14)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
[see also
Hendra-like virus - Malaysia (12) 990329201102
Hendra-like virus - Malaysia (13) (not yet archived)]
Date: Mon, 29 Mar 1999 16:25:58 -0800
From: <bernie@whidbey.net> and <pollackmp@mindspring.com>
Source: Media, 29 Mar 1999 (edited)
[The previous posting on ProMED-mail contained some of this information but not all. It is worth noting that the Malaysian government is hoping that ribavirin will be as useful as it appears to be (we all do) but, at the same time, is recommending vaccination, one assumes with Japanese encephalitis (JE) vaccine, for people who have symptoms of high fever and dizziness. The [brackets] below contain my comments. - Mod.CHC]

Malaysia struggled on Monday to determine the origin of a newly detected virus which, along with another discovered six months ago, has killed 63 people in the central pig-breeding region. Health authorities said they knew little about the new virus except that it was similar to Hendra virus, a member of the Paramyxo [Paramyxoviridae] family, which caused the deaths of two people and 15 horses in Australia in 1994-95.
The new virus causes symptoms similar to those caused by JE virus, which was first detected in Malaysia in October and was also harbored in pigs, officials said. [Pigs were not found dying of JE virus last October.] Japanese encephalitis virus is transmitted by mosquitoes and is marked by high fever, headaches, dizziness, convulsions and loss of consciousness leading to death if untreated [and sometime even if treated]. But the new virus is different in that it was believed to be spread by direct contact. It can, however, be killed by soap, detergent and disinfectant.
Authorities said they had no idea where the new strain came from or how to wipe it out. The Malaysian Minister of Health indicated that the Government is trying to answer questions regarding origin of the virus, route of transmission, and pathogenicity for animals other than pigs. In that way, he suggested, it might be possible to improve control efforts.
The discovery of the new strain 10 days ago has complicated efforts to battle the viral epidemic which has prompted a health scare in two central regions. Authorities initially blamed the deaths on Japanese encephalitis, which is endemic in Malaysia and many other Asian countries.
In an effort to contain the outbreak, authorities have killed 139 000 pigs of a target population of about a million. Other efforts have focused on vaccinating residents and pigs against [JE], and spraying the two regions where the outbreaks occurred to kill _Culex_ mosquitoes, which transmit [JE] from pigs to humans. But the presence of the Hendra-like virus required a fresh strategy as it is believed to be transmitted by direct contact with live, sick pigs.
Fewer than one third of the 63 deaths have been confirmed as encephalitis cases and authorities have blamed the new virus for at least some of the deaths.

The epidemic has harmed the country's lucrative pig business and posed political headaches to the government. Sales of pork have dropped 70% while a ban of Malaysian pork imports by Thailand, Singapore and the Philippines has badly hit the 1.5 billion ringgit ($395 million) industry. Live pig exports are valued at 400 million ringgit a year. Almost all pig farmers and consumers belong to the ethnic Chinese minority, who eat pork, but the majority Muslim Malays, who make up more than half the 22 million population, revile the animal, which Islam considers unclean.
Authorities have said that the best weapon against the [Hendra-like] virus so far seemed to be found in simple cleansing solutions, such as soaps and disinfectants.
A team of eight experts from Atlanta's Centers for Disease Control and Prevention is now on site. They are working with experts from [Malaysia], Australia and Taiwan to help find ways to fight the epidemic. The U.S. experts brought sophisticated equipment and have set up a makeshift laboratory at a government hospital to study the new virus.
Authorities hope that ribavirin would be as effective in battling the new virus.
The minister urged those with symptoms of high fever and dizziness to get vaccinated at once. The government has prepared to jab 250 000 people but only about 65 000 had come forward until Friday.
The Health Ministry issued a list of precautionary measures to those working in the pig-breeding industry, asking them to be covered head to toe and to use soap liberally, and released a statement on Monday listing precautionary measures for the nation's estimated 300 000 pig farmers as well as thousands of farm helpers, truck drivers and slaughterhouse workers. It advised the use of eye goggles, face masks, boots, plastic aprons, and water-proof gloves when handling pigs. It also recommended refraining from treating or touching sick animals, and suggested spraying disinfectant on dead pigs.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....calisher/jw

##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-03-30 23:50:00
Subject: PRO/AH/EDR> Hendra-like virus - Malaysia (13)
Archive Number: 19990330.0508

HENDRA-LIKE VIRUS - MALAYSIA (13)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
[see also
Hendra-like virus? - Malaysia: RFI 990319071030
Hendra-like virus - Malaysia, Singapore (02) 990319150639
Hendra-like virus - Malaysia (12) 990329201102]
Date: 30 March 1999
From: Charles H. Calisher, Virus Diseases Moderator, ProMED-mail
Source: Star web site <http://www.jaring.my/~star/current/news.html>
[paraphrased by Mod CHC, with comments]

The pace of the Hendra-like virus epidemic in Malaysia does not appear to be slowing. According to the Star newspaper, five more people have died in Negri Sembilan. The report des not say whether they died from infection with Japanese encephalitis (JE) flavivirus or from the newly recognizd Hendra-like paramyxovirus.
CDC personnel have established a high-level biohazard laboratory at the University of Malaysia to handle specimens and to identify isolates of the paramyxovirus and to conduct studies to determine the mode of transmission of this virus to humans.
The general population is being advised to seek immediate medical attention if they are suffering from signs of disease, such as fever, headache or dizziness. Apparently, ribavirin is being used successfully but only if this antiviral drug is administered in the early stages of illness.
The Star newspaper provides information to farmers, truck (lorry) drivers, and abbatoir workers regarding procedures to be used for self-protection from the Hendra-like virus.
This newspaper report has a link to the Malaysian Department of Public Health website, which provides a table showing number of cases and number of deaths by state. However, the table provides information only regarding suspect JE cases (166), confirmed JE cases (42), total number of cases (208), and number of deaths (71). It is, therefore, unclear as to how many cases of the Hendra-like virus have been diagnosed and how many of those might be included in this table. Informal communications suggest that most patients have been infected with the Hendra-like virus, rather than with JE virus. This is yet to be confirmed.
There is concern on the part of all involved regarding the possibility of a laboratory accident leading to an infection. Two people may possibly have had finger-sticks with clinical material containing the Hendra-like virus; they are being watched closely for signs of illness.
This appears to be a very nasty virus infection. Most hospitalized patients are encephalitic, few have respiratory involvement as a principal sign. It is not surprising that illnesses caused by the two viruses are confused.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....calisher/jw

Published Date: 1999-03-31 23:50:00
Subject: PRO/AH/EDR> Hendra-like virus - Malaysia, Singapore: Fact sheet (02)
Archive Number: 19990331.0516

HENDRA-LIKE VIRUS - MALAYSIA, SINGAPORE: FACT SHEET (02)
****
**
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
[see also
Hendra virus - Malaysia, Singapore: Fact sheet 990319121923
Hendra-like virus? - Singapore 990327204906
Hendra-like virus - Malaysia, Singapore (02) 990319150639
Hendra-like virus - Malaysia (13) 990330195710
Hendra-like virus - Malaysia (14) 990330204516]
Date: Wed, 31 Mar 1999
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: Berita MMA vol 29 No 3, March 1999 ex Vads Corner
(http://www.geocities.com/HotSprings/2188/index.html)
[The following factsheet written by the discoverers of the Hendra-like virus provides background that is essential to the understanding of the current viral encephalitis outbreak in Malaysia. The article, which includes an electron micrograph of the virus, has been shortened and edited; my apologies to the authors. Those interested in the entire article can check the website above. - Mod.CYC]
Factsheets about a new paramyxovirus isolated during the viral encephalitis outbreak in Negri Sembilan
---
During the current outbreak of viral encephalitis in Negri Sembilan, there was evidence that another agent [was] involved. Unlike known JE [Japanese encephalitis] outbreaks which affect mainly children, this outbreak involved mainly adults working in pig farms. Many well-spaced acute and convalescent [serum] samples were negative for JE serologically and there were cases even in those who had received full immunization with mouse brain-derived inactivated JE vaccine. In addition, there were anecdotal accounts of pigs dying, another piece of useful information to alert us of the possibility of another agent, not JE [virus].
A virus which gives rise to severe syncytial formation in Vero cells was isolated from the cerebrospinal fluid of 12 patients with viral encephalitis. This virus, isolated in the Department of Medical Microbiology, University of Malaysia, was taken to the Centers for Disease Control and Prevention (CDC), Atlanta, USA. Preliminary evidence showed that it is possibly a new paramyxovirus related to [the] Hendra virus [of Australia].
This new Malaysian paramyxovirus was first tested in CDC, Fort Collins, and found not to be related to any known arboviruses. In addition, reverse-transcriptase polymerase chain reaction using consensus primers directed against alphaviruses, flaviviruses and bunyaviruses were negative. Also at CDC, Fort Collins, electron microscopy on a grid of infected cells prepared in the University of Malaysia showed foci of thickening plasma membrane with hairy-like projections suggestive of virus morphogenesis at the cell membrane. The virus appears as pleomorphic, enveloped particles (spherical and elongated) of 200 to 300+ nanometers, and helical

nucleocapsids were noted within the envelope. Multinucleated cells were prominent and the nuclei appear normal. The virus particles are compatible with paramyxoviruses and cross-react with Hendra virus antibody by immunofluorescence. CDC Atlanta has developed a serological test for IgM [antibody] to Hendra virus and a number of serum samples from the current outbreak have been shown to be positive.
Preliminary results showed that this new Hendra-like virus is the major cause of the viral encephalitis outbreak in Negri Sembilan. [Given that it is] a new virus, we can ony [assume] that it shares certain properties with the Australian Hendra virus. Further characterization of this virus is on-going in CDC and in the University of Malaysia.
It is hoped that the various preventive measures undertaken by the government will be effective to curb the spread of this outbreak which has, to date, claimed over 60 lives and ruined the pig industry.
--
Dr Chua Kaw Bing and Prof Lam Sai Kit
Department of Medical Microbiology
Faculty of Medicine
University of Malaya
Kuala Lumpur
29 March 1999
[Obviously this is a definitive report. We are all grateful to Dr. Ken Lam and Dr. Chua Kaw Bing for having taken the time from their exceedingly busy work-load to provide this background and preliminary information. We are continuously grateful to Dr. Muruga Vadivale for maintaining his web page. Now that the entire team is in place and the etiologic agent is being investigated, we can await updates on numbers of cases and watch with fascination as this emerging disease is controlled and documented. Congratulations to all involved. Those of us who have worked under conditions in which the public, government, and fellow scientists want results "yesterday" can understand the immense personal and scientific pressures that are brought to bear. - Mod.CHC]
.....calisher/jw

##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-04-10 23:50:00
Subject: PRO/AH> Nipah virus (Hendra-like) prevention - Malaysia: horses
Archive Number: 19990410.0592

NIPAH VIRUS (HENDRA-LIKE) PREVENTION - MALAYSIA: HORSES
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Hendra-like virus, prevention - Indonesia 990404210321
Hendra-like virus, prevention - Taiwan 990402165455
Hendra-like virus, prevention - Thailand 990405120523
Nipah virus (Hendra-like) - Malaysia today
[1
Date: Fri, 9 Apr 1999 16:49:29 +0800
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: New Straits Times, 9 Apr 1999 [edited

The Veterinary Services Department [Malaysia has banned the movement of horses in the country, directing that the animals be screened for [Nipah virus with immediate effect.
However, races will go on as usual although turf clubs will be entering horses from their own stable only.
Veterinary Services Department director-general Dr Mohd Nordin Mohd Nor said horses at the three Malaysian turf clubs (Selangor, Penang and Perak), polo clubs, equestrian and riding clubs, police and armed forces, City Hall and those belonging to individuals, must undergo screening. All costs will be borne by the owners.
[Nipah virus is a member of the Paramyxovirus family and probably related to [Hendra virus discovered in Australia in September 1994, at a Brisbane suburb called Hendra. [That virus first appeared when there was an outbreak of [a respiratory disease in 18 horses and two humans resulting in the death of several horses and a human.
Mohd Nordin said horses from Australia and New Zealand would also be required to undergo screening and be certified free of [Nipah virus. "In the interim period, all horses are not permitted to be moved [without prior approval from the State Veterinary Services director. He said the horses must be subjected to thorough clinical examination by government veterinary officers and any movement must be accompanied by an official "veterinary health certificate" or "inter-states movement permit" issued by the respective state directors of veterinary services. Each horse must receive a complete course of JE [Japanese encephalitis vaccinations using the approved inactivated vaccine," he said.
"The floats or trucks used for transportation of the horses must be thoroughly cleaned and disinfected using the approved disinfectant and fumigated before and after the transportation of the animals." Mohd Nordin said transportation of horses must take place only during office hours or the day.
He said equine-based activities such as racing, polo, and riding within the

establishments was allowed but should only be confined to resident horses in each establishment. No outside horses are permitted. "All stables and equine establishments must be kept clean, free from flies, mosquitoes, rodents and other pests at all times."
Mohd Nordin said veterinarians, club managers or owners of horses must immediately inform the nearest veterinary services department/laboratory if horses show neurological and respiratory difficulty. All deaths of horses or other animals kept in the establishment must be immediately reported ...
Post mortems must be conducted and specimens sent for virus isolation and identification," he said. Mohd Nordin said if checks on horses tested positive for [Nipah virus, the department was empowered to destroy them without compensation.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[Regarding the last sentence, this is a good way to make sure that racehorse & polo pony owners do not report sick horses - Mod.JW
***
[2
Date: Sat, 10 Apr 1999 07:21:34 +0800
From: "Dr.M.Vadivale" <vale@pop.jaring.my>
Source: http://www.bernama.com/bernama/general/ge0904_11.htm
[edited

KUALA LUMPUR, April 9 (Bernama) -- After the culling of nearly a million pigs following the outbreak of the Japanese Encephalitis (JE) and [Nipah virus , the Veterinary Services Department now says horses infected with the deadly viruses may have to be destroyed too.
Its director-general Dr Mohd Nordin Mohd Nor said today the department has sent 1400 blood samples of horses belonging to the Malaysian Racing Association to the Australian Animal [Health laboratory in Geelong, Australia for screening.
" If the samples are positive, maybe action can be taken for destruction (of the horses)," he told a news conference called by Deputy Prime Minister Datuk Seri Abdullah Ahmad Badawi.
Abdullah had earlier chaired the Cabinet Committee meeting on JE. Dr Nordin said the blood samples were taken following claims that the horses might be infected. " This is done to get a clearer picture on whether horses have been infected as there have been much talk about the animals and this has created suspicion among those involved in the equine industry," he said.
Dr Nordin said results of the blood samples, which were sent two days ago, were expected to be known in a week.
He said yesterday that the department had banned all movement of horses and directed establishments and individuals to screen all horses for the Hendra-like virus.
He said the directive issued last Wednesday covered horses at the Selangor, Pulau Pinang and Perak turf clubs, polo clubs, equestrian, riding clubs and including those managed by the police, armed forces, Kuala Lumpur City Hall, spelling stations and those belonging to other organisations and individuals.
Dr Nordin said the second stage would be to send blood samples of horses belonging to polo clubs, equestrian and riding clubs to Australia for screening.
There were about 1800 horses in Malaysia, incurring about RM3,000 a month in maintenance and training costs. " Since, it is an expensive industry, horse owners have been very self-regulatory in maintaining the horses' health and hygiene," [a local veterinarian said. He said the ban would also affect the performance of racing horses since they would be having more rest days. It would also have an impact on the local tourism industry as less horse racing would result in less travelling and spending of money by racing fans.
Meanwhile, the National Stud Farm in Tanjung Rambutan, Perak, the only horse-breeding farm in Malaysia, had stopped movement of its horses recently and was waiting for the blood sample results of its horses from Australia.
Its Senior Mananger for Horse Industry Development Dr Ho Boon Chan said the

farm, which has been breeding horses for the past 29 years, had been self-regulatory in maintaining hygiene and health of its horses. He said imported horses would be quarantined for 14 to 30 days and subjected to thorough observations apart from being vaccinated against horse flu and JE. Dr Ho said since the outbreak, the farm which has 174 horses, has not recorded any JE or [Nipah virus [disease among the animals and its staff.

--

ProMED-mail

e-mail: promed@usa.healthnet.org

[We suppose these are sensible precautions, but emphasize that Nipah virus is different from the Hendra virus that killed horses & 2 people in Australia, and very different from JE virus - Mod.JW

.....calisher/jw

--

##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-04-12 23:50:00
Subject: PRO/AH> Nipah virus (Hendra-like), natural history
Archive Number: 19990412.0608

NIPAH VIRUS (HENDRA-LIKE), NATURAL HISTORY
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
[see also
Hendra-like virus, natural host 990403155006
Hendra-like virus, natural host (02) 990404210253
Hendra-like virus, natural host (03) 990407224432
Hendra-like virus, natural history (04) 990407225433]
[1]
Date: Wed, 7 Apr 1999 22:38:15 -0700
From: Merritt Clifton <anmlpepl@whidbey.com>

Most fruit bats are highly specialized feeders, which normally eat just a narrow range of fruits and don't tend to come to the ground or come into much contact with other species who don't eat the same things. They do of course fall to the ground dead and could be eaten by pigs -- but that could have been going on for centuries, and this Hendra-like virus hasn't (apparently) been at large before, though it's possible it has and just was not recognized as such.
Accordingly, were I in Malaysia looking for the source of the disease, I would be searching for something that suddenly increased the amount of contact between pigs and fruit bats -- and then I'd start checking the particular type(s) of fruit bats involved.
For example, we know that much of Malaysia was ravaged by drought and forest fires in 1997-1998. Was one outcome that certain types of fruit bats lost their primary food source and have turned to something commonly fed to pigs? Ground-fallen orchard fruit and over-ripe market fruit make up much of the diet of pigs in India and Latin America, as I've recently seen; I expect it's the same in Malaysia. If you have fruit bats now mingling with the pigs to get that fruit, who formerly didn't, the case may be cracked.
Likewise, if you have insectivorous bats who specialize in a particular type of fruit fly, and have had to move into proximity to pigs, you may have a suspect -- but I'd think, from the Australian Hendra virus episode, that fruit bats are more likely to be involved.
Figuring out which fruit bats shouldn't be much harder than rigging up a few night cameras to monitor the pig feed piles. 150 of the cameras are already in Malaysia, monitoring possible tiger paths, under direction of Tony Lynam of the New York-based Wildlife Conservation Society.
--
Merritt Clifton
Editor, ANIMAL PEOPLE
e-mail: <anmlpepl@whidbey.com>
[Fascinating hypothesis. Really good epidemiologists investigate all possible avenues. Given that the investigators in Malaysia include really good epidemiologists, I am sure they will take this lead and run with it. - Mod CHC]
***
[2]
Date: Fri, 09 Apr 1999 11:29:18 +1000

From: Paul Prociv <p.prociv@mailbox.uq.oz.au>

The genus _Rousettus_ comprises largish fruit-bats (about the size of the smallest _Pteropus_ species) that also roost in the twilight-zone of caves, but otherwise seem to behave like their larger cousins. The importance of _Rousettus_ is that it extends all the way across southern Asia into Africa, where it covers most of the continent, from Egypt down to South Africa, and that it shares parasites with _Pteropus_ (although, enigmatically, there are no _Pteropus_ species on the African mainland).
As lyssaviruses have been found in megachiropterans from Africa, India and Australia, should _Pteropus_ eventually be incriminated as a reservoir of Nipah virus, then it is likely that _Rousettus_ and related genera will also be involved -- or, at least, should be investigated from this angle.
--
Paul Prociv
<p.prociv@mailbox.uq.oz.au>
.....calisher/jw
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-04-14 23:50:00
Subject: PRO/AH> Nipah (Hendra-like) virus - Malaysia (04)
Archive Number: 19990414.0615

NIPAH (HENDRA-LIKE) VIRUS - MALAYSIA (04)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
[see also
Nipah virus (Hendra-like), natural history 990412220834
Nipah virus (Hendra-like) - Malaysia 990410222844
Nipah virus (Hendra-like) - Malaysia (02) 990411105729
Nipah virus (Hendra-like) prevention - Malaysia: h... 990410234339
Nipah virus - Malaysia: unnatural event? 990411212416
Nipah (Hendra-like) virus - Malaysia (03) (not yet archived)]
Date: Wed, 14 Apr 1999
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: Bernama; 13 Apr 1999

The attitude of pig farmers and workers who refuse to wear protective gear when handling the animals makes it difficult to contain the outbreak of the Japanese encephalitis (JE) and Nipah viral infection, Director-Generaal of Health Tan Sri Dr Abu Bakar Suleiman said.
"Curbing the Hendra-like [Nipah] viral infection seems to be more difficult as it is related to an individual's behaviour. To curb the disease, farm workers must wear the specified attire so that they would not be infected by the virus," he told a press conference here [in Kuala Lumpur] today.
He said the Health Ministry had received feedback that there were workers at the pig farms who refused to wear proper attire on grounds that they had been employed in the industry for so long without any problem. "We have to plead with them (the workers) for their own safety," he said. He urged those involved in the pig farming industry including breeders, farm workers, lorry drivers and abattoir workers to wear proper attire. The attire recommended consists of long-sleeved shirt, long pants, face mask, gloves, and boots while the body of the person involved and vehicle used in transporting the animal must be washed with soap. He said employers should also advise their workers to put on suitable attire to ensure that their safety was protected.
On the Nipah virus, he said the actual number of patients infected by the virus had not been ascertained because there were cases of patients who were infected by both the JE and the Nipah virus. "With the emergence of the case of the farm worker in Ipoh (first victim in Perak of the Nipah virus), we
are afraid there may be more cases in other places that we don't know yet," he said. In this context, he urged pig farmers to report to the Veterinary Services Department if they came across any sick animal in their farm.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[I fully understand the difficulties, and sympathise with the Malaysian government in its uphill effort, in trying to get those connected with the pig-farming industry to wear the protective attire and gear not only for their own safety but also for the safety of their family members, friends

and the public. The government must continue to step up its efforts in public health eduction of these workers.
In my own opinion, it is an exercise in futility to continue the discussion of JE versus Nipah in the current outbreak, now that it is recognized Nipah virus plays an important part in causing illness and deaths in man, while at the same time not disputing the presence of JE cases in the outbreak. (JE virus does not cause illness in adult pigs and thus far there has not been any confirmed data on pig deaths caused by JE virus). Numbers of cases and deaths due to both viruses are constantly being revised as more test results become available. However, it is important not to cause further confusion in the report of 'viral encephalitis cases', 'laboratory confirmed JE cases' and 'laboratory confirmed cases of Nipah virus infection". JE and Nipah viruses are 2 entirely different viruses (in morphology, genomic structure, host pathogenicity, etc), but both [can] cause encephalitis.
The statement on the finding of the first case of Nipah virus infection in Ipoh is a realistic assessment of the present status of the outbreak by the Director-General of Health. One can expect more cases from Ipoh and elsewhere -- and this should be our major concern now. - Mod.CYC]
****
[If the government can establish laws regarding examination and disposition of horses and pigs, surely it can get the word out about adequate protective gear. One more human case, in an unprotected pig worker, will do the trick but that would be most unfortunate.
I still have the nagging feeling that the definition of "confirmed JE" is not up to standards acceptable to many of us. Finding antibody, IgM or otherwise, in a single human serum sample certainly is not confirmatory, simply presumptive. Under the tough field conditions at the present time in Malaysia, such a distinction might not be possible. If such is the case, then an added column to all tables, "Presumptive" would be helpful. If the probability of acquiring JE virus infection is as low as the data indicate and the probability of acquiring Nepah virus infection is also low, what must be the probability of someone having both? Probably about nil. I'm willing to make a bet: All but 30 (or so) cases of encephalitis with onset during this Malaysian epidemic will be shown to have been caused by Nipah virus. - Mod.CHC]
******
[The litmus test on "double infections" with JE & Nipah virus should be this -- were both viruses isolated from the same patient? If it is not both viruses, just both antibodies, how do we know that the patient hadn´t been infected with -- or vaccinated against -- JE some time ago & that those antibodies have nothing to with his current illness due to Nipah virus? - Mod.JW]
.....calisher/jw
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org (NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##



Published Date: 1999-04-14 23:50:00
Subject: PRO/AH/EDR> Nipah virus (Hendra-like) - Malaysia (03)
Archive Number: 19990414.0613

NIPAH (HENDRA-LIKE) VIRUS - MALAYSIA (03)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
[see also
Nipah virus (Hendra-like), natural history 990412220834
Nipah virus (Hendra-like) - Malaysia 990410222844
Nipah virus (Hendra-like) - Malaysia (02) 990411105729
Nipah virus (Hendra-like) prevention - Malaysia: horses 990410234339
Nipah virus - Malaysia: unnatural event? 990411212416]
Date: Wed, 14 Apr 1999
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: Bernama; The Star Online; 14 Apr 1999 [edited]

The Australian Animal Health Laboratory in Geelong, 60 km from [Melbourne], is continuing to test blood samples of Malaysian horses and pigs suspected of having deadly viruses. "We are getting samples on a regular basis and results are being sent back," Dr Harvey Westbury told Bernama. He said he was not in a position to make any further comment because a contract with the Malaysian health and veterinary services stipulates that only the Malaysian authorities can discuss results of the tests. "Any public comment must come from Kuala Lumpur, " he said.
[Dr Westbury] said there was no time-frame to when the sampling and tests would end. It would be an on-going exercise until the JE [Japanese encephalitis] and the Hendra-like [Nipah] virus were destroyed completely.
[The Star] reported that] experts from the Atlanta-based Centers for Disease Control and Prevention (CDC) are examining samples taken from the carcasses of animals from areas affected by the viral encephalitis [epidemic] to see if they were killed by the newly discovered Nipah virus.
The experts have already taken blood samples from goats, cows, chickens, dogs and cats which have mysteriously died since the culling operation started in the Bukit Pelanduk area. About 10 farmers have complained that the animals had been dying over the past week.
It is believed that the experts are also trying to find out if the deaths were due to the insecticide dumped and sprayed in the area to kill _Culex_ mosquitoes, carriers of the JE virus. The experts have also asked locals who are still in the area to provide live animals including birds and rats for testing.
Earlier at a press conference in Kuala Lumpur, Prof Lam Sai Kit, head of Universiti Malaya's Medical Microbiology Department said preliminary data suggested that mammals like cattle, goats, cats and dogs might be affected by the Nipah virus. "However, we have yet to confirm this. Even if any of these animals are involved, they are not a major source of the virus's spread. Pig populations are still the prime suspects," he said.
Prof Lam said the disease may now be under control with the culling of pigs. "We are looking at the tail-end of the epidemic. The number of new cases is probably due to the long incubation period of the disease," he said.
Prof C.T. Chua, acting dean of Universiti Malaya's Medical Department [Faculty], said there had not been any evidence that the Nipah virus was

spread through pork, as no butchers, meat handlers nor consumers have contracted the disease.
He said the research team was also collecting samples from fruit bat populations in Ipoh and Johor to ascertain if bats were the link.
It is not common to have two causes of viral encephalitis simultaneously and the Health Ministry is not ruling out more causes. Health director-general Tan Sri Dr Abu Bakar Suleiman said: "Two types of viruses playing their [individual] role in a single patient is very complex." He assured that everything possible was being done to look for the first [?primary] cause.
"Preliminary findings showed a lot of cases were negative for JE and Nipah virus infections. It was puzzling to see declining JE incidence but increasing cases of viral encephalitis. The majority are Nipah virus infections," he said when tracing the efforts to find out the cause of the viral encephalitis outbreak which killed at least 15 people since the first reported case in a pig farming community in Perak on Nov 4 last year. Another 78 people involved in the pig industry in Negri Sembilan died, including five cases in Kampung Wong Seng Chow between Dec 26 last year and Jan 4, followed by 73 cases in Kampung Baru Sungai Nipah, Kampung Sawah and Kampung Bukit Pelanduk between Feb 23 & now.
Dr Abu Bakar said tracing the cause of the outbreak would be based on clinical data, epidemiological data and laboratory testing.
He said the movement of pigs could spread the Nipah virus, adding that he was informed that trading of pigs was common.
Dr Abu Bakar said the ministry was planning to set up a high tech P3 laboraotry. He said P4 laboratories were expensive and Malaysia could seek the help of those with such laboratories.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[Much if this is good news. The epidemic seems to be coming to an end, the etiologic agent has been recognized and named, bats are being studied as reservoirs of Nipah virus, and the government is releasing information. Some data are still being withheld but those are from on-going studies and we expect that summaries and scientific publications will be available when all the data are in. The possibility of dual Nipah and Japanese encephalitis infections is intriguing.

The identification of virus isolates from species other than human and pigs will be fascinating. One should keep in mind that cases of encephalitis, though rare, do occur at all times of year in all places, so the possibility of the involvement of a third etiologic agent is not surprising, and likely will be shown to be a previously endemic virus, one not a primary cause of many cases.
This report contains the first hint that the incubation period in pigs is a long one and the first confirmation that meat handlers and consumers have not been affected by Nipah virus..
I wonder why horses are being considered suspected hosts of Nepah virus. Have Nepah virus infections been recognized in horses? - Mod.CHC]
.....calisher/jw
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send



Published Date: 1999-04-15 23:50:00
Subject: PRO/AH/EDR> Nipah virus, pigs - Malaysia
Archive Number: 19990415.0621

NIPAH VIRUS, PIGS - MALAYSIA
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
[see also
Nipah virus (Hendra-like), natural history 990412220834
Nipah virus (Hendra-like) - Malaysia 990410222844
Nipah virus (Hendra-like) - Malaysia (02) 990411105729
Nipah virus (Hendra-like) - Malaysia (03) 990414110325
Nipah (Hendra-like) virus - Malaysia (04) 990414205902
Nipah virus - Malaysia today]
Date: Thu, 15 Apr 1999 14:04:41 +0800
From: Muruga Vadivale <vale@pop.jaring.my>
Source: The Star Online, 15 Apr 1999 [edited]
<http://main.thestar.com.my/je/news/1999/4/15/1512ipmo.asp>

Nipah virus has been found in samples taken from live pigs at a farm in Salak Utara, Sungai Siput, about 30km from Ipoh, Perak, after a pig farmer reported the death of 30 of his pigs. State Health Committee chairman Datuk Lee Chee Leong said officers from the state Veterinary Services Department took blood samples from the pigs on Monday. Lee said based on the samples taken from 35 of the total 4000 live pigs at the farm, it was discovered that at least 16% of the pigs were Nipah virus positive.
He said immediate action was taken to cull all the pigs at the farm beginning yesterday. Meanwhile, Lee said a total of 116 055 of 137 168 pigs in 50 farms had been culled in Perak so far. A total of 13 780 pigs were culled on Tuesday. Lee said the number of farms involved in the culling activities had also been increased from the initial 55 farms to 72 farms now that the buffer zone in Ulu Piah had been expanded by another 10km radius where the mandatory culling of pigs would be carried out. "The buffer zone was expanded after the detection of the latest case of Nipah virus in a sty worker in the high risk areas of Tambun, Ampang and Ulu Piah recently," he said. Lee said that in the expanded buffer zones, culling would involve another 17 pig farms from Taman Wing Onn, Bercham, Tg Rambutan and Gunung Rapat with a total of 11 000 pigs.
He said the latest victim, who is suspected to have contracted Nipah virus and was hospitalized at the Fatimah Hospital since April 4, was still in coma.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[Reporting still seems to be in the hands of people who are either inarticulate or devoid of knowledge of the situation. This report does not indicate whether "positive" means "with antibody" or "with virus". Given that the report indicates blood samples were tested, I am assuming that "positive" means "with antibody". Why in the world anyone would want to kill an animal that already has antibody to Nipah virus is beyond me
- Mod.CHC]
[Perhaps because someone suspects they could still be infectious
-- a question raised by CHC in this comment to an earlier post

today: "Anyone looking at the possibility of a persistent carrier state in pigs?" - Mod.JW]
.....calisher/jw
--
Dr Jack Woodall
Director, ProMED-mail
Institute of Biomedical Sciences
Federal University of Rio de Janeiro
Rio de Janeiro - RJ, Brazil
<woodall@biogmed.ufrj.br>
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-04-15 23:50:00
Subject: PRO/AH/EDR> Nipah virus - Malaysia
Archive Number: 19990415.0619

NIPAH VIRUS - MALAYSIA
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
[see also
Nipah virus (Hendra-like), natural history 990412220834
Nipah virus (Hendra-like) - Malaysia 990410222844
Nipah virus (Hendra-like) - Malaysia (02) 990411105729
Nipah virus (Hendra-like) - Malaysia (03) 990414110325
Nipah (Hendra-like) virus - Malaysia (04) 990414205902]
Date: Wed, 14 Apr 1999 08:14:38 +0800
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: The Straits Times, 14 Apr 1999 [edited]

Some 90 victims of a viral [encephalitis] outbreak have recovered and been discharged so far, Malaysian officials said yesterday. As of Monday night, there have been 251 suspected cases of [either] Japanese encephalitis (JE) or Nipah virus in Perak and Negri Sembilan, with 95 deaths. A total of 142 cases have been confirmed to be from the two viruses [it would be more informative if there is a break-down here into JE and Nipah virus cases - Mod.CYC], and indications are the remainder are mainly Nipah [virus] cases.
Kuala Lumpur Hospital specialist Datuk Dr Kew Siang Tong said the fatality rate of victims of the Nipah virus was about 38%, while that for victims infected with JE [virus] was about 36%. But those infected with both viruses have a mortality rate of 52%. She added that while the new Nipah virus could be deadly to humans, it killed less than 5% of the pigs which contracted it, and this made prevention methods more important.
Infected pigs were apparently still escaping the cordon that the authorities had set up, she said, noting two housewives in Port Dickson contracted Nipah [virus] from handling an infected pig this month, and that the first case [of Nipah virus infection] had been detected in Perak.
Director-General of Health Tan Sri Abu Bakar Suleiman said: "We are very upset about the new Perak case. It means there are sick pigs in Ipoh, with the potential to infect people. From our information, trading of pigs is common."
Dr Kew said that earlier uncertainty over the killer virus was due to the almost identical symptoms of JE and Nipah [virus infections]. Both cause fevers and can lead to comas. "There was JE in the outbreak but the predominant viral agent is the Nipah virus," she said.The Malaysian authorities have asked the US Centers for Disease Control [and Prevention] for help in developing treatments for the Nipah [virus infection], and antiviral agents are already being tested on some of the victims.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[There are two pieces of information in this report that I am not comfortable with at this stage of the investigation of the outbreak -- one is on the 38% fatality rate for human disease caused by Nipah virus, and the other is the 5% fatality rate for infected pigs.

As I have no information on the method of calculation of these figures, I shall reserve comment on these. On the basis of reports received so far, the identification of Nipah virus infection in humans and pigs (the latter seems to be new information) is still on-going. There is also indication (not confirmed) that the outbreak began with JE virus infection but the later major part of the outbreak was due to Nipah virus.
As far as the fatality rate for pigs is concerned, it can only be reliable if experimental infection of pigs with Nipah virus is done (as it was with the Australian Hendra virus in horses.) I understand that experimental infection of pigs with the Nipah virus has been successfully demonstrated in Australia, and I am sure we will be getting information on this very soon. - Mod.CYC]
****
[The flaccidity of these reports continues to amaze. Perhaps we will recieve hard data soon. Anyone looking at the possibility of a persistent carrier state in pigs? - Mod.CHC]
.....calisher/jw
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-04-16 23:50:00
Subject: PRO/AH> Nipah virus, natural history
Archive Number: 19990416.0633

NIPAH VIRUS, NATURAL HISTORY
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus (Hendra-like), natural history 990412220834
Hendra-like virus, natural history (04) 990407225433
Hendra-like virus, natural host 990403155006
Hendra-like virus, natural host (02) 990404210253
Hendra-like virus, natural host (03) 990407224432
Date: Tue 13 Apr 1999
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>

The origin of Nipah virus and its modes of transmission among pigs and man are certainly areas of urgent investigation by the epidemiologists now in Malaysia. Their understanding is important to the prevention and control of this virulent virus for man and pigs.
I would like to report an observation relayed to me by a reliable source in March 1999 relating to the probable mode of transmission of the virus among pigs.
The observation was made by a supervisor of a pig farm in Ulu Piah/Tambun/Ampang area of the Kinta District where the 'Japanese encephalitis" outbreak first started. The supervisor mentioned the large numbers of mynah birds that came to eat animal feed on the farms. He said that these birds had the habit of flying onto the back of pigs to peck at insects [ticks, etc. These birds flew from one pig enclosure to another and also to other nearby farms.
The role of these mynah birds in Nipah virus transmission and spread among the pig population deserve looking into.
--
Chan Yow Cheong
<chanyowcheong@pacific.net.sg>
.....jw
--
Dr Jack Woodall
Director, ProMED-mail
Institute of Biomedical Sciences
Federal University of Rio de Janeiro
Rio de Janeiro - RJ, Brazil
<woodall@biogmed.ufrj.br>
--
##
ProMED-mail makes every effort to verify the reports that
are posted, but the accuracy and completeness of the
information, and of any statements or opinions based
thereon, are not guaranteed. The reader assumes all risks in

Published Date: 1999-04-16 23:50:00
Subject: PRO/AH> Nipah virus, pigs - Malaysia (02)
Archive Number: 19990416.0631

NIPAH VIRUS, PIGS - MALAYSIA (02)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus, pigs - Malaysia 990415164709
Date: Fri 16 Apr 1999 21:12:03 +0800
From: "Dr.Muruga Vadivale" <vale@pop.jaring.my>
Source: Bernama 16 Apr 1999 [edited
http://www.bernama.com/bernama/general/ge1604_15.htm

****
Nipah virus discovered in pigs inspected in Sungai Siput,
Perak, which is a new area.
****
The Health Ministry today warned that the Nipah virus will continue to spread if the smuggling of pigs from the affected areas is not stopped immediately.
Minister Datuk Chua Jui Meng said the smuggling of pigs out of the outbreak areas was undermining efforts to overcome the problem.
"We now expect new viral encephalitis cases to be detected outside the affected areas," he told reporters.
He was asked to comment on the discovery of the Nipah virus in pigs inspected in Sungai Siput, Perak, which is a new area.
The Perak government announced yesterday that all pigs in the state would be culled even if only one pig was detected to be infected with the Nipah virus.
Chua said that despite the culling, the problem would persist so long as there were irresponsible people smuggling out the pigs.
"Despite the warnings and strict enforcement, there are still people who seem to value money more than lives...they are only endangering themselves," he said.
Meanwhile, the outbreak in Bukit Pelandok, Negeri Sembilan, was reported to be nearly fully under control following the massive operation to contain the disease.
--
ProMED-mail
<promed@usa.healthnet.org
[Shades of what apparently happened in the UK after the BSE outbreak began; smuggling of meat into Europe & continued use of banned feed has extended the epizootic of BSE & the epidemic of nCJD - Mod.JW
.....jw

--
##



Published Date: 1999-04-23 23:50:00
Subject: PRO/AH> Nipah virus - Malaysia (06)
Archive Number: 19990423.0688

NIPAH VIRUS - MALAYSIA (06)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah (Hendra-like) virus - Malaysia (04) 990414205902
Nipah (Hendra-like) virus - Malaysia (05) 990418203525
Date: Thu, 22 Apr 1999 16:15:11 +0800
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: WHO Regional Office for the Western Pacific, 21 Apr 1999

The outbreak of viral encephalitis that has affected parts of the states of Perak, Negri Sembilan and Selangor in Malaysia appears to be declining. The number of hospital admissions over the past week has diminished although 41 patients remain hospitalized. Since the beginning of the outbreak in October 1998 until 19 April 1999, there have been a total of 256 cases and 98 deaths. Of the deaths for which tests have been completed, 40 were due to Nipah virus, 8 to Japanese encephalitis (JE) and 17 had a dual infection of JE and Nipah virus.
Culling of pigs has proven effective in eliminating the source of human infections. During the culling operation 883 324 pigs were slaughtered in Negri Sembilan and Selangor. Another 14 905 are scheduled for culling in the state of Perak. Although there is still a chance of new cases appearing in other areas due to the movement of pigs, the coordinated control measures adopted by the Health and the Veterinary Services of the Malaysian Government appears to have been successful.
WHO and international experts have also worked with government and non-governmental agencies to control the disease. A programme to survey all of the more than 1000 pig farms in Malaysia for Nipah virus will soon get underway. A system to sample the farms on a regular basis will then be put in place to prevent another such outbreak from taking place in the future.
In addition to the ongoing clinical and laboratory investigations, a number of epidemiological studies are being carried out to investigate how the virus is transmitted and if any animals in addition to pigs are involved.
More than 400 health workers have been in the affected areas interviewing and testing farmers, their families, abattoir workers, pork sellers, veterinarians, soldiers involved in the culling operation and hospital staff to determine how the virus is transmitted. At the same time, studies of fruit bats and other possible animals, including goats and dogs, are proceeding. At one point, there was concern that horses were affected but all tests done so far have proved negative. Testing will continue.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[Technically this is not an "outbreak of viral encephalitis", it is an

outbreak of viral encephalitides. At least two viruses, Japanese encephalitis and Nipah, are responsible for most or all of these cases. That "40 were due to Nipah virus, 8 to Japanese encephalitis (JE) and 17 had a dual infection of JE and Nipah virus" brings us closer to the expected distribution. Personally, I find the likelihood of dual infections quite low, much lower than 17. The method for defining a case of either Nipah or JE has yet to be revealed. When that information becomes available, the number of cases that can be attributed to JE virus will be much more clear. If, for example, the diagnosis is based on clinical impression + a single serum sample with IgM antibody to JE virus, I sure would have my doubts, particularly when the sample comes from a country where other flaviviruses occur, including dengue viruses, Tembusu virus, and perhaps others.
Congratulations to the Malaysian Government for the heroic efforts taken and to other groups for assisting. The surveillance system being established will provide an early warning system, but it likely will not prevent future cases or outbreaks. - Mod.CHC
.....calisher/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-04-18 23:50:00
Subject: PRO/AH/EDR> Nipah (Hendra-like) virus - Malaysia (05)
Archive Number: 19990418.0642

NIPAH (HENDRA-LIKE) VIRUS - MALAYSIA (05)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah (Hendra-like) virus - Malaysia (04) 990414205902
Nipah virus (Hendra-like) - Malaysia 990410222844
Nipah virus (Hendra-like) - Malaysia (02) 990411105729
Nipah virus (Hendra-like) - Malaysia (03) 990414110325
Nipah virus, pigs - Malaysia 990415164709
Nipah virus, pigs - Malaysia (02) 990416154539
Nipah virus - Malaysia 990415153739
Date: Sat, 17 Apr 1999 12:33:48 -0400
From: Marjorie P. Pollack <pollackmp@mindspring.com>
Source: MOH Malaysia website: <http://www.dph.gov.my/press/press2/cases.htm>

SUMMARY: 16 APRIL 1999 @ 6.00 p.m
On 16 Apr 1999 till 6 pm, 2 new cases have been reported. 1 in Hospital Seremban and 1 in Hospital Kuala Lumpur. 1 death was reported in Hospital University Kuala Lumpur. Total cases reported to date from Perak and Negeri Sembilan are 253 with 96 deaths. 153 cases have been confirmed serologically to be JE and Hendra like.
For Bukit Pelanduk alone a total of 219 cases with 76 deaths have been reported.
--
Dr. Abdul Rahman / Dr Satwan
National JE Operation Room
Vektor Borne Disease Control Section
Disease Control Division
Ministry of Health Malaysia.
Tel: 03-2746900
e-mail: vektor@dph.gov.my
***
[2
Source: media 17 Apr 1999

New virus cases as Malaysia blames pig smugglers
A pig-borne virus that has killed 97 people in Malaysia could spread to still unaffected regions of the country because pigs are being smuggled across state lines, health authorities have said.
Officials said on Saturday one more person had died in a pig-breeding region in Negri Sembilan state, the focus of a viral encephalitis outbreak that has ravaged the country's $400 million pork trade and hit tourism.
Another two people were admitted to hospitals after showing symptoms of viral encephalitis, bringing the total number of cases to 256 in three affected states since the outbreak began in October.

Health Minister Chua Jui Meng slammed pig industry workers for defying a nationwide ban on the movement of pigs, saying they were undermining government efforts to contain the spread of the epidemic.
"We now expect new viral encephalitis cases to be detected outside the affected areas," the official Bernama news agency quoted him as saying on Friday.
Health officials recently reported a new infection in a previously unaffected pig farming region in Perak state, stoking fears that the outbreak was spreading.
Several local newspapers had declared the outbreak was at its tail-end after officials reported no new deaths or cases over the past three days.
***
[3
Source: The Star (Malaysia), Sat 17 April 1999

After almost four months and 78 deaths in Negri Sembilan, the viral encephalitis outbreak seems to have ended. There were no fresh cases in the state the past four days.
Describing it as a good sign, state Unity and Social Development Committee chairman Datuk Goh Siow Huat said more than 100 victims have been discharged from hospitals since Jan 4.
The latest is a patient who left the Seremban Hospital yesterday.
"We now hope this situation will maintain and none of the 41 others still warded at hospitals here and in Kuala Lumpur will succumb to the virus," he told reporters yesterday.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[The standard criterion with which to declare an epidemic over is to record no new cases for twice the incubation period of the disease. Since the incubation period has not been announced (or determined?), this is difficult to judge, but 4 days with no cases seems a little early to make such an announcement. However, we do sincerely hope this terrible epidemic is in fact coming to an end. - Mod.JW
.....jw/es
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-04-19 23:50:00
Subject: PRO/AH> Nipah virus, pigs - Malaysia (03)
Archive Number: 19990419.0645

NIPAH VIRUS, PIGS - MALAYSIA (03)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus (Hendra-like), natural history 990412220834
Nipah virus (Hendra-like) - Malaysia 990410222844
Nipah virus (Hendra-like) - Malaysia (02) 990411105729
Nipah virus (Hendra-like) - Malaysia (03) 990414110325
Nipah virus, pigs - Malaysia 990415164709
Nipah virus, pigs - Malaysia (02) 990416154539
Date: Sun, 18 Apr 1999 20:32:42 +0800
From: Dr.Muruga Vadivale <vale@pop.jaring.my>
Source: NSTP
<18110138.8aak1ons.html" target="_blank">http://www.afp.com/ext/english/nst/malaysia/9904
18110138.8aak1ons.html>

A mass pig culling operation in a Malaysian state to curb an encephalitis outbreak that has killed 98 people, ended Sunday with 640,500 pigs killed.
The operation began on March 20 in southwest Negeri Sembilan state where 83 of the victims had died since early this year, the official Bernama news agency said.
State veterinary services director Majid Awang said all personnel, including more than 1,000 soldiers, deployed for the exercise would be withdrawn from the areas of operation. But authorities would continue to monitor the situation, Majid was cited as saying.
Another 40 people in Negeri Sembilan were still warded at six hospitals due to suspected encephalitis, of which 19 were in critical condition, Bernama said. The state government was now looking into the relocation of hundreds of affected pig farmers who feared returning to their homes, Bernama cited an official as saying.
The epidemic broke out in northern Perak state in October and spread south to Negeri Sembilan two months later, crippling the 1.5 billion ringgit (395 million dollar) pig industry. The pig culling has been extended to Perak and neighbouring Selangor to contain the Japanese encephalitis virus and a second virus, linked to the Hendra strain affecting horses and humans in Brisbane, Australia in 1994. Malaysia was also focusing on horses to curb the second mystery virus, suspected to have caused most of the 98 deaths, officials said. The outbreak has hit the tourism industry and led to a 70 percent slump in pork sales.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....jw/es
--
##



Published Date: 1999-04-19 23:50:00
Subject: PRO/AH> Nipah virus, pigs - Malaysia (04)
Archive Number: 19990419.0644

NIPAH VIRUS, PIGS - MALAYSIA (04)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus, pigs - Malaysia 990415164709
Nipah virus, pigs - Malaysia (02) 990416154539
Nipah virus, pigs - Malaysia (03) not yet archived
Date: Mon, 19 Apr 1999
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia

Persistent carrier state of Hendra virus
Both Drs Charles Calisher and Jack Woodall have raised the question of a persistent carrier state of Nipah virus in pigs in a recent posting.
I would like to quote the following paragraph from the authors' discussion in a recently published paper on transmission studies of Hendra virus (HeV) in horses (1):
"The isolation of [Hendra virus from the spleen of a recovered [and subsequently euthanased horse at 21 days PI [postinfection, in the presence of a high antibody titre [HeV-specific neutralising antibody at a titre of 1:512, demonstrates that HeV can persist in recovered horses for some time past initial infection. Virus was isolated from the kidney of the initial human case, where the antibody titre was 1:64 (2). In another person who developed encephalitis, the initial antibody titre was lower and disease developed over a period of 14 months (3). The question still remains open about persistence of virus and the carrier state."
References:
(1) Williamson MM, Hooper PT, Selleck PW et al. Transmission studies of Hendra virus (equine morbillivirus) in fruit bats, horses and cats. Aust Vet J 1998; 76:813-818.
(2) Murray PK, Selleck PW, Hooper PT et al. A morbillivirus that caused fatal disease in horses and humans. Science 1995; 268: 94-96.
(3) O'Sullivan JD, Allworth AM, Paterson DL et al. Fatal encephalitis due to novel paramyxovirus transmitted from horses. Lancet 1997; 349: 93-95.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....jw/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID



Published Date: 1999-04-21 23:50:00
Subject: PRO/AH/EDR> Nipah virus, dogs positive
Archive Number: 19990421.0664

NIPAH VIRUS, DOGS POSITIVE
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
Date: Tue, 20 Apr 1999 08:35:59 -0400
From: Marjorie P. Pollack <pollackmp@mindspring.com>
Source: media, 20 Apr 1999

Veterinary Services Department Director-General Nordin Mohd Nor said at least two dogs in the worst hit Negeri Sembilan state -- the focus of the viral encephalitis outbreak that has ravaged the $400 million pork industry -- had tested positive for the Nipah virus, raising fears that other animals could be carrying the disease.
"This shows that this disease can be contracted by dogs," he said. He said the dogs may been infected by eating the carcasses of buried pigs. But authorities have repeatedly stressed that the meat of dead pigs was safe for consumption. [They presumably meant after cooking - Mod.JW]
Authorities would for the next three months begin taking blood samples from pigs in all pig farms and slaughterhouses.
All other animal species around affected areas, particularly in the Bukit Pelandok area in Negeri Sembilan, would also be tested for encephalitis. The authorities have so far taken the blood samples of rats, birds, goats, cattle and wild animals including bats in the area.
"We are keeping our options open," he said. "We have people looking at every species imaginable in that area," he said.
Health officials admitted recently that the mysterious cause for some of the total 259 encephalitis cases, was neither Japanese encephalitis nor Nipah and was still unknown. [As Mod.CHC commented in an earlier post, many viruses cause encephalitis, so it is not surprising that some cases may be due to viruses other than JE & Nipah - Mod.JW]
The similarity of Nipah to the Hendra virus carried by fruit bats which killed 15 race horses and two trainers in Australia in 1994 and 1995, had stoked speculation that horses were the source of the outbreak. But Nordin said 1400 race horses had been tested and declared virus-free. Another 6000 polo, equestrian and individually-owned horses would be tested in the weeks ahead.
[Byline: Benjamin Low]
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....jw/es
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted



Published Date: 1999-04-23 23:50:00
Subject: PRO/AH> Nipah virus, pigs - Malaysia (05)
Archive Number: 19990423.0689

NIPAH VIRUS, PIGS - MALAYSIA (05)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus, pigs - Malaysia 990415164709
Nipah virus, pigs - Malaysia (02) 990416154539
Nipah virus, pigs - Malaysia (03) 990419234612
Nipah virus, pigs - Malaysia (04) 990419234521
Date: Thu, 22 Apr 1999 18:02:17 +0000
From: Jamal Hassan <JAMAL@jphvri.po.my>
Source: Star Publications (Malaysia), Thursday, April 22, 1999
<http://main.thestar.com.my/je/news/1999/4/22/2204wncu.asp>

[1
The Government will consider requests from farmers outside designated Japanese Encephalitis (JE) buffer zones to help cull their pigs, said Agriculture Minister Datuk Dr Amar Sulaiman Daud. He said some farmers from Malacca who were not from the buffer zone, had asked the Cabinet Task Force on JE to help cull their pigs.
"We will consider their request because it will cost us RM10 to cull a pig (from outside the buffer zones)," he said yesterday. Dr Sulaiman said the authorities had destroyed about 27,000 pigs from outside the designated buffer zones, mainly in Perak. He said the figure was small considering the 900,000 pigs culled since March 20.
He said one reason pig farmers from outside designated buffer zones wanted the authorities to cull their pigs was because there was no demand for pork.
******
[2
Date: Thu, 22 Apr 1999 20:17:14 +0000
From: Jamal Hassan <JAMAL@jphvri.po.my>
Source: Star Publications (Malaysia), Friday, April 23, 1999
<http://main.thestar.com.my/je/news/1999/4/23/2312ipcl.asp>

The state government has decided to close down all the 164 pig farms in the Kinta district which are mostly located in Tambun, Ampang and Ulu Piah in view of the viral encephalitis outbreak. Mentri Besar Tan Sri Ramli Ngah Talib said the state government would not issue new licences for farms to operate in these areas, adding that the decision was because the areas were located in a densely populated region. "We will not allow any pig farms to operate in that area anymore as their presence is not only a hazard to health but also causes air pollution. "As such we hope that the farmers will not keep dragging their feet in heeding our call to operate at the centralised farm in Kuala Bikam," he told reporters after attending a ground-breaking ceremony of the Small Holders Consolidated Bhd building yesterday.

--
Jamal Hassan
Research Officer, Biologics Development
Veterinary Research Institute (VRI)
No 59, Jalan Sultan Azlan Shah
31400 Ipoh, Perak Darul Ridzuan, Malaysia.
tel (O): 605-5457166/87
fax (O): 605-5463368/5473509
tel (H): 605-3134739
e-mail: JAMAL@jphvri.po.my
web site: <http://agrolink.moa.my/jph/vriph/>http://agrolink.moa.my/jph/vriph/
.....calisher/es
--
##
ProMED-mail makes every effort to verify the reports that
are posted, but the accuracy and completeness of the
information, and of any statements or opinions based
thereon, are not guaranteed. The reader assumes all risks in
using information posted or archived by ProMED-mail. ISID
and its associated service providers shall not be held
responsible for errors or omissions or held liable for any
damages incurred as a result of use or reliance upon posted
or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your
full name and affiliation, it may not be posted. Send
commands to subscribe/unsubscribe, get archives, help,
etc. to: majordomo@promedmail.org. For assistance from a
human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-04-23 23:50:00
Subject: PRO/AH> Nipah virus, dogs - Malaysia (02)
Archive Number: 19990423.0683

NIPAH VIRUS, DOGS - MALAYSIA (02)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
[see also
Nipah virus, dogs positive 990421000350]
Date: Wed, 21 Apr 1999 22:42:30 -0300
From: ProMED-mail
Source: Agence France Presse English, Wed 21 Apr 1999

As of Sunday, soldiers have shot dead 788 abandoned dogs in the district during a month long operation to cull infected pigs, a spokesman for the veterinary services department told [news reporters].
"All unlicensed dogs and stray dogs found will be put to sleep. This is an ongoing campaign against rabies and made more urgent now," he said, adding that pet dogs would not be subjected to any tests.
The spokesman said the two dogs that were tested positive were abandoned animals that died after eating the carcasses of infected pigs.
"We do not preclude anything. We are also taking blood samples from other animals such as goats and birds, but we have no capabilities to test them. To our knowledge, the virus is only limited to mammals," he said.
He said samples from two goats that were sent to a laboratory in Geelong, Australia [Australian Animal Health Laboratory], had tested negative and that the department was continuously monitoring the situation.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[To summarize: stray dogs are being killed but not tested and pet dogs are not being killed or tested. - Mod.CHC]
****
[2]
[In response to Nipah virus, dogs positive 990421000350]
Date: Thu, 22 Apr 1999 8:48 -0600
From: Regg Neiger <NeigerR@mg.sdstate.edu>

What is meant by tested positive? Did they demonstrate antibodies to Nipah virus or did they demonstrate the virus itself in the dogs? I think being exposed and developing antibodies shouldn't be equated with having the disease or being able to spread disease.
--
Regg Neiger DVM
Veterinary Science Department
Box 2175
South Dakota State University
Brookings, SD 57007-1396
Phone 605-688-5171
FAX 605-688-6003
e-mail: neigerr@mg.sdstate.edu
[No doubt. We can only pass on what we receive, and not all of that. As we haven't heard of an isolate of Nipah virus from a dog, we are assuming

the tests referred to are antibody tests; however, that assumption may very well be false. We await something more definitive. - Mod.CHC]
.....calisher/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-04-23 23:50:00
Subject: PRO/AH> Nipah virus, transmission mechanism - Malaysia
Archive Number: 19990423.0681

NIPAH VIRUS, TRANSMISSION MECHANISM - MALAYSIA
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
Date: Tue, 20 Apr 1999 21:55:35 +0800
From: Muruga Vadivale <vale@pop.jaring.my>
Source: The Star, Tues., 20 April 1999
<http://main.thestar.com.my/je/news/1999/4/20/2017ktbn.asp>

[The mechanism of transmission of Nipah virus has not been determined, although infection by direct contact is likely.] Early indications from test results have shown that there is low or no human-to-human transmission of the Nipah virus, Health Minister Datuk Chua Jui Meng said. However, the manner in which the virus spreads was still not known, he said.
Chua said that "barrier nursing" or the wearing of protective clothing must continue to be practised by those in the pig industry and hospital staff providing intensive care to patients.
He said he had received a report on the first test results on the viral outbreak from the [on-site] veterinary team of the Atlanta-based Centres for Disease Control and Prevention (CDC) led by Dr Tom Ksiazek. Chua said the team had taken blood samples of 400 hospital staff who had been nursing and were exposed to patients infected with the Nipah virus. He said the first batch of samples from 183 staff tested negative for the Nipah virus. The tests were done with the reagents normally used to detect [Hendra] virus.
"The absence of the Nipah virus in the samples is good news because the results are suggestive of low or no transmissability of the Nipah virus from human to human. But this is still only an early indication and we must not let down our guard," he told reporters after attending the official opening of the Pasir Puteh hospital, about 50km here yesterday.
Chua said the CDC's veterinary team recommended that the practice of "barrier nursing" be continued. Staff are advised to take all precautions to avoid direct contact with patients and wear face masks, goggles, gloves, long-sleeved shirts, trousers, and boots. Chua said that those in the pig industry, including farmers and abattoir workers, were advised to do the same.
He said it was certain that the Nipah virus could be transmitted from pigs to humans, as there were a few cases of workers who fell ill after ignoring advice not to touch the animals with their bare hands.
Chua said the team was on the verge of developing the specific reagent needed to detect Nipah virus, which is different from [Hendra] virus.
He said the ministry had distributed 800,000 leaflets on precautionary measures against the virus to those in the pig industry and in schools near the epidemic areas.
Chua praised doctors, nurses, specialists and support staff who had remained committed to their work in the hospitals including those in Kuala Lumpur, Petaling Jaya, Port Dickson, Kuala Pilah, Klang and Seremban.
--
ProMED-mail
e-mail: promed@usa.healthnet.org

[The absence of antibody in medical personnel is reassuring, given the severity of infection with Nipah virus. The original version of this report, i.e., before I edited it a bit, still carried statements confusing Hendra virus and Nipah ("the Hendra-like") virus. Tests conducted thus far have been done with Hendra virus, not with Nipah virus. However, the two viruses are closely related and reagents prepared with Hendra virus should be adequate for use in testing for antibody to Nipah virus. As this report indicates, more type-specific reagents are being prepared, ostensibly with Nipah virus. - Mod.CHC]
.....calisher/jw/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-04-24 23:50:00
Subject: PRO/AH> Nipah virus infection, prevention - Singapore
Archive Number: 19990424.0692

NIPAH VIRUS INFECTION, PREVENTION - SINGAPORE
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Pig ban lifted - Singapore 990423225915
Date: Fri, 23 Apr 1999
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: Television Corporation Singapore Channel NewsAsia, 23 Apr 1999
[edited

By November next year, only chilled meat will be available in Singapore. Under a cold chain system, all sellers of pork, chicken, beef and mutton in wet markets will have to install display chillers to keep their meat. The idea is to have all meat kept at a constant temperature of about 4 degrees. The move to implement the cold chain system starts with pork stall holders. National Development Minister Lim Hng Kiang who announced this, also said the Primary Production Department [PPD will resume the import of live pigs from Indonesia on Monday. 840 pigs will start to come in from Pulau Bulan, Indonesia. They'll be slaughtered at the new abattoir in Jurong and immediately chilled before hitting the markets on Wednesday morning. With the phasing out of warm pork, pork sellers will no longer come into close contact with live pigs. Only PPD inspectors and abattoir workers, who'll be required to wear protective clothing such as face shields and helmets, [will be in close contact with live pigs. The cold chain system would allow PPD's officers to conduct more stringent checks on the meat.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....calisher/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your



Published Date: 1999-04-25 23:50:00
Subject: PRO/AH> Nipah virus - Malaysia (08)
Archive Number: 19990425.0694

NIPAH VIRUS - MALAYSIA (08)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
[see also
Nipah virus, pigs - Malaysia (02) 990416154539
Nipah virus, pigs - Malaysia (03) 990419234612
Nipah virus, pigs - Malaysia (04) 990419234521
Nipah virus, pigs - Malaysia (05) 990423225739
Nipah virus - Malaysia (06) 990423225608
Nipah virus - Malaysia (07) (not yet archived)]
[1]
Date: Sat, 24 Apr 1999 11:57:07 +0000
From: Jamal Hassan <JAMAL@jphvri.po.my>
Source: Star Publications (Malaysia), Friday, April 23, 1999
<http://main.thestar.com.my/je/news/1999/4/23/2312sbnl.asp>

The [Nipah] viral outbreak has been a costly lesson to farmers who now realise that the industry's future lies in the integrated pig-farming area.
Negri Sembilan Mentri Besar Tan Sri Mohamed Isa Abdul Samad said pig-farming activities would, in future, be conducted at the area in Bukit Pelanduk, Port Dickson. "The area has a proper system required for clean farming activities," he said after the exco [?] meeting on Wednesday.
Isa explained that the area also had an oxidation pond and proper drainage for the industry. "I believe that farmers will now realise the need for a proper farm management system in the future." Isa said the Government had been strict with enforcement among pig farmers. He added that although 80% of the land under Phase One of the project had been sold, farmers had yet to move in.
Meanwhile, two farm workers from Bukit Pelanduk died of viral encephalitis at Universiti Hospital while a new case was admitted for observation on Tuesday but there were no deaths or admissions on Wednesday.
This brings the death toll in Negri Sembilan to 83 while the national figure stands at 98.
--
Jamal Hassan
Research Officer, Biologics Development
Veterinary Research Institute (VRI),
No 59, Jalan Sultan Azlan Shah, 31400 Ipoh,
Perak Darul Ridzuan, Malaysia.
tel (O): 605-5457166/87
fax (O): 605-5463368/5473509
tel (H): 605-3134739
web site: http://agrolink.moa.my/jph/vriph/
e-mail: JAMAL@jphvri.po.my
[It has yet to be determined what "proper" and "improper" farm management means in this situation. Improper management (husbandry) techniques may very well not have been the cause of the epizoodemic and therefore not the fault of the pig farmers. Final analysis of the cause of the explosive outbreak will have to await additional data than what have been released to

this point in time. - Mod.CHC]
****
[2]
Date: Sat, 24 Apr 1999
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: Department of Veterinary Services, Ministry of Agriculture
Malaysia, 20 Apr 1999 [edited]

NATIONAL TESTING AND SURVEILLANCE PROGRAM FOR NIPAH VIRUS IN PIGS - PRESS STATEMENT, 20 APRIL 1999
[The] Veterinary Research Institute [VRI, in Ipoh], in conjunction with the Centers for Disease Control and Prevention and CSIRO Australian Animal Health Laboratory, have developed and tested a laboratory test for identifying past infections of Nipah virus in pigs. With this recent development, we [Department of Veterinary Services, DVS] are now ready to implement a National Testing and Surveillance Program for Malaysia... This program will start on 21 April 1999 and has a planned completion date of 20 July 1999... [The 3-tiered program consists of]:
1. Surveillance program for all pig farms to detect Nipah virus. Bleeding teams will be established in the State Department of Veterinary Services ... Regional Veterinary Laboratory [RVL] will process the blood and to consign sera to VRI for testing.
2. Surveillance program for abattoirs by ante-mortem inspection and random blood sampling to provide assurance that pigs entering the food chain are uninfected. We are using the established "farm code" that is unique to each pig farm. Pigs entering abattoirs must have farm code tattooed on the back, [and] animals without the code will not be slaughtered. Positive antibody tests will require farm trace back and follow-up testing and culling of positive farms.
3. RVL will investigate reports on suspicious Nipah-like disease in pigs. If blood tests are positive for Nipah virus the farm will be culled. A provisional approval for slaughter only will be given to all farms outside the containment area without human cases. These farms will be given 90 days to comply with the DVS's testing program... During the 90-day period no movement of pigs [or] artificial insemination are allowed between pig farms.
Only empty vehicles are allowed to enter farms to collect pigs for slaughter. At the end of 90 days from the start of the program, farms that did not participate in the testing will have their pigs culled with no financial assistance.
Existing government "Farm Codes" and Global Positioning System will be used as farm site-specific identifier. A minimum number of 15 sows will be tested from any one farm. Two separate blood samplings will be required from each farm not less than 3 weeks apart. It is the responsibility of each farmer to bear the cost of sampling and the government will bear the cost of the blood test.
All results from VRI will be released only to Director General [DG] of DVS who will notify the Ministry of Health and direct the State Director of Veterinary Services to take the following actions:
1. Upon completion of 2 blood draws and negative test results, a farm will be issued a Certificate of Test free from Nipah virus from the DG of DVS.
2. Farms testing positive will be considered infected and subject to immediate quarantine and movement restrictions.
3. Where a farm has been identified as infected, DG of DVS will advise the State Veterinary Office for immediate action.
4. Where one farm in a district has been declared infected, a control zone of 1/2 km will be declared around the farm, effective from the time the results are reported.
5. All pigs from the infected farm will be culled and subjected to financial assistance approved by the Task Force.
6. All farms in the control zone will be declared high-risk farms and tested as a first priority.
7. Pigs from the control zone will not be permitted to move to slaughter or any other purpose until which time the farms have been tested negative

twice and clear.
A database will be maintained in the DG of DVS office and linked to a Geographical Information System for assessment and reporting. Results will be entered electronically at VRI and transmitted daily to the office of the DG of DVS.
Instructions and personal protective attire for safe sampling procedures have been developed in conjunction with the Ministry of Health and delivered to pig bleeding and laboratory teams.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....calisher/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.

Published Date: 1999-04-28 23:50:00
Subject: PRO/AH/EDR> Nipah virus, pigs - Malaysia (06)
Archive Number: 19990428.0712

NIPAH VIRUS, PIGS - MALAYSIA (06)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus, pigs - Malaysia 990415164709
Nipah virus, pigs - Malaysia (02) 990416154539
Nipah virus, pigs - Malaysia (03) 990419234612
Nipah virus, pigs - Malaysia (04) 990419234521
Nipah virus, pigs - Malaysia (05) 990423225739
Nipah virus - Malaysia (10) not yet archived
Date: Thu, 29 Apr 1999
From: Chan Yow Cheong mailto:chanyowcheong@pacific.net.sg
ProMED-mail Regional Moderator for Asia
Source: Bernama, 28 Apr 1999 [edited

The Nipah virus has infected pigs in Gopeng and Bidor [both in the Kinta district of Perak state - Mod.- CYC. Menteri Besar Tan Sri Ramli Ngah Talib, in confirming this today, said that the government had decided to cull all 4,500 pigs in a farm at Kampung Koboi, Gopeng, and another 4,000 at the Coldstream pig farm in Bidor within two weeks.
"Perak is not free of the Nipah virus yet ... it has now appeared in Bidor and Gopeng. If found in areas in their vicinity, pigs in such areas will also be culled," he told reporters. Ramli also said that the pig culling operation in high-risk areas here - Ampang, Ulu Piah, Tambun and Sungai Siput - ended yesterday with a total of 154,839 pigs destroyed. The pig culling team is now involved in "mopping up" operation to rid the areas of stray pigs.
The menteri besar said that there were no new cases of Japanese encephalitis or Nipah virus [infection in the state. The last victim was detected on April 8, he added.
Meanwhile, State Agriculture Committee Chairman Datuk Ramly Zahari said that the cause of the spread of the [Nipah virus to the two areas had not been ascertained. As such, he said, the pig culling team had been directed to destroy stray cats and dogs in the high-risk areas to prevent the possible spread of the disease. "We will also direct the Veterinary Services Department to conduct tests on stray animals kept in the pound to detect the virus," he said.
On allegations that some horses had died from the [Nipah virus, he said that this could not be confirmed as the result of the blood test on the horses done in Australia had not been received.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[Earlier postings reported that race horses had not been infected with Nipah virus. The horses mentioned in this report presumably refer to polo

and other horses. - Mod.CYC.
.....es
##
ProMED-mail makes every effort to verify the reports that
are posted, but the accuracy and completeness of the
information, and of any statements or opinions based
thereon, are not guaranteed. The reader assumes all risks in
using information posted or archived by ProMED-mail. ISID
and its associated service providers shall not be held
responsible for errors or omissions or held liable for any
damages incurred as a result of use or reliance upon posted
or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your
full name and affiliation, it may not be posted. Send
commands to subscribe/unsubscribe, get archives, help,
etc. to: majordomo@promedmail.org. For assistance from a
human being send mail to: owner-promed@promedmail.org.

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-04-29 23:50:00
Subject: PRO/AH/EDR> Nipah virus, horses - Malaysia
Archive Number: 19990429.0714

NIPAH VIRUS, HORSES - MALAYSIA
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus (Hendra-like) prevention - Malaysia: horses 990410234339,
Nipah virus (Hendra-like) prevention - Malaysia: horses(02) 990416160426
Date: Thu, 29 Apr 1999
From: Chan Yow Cheong mailto:chanyowcheong@pacific.net.sg
ProMED-mail Regional Moderator for Asia
Source: Star Online, 29 Apr 1999 [edited

The Iskandar Polo Club in Ipoh, where two horses were tested positive for the Nipah virus, was placed under quarantine a few days ago. Veterinary Services Department director-general Dr Mohd Nordin Mohd Nor said the two horses had been put down. "The quarantine is to protect the horses at the club which is located very near to pig farms in Tambun, Ampang and Ulu Piah," he said.
Dr Nordin said the tests were done in Australia and the results of the second test on the infected horses were expected soon. He added that it appeared the horses were infected by the pigs.
The club is about 2 km from the Ulu Piah/Ampang pig farming area where the viral encephalitis outbreak started as far back as November 1997. Horses had been implicated in the viral encephalitis outbreak which killed at least 100 people so far.
Talk of horses dying mysteriously surfaced at the polo club last year.
Health Ministry deputy director (public health) Dr Tee Ah Sian was informed that three horses at the club were suspected to be down with Japanese encephalitis [JE when she visited the affected farms on November 17.
Dr Nordin said [blood samples of [from horses at the club were the earlier batches sent for testing in Australia. He also said that samples would be taken from 4,500 horses nationwide and sent for testing.
On April 15, Dr Nordin announced a clean bill of health for 1,400 racehorses in the country which were tested negative for the Hendra virus in Australia.
[Byline: Foong Pek Yee
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[Apart from the information that the viral encephalitis outbreak in the Ulu Piah/Ampang pig farming area started as far back as November 1997, and the recent finding of antibodies to Nipah virus in two horses at the polo club, it is difficult to decipher the rest of the report. Let's hope future reports will confirm that the horses at the polo club did die of viral encephalitis as far back as Nov 17, 1997 and the basis for blaming the pigs for infecting the horses. - Mod.CYC



Published Date: 1999-05-01 23:50:00
Subject: PRO/AH> Nipah virus - Malaysia (11)
Archive Number: 19990501.0722

NIPAH VIRUS - MALAYSIA (11)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus - Malaysia 990415153739
Nipah virus - Malaysia (10) 990428233320
Nipah virus (Hendra-like), natural history 990412220834
Nipah virus, natural history 990416162248
Date: Sat, 1 May 1999
From: Chan Yow Cheong mailto:chanyowcheong@pacific.net.sg
ProMED-mail Regional Moderator for Asia
Source: Bernama, 1 May 1999 [edited

The Health Ministry has formed primary teams to carry out extensive medical follow-ups on viral encephalitis (VE) patients who had been discharged, especially those formerly infected with the Nipah or Hendra-like virus.
Its minister Datuk Chua Jui Meng said the teams would only be available at hospitals with VE patients and would be headed by the chief physician or the chief neurologist wherever available. "This is the first time we are facing the Nipah virus and we need to have as much information such as the clinical features of the disease, we want to know what happens during the acute phase of the patients' illness and after their discharge," he said.
It would also help the doctors and rehabilitation teams to monitor the patients' recovery, late complications and possible reactivation of the viruses, Chua told reporters.
The follow-up exercise would be carried out for one year with the first five follow-ups to be done on a monthly basis while the sixth follow-up would be done on the ninth month. "The seventh follow-up will be done 12 months after discharge," said Chua, adding that patients would be assessed on their general health, functional status, whether there were damaged or dysfunctional organs as well as their psychological well-being.
Chua said the ministry knew the danger posed by the Hendra virus [in Australia based on an incident involving a patient who died 13 months after being discharged from hospital.
The minister also said the cabinet, at its weekly meeting last week, had decided to set up a permanent council for zoonotic diseases but declined to reveal more details when asked.
In a related development, Chua denied a local newspaper report today which said that a pig farm worker at Seelong, 20 kilometres from Johor Bahru [in the southernmost Johor state, fell into a coma and was now in the intensive care unit of the Sultanah Aminah Hospital. Chua said he had checked and found no such case existed and wanted the story which appeared on the front page of the newspaper to be corrected immediately as it would cause undue alarm among the public.
--



Published Date: 1999-05-02 23:50:00
Subject: PRO/AH/EDR> Nipah virus, pigs - Malaysia (07)
Archive Number: 19990502.0724

NIPAH VIRUS, PIGS - MALAYSIA (07)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus, pigs - Malaysia 990415164709
Nipah virus, pigs - Malaysia (02) 990416154539
Nipah virus, pigs - Malaysia (03) 990419234612
Nipah virus, pigs - Malaysia (04) 990419234521
Nipah virus, pigs - Malaysia (05) 990423225739
Nipah virus, pigs - Malaysia (06) 990428233813
Nipah virus - Malaysia (11) 990501102223
Date: Sat, 1 May 1999
From: Chan Yow Cheong mailto:chanyowcheong@pacific.net.sg
ProMED-mail Regional Moderator for Asia
Source: Star Online, 1 May 1999 [edited

A pig farm in Seelong, about 20 km from Johor Baru [in the southernmost state of Johor has been under quarantine since Wednesday after one animal was tested positive for the Nipah virus. Police personnel have been mobilised to seal the farm since the infection was detected.
State executive councillor Dr Chua Soi Lek confirmed that a pig in the 4,000-animal farm was tested positive for the virus. The health and veterinary authorities were carrying out further tests, and took 30 samples yesterday, he added. Results are expected by Tuesday.
The quarantine was imposed after a worker fell into a coma recently, and who is now in the intensive-care unit of the Sultanah Aminah Hospital.
The owner of the farm said several of his pigs had died earlier and he disposed the carcasses by burning them. There are five other farms within a 10 km radius.
Johor is the fourth state to have Nipah-infested [infected pigs. The deadly virus, which is spread to human beings through contact with infected pigs, is believed to be responsible for the majority of the 100 human fatalities in Negri Sembilan, Perak and Selangor.
In Kuala Lumpur, Foong Pek Yee reports that Health Minister Datuk Chua Jui Meng had confirmed to an MP [Member of Parliament from Johor that some of the pigs there had tested positive for Nipah [virus.
The Government has been conducting tests on pigs nationwide for the presence of Nipah virus since April 20. Pigs in any farm would be culled even if one animal is tested positive for the Nipah virus.
[Written by: Shahar Yaacob and Charles Fernandez
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[In a separate report by Bernama news agency, Health Minister Chua was quoted to have denied that there was a pig farm worker (from Seelong) who

was in a coma in the above-mentioned hospital. - Mod.CYC
.....es
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-05-04 23:50:00
Subject: PRO/AH/EDR> Nipah virus - Malaysia (12)
Archive Number: 19990504.0731

NIPAH VIRUS - MALAYSIA (12)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus - Malaysia (11) 990501102223
Nipah virus, pigs - Malaysia (07) 990502033808

Date: Mon, 3 May 1999
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: Bernama, 3 May 1999 [edited

The Government set up an Inter-ministerial Committee on 28 April 1999 to handle virus diseases originating from animals such as the Hendra, Nipah and Japanese encephalitis [JE, rabies and other ailments, the Dewan Negara [Malaysian Parliament was told today.
Health Minister Datuk Chua Jui Meng said the committee would advise on preventive and control measures among other things and coordinate the efforts of the various ministries and set up a zoonotic diseases unit.
He said under phase two of the operation to eradicate such diseases, the Veterinary Services Department was collecting blood samples from pigs outside of the disease affected areas and the operation was expected to last three months. Local and foreign experts were also collecting blood samples from dogs, cats, wild boars, cows, buffaloes, bats, goats, horses, rats and birds to establish whether they were carrying the deadly viruses.
"So far dogs and cats in the affected areas have tested positive [for Nipah virus and two horses in Ipoh also had the deadly virus," Chua said. He said the destruction of 901 934 pigs over 35 days had reduced cases of viral diseases [meaning encephalitis.
He said studies conducted on people affected by viral diseases [meaning encephalitis in Negri Sembilan and Perak showed 139 were affected by the Nipah virus, 20 by the JE [virus, 28 people had both viruses and results were being awaited on 71 other cases.
"Of those who had died of viral diseases [?encephalitis, eight were confirmed to have had the JE virus, 26 had been infected by both, 49 were infected by the Nipah virus and the results on 26 others were being awaited.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[We are still in the dark as to how the various aetiologies of the fatal human cases were established -- by virus isolation, demonstration of viral nucleic acid by PCR, or antibody test? I do not expect Members of Parliament would be interested in this information, but I hope the responsible laboratory could enlighten us on this. -- Mod. CYC
.....jw



Published Date: 1999-05-05 23:50:00
Subject: PRO/AH/EDR> Nipah virus, pigs - Malaysia (07): CORRECTION
Archive Number: 19990505.0743

NIPAH VIRUS, PIGS - MALAYSIA (07): CORRECTION
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus, pigs - Malaysia (07) 990502033808
Nipah virus - Malaysia (12) 990504142537
Date: Wed, 5 May 1999 19:40:27 +0000
From: JAMAL@jphvri.po.my (Jamal Hassan)
Organization: Veterinary Research Institute Malaysia
Source: Star Publications (Malaysia), 5 May 1999 [edited
<http://thestar.com.my/je/news/1999/5/5/0506fpjo.asp>

The pig which tested positive for the Nipah virus is said to be from a farm in Seelong, Johor [but see below.
The discovery was made when the animal was in an abbatoir in the state. It is not known whether the pig was slaughtered or not [nor even whether it originated from the state?
Cabinet task force on JE deputy chairman Datuk Seri Dr Ling Liong Sik said yesterday that culling of pigs at the farm would be conducted if tests proved the animals were infected.
To date, however, he said that no pig from that farm had tested positive for the Nipah virus.
It was learnt that the farm, which has 4000 pigs, was still under quarantine, pending results of further tests.
Dr Ling, who is also Transport Minister, was speaking to reporters after chairing the task force meeting at the Prime Minister's Department here yesterday.
It was reported in The Star last Saturday that the pig farm in Seelong, 20km from Johor Baru, was under quarantine since last Wednesday after one pig tested positive for the Nipah virus.
However, Health Minister Datuk Chua Jui Meng said on Sunday that the sample was an old one drawn some time ago to test for the Japanese Encephalitis virus and there could have been a mix-up.
Dr Ling said that pigs in only two of 212 farms in the country were tested positive for the Nipah virus under a three-month national testing and surveillance programme which started on April 21. One was in Kampar and the other in Bidor [both in Perak state, he said, adding that 7883 pigs from both farms had already been culled.
There had been no new cases of viral encephalitis over the past 13 days and, to date, 32 people were still hospitalized and the death toll stood at 100, he said.
Dr Ling said it was not decided when those who lived in pig farms prior to the outbreak could return, as many pig carcasses had yet to be disposed of.
For those who did not live near the farms but were evacuated because of the outbreak, the health and veterinary services departments would decide when

they could return, he added.
[Byline: Foong Pek Yee
[Another confusing newspaper report. It would be nice if we could have an official report stating that there is still no evidence of Nipah virus in Johore State - Mod.JW
.....jw
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-05-08 23:50:00
Subject: PRO/AH/EDR> Nipah virus - Malaysia (13)
Archive Number: 19990508.0759

NIPAH VIRUS - MALAYSIA (13)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus, pigs - Malaysia (07): CORRECTION 990505180824
Nipah virus - Malaysia (12) 990504142537
Date: Sat 8 May 1999
From: ProMED-mail <promed@usa.healthnet.org>
Source: Agence France Presse English, Sat 8 May 1999 [edited

The pig-borne encephalitis outbreak in Malaysia that has claimed 100 lives is "virtually over", the World Health Organization (WHO) said Saturday, crediting the culling of
almost a million pigs for controlling the disease.
While 100 people had died from over 258 recorded cases of the disease, the WHO said that as of 30 Apr 1999 there had been no new cases admitted to hospitals in the past eight days. This compared to seven new cases being admitted to hospitals daily
in mid-March when the outbreak was at its peak.
Culling of 901 228 pigs in three states to prevent the spread of the virus "has effectively elminated the reservoir of the virus... and brought the outbreak to an end," the WHO said. While the destruction of the pigs had a "major economic impact... it clearly saved many lives," the WHO added.
According to Malaysian health ministry data, the pig culling was completed on 26 Apr 1999.
--
ProMED-mail
promed@usa.healthnet.org
[But see Nipah virus, pigs - Malaysia (08), posted today; 4000 pigs in Johor state are to be culled because some "tested positive," and are potentially infectious - Mod.JW
.....jw

##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****



Published Date: 1999-05-13 23:50:00
Subject: PRO/AH> Nipah virus - Malaysia (14)
Archive Number: 19990513.0779

NIPAH VIRUS - MALAYSIA (14)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>
[see also
Nipah virus - Malaysia (10) 990428233320
Nipah virus - Malaysia (11) 990501102223
Nipah virus - Malaysia (12) 990504142537
Nipah virus - Malaysia (13) 990508222545
Nipah virus, pigs - Malaysia (08) 990508222511]
Date: Wed 12 May 1999 20:56:20 -0600
From: "Charles H. Calisher" <calisher@usa.healthnet.org>

If you are getting as tired as I am of seeing all these messages about pig-killing exercises, ill-defined diagnoses, and unscientific statements attributed to uninformed politicians, please see my comments below.
I refer to, for example:
>>>>>>>>>>
Date: Sun 9 May 1999 17:01:19 +0000
From: Jamal Hassan <JAMAL@jphvri.po.my>
Source: The New Straits Times Press (Malaysia) Berhad;
Sun, May 9 1999;
<http://www.nstpi.com.my/nstpi/>http://www.nstpi.com.my/nstpi/
[excerpts]
Preparations are under way for the culling of an estimated 4000 pigs from a farm in Seelong, near Senai, after blood samples from pigs there tested positive for the Nipah virus...
Dr Chua said "The public at large is not at risk because the affected farm is deep in an oil palm estate and there are no human settlements within a five-kilometre radius. "The other 81 farms in Johor are located in remote areas, at least 15 kilometres from any residential area.So there is no reason to panic," he stressed. A 0.5km radius of the farm has been sealed off and the police will deploy a 24-hour road-block near the farm...
On blood samples taken from the farmer and seven workers from the pig farm in Seelong, Dr Chua said the WHO collaborating centre for air-borne [sic -- should read "arthropod-borne," meaning carried by mosquitoes, ticks, etc.] viruses in Universiti Malaya had confirmed them negative for the Nipah virus. Dr Chua added that a nearby vegetable farm had also been asked to cease operations immediately.
Health Minister Datuk Chua Jui Meng said today only 31 suspected JE cases were currently being treated in various hospitals in the country...
"A total of 258 people who were suspected VE cases were admitted at the height of the outbreak in March of which 100 died while another 127 had been discharged," he said...
He also reminded residents in VE affected areas in Lukut not

to return to their houses for the moment until the Cabinet Task Force has made a decision on the matter...
Meanwhile, the JE Humanitarian Fund today received RM30,000 ... for relief work for 204 families affected by the viral encephalitis outbreak in Bukit Pelandok.
>>>>>>>>>>
>From the very outset of this Nipah virus epidemic -- whenever that was -- we have been bombarded with misinformation and misstatements. I have not seen or heard of a shred of evidence that there has been a single confirmed case of Japanese encephalitis [in peninsular Malaysia] since very early 1999, either in humans or in pigs.
If such data are available, we would welcome them and would post them immediately on ProMED-mail.
The basic problem remains definitions for "a case" and "an infection with". Antibody to a virus in a serum sample from an ill person or pig (or horse or anything else) is confirmatory of nothing. Yet the Malaysian authorities are reported to have publicly pronounced this many cases of JE virus and that many cases of Nipah virus. A confirmed "positive", in terms of a human or a pig, depends upon either virus isolation or a change in antibody titers between paired acute- and convalescent-phase serum samples.
No doubt finding IgM antibody in a single serum sample from a sick human (or pig) provides excellent presumptive data, but it does not provide confirmatory evidence of recent infection.
We have heard nothing regarding persistence of Nipah virus in pigs. If there is evidence that persistent infections occur, we would like to know that -- as would everyone else. If there is no evidence for such a persistent state, then why are pigs that are "positive" (assuming this means they have been shown to have antibody in a single serum sample) being killed? Seems to me these immune animals would be the ones to retain.
Until we begin to receive real data, rather than statements from government spokespeople, ProMED-mail will not post repetitive and unhelpful reports, but will continue to post messages regarding areas newly discovered to have infected animals, and other important data.
No further mention of Japanese encephalitis will be made here unless some confirmatory evidence is presented that JE virus is still circulating or has infected even one human or one pig since, say, January 1999.
Terms such as "VE", meaning "virus encephalitis", are obfuscating with regard to whether a human or a pig has Japanese encephalitis or Nipah virus.
The Malaysian government task force responsible for investigations of the epizoodemic of Nipah disease is still called the "State Japanese encephalitis/Nipah Task Force", which suggests that JE is not only a current problem but THE principal curent problem. It could as well be called the State Ebola/Yellow Fever/Nipah Task Force and be just as accurate. Indeed, The New Straits Times Press (Malaysia) Berhad, Sat 24 Apr 1999) quoted Health Minister Chua as having said that there were more than 13 000 malaria cases last year but no yellow fever cases. He could have added no smallpox either.
Personally, I suspect that the actual situation with regard to the causes of this epizoodemic, the political reasons and repercussions deriving therefrom, and the overall logistics have not begun to be mentioned. I have received, addressed to me personally, many messages from people in Malaysia who have told me of scientific personnel in Malaysia being threatened with firing, transfers, and funding reductions if they continue to speak out in conflict with official statements, and of other even more heinous accusations.

The free exchange of information can never cause the expansion of an epidemic, and statements that the public should not panic cannot begin to assuage public feelings that the entire story is not being told.

--

Charles H. Calisher
ProMED-mail Viral Diseases Moderator
Professor of Microbiology
Colorado State University
Fort Collins, CO, USA
<calisher@usa.healthnet.org>

.....calisher/jw

--

##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-05-14 23:50:00
Subject: PRO/AH/EDR> Nipah virus, natural history (02)
Archive Number: 19990514.0786

NIPAH VIRUS, NATURAL HISTORY (02)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus, natural history 990416162248
Nipah virus - Malaysia (14) 990513151319
Nipah virus, dogs - Malaysia (02) 990423223151
Nipah virus, horses - Malaysia 990429220334
Nipah virus, pigs - Malaysia (08) 990508222511
Nipah virus, pigs - Malaysia (09) today
Date: Thu, 13 May 1999 21:18:55 -0400
From: Marjorie P. Pollack <pollackmp@mindspring.com>
Source: M2 Communications Ltd., 13 May 1999 17:42
****
... we have confirmed that humans, pigs, dogs, cats, horses, goats and bats have been infected by the Nipah virus...
****
Australian scientists are playing a key role in the international effort to stop the deadly Malaysian Nipah virus, which has killed scores of people and thousands of pigs. CSIRO Animal Health's Dr Peter Daniels and Dr John White have just returned from Malaysia, where they joined a team from the [US Atlanta-based Centers for Disease Control and Prevention (CDC), in investigating and controlling the outbreak.
Dr Peter Daniels is a veterinarian and project leader of CSIRO Animal Health's Diagnosis and Epidemiology section. He has been working with the Malaysian Department of Veterinary Services in conducting animal post mortems, and collecting blood samples from pigs and other animals for testing at the Australian Animal Health Laboratory (AAHL) in Geelong.
"Through testing at AAHL we have confirmed that humans, pigs, dogs, cats, horses, goats and bats have been infected by the Nipah virus. This information is critical in assisting the Malaysian veterinary services to successfully contain the virus and prevent further deaths. We are also undertaking transmission experiments with pigs to determine how they may be passing the virus to other pigs, and to people. The unique biocontainment facilities at AAHL make it one of the few places in the world where testing and research of this sort can be safely carried out. While collecting samples in affected areas in Malaysia, we wore special breathing hoods to help minimise any risk of infection with the disease. The Malaysian vets have now been equipped with similar apparatus and trained in its use, and strict protocols developed to ensure their safety while working on potentially infected farms.

[Difficult to tell where the quotes began and ended in this paragraph, so I simply put there where they might belong. I apologize if I warped any quotes. - Mod.CC
"The most important part of the work has been to apply this early knowledge of the disease and how it is spread, to develop control measures. We assisted the Malaysian Veterinary Services Department in designing a national surveillance and eradication program for the disease in livestock, based on the detection and culling of infected pigs," Dr Daniels says.
Dr John White is a CSIRO Animal Health research scientist with experience in developing diagnostic tests for viral diseases. Dr White worked with staff from the Veterinary Research Institute (VRI), in Ipoh, Malaysia to develop a blood test to show if pigs have been exposed to the virus. "The test is now being used in Malaysia to screen at least 30 000 pig blood samples from more than 1000 pig farms nationwide, as part of the control strategy for the Nipah virus. Pigs are also being randomly sampled at Malaysian abbatoirs to ensure that potentially diseased animals are not being submitted for human consumption," Dr White says.
Dr White will soon return to Malaysia to assist the staff at VRI to develop screening tests for other animals known to be susceptible to the Nipah virus.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[Once again there is the hint that pigs with antibody are being culled because they have antibody. Someone sure must know something I don't know.
John Mackenzie, one of the organizers of the up-coming (August 1999) International Congress for Virology, has arranged for a special 'late breaker' session with several papers on Nipah virus and other emerging viral diseases. - Mod.CC
.....cc/jw
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-05-14 23:50:00
Subject: PRO/AH/EDR> Nipah virus, pigs - Malaysia (09)
Archive Number: 19990514.0785

NIPAH VIRUS, PIGS - MALAYSIA (09)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus, pigs - Malaysia (08) 990508222511
Nipah virus - Malaysia (14) 990513151319
Date: Tue, 11 May 1999 06:26:49 +0800
From: Chan Yow Cheong
<chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: Agence France-Presse ex New Straits Times, 10 May 1999 [edited

Malaysia is to extend its mass pig culling to the eastern state of Kelantan after 40 pigs there tested positive for a deadly virus [Nipah virus following an outbreak that killed 100 people elsewhere in the country, reports said Monday.
It was the first time the epidemic [Nipah virus -- previously contained on the west coast of peninsular Malaysia -- has been detected in an eastern state, The Sun newspaper reported.
Chinese and Thai pig farmers had surrended the animals to be destroyed after recent tests for the Nipah virus were positive, district officer Jamil Muhammad was quoted as saying. "We have been appealing to pig owners to keep their animals fenced in clean surroundings but a number of them are still allowing their animals to roam free," he said, adding that the culling would begin Tuesday.
Authorities have said they would kill a few thousand pigs in southern Johor state after one animal [early reports said three pigs - Mod. CYC tested positive for the Nipah virus [antibody?.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[Nipah virus now occurs in four states in the country. This is the first time the virus has been reported in an eastern state. With the addition of Johor and now Kelantan states, it would seem that there has been widespread movement of infected pigs in the early phase of the outbreak. - Mod. CYC
[Has anyone considered the possibility that the spread of Nipah virus will not be contained and that it will eventually be detected outside Malaysia? - Mod CHC
.....calisher/jw
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in



Published Date: 1999-05-17 23:50:00
Subject: PRO/AH> Nipah virus infection prevention - Singapore (02)
Archive Number: 19990517.0804

NIPAH VIRUS INFECTION PREVENTION - SINGAPORE (02)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus infection, prevention - Singapore 990424211458
Nipah virus, horses - Malaysia 990429220334
Nipah virus, natural history (02) 990514173049
Pig ban lifted - Singapore 990423225915
Date: Tue, 4 May 1999 09:11:48 +0800
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: The Straits Times, 4 May 1999 [edited

Of 706 horses in Singapore tested for the Hendra virus [as a surrogate for Nipah virus - Mod CHC, 695 have been given a clean bill of health. The Primary Production Department [PPD is still awaiting test results for the remaining 11 horses.
The blood samples taken from the 706 horses were sent to the Australian Animal Health Laboratory [Geelong for testing, said the department. This was carried out after the outbreak of a viral infection in Malaysia and Singapore. It killed one abattoir worker here and about 100 pig farmers and others linked to the trade across the causeway. Those killed had died from infections, mainly of the brain, caused by a new virus named Nipah.
The 706 Singapore horses were screened for the Hendra virus as the Nipah virus is from the same family, said the PPD. Test results for 541 race horses were negative. Of the 165 polo ponies and other horses, the test was negative for 154. The Singapore Turf Club has also screened [more than 400 stable hands and other employees who come into contact with horses, and found them to be free of any infection.
Meanwhile, the ban on the movement of horses between Singapore and Malaysia remains in place.

--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....cc/jw/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any



Published Date: 1999-05-18 23:50:00
Subject: PRO/AH> Nipah virus, pigs - Malaysia (10)
Archive Number: 19990518.0808

NIPAH VIRUS, PIGS - MALAYSIA (10)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed/html>

See Also

Nipah virus, pigs - Malaysia 990415164709
Nipah virus, pigs - Malaysia (09) 990514165641
Date: Mon, 17 May 1999
From: Chan Yow Cheong mailto:chanyowcheong@pacific.net.sg
ProMED-mail Regional Moderator for Asia
Source: Star Online, 17 May 1999 [edited

[Antibody to Nipah virus has been found at four pig farms in Paya Mengkuang and Bukit Berung in Alor Gajah [in the state of Malacca, an official said here yesterday. He said an emergency meeting of the various departments concerned, to be chaired by state secretary Datuk Wira Abdul Aziz Omar, has been scheduled for today to discuss the actions to be taken, including the culling of pigs.
This is the first time that the [Nipah virus has been detected in the [Malacca state since the [beginning of the? viral encephalitis outbreak. There are more than 150,000 pigs at the 102 farms here, with 97 farms in Alor Gajah district alone.
[Both State Manpower and Health Committee chairman and state Agriculture and Rural Development Committee chairman, who are jointly chairing the committee on the pig issue, refused to comment [on the information given by the official who said that Nipah virus infection has been detected in pigs at four pig farms in Malacca - Mod.CYC. State Veterinary Services Department director, Dr Borhan Abu Samah also refused to comment.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[One Chinese newspaper in Malaysia also carries the story of Nipah virus infection in pigs in Malacca. Malacca will be the fourth and latest state, following Perak, Negri Sembilan and Johor, to report Nipah virus infection in pigs. The earlier report of Nipah virus infection in pigs in the state of Pahang on the east coast has not been officially confirmed. - Mod.CYC
.....cc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any



Published Date: 1999-05-18 23:50:00
Subject: PRO/AH> Nipah virus - Malaysia (15)
Archive Number: 19990518.0805

NIPAH VIRUS - MALAYSIA (15)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed/html>

See Also

Nipah virus - Malaysia (10) 990428233320
Nipah virus - Malaysia (11) 990501102223
Nipah virus - Malaysia (12) 990504142537
Nipah virus - Malaysia (13) 990508222545
Nipah virus - Malaysia (14) 990513151319
Date: Mon, 17 May 1999 22:41:24 -0300
From: ProMED-mail
Source: Bernama, via Agence France Presse English, Mon 17 May 1999

A deadly encephalitis virus claimed a new victim Monday as it was reported to have spread to Malaysia's southern historic state of Malacca, the official Bernama news agency said. Bernama said the 43-year-old victim was a pig farm worker admitted a month ago to Seremban Hospital in the worst affected southern state of Negri Sembilan.
Goh Siow Huat, state unity and development committee chairman, confirmed the death, adding 22 people were still being treated for the disease in three hospitals around the country. The [Nipah virus which is carried by pigs has so far killed some 100 people.
Abu Zahar said no farmers or residents in the area had been infected with the virus, but the health department would step up monitoring. The virus was believed to have spread to Malacca after people smuggled in infected pigs from other states, he said.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[This epidemic has not yet been completely suppressed. - Mod.CC
.....jw/cc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org



Published Date: 1999-05-19 23:50:00
Subject: PRO/AH> Nipah virus, more infected pigs expected - Malaysia
Archive Number: 19990519.0831

NIPAH VIRUS, MORE INFECTED PIGS EXPECTED - MALAYSIA
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed/html>
Date: Thu, 20 May 1999
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: Bernama, 19 May 1999 [edited]

The Perak Japanese Encephalitis [should now be called Nipah Virus Encephalitis - Mod. CYC] operations room has been placed on standby for the possibility of a fresh outbreak of the disease following the latest case of Nipah virus infection in a pig farm outside the high-risk area recently.
State Agriculture Committee chairman Datuk Ramly Zahari said today the task force on the pig cull had been dispatched to help the farms with pigs that had been tested positive for the virus.
"According to the original schedule, we should have closed the operations room because all the pigs to be culled have been put down. However, the emergence of new cases in several areas outside the high-risk areas makes it necessary for us to be always prepared, including to destroy pigs turned over by panicky farmers," he said.
Yesterday, [some] of the 3,000 pigs in two farms in Chemor, near [Ipoh], and a farm in Ayer Kuning, Batang Padang, were confirmed to be infected with the Nipah virus [i.e., shown to have on the premises pigs with antibody to Nipah virus - Mod.CC].
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....cc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##



Published Date: 1999-05-19 23:50:00
Subject: PRO/AH> Nipah virus, fruit bat reservoir? - Malaysia
Archive Number: 19990519.0828

NIPAH VIRUS, FRUIT BAT RESERVOIR? - MALAYSIA
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed/html>

See Also

Hendra-like virus, natural history (04) 990407225433
Hendra-like virus, natural host 990403155006
Hendra-like virus, natural host (02) 990404210253
Hendra-like virus, natural host (03) 990407224432
Date: Wed, 19 May 1999 14:54:51 +0100 (BST)
From: Jack Woodall

Fruit bats are suspected to be the source of a deadly brain virus which has killed more than 100 in Malaysia. Antibodies to the virus, thought to have been passed from pigs to humans, perhaps via mosquitoes, have been found in the bats by Australian researchers, raising the possibility that they may be the original "reservoir" for the disease.
New Scientist reports that more than 300 blood samples have been taken from bats throughout Malaysia. In some areas, as many as a quarter of them show signs of contact with the virus. However, the conclusive proof - the presence of the virus itself - has not yet been found, although further tests are being carried out in the US on bat tissue.
Scientists now hope the lethal outbreak will produce funding to allow testing of bats throughout south-east Asia. Peter Young of the Queensland Animal Research Institute said: "We want to check bats from the Philippines, Indonesia, Malaysia and Papua New Guinea."
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[The original message contained numerous misleading statements (a) confusing Nipah, Japanese encephalitis, and Hendra viruses, (b) on the irrelevant use of JE vaccine, and (c) other non sequiturs. These were deleted prior to posting but it shows there is still considerable confusion as to the problem, the cause and, therefore, the solution. - Mod.CHC
.....cc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.



Published Date: 1999-05-19 23:50:00
Subject: PRO/AH> Nipah virus, nationwide sampling - Malaysia
Archive Number: 19990519.0826

NIPAH VIRUS, NATIONWIDE SAMPLING - MALAYSIA
****

A ProMED-mail post
<http://www.healthnet.org/programs/promed/html>
Date: Wed, 19 May 1999 09:29:52 -0400
From: Marjorie P. Pollack <pollackmp@mindspring.com> &
Chan Yow Cheong <chanyowcheong@pacific.net.sg>,
ProMED-mail Regional Moderator for Asia
Source: media, including Malaysia Star Online

Health officials say more pigs across Malaysia will be infected by Nipah virus, which has already killed more than 100 people, news reports said today.

Malaysia has been conducting random tests on pigs throughout the Southeast Asian nation, according to Veterinary Services Director General Dr. Mohd Nordin Mohd. Nor. Any hog farm found with just one infected pig [defined as having antibody, as far as we can tell - Mod.CC] must destroy its entire stock, he was reported as having said. Whereas Nipah virus first was observed to have killed pigs and humans in Negri Sembilan state in western Malaysia where 84 people died, the virus has since swept into the states of Perak, Johor, Kelantan, Malacca and Selangor.

Health officials initially believed the disease was Japanese encephalitis, [the etiologic agent of] which is transmitted from pigs to humans by _Culex_ mosquitoes. Later, scientists identified a new virus, named Nipah after the Malaysian village where it claimed its first victim.

The eight-month outbreak has ruined the pig-farming industry in many parts of Malaysia. Pig farmers in the worst-hit area, 60 miles southeast of the capital of Kuala Lumpur, abandoned their homes in March.

A farm in Sungai Buloh, Selangor, has been listed as "high risk" after one of its workers was admitted to hospital on May 14 and fell into a coma, Selangor executive councillor Datuk Abdul Fatah Iskandar said yesterday. Fatah said the Sungai Buloh farm had 2,600 pigs and "some of its pigs are also coughing, a symptom of Nipah infection."

Health director-general Tan Sri Dr Abu Bakar Suleiman said the ministry expected some farms outside the outbreak areas to be tested positive because "of the way pigs were moved all over the place. "I am more concerned about farmers and workers taking precautions to protect themselves from being infected by the pigs," Dr Abu Bakar said in an interview.

[Bernama reported that] the government is no longer allowing military personnel to be involved in pig culling operations and following the decision, the operation to put down the animals in five pig farms in Alor Gajah [in Malaka] today had been shelved. State Secretary Datuk Wira Abdul Aziz Omar said confirmation of the government decision had been conveyed early this morning. "Thus the operation scheduled to commence at about 8 am today had to be shelved as there are no shooters," he said. Pig culling operations planned for Perak and Johor were also facing the same problem following the decision prohibiting members of the armed forces to be involved, he said.

The operation in Alor Gajah was said to be deemed urgent as the state

government feared the possibility of an increase in the number of pigs that had to be destroyed as the results of the tests on blood samples taken from pigs in 93 other farms throughout the state had yet to be received.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[The reports painted a rather grim picture of the present status of the Nipah virus encephalitis outbreak in peninsular Malaysia. There should be no doubt that Nipah virus has already spread countrywide, at least among pigs. At least one new yet-to-be-confirmed human case (patient is now in a coma) has been reported. To make matter worse, military personnel have been taken off pig culling operations, resulting in delay in culling of infected pigs because of lack of shooters. - Mod. CYC]
[Given that wild birds are a natural amplifying host for Japanese encephalitis virus, what will happen next mosquito season when mosquitoes, infected by feeding on such birds, look for a mammalian vertebrate blood meal? If there won't be any pigs around for them to feed on will they quest for other large vertebrates, such as humans? - Mod.CC]
.....cc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-05-19 23:50:00
Subject: PRO/AH> Nipah virus, pigs - Malaysia (11)
Archive Number: 19990519.0811

NIPAH VIRUS, PIGS - MALAYSIA (11)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed/html>

See Also

Nipah virus, pigs - Malaysia (07) 990502033808
Nipah virus, pigs - Malaysia (07): CORRECTION 990505180824
Nipah virus, pigs - Malaysia (08) 990508222511
Nipah virus, pigs - Malaysia (09) 990514165641
Nipah virus, pigs - Malaysia (10) not yet archived
Date: Mon, 17 May 1999
From: Chan Yow Cheong mailto:chanyowcheong@pacific.net.sg
ProMED-mail Regional Moderator for Asia
Source: Bernama, 17 May 1999 [edited

The Melaka [Malacca? government has ordered the immediate closure of 79 pig farms in Alor Gajah and declared their surrounding areas as disease control zones following the detection of [antibody to Nipah virus at four farms. Chief Minister Datuk Seri Abu Zahar Isnin said the four farms confirmed to be affected [sic by Nipah virus had been placed under quarantine, and the 27,700 pigs there would be culled. The disease control zones cover areas within a 5-km radius of the farms. The farms ordered to be closed are in Bukit Beruang and Paya Mengkuang, and have about 100,000 pigs.
He said no farmers or residients in these places were infected by the virus, but the Health Department would step up its monitoring of the situation.
The Nipah [virus antibody-positive results for the four farms were received yesterday, but tests on blood samples from pigs in other farms in the affected areas and in Melaka Tengah and Jasin districts were negative.
Abu Zahar said fresh blood tests would be conducted following the discovery of the virus, and other animals [such as cows, goats and dogs would be included in the tests.
He said the virus was believed to have spread to Melaka after people smuggled in infected pigs from other states. Bukit Pelandok in Negri Sembilan, the area worst hit by the Japanese encephalitis and Nipah [virus epidemic, is only about 30 km from the Melaka border.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....cc/es
--
##
ProMED-mail makes every effort to verify the reports that
are posted, but the accuracy and completeness of the
information, and of any statements or opinions based



Published Date: 1999-05-19 23:50:00
Subject: PRO/AH> Nipah virus, dogs - Malaysia (03)
Archive Number: 19990519.0810

NIPAH VIRUS, DOGS - MALAYSIA (03)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed/html>

See Also

Nipah virus, dogs - Malaysia (02) 990423223151
Nipah virus, dogs positive 990421000350
Date: Sun, 16 May 1999 12:08:21 -0400
From: Marjorie P. Pollack <pollackmp@mindspring.com>
Source: From the Malaysian Star Online, Sun, 16 May 1999 12:08:21 -0400
<http://www.thestar.com.my/je/news/1999/5/16/1603jbcu.asp>

[Antibody to Nipah virus has been found in seven stray dogs kept at the Ipoh Society for the Prevention of Cruelty to Animals (ISPCA).
Veterinary Services Department director-general Datuk Dr Mohd Nordin Mohd Nor said all the 20 dogs at the ISPCA would be put down tomorrow. "Although the 13 dogs are only suspected to be infected, they have been classified as positive," he said yesterday. Dr Mohd Nordin added that no cats [had been shown to have antibody to Nipah virus.
Asked how the dogs could be infected when the ISPCA was located far away from the Nipah high-risk areas, he said the dogs were strays and they might have been sent to the ISPCA before the outbreak occurred.
The blood samples from the 20 dogs were out of the 92 blood samples of dogs and cats taken by the Veterinary Research Institute (VRI) last week. State veterinary services department director Dr Abd Kadir Osman said the ISPCA was under quarantine.
He said the VRI would take blood samples from all the other cats and dogs which had been tested negative as a precautionary measure as the virus might act late in some animals.
It is learnt that staff of the ISPCA would also be tested for the virus.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[Let us hope the ISPCA workers are not found to have antibody to Nipah virus. - Mod.CC
.....cc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted



Published Date: 1999-05-21 23:50:00
Subject: PRO/AH> Nipah virus, fruit bat reservoir? - Malaysia
Archive Number: 19990521.0838

NIPAH VIRUS, FRUIT BAT RESERVOIR? - MALAYSIA
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed/html>

See Also

Hendra-like virus, natural history (04) 990407225433
Hendra-like virus, natural host 990403155006
Hendra-like virus, natural host (02) 990404210253
Hendra-like virus, natural host (03) 990407224432
Date: Wed, 19 May 1999 14:54:51 +0100 (BST)
From: Jack Woodall

Fruit bats are suspected to be the source of a deadly brain virus which has killed more than 100 in Malaysia. Antibodies to the virus, thought to have been passed from pigs to humans, perhaps via mosquitoes, have been found in the bats by Australian researchers, raising the possibility that they may be the original "reservoir" for the disease.
New Scientist reports that more than 300 blood samples have been taken from bats throughout Malaysia. In some areas, as many as a quarter of them show signs of contact with the virus. However, the conclusive proof - the presence of the virus itself - has not yet been found, although further tests are being carried out in the US on bat tissue.
Scientists now hope the lethal outbreak will produce funding to allow testing of bats throughout south-east Asia. Peter Young of the Queensland Animal Research Institute said: "We want to check bats from the Philippines, Indonesia, Malaysia and Papua New Guinea."
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[The original message contained numerous misleading statements (a) confusing Nipah, Japanese encephalitis, and Hendra viruses, (b) on the irrelevant use of JE vaccine, and (c) other non sequiturs. These were deleted prior to posting but it shows there is still considerable confusion as to the problem, the cause and, therefore, the solution. - Mod.CHC
.....cc/es
--
****
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.



Published Date: 1999-05-21 23:50:00
Subject: PRO/AH> Nipah virus, nationwide sampling - Malaysia
Archive Number: 19990521.0837

NIPAH VIRUS, NATIONWIDE SAMPLING - MALAYSIA
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed/html>
Date: Wed, 19 May 1999 09:29:52 -0400
From: Marjorie P. Pollack <pollackmp@mindspring.com> &
Chan Yow Cheong <chanyowcheong@pacific.net.sg>,
ProMED-mail Regional Moderator for Asia
Source: media, including Malaysia Star Online

Health officials say more pigs across Malaysia will be infected by Nipah virus, which has already killed more than 100 people, news reports said today.
Malaysia has been conducting random tests on pigs throughout the Southeast Asian nation, according to Veterinary Services Director General Dr. Mohd Nordin Mohd. Nor. Any hog farm found with just one infected pig [defined as having antibody, as far as we can tell - Mod.CC] must destroy its entire stock, he was reported as having said. Whereas Nipah virus first was observed to have killed pigs and humans in Negri Sembilan state in western Malaysia where 84 people died, the virus has since swept into the states of Perak, Johor, Kelantan, Malacca and Selangor.
Health officials initially believed the disease was Japanese encephalitis, [the etiologic agent of] which is transmitted from pigs to humans by _Culex_ mosquitoes. Later, scientists identified a new virus, named Nipah after the Malaysian village where it claimed its first victim.
The eight-month outbreak has ruined the pig-farming industry in many parts of Malaysia. Pig farmers in the worst-hit area, 60 miles southeast of the capital of Kuala Lumpur, abandoned their homes in March.
A farm in Sungai Buloh, Selangor, has been listed as "high risk" after one of its workers was admitted to hospital on May 14 and fell into a coma, Selangor executive councillor Datuk Abdul Fatah Iskandar said yesterday. Fatah said the Sungai Buloh farm had 2,600 pigs and "some of its pigs are also coughing, a symptom of Nipah infection."
Health director-general Tan Sri Dr Abu Bakar Suleiman said the ministry expected some farms outside the outbreak areas to be tested positive because "of the way pigs were moved all over the place. "I am more concerned about farmers and workers taking precautions to protect themselves from being infected by the pigs," Dr Abu Bakar said in an interview.
[Bernama reported that] the government is no longer allowing military personnel to be involved in pig culling operations and following the decision, the operation to put down the animals in five pig farms in Alor Gajah [in Malaka] today had been shelved. State Secretary Datuk Wira Abdul Aziz Omar said confirmation of the government decision had been conveyed early this morning. "Thus the operation scheduled to commence at about 8 am today had to be shelved as there are no shooters," he said. Pig culling operations planned for Perak and Johor were also facing the same problem following the decision prohibiting members of the armed forces to be involved, he said.
The operation in Alor Gajah was said to be deemed urgent as the state

government feared the possibility of an increase in the number of pigs that had to be destroyed as the results of the tests on blood samples taken from pigs in 93 other farms throughout the state had yet to be received.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[The reports painted a rather grim picture of the present status of the Nipah virus encephalitis outbreak in peninsular Malaysia. There should be no doubt that Nipah virus has already spread countrywide, at least among pigs. At least one new yet-to-be-confirmed human case (patient is now in a coma) has been reported. To make matter worse, military personnel have been taken off pig culling operations, resulting in delay in culling of infected pigs because of lack of shooters. - Mod. CYC]
[Given that wild birds are a natural amplifying host for Japanese encephalitis virus, what will happen next mosquito season when mosquitoes, infected by feeding on such birds, look for a mammalian vertebrate blood meal? If there won't be any pigs around for them to feed on will they quest for other large vertebrates, such as humans? - Mod.CC]
.....cc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-05-23 23:50:00
Subject: PRO/AH> Nipah virus, natural history (03)
Archive Number: 19990523.0857

NIPAH VIRUS, NATURAL HISTORY (03)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus (Hendra-like), natural history 990412220834
Nipah virus, natural history 990416162248
Nipah virus, natural history (02) 990514173049
Date: Thu, 20 May 1999 10:30:01 +0100
From: Tidona <mail@tidona.de>

Concerning the natural reservoir of Nipah virus. Local researchers appear to concentrate entirely on facts that are known about Hendra virus, although the biological properties (host range, transmission, disease, etc.) of Nipah virus seem to be rather different from Hendra virus and similar to Menangle virus (isolated in 1997 in New South Wales, Australia, where it caused an epidemic in pigs and influenza-like illness in two humans). Only recently we have isolated and characterized a novel paramyxovirus from an apparently healthy tree shrew (_Tupaia belangeri_) that had been captured in 1978 in the area around Bangkok [Thailand. The nucleotide sequences of the N and P/C/V genes of this Tupaia paramyxovirus (TPMV) are now available (GenBank Accession No. AF079780) and the results will appear in one of the next issues of the journal Virology. Highest amino-acid sequence homologies were found between TPMV and Hendra virus. As there are a lot of tree shrews in the geographic area where Nipah virus was detected I would suggest to regard these animals as a potential natural reservoir.
--
Christian A. Tidona
Institute for Medical Virology
University of Heidelberg
Im Neuenheimer Feld 324
D-69120 Heidelberg
Germany
e-mail: mail@tidona.de
[This is an interesting suggestion. Note, however, that Menangle virus has a clearly different nucleotide sequence from Hendra & Nipah viruses. - Mod.JW
.....jw/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any



Published Date: 1999-05-23 23:50:00
Subject: PRO/AH/EDR> Nipah virus, pigs - Malaysia (Penang)
Archive Number: 19990523.0849

NIPAH VIRUS, PIGS - MALAYSIA (PENANG)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus, pigs - Malaysia 990415164709
Nipah virus, pigs - Malaysia (02) 990416154539
Nipah virus, pigs - Malaysia (11) 990519000721
[1
Date: Thu, 20 May 1999
From: Chan Yow Cheong mailto:chanyowcheong@pacific.net.sg
ProMED-mail Regional Moderator for Asia
Source: Bernama, 20 May 1999 [edited
[The delay in posting, due to a problem with our bulk mailer, is regretted. - Mod.JW

A pig farm in Valdor, Nibong Tebal, near [Pulau Pinang or Penang was today confirmed to be a Nipah virus-infected area after blood samples from its pigs tested positive.
Chief Minister Tan Sri Dr Koh Tsu Koon said the farm was quarantined at noon and the residents had been directed not to move any animal in and out of the area. The owner had been informed that all the 2414 pigs in the farm would be culled immediately. "All areas and roads around the area are now guarded by police and the public is not allowed to bring any livestock or pets in and out of the area," he said.
The state government was informed of the blood test results by the Veterinary Studies [?Research Institute in Ipoh this morning. The state government had also directed the operators of the other 49 pig farms nearby not to move their pigs except for slaughter, he said.
[Penang State is a new focus of Nipah virus infection in Malaysia - Mod.CYC
***
[2
Date: Fri, 21 May 1999 21:31:44 +0800
From: Dr.M.Vadivale <vale@pop.jaring.my>
Source: <http://thestar.com.my/je/news/1999/5/21/2110tsni.asp> [edited

Penang has been put on red alert as the deadly Nipah virus has been detected at a farm with 2,414 pigs in Kampung Luar Valdor in Sungai Bakap, Seberang Prai Selatan.
Chief Minister Tan Sri Dr Koh Tsu Koon said results of the test came through the Veterinary Research Institute in Ipoh at 9.30am yesterday. He said blood samples from the pigs were taken on May 4 and the tests were ready on Tuesday "but the authorities had to wait and double check" before ordering a quarantine at 2:30 PM yesterday.
"I have ordered an immediate quarantine on that farm, the people there will be evacuated and all the pigs on the farm will be culled as soon as

possible," he told a press conference before the afternoon session of the state assembly sitting yesterday. Dr Koh said the farmer and his family would be evacuated to a centre that had yet to be decided on.
He said the state task force which had been re-activated would be mobilised to facilitate all culling and evacuation arrangement to curb the spread of the disease to 49 other farms in Valdor New Village.
Dr Koh said the 49 pig farms in Kampung Valdor had 56,724 pigs. A second blood test would be carried out immediately on them too.
"The whole area has also been placed under quarantine, which means that no movement of all animals is allowed in and out of the area from 2.30pm today," he said.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....jw/es
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-05-23 23:50:00
Subject: PRO/AH> Nipah virus, dogs - Malaysia (04)
Archive Number: 19990523.0847

NIPAH VIRUS, DOGS - MALAYSIA (04)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus, dogs positive 990421000350
Nipah virus, dogs - Malaysia (02) 990423223151
Nipah virus, dogs - Malaysia (03) 990519000649
Date: Fri, 21 May 1999 21:39:03 +0800
From: Dr.M.Vadivale <vale@pop.jaring.my>
Source: The Star, Malaysia, Mon 17 May 1999 [edited
<http://thestar.com.my/je/news/1999/5/17/1711ipni.asp>

Private veterinarians were surprised by the news that 20 dogs from the Ipoh Society for the Prevention of Cruelty to Animals (ISPCA) would be put down after testing positive for the Nipah virus.
Expressing his skepticism, a veterinarian, who did want to be named, has questioned the accuracy of the ELISA test conducted by the Centres for Disease Control and Prevention (CDC) in Atlanta to detect the Nipah virus.
He said the blood samples of two private-owned dogs had been sent by two local veterinarians to be tested together with the blood samples of the ISPCA dogs and cats and that both animals had tested positive.
He said the two dogs in question were neither near the Nipah high-risk area, nor were they ever at ISPCA.
"We want to know the specificity of the Nipah test conducted by the CDC. "I suspect that the blood samples of all the 20 dogs might have shown positive because of a cross reaction between the Nipah virus antigen used for the test and the vaccine viruses normally given to dogs once a year.
"The six-in-one distemper vaccination given to dogs has six vaccine viruses of which three are of the paramyxovirus type," he said.
Another veterinarian said the ISPCA was located far from the Nipah high-risk areas of Tambun, Ampang and Ulu Piah.
The CDC officer stationed in the country declined to comment.
[Byline: V.P. Sujata & Kuldeep S. Jessy
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[Seems a fair question. Answers, anyone? - Mod.JW
.....jw/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID



Published Date: 1999-06-06 23:50:00
Subject: PRO/AH> Nipah virus, dogs - Malaysia (05)
Archive Number: 19990606.0957

NIPAH VIRUS, DOGS - MALAYSIA (05)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed/html>

See Also

Nipah virus, dogs - Malaysia (02) 990423223151
Nipah virus, dogs - Malaysia (03) 990519000649
Nipah virus, dogs - Malaysia (04) 990523104358
[1
Date: Mon, 24 May 1999 12:16:13 +0800
From: Dr Peter Irwin <irwinp@numbat.murdoch.edu.au>

Having worked for two years recently at the Universiti Putra Malaysia teaching dog and cat medicine may I please comment on the most recent report of Nipah positive dogs from the Ipoh region (geographically distant from the Nipah-affected areas)?
The positive serology in these dogs is consistent with exposure but there does not seem to be convincing evidence that dogs develop disease from my reading of the ProMED-mail postings. A number of dogs were identified as showing "distemper-like" neurological signs during the early reports of the Nipah virus outbreak, but it should be remembered that canine distemper is endemic and very common in Malaysia. It is unlikely that any of those farm dogs were vaccinated - have the distemper serology results been made available on these dogs? Perhaps it is going to be a case of the more animals that are tested, the more that will turn out to be positive, but is that justification enough to destroy them?
--
Dr Peter Irwin BVetMed PhD FACVSc
Senior Lecturer Small Animal Medicine
School of Veterinary Clinical Science
Division of Veterinary and Biomedical Sciences
Murdoch University Western Australia 6150
[We shall all have to await the release of data that clearly have been accumulated but not released. I have not information as to the specificity of the tests being used, at least with respect to whether they are type-specific or antigenic complex-specific. Until we know this we cannot judge whether the tests are adequate but with Tom Ksiazek involved in the testing, I am confident the tests are good ones. One should keep in mind that whereas canine distemper virus is a member of the family Paramyxoviridae and Hendra and Nipah viruses are also members of that same family, the latter two are members of a different genus within the family. How much if any cross-reactivity occurs between members of different genera of the family Paramyxoviridae is unknown to me. I do not know whether dogs become ill after infection with Nipah virus but I wouldn't bet against it.
- Mod.CHC
****

[2
Date: Wed, 26 May 1999 18:42:32 +0000
From: Jamal Hassan <JAMAL@jphvri.po.my>
Source: Star Online, Star Publications (Malaysia)
<http://thestar.com.my/je/news/1999/5/26/2608kchv.asp>

The state government has banned the unauthorised movement of pigs, dogs and cats in Kuching, Serian and Sibu districts [of Sarawak, which have been declared Nipah virus-infected areas. State Secretary Tan Sri Haji Hamid Bugo said in a government gazette notification that there was reasonable cause to believe that the Nipah or Hendra-like virus existed among these animals in the three districts.
Following the coming into force of the Kuching, Serian and Sibu Districts (Nipah Virus Infected Areas) Order, 1999 on May 14, he said the removal of the animals into or out of the affected areas was prohibited unless the animals had been inspected and certified free from Nipah virus infection by a competent authority. The order took the Kuching and Samarahan Division Livestock Breeders Association by surprise.
On May 17, state Environment and Public Health Minister Datuk Amar James Wong Kim Min told the State Assembly that Sarawak had been spared the Nipah virus and [sic that there were no confirmed cases of JE associated with commercial pig farms in the state. However, Wong said that health education on the danger of Nipah virus infection and the need to observe personal protective measures by pig farm and abattoir workers and those transporting the animals should be stepped up.
--
Jamal Hassan
Research Officer, Biologics Development,
Veterinary Research Institute (VRI)
No 59, Jalan Sultan Azlan Shah,
31400 Ipoh, Perak Darul Ridzuan
Malaysia.
web site: http://agrolink.moa.my/jph/vriph/
e-mail: JAMAL@jphvri.po.my
.....chc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-06-06 23:50:00
Subject: PRO/AH> Nipah virus - Malaysia (16)
Archive Number: 19990606.0949

NIPAH VIRUS - MALAYSIA (16)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed/html>

See Also

Nipah virus - Malaysia (12) 990504142537
Nipah virus - Malaysia (13) 990508222545
Nipah virus - Malaysia (14) 990513151319
Nipah virus - Malaysia (14): Disclaimer 990519122827
Nipah virus - Malaysia (15) 990518194240
[1
Date: Tue, 1 Jun 1999
From: Chan Yow Cheong mailto:chanyowcheong@pacific.net.sg
ProMED-mail Regional Moderator for Asia
Source: Bernama ex The Straits Times, 1 Jun 1999 [edited

Two workers at a pig farm in Sungai Buloh in Selangor died of the Nipah virus, taking the total death toll to 103 since the outbreak began in October [1998.
A spokesman for the Selangor JE operations room said one worker died last Friday and the other last Saturday at the Kuala Lumpur Hospital. They had been hospitalised since May 15, the spokesman said. The spokesman said the authorities had placed three pig farms in Sungai Buloh under quarantine since the two cases were detected.
******
[2
Date: Tue, 01 Jun 1999 06:40:29 -0400
From: Marjorie P. Pollack <pollackmp@mindspring.com>
Source: Asia Pulse, 05/31/1999 22:57

Another victim of Nipah virus - a 68-year old woman from Sungei Buloh died in University Hospital. Earlier two pig farm workers who were suspected to have been infected with the virus from Sungei Buloh died in Kuala Lumpur Hospital last week.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[This epidemic seems to have tailed off but is definitely not over, no matter the official pronouncements. - Mod.CHC
.....chc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in



Published Date: 1999-06-06 23:50:00
Subject: PRO/AH> Nipah virus - Malaysia: official report
Archive Number: 19990606.0948

NIPAH VIRUS - MALAYSIA: OFFICIAL REPORT
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed/html>
[see also
Nipah virus - Malaysia (12) 990504142537
Nipah virus - Malaysia (13) 990508222545
Nipah virus - Malaysia (14) 990513151319
Nipah virus - Malaysia (14): Disclaimer 990519122827
Nipah virus - Malaysia (15) 990518194240
Nipah virus - Malaysia (16) (not yet archived)]
Date: Sat, 05 Jun 1999 20:40:43 -0600
From: ProMED-mail <promed@usa.healthnet.org>
Source: <http://www.oie.int/info/AIS_71.HTM>

[Dr. Arnon Shimshony was kind enough to bring this official report to our attention. - Mod.CHC]
"Emergency report" by the Director General of the Malaysian Veterinary Services, Dr Mohd Nordin Mohd Nor, to the OIE, published in their weekly DISEASE INFORMATION of 28 May 1999, Vol. 12 - No. 20.
Text of a report received on 17 May 1999 from Dr Mohd Nordin Mohd Nor, Director General of Veterinary Services, Ministry of Agriculture, Kuala Lumpur; Report date: 15 May 1999.
1. History of human cases
The outbreak of Nipah disease in Malaysia, which has caused human fatalities, has been attributed to a viral infection in pigs. The outbreak in 1998/99 has been investigated and traced back to earlier incidences which were provisionally diagnosed as Japanese encephalitis (JE).
In 1997, the illness was reported in a number of pig-farm workers, one of whom died. Most of them received treatment at private hospitals.
In 1998, more cases of viral encephalitis were reported and two more villages were affected. A special Task Force comprising officers from the medical and veterinary departments was formed. By the end of 1998, ten workers from Tambun, Ulu Piah and Ampang had died from the disease after being in a coma for periods ranging from four days to a few weeks. Among the viral encephalitis cases, only about 15% were confirmed as JE, leaving the remaining 85% undetermined.
By mid-December 1998, the disease had spread to Sikamat, about 60 km south of Kuala Lumpur, through movement of infected pigs. Seven of the 20 workers developed the disease and five died in January 1999.
By March 1999 the disease had spread to the major pig producing area of Bukit Pelandok in the State of Negeri Sembilan.

The Department of Medical Microbiology, University of Malaya, successfully isolated an unknown virus. The virus was sent to the Arbovirus Research Center, Center for Disease Control (CDC) in Fort Collins, Colorado, United States of America. There, the Malaysian and United States scientists worked together to study the characteristics of the virus. On 18 March 1999, the CDC announced that the isolate was of a genus closely related to the Hendra virus, a paramyxovirus first isolated in Brisbane, Australia, in 1994. On

10 April 1999, the isolate was officially called the Nipah virus, named after the village Sungai Nipah in Negeri Sembilan, where the worker from whom the virus was isolated had died.
The disease spread to more farms and, from 1 March to 10 May 1999, a total of 224 suspected cases of viral encephalitis occurred in Negeri Sembilan with 80 fatalities.
Out of a total of 258 persons suspected of being infected with the Nipah virus, 100 have died.
As a measure to control the spread of the new virus, farmers and their families have been instructed to leave their villages and settle temporarily in schools and community halls outside the affected district.
Assistance has been sought from experts in the CDC and Australia to help with the diagnosis and control of Nipah disease.
2. Clinical picture in humans
- Mild to severe clinical signs.
- Fever and headaches of varying severity.
- A few patients present drowsiness and disorientation, later falling into a coma and requiring artificial respiration.
- A majority of the patients in a coma subsequently die
- The full course of the disease is still unknown.
- The incubation period is postulated to be from one to three weeks.
Some patients have shown serological reactivity without clinical signs.
3. Disease in pigs
- Generally, mortality is low but morbidity is high.
- Spread of the disease between and within pig farms has not been established.
3.1 Clinical signs
a) Weaners and porkers
- Mild to severe coughing, with varying reports of mortality and morbidity.
b) Sows and boars
- Disease more pronounced, including moderate to severe respiratory disorder characterised by dyspnoea, convulsions and death.
- In boars, disease may be acute, death occurring within several hours.
Thick mucopurulent discharge and pneumonia in less severe forms.
c) Piglets, gilts and sows
- Convulsions and other neurological signs.
3.2 Necropsy
- Varying degrees of consolidation of the lungs, primarily the diaphragmatic lobes (prominently thickened interlobular septa).
- Cut surface showed exudate of varying consistency in the bronchi.
- Kidneys showed congestion both on the surface and in the cortex.

- Brain appeared normal except in a case with petechial haemorrhage.
- Other visceral organs appeared normal.
4. Disease in other animals
Serologically positive dogs, cats, horses and goats were found in the infected areas.
Dogs: lesions observed at necropsy of dogs presenting clinical signs were similar to those of affected pigs. Kidneys showed severe haemorrhage and congestion. Exudates were present in the trachea and bronchi.
5. Mode of transmission
Transmission studies in animals are being carried out at the Australian Animal Health Laboratory (AAHL), CSIRO (1), Australia.
5.1 Oral inoculation
- Incubation period for clinical signs was 14 to 16 days.
- Clinical signs and gross pathology were mild.
- Virus isolation work is in progress.
5.2 Parenteral inoculation
- Two inoculated pigs developed a more severe disease, one showing a central nervous system syndrome and the other a respiratory tract syndrome. Signs developed within 7 to 10 days of challenge.
5.3 In-contact pigs
- Infection occurred quickly, possibly at first contact. Neutralising antibodies were detected at day 14.
- Virus multiplication in the tonsils and respiratory epithelium, together with contaminated cellular debris in the lumen of air passages in the lung,

suggests that the virus may at least be transmitted by pharyngeal and bronchial secretions.
Other results are pending.
6. Diagnosis
6.1 Virus isolation
Tissue samples of lung, liver, kidney, spleen, heart and brain were collected from necropsied animals for virological examination. Samples were sent to the CDC in Atlanta, Georgia, United States of America.
Molecular studies done on the virus isolate showed a 21% difference in the nucleotide sequence and an 11% difference in the amino acid sequence compared to the Hendra virus.
6.2 Serological tests
Two laboratories, namely the Veterinary Research Institute (VRI), Ipoh, and the Task Force Laboratory at the Department of Medical Microbiology, University of Malaya, were selected to carry out serological tests on the veterinary and human sera respectively. Samples were tested using the IgG and IgM capture ELISA at the above laboratories and virus neutralisation tests at AAHL, Geelong (Australia).

7. Results of serological surveillance in animals during the outbreak period
7.1 Pigs
In a previously infected farm, more than 95% of sows had Nipah virus antibodies. More than 90% of the piglets had antibodies assumed to be maternal antibodies. Antibody prevalence across all ages is currently being studied in an infected farm.
7.2 Horses
At a farm in an infected area, 2 of the 47 polo horses were found to have Nipah virus antibodies and were euthanised. All racehorses in the country have tested negative.
7.3 Dogs
More than 50% of dogs captured in one of the infected areas were positive to Nipah virus by IgG capture ELISA using Hendra antigen.
Antibodies in dogs in other infected areas are also being studied.
7.4 Cats
Out of 23 cats tested in the affected area, one was seropositive.
7.5 Bats
Out of 99 flying foxes tested, 15 were found to be positive to the virus neutralisation test for the Nipah virus.
7.6 Rodents
To date, serum samples from rats trapped in infected areas have all been negative. Further tests are in progress.
7.7 Other animals
Sera have also been collected from cattle, goats, sheep, squirrels, wild boar, wild birds, poultry and ostriches for later testing.
8. Control and eradication programme
8.1 Control Programme for Nipah Disease Phase I
With the discovery of the aetiology of the disease, a programme was developed for immediate eradication of the disease by mass culling of pigs.
>From 28 February to 26 April 1999, a total of 901,918 pigs were culled in four infected areas (one in the State of Perak, one in Selangor and two in Negeri Sembilan).
8.2 Control Programme for Nipah Disease Phase II
A surveillance programme was developed to detect previously infected farms by testing for the presence of pigs with antibodies to the Nipah virus.
All farms outside the previously designated high risk areas will be screened by taking a statistically valid random sample of sows for detection of Nipah virus antibodies. Farms with two consecutive negative tests performed within an interval of three weeks will be accorded "provisionally free" status. However, farms found to be positive during the first or second tests will be depopulated.
To date, 235 farms have been tested, of which 9 were found to be positive. A total of 23,736 animals and 11,458 pigs in 4 of the positive farms have been culled. In this programme a total of 824 farms with a 1.6 million SPP (standing pig population) will be tested.
9. Actions for the future

Investigations will continue in order to ascertain the natural hosts of the Nipah virus and the modes of transmission to domestic animals and humans. The outbreak has given the Government of Malaysia an opportunity to review the status of the pig industry and the direction for revival of the industry.
(1) CSIRO: Commonwealth Scientific and Industrial Research Organisation.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[This is the first comprehensive report we have seen and may be the first comprehensive report. Japanese encephalitis is no longer being reported as the etiologic agent of Nipah disease and other steps forward obviously have been taken. The overall mortality rate in humans is 38.8%. Many questions remain (Are pigs persistently infected? Does Nipah virus react with antibodies to paramyxoviruses other than Hendra virus? What is the significance of antibody if "some patients have shown serological reactivity without clinical signs"? and more). Nonetheless, the picture is clearing. - Mod.CHC]
.....chc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-06-07 23:50:00
Subject: PRO/AH> Nipah virus, pigs - Malaysia (12)
Archive Number: 19990607.0970

NIPAH VIRUS, PIGS - MALAYSIA (12)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed/html>

See Also

Nipah virus, pigs - Malaysia (08) 990508222511
Nipah virus, pigs - Malaysia (09) 990514165641
Nipah virus, pigs - Malaysia (10) 990518230629
Nipah virus, pigs - Malaysia (11) 990519000721
Nipah virus, pigs - Malaysia (Penang) 990523104524
Date: Sat, 5 Jun 1999 20:48:01 +0800
From: Muruga Vadivale <vale@pop.jaring.my>
Source: http://thestar.com.my/je/news/1999/6/5/0505ipni.asp

Less than 4% of the pigs in 600 farms located in low-risk areas in the country have tested positive for the Nipah virus. Veterinary Services Department director-general Datuk Dr Mohd Nordin Mohd Noor said the result was encouraging and was better than the department had anticipated. He said the department was now conducting its second round of testing which was scheduled to be completed by July 20. "About 230 farms have undergone the second round of testing but the results are not known yet. "We do not expect the results to show a higher percentage than the first test," he told reporters after presenting awards to winners of a livestock breeding competition at the Infoternak farm here yesterday.
On the Government's contribution of RM50 per pig culled to affected pig farmers, Dr Nordin said only 71 of the 86 pig farmers in Perak had applied for and received the assistance. In Selangor and Negri Sembilan, he said the pig farmers had not applied for the contribution as they were still negotiating for RM200 a pig.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....chc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.



Published Date: 1999-06-18 23:50:00
Subject: PRO/AH/EDR> Nipah virus, pigs - Malaysia (13)
Archive Number: 19990618.1041

NIPAH VIRUS, PIGS - MALAYSIA (13)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus, pigs - Malaysia (12) 990607234625
Nipah virus, pigs - Malaysia (Penang) 990523104524
Date: Thu, 17 Jun 1999 21:13:39 +0800
From: Chan Yow Cheong mailto:chanyowcheong@pacific.net.sg
ProMED-mail Regional Moderator for Asia
Source: Sin Chew Jit Poh/Asia News Network ex The Straits Times,
17 Jun 1999 [edited

Pigs from three more farms in Johor [peninsular Malaysia's southern-most state, across the bridge from Singapore have been found to have been infected with the deadly Nipah virus, according to the latest sample analysis.
[The three farms join the ranks of eight other Johor pig farms, bringing the number of affected farms to 11. There are 82 pig farms in Johor state.
In the first sample analysis, four farms were found to be infected, and 15 900 pigs were killed. In the second round, another four farms were found to be infected, which puts another 17 000 pigs in line to be killed.
The latest three infected farms, which surfaced in the third round of sample analysis, bring the number of pigs killed or to be killed to nearly 44 000 [in the state.
The outbreak of the [Nipah virus, which has killed more than 100 people across the country, started in Perak in October 1998. It spread to Negri Sembilan two months later and Kelantan last month. Almost a million pigs have been killed countrywide in the operations against the spread of the virus.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....chc/jw
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org



Published Date: 1999-06-30 23:50:00
Subject: PRO/AH/EDR> Nipah virus - Malaysia (17)
Archive Number: 19990630.1104

NIPAH VIRUS - MALAYSIA (17)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus - Malaysia (14) 990513151319
Nipah virus - Malaysia (15) 990518194240
Nipah virus - Malaysia (16) 990606113035
Nipah virus - Malaysia: official report 990606113005
Date: Wed, 30 Jun 1999
From: Chan Yow Cheong mailto:chanyowcheong@pacific.net.sg
ProMED-mail Regional Moderator for Asia
Source: New Straits Times, 30 Jun 1999 [edited

Residential areas at former pig farming areas in Lukut that were hit by the [Nipah viral encephalitis [VE outbreak this year will be declared safe for occupation by the end of this week. Of the 999 houses that were evacuated in Bukit Pelandok, Kampung Baru Sungai Nipah and Kampung Sawah in Lukut since the the VE pig culling operation began on 20 Mar 1999, 941 houses
have been declared safe for occupation.
[State Health director Dr Ramli Rahmat said the area on the whole was now perfectly safe and there are now no restrictions on the movement of people there. He said: "The department will however continue to monitor the area including holding mosquito and disease surveillance there. We are also following up on VE patients who recovered and their families." Dr Ramli said the Seremban hospital conducts special VE clinics on Fridays for the VE follow-up checks.
He said VE patients who had recovered were required to visit the clinic for checks seven times over a one-year period after their discharge from hospital. "It is vital that these people come for their scheduled checks. Department officers would be despatched to seek out those who fail to turn up," he added.
Dr Ramli said about 226 people from pig farming areas in the State had been warded [hospitalized with suspected VE this year; 83 succumbed to the disease.
He said there were still 3 patients being treated at the Seremban hospital for suspected VE with 2 stable cases and one still ill, adding that there were another 7 patients in hospitals in Kuala Lumpur.
[The Nipah viral encephalitis follow-up of patients who have recovered, I was informed, has yielded evidence of relapses in at least 5 patients. During the outbreak, we have discussed the question of viral persistence in our postings. It was pointed out that in Australia a patient developed encephalitis over a period of 14 months after an initial Hendra virus infection. The finding of disease relapse in Nipah viral encephalitis patients is disturbing and I hope official confirmation and detailed data

are forthcoming from Malaysia. - Mod. CYC
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[The suggestion that relapses occur is disturbing. That the term "viral encephalitis" or "VE" is still being used is also, but not equally, disturbing. Looks like someone in the Malaysian Government intends to stonewall right to the bitter end. That mosquito surveillance is even mentioned tells where the mind set is. Nipah virus is not transmitted biologically by mosquitoes; i.e., it is not an arbovirus. The worry about mosquitoes is residual from the early days of the epidemic when the Malaysian Government mistook the early cases of Nipah encephalitis for Japanese encephalitis. There is a long way to go. - Mod.CHC
.....chc/jw

##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-07-07 23:50:00
Subject: PRO/AH> Nipah virus, pigs - Malaysia (14)
Archive Number: 19990707.1124

NIPAH VIRUS, PIGS - MALAYSIA (14)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus, pigs - Malaysia 990415164709
Nipah virus, pigs - Malaysia (02) 990416154539
Nipah virus, pigs - Malaysia (13) 990618165659
Date: Tue, 6 Jul 1999
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: The Star Online, 6 Jul 1999 [edited

Some 1,500 pigs were culled and burnt in two large pits near the beach in Gertak Sanggol [Penang state yesterday, Chief Minister Tan Sri Dr Koh Tsu Koon said.
He said the pigs were among 5,600 pigs from a farm in Gertak Sanggol which would be culled and burnt until tomorrow. Another 600 from another farm in Sungai Tiram would be culled from Thursday.
"Our priority has always been to cull within the farm itself but in this case we cannot do so as the area is very congested," he told a press conference at Penang Development Corporation yesterday.
"If we were to transport the pigs to a culling area far away from the infected farm, we will be exposing more people to greater danger," he said, adding that affected residents should bear with the inconvenience during the three days of culling.
Over 200 residents who were evacuated from their homes yesterday protested over the burning of carcasses "almost at their doorsteps." During a dialogue on Sunday, residents from 21 houses were ordered to evacuate their homes. Many said the pigs should have been burnt and buried at the affected farm instead of at the site 1km away from the farm.
Dr Koh said 11 pigs from a farm in Gertak Sanggol were found infected with the Nipah virus while more than three were detected in Sungai Tiram. He said the 11 tests were done on 24 blood samples taken from the Gertak Sanggol farm in June and the results were ready on Thursday. He said the authorities were still awaiting the results of the blood tests from five more samples.
Dr Koh also said the main reason he had asked that the media only get the news of the Nipah virus from official statements issued by him or the state secretary was to safeguard the pig farming and tourism industry in the state.
"It is not a cover-up. Farms that are involved are localised, so we can contain it locally and the losses are suffered by a small number of people. We contained the news because it is not necessary to alarm the public."
--
ProMED-mail
e-mail: promed@usa.healthnet.org

[We now understand why there has been a conspicuous absence of news on the Nipah virus outbreak especially of human infections coming out from Malaysia through the media although infection is still being detected among pigs in pig farms in certain states. The answer lies in the last sentence: "We contained the news because it is not necessary to alarm the public" in the Penang Chief Minister's statement. I suppose this is the official stand of the Malaysian government on the matter. - Mod.CYC
.....jw/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-07-11 23:50:00
Subject: PRO/AH> Nipah virus - Malaysia (18)
Archive Number: 19990711.1165

NIPAH VIRUS - MALAYSIA (18)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus, pigs - Malaysia (10) 990518230629
Nipah virus, pigs - Malaysia (11) 990519000721
Nipah virus, pigs - Malaysia (12) 990607234625
Nipah virus, pigs - Malaysia (13) 990618165659
Nipah virus, pigs - Malaysia (14) 990707004159
Nipah virus - Malaysia (14) 990513151319
Nipah virus - Malaysia (15) 990518194240
Nipah virus - Malaysia (16) 990606113035
Nipah virus - Malaysia (17) 990630230024
Nipah virus - Malaysia: official report 990606113005
Date: Sat, 10 Jul 1999
From: Chan Yow Cheong mailto:chanyowcheong@pacific.net.sg
ProMED-mail Regional Moderator for Asia
Source: Daily Express, 9 Jul 1999 [edited
<http://www.infosabah.com.my/Daily_Express/>

A report by 25 foreign experts confirms that the viral encephalitis which hit the country recently was caused by two viruses, the Japanese Encephalitis (JE) and Nipah. Deputy Director-General of Health (Public Health) Datuk Dr Abdul Aziz Mahmood said the report submitted to the Health Ministry last month rejected claim that the authorities had wrongly identified the viruses responsible.
"The experts have acknowledged that the move by the government to cull infected pigs had succeeded in controlling the outbreak," he said at a news conference to announce the findings of the foreign experts, here [Kuala Lumpur today.
Opposition leader Lim Kit Siang had in the Dewan Rakyat [Parliament recently accused the government of failing to identify the culprit virus when it announced two viruses instead of one for causing the viral encephalitis. He claimed that only one virus was responsible and that was the Nipah virus.
Dr Abdul Aziz said the foreign experts headed by zoonotic expert Dr Thomas G. Ksiazek from the Centre of Disease Control, United States, also discovered that dogs, cats and horses in the affected areas were also infected by the viruses. However, he said studies showed that these animals could not spread the viruses to other animals of the same species.
The foreign experts, comprising 12 from CDC, five from Japan, three each from Australia and the World Health Organisation (WHO) and two from Germany, also commended the Malaysian government for adopting correct measures in checking the viral encephalitis since it was detected in September last year.

Dr Abdul Aziz said the last JE/Nipah infected case was reported on 27 May, involving seven pig farmers in Sungai Buloh, Selangor. Four of the farmers later died, he said. As at May 27, there were 265 JE/Nipah cases detected and 105 of the patients died.

[Caveat emptor; if you are prepared to buy this, beware. Until at least very recently, there has not been a shred of evidence reported (no virus isolations, no seroconversions) that any Malaysian encephalitis case within the past months has been caused by Japanese encephalitis virus. Call me a skeptic (the American humorist Will Rogers, said: "There's no trick to being a humorist when you have the whole government working for you.") but I recall the report posted on ProMED-mail in early June [Nipah virus - Malaysia: official report 990606113005. Below we repost the germane portions of that report. Not a shred of evidence that any 1999 encephalitis cases were caused by Japanese encephalitis virus. Still, the official line from Malaysia is not only that the epidemic was of mixed etiology (Nipah virus as well as Japanese encephalitis virus) but that the 265 cases were caused by "JE/Nipah". If this is not nonsense, I owe a huge apology to an entire country. Let's wait and see. I expect that hard data will be presented at the International Congress of Virology in Sydney next month and at the American Society for Tropical Medicine and Hygiene annual meeting the end of November. I would like to see data on virus isolations and confirmed serodiagnoses, not diagnoses based on tests of single serum samples. If one of the 25 foreign experts would be willing to provide such data, we would be pleased to post it. Meanwhile, it's a bit too early for me to draft that letter of apology. - Mod CHC

BEGINNING OF COPIED REPORT

'Emergency report' by the Director General of the Malaysian Veterinary Services, Dr Mohd Nordin Mohd Nor, to the OIE, published in their weekly DISEASE INFORMATION of 28 May 1999, Vol. 12 - No. 20.

Text of a report received on 17 May 1999 from Dr Mohd Nordin Mohd Nor, Director General of Veterinary Services, Ministry of Agriculture, Kuala Lumpur; Report date: 15 May1999.

1. History of human cases

The outbreak of Nipah disease in Malaysia, which has caused human fatalities, has been attributed to a viral infection in pigs. The outbreak in 1998/99 has been investigated and traced back to earlier incidences which were provisionally diagnosed as Japanese encephalitis (JE).

In 1997, the illness was reported in a number of pig-farm workers, one of whom died. Most of them received treatment at private hospitals.

In 1998, more cases of viral encephalitis were reported and two more villages were affected. A special Task Force comprising officers from the medical and veterinary departments was formed. By the end of 1998, ten workers from Tambun, Ulu Piah and Ampang had died from the disease after being in a coma for periods ranging from four days to a few weeks. Among the viral encephalitis cases, only about 15% were confirmed as JE, leaving the remaining 85% undetermined.

By mid-December 1998, the disease had spread to Sikamat, about 60 km south of Kuala Lumpur, through movement of infected pigs. Seven of the 20 workers developed the disease and five died in January 1999.

By March 1999 the disease had spread to the major pig producing area of Bukit Pelandok in the State of Negeri Sembilan.

The Department of Medical Microbiology, University of Malaya, successfully isolated an unknown virus. The virus was sent to the Arbovirus Research Center, Center for Disease Control (CDC) in Fort Collins, Colorado, United States of America. There, the Malaysian and United States scientists worked together to study the characteristics of the virus. On 18 March 1999, the CDC announced that the isolate was of a genus closely related to the Hendra virus, a paramyxovirus first isolated in Brisbane, Australia, in 1994. On 10 April 1999, the isolate was officially called the Nipah virus, named after the village Sungai Nipah in Negeri Sembilan, where the worker from whom the virus was isolated had died.

The disease spread to more farms and, from 1 March to 10 May 1999, a total of 224 suspected cases of viral encephalitis occurred in Negeri Sembilan

with 80 fatalities.

Out of a total of 258 persons suspected of being infected with the Nipah virus, 100 have died.
As a measure to control the spread of the new virus, farmers and their families have been instructed to leave their villages and settle temporarily in schools and community halls outside the affected district.
Assistance has been sought from experts in the CDC and Australia to help with the diagnosis and control of Nipah disease.
6.2 Serological tests
Two laboratories, namely the Veterinary Research Institute (VRI), Ipoh, and the Task Force Laboratory at the Department of Medical Microbiology, University of Malaya, were selected to carry out serological tests on the veterinary and human sera respectively. Samples were tested using the IgG and IgM capture ELISA at the above laboratories and virus neutralisation tests at AAHL, Geelong (Australia).
7. Results of serological surveillance in animals during the outbreak period

7.1 Pigs
In a previously infected farm, more than 95% of sows had Nipah virus antibodies. More than 90% of the piglets had antibodies assumed to be maternal antibodies. Antibody prevalence across all ages is currently being studied in an infected farm.
END OF COPIED REPORT
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[This is the first comprehensive report we have seen and may be the first comprehensive report. Japanese encephalitis is no longer being reported as the etiologic agent of Nipah disease and other steps forward obviously have been taken. The overall mortality rate in humans is 38.8%. Many questions remain (Are pigs persistently infected? Does Nipah virus react with antibodies to paramyxoviruses other than Hendra virus? What is the significance of antibody if "some patients have shown serological reactivity without clinical signs"? and more). Nonetheless, the picture is clearing. - Mod.CHC
.....chc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-07-28 23:50:00
Subject: PRO/AH/EDR> Nipah virus - Malaysia (19)
Archive Number: 19990728.1274

NIPAH VIRUS - MALAYSIA (19)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus - Malaysia (18) 990711155147
Nipah virus - Malaysia: official report 990606113005
Date: Wed, 28 Jul 1999
From: Chan Yow Cheong mailto:chanyowcheong@pacific.net.sg
ProMED-mail Regional Moderator for Asia
Source: New Straits Times, 28 Jul 1999 [edited
http://www.nstpi.com.my/

[Below is an edited news report of a scientific seminar on "Nipah virus encephalitis" held on Monday, 26 Jul 1999 at the Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia. - Mod. CYC
In Malaysian medical history, one lorry driver will stand out. From his brain, scientists isolated a hitherto unknown virus which swept through pig farms in 3 states leaving a massive trail of devastation. That lorry driver, who died from viral encephalitis, was from Kampung Baru Sungai Nipah, Negeri Sembilan.
The Nipah virus, named after his community, is the world's newest nasty germ.
[Chief neurologist Professor Dr C.T. Tan of the University Hospital, working with Dr Goh Khean Jin, was suspicous that they were dealing with a new disease but had to wait for conclusive investigations from virologists. In the meantime, they worked on what they knew.
"The clinical picture was encephalitis, it sure looked like JE [Japanese encephalitis," says Dr Tan. "What was different was that the patients were adults. Only children get JE. We noted unusual signs like jerking and twitching.
"The clinical manifestations were unpredictable. In some cases, the patient had a mild headache in the morning but by evening needed a ventilator. Eventually, about 30 per cent of patients died. That's lethal."
WHAT'S NEW ABOUT NIPAH
Four people who recovered and went home have recently returned with what appears to be a relapse, with quite severe symptoms. It is not yet known exactly why they had a relapse. A relapse is not necessarily brought about by a return of the virus. It could be a purely clinical event because the human body is known to do this.
Another person -- she left her farm more than 3 months ago and was not sick at all -- has now reported encephalitis. This is the first case of a late onset of the disease.
Both events present new scientific challenges for clinicians who

are now investigating. It also suggests how dangerous the Nipah virus may be.
The Nipah virus engages a double whammy on human beings. The key event is the damage it does to blood vessels, particularly the smaller blood vessels of the brain. "That damage sets off a chain of events which lead to coma and death," says neuropathologist Associate Professor Dr Wong Kum Thong who led the autopsies at Universiti Hospital. "This virus is decidedly vicious, it moves very fast. The only known thing that leaves a similar, though not exactly the same trail of damage is the Hendra virus. Also, pathologists are studying the intriguing black spots found on the brain."
Here is an account of what the Nipah virus does to humans:
- The virus enters the body and gets into the bloodstream. This exact process is still being studied but what's clear is that, at some point in the process, the virus multiplies prolifically and heads for the brain.
- Once there, the virus penetrates cells of the inner wall of the blood vessels, known as the endothelium. These cells start to fuse together, forming giant cells which is abnormal. Soon, the giant cells die.
- With the inner wall damaged, the virus attacks the outer wall by simply "taking over" those cells. When those cells cannot cope any more, the virus leaps out of the bloodstream and invades the brain cells.
- While the blood vessel is being so brutally damaged, the body begins reacting by trying to heal the "wound". It starts off a blood clotting process -- called thrombosis -- hoping that the "punctured" blood vessel will be sealed off. This is a normal bodily reaction.
- Technically, such clotting is an intelligent move. But the Nipah virus, working in such huge numbers, is so pervasive that quickly, there are tiny clots everywhere. These clots eventually become blockages and, because the bloodstream is a closed system, pressure starts to build. Downstream, the resulting lack of oxygen causes the death of brain cells which those blood vessels are supposed to supply. This means brain damage has begun. That's the first part of the double whammy.
- Once out of the blood vessel, the virus invades cells of the brain. It simply takes over those cells, throwing metabolic processes haywire. The flushing systems of the cells fail, that's why inflammation sets in.
Eventually, the virus hits cells of the nervous system -- called neurons -- and disables all standard operating procedures of the body.
WHAT WE'RE STILL STUDYING
- Which exact part of the double whammy causes death?
- Why the brain? Actually, viral damage was found in all vital organs of autopsied patients -- to a lesser extent in the liver, to a greater extent in the brain. Because the brain is the body's control centre, damage done here is devastating. Tissue affinity -- or a certain predilection -- always plays a role. Viruses, and many other germs, are target-specific. This predilection can be seen in the way the virus attacks small blood vessels. For some reason, it doesn't target large arteries and veins. In one way, it's a blessing that the virus goes for the human brain. Supposing it preferred the lungs, then chances are humans would be coughing up the virus.
- What about the body's highly-rated immune response system? This is one occasion when the immune system is too slow for a fast working virus. Was it because this was man's first exposure to the Nipah virus?
- Why some people got sick and others didn't although all were from the high-risk group? This will be the epidemic's greatest challenge. If those people had some kind of immunity, perhaps that protection can be mimicked by way of a vaccine or other treatment.
[Byline: Theresa Manavalan
--

ProMED-mail
<promed@usa.healthnet.org
[It is not clear from this report whether the relapses & late onset have been confirmed by laboratory tests. We await further details - Mod.JW
.....jw
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.

Published Date: 1999-07-31 23:50:00
Subject: PRO/AH> Nipah virus - Malaysia: lab identification
Archive Number: 19990731.1303

NIPAH VIRUS - MALAYSIA: LAB IDENTIFICATION
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus - Malaysia: clinical & pathology not yet archived
Nipah virus - Malaysia 990415153739
Nipah virus - Malaysia (20) not yet archived
Nipah virus (Hendra-like) - Malaysia 990410222844
Nipah (Hendra-like) virus - Malaysia (05) 990418203525
Nipah virus, pigs - Malaysia 990415164709
Nipah virus, pigs - Malaysia (14) 990707004159
Hendra-like virus? - Malaysia: RFI 990319071030
Hendra-like virus? - Malaysia (02) 990319084147
Hendra-like virus - Malaysia (21) 990408163833
Date: Sat, 31 Jul 1999
From: Chan Yow Cheong mailto:chanyowcheong@pacific.net.sg
ProMED-mail Regional Moderator for Asia
Source: Lam Sai Kit, Kenneth mailto:lamsk@medicine.med.um.edu.my and M Vadivale SMTP:vale@pop.jaring.my, 30 Jul 1999 [edited

[Abstract of scientific paper presented at a Nipah Virus Encephalitis seminar held on 26 July 1999 at the University of Malaya Medical Centre (UMMC) in Malaysia. - Mod.CYC
Nipah Virus Encephalitis : Tracking A Killer Virus

Chua KB, Lam SK
Department of Medical Microbiology
The outbreak of viral encephalitis started in Perak in late September 1998 and spread to Negeri Sembilan by late February 1999. We received cerebrospinal fluid specimens from Seremban Hospital on 1st March and worked on a fast track to isolate and identify the killer virus.
Although we confirmed several cases of Japanese encephalitis infection serologically, epidemiological evidence suggested the existence of another virus. Specimens were inoculated into a variety of host systems and within five days, we detected a virus which caused syncytial formation in Vero cells. Electron microscopy revealed pleomorphic viral particles ranging in size from 160 - 300 nm, making us suspect that it is a member of the paramyxovirus family.
At CDC, Fort Collins, arborviruses were ruled out and electron microscopy confirmed our own observation. Further studies at CDC, Atlanta, revealed that the virus was related antigenically to the Australian Hendra virus. Since it is obviously a new virus, it was named Nipah virus after the locality of the outbreak.
After confirming that Nipah virus is a paramyxovirus, we advised the Ministry of Health on relevant control measures, which included the

avoidance of direct contact with infected pigs and the liberal use of disinfectants in pig farms. Based on our suggestion, ribavarin was used in the management of infected patients showing early symptoms. We also established that throat gargles and urine from patients contained the virus and the information was used to prevent nosocomial infections. Tracking this killer virus, from isolation to identification, took exactly 17 days.

--

ProMED-mail
e-mail: promed@usa.healthnet.org
.....jw/es

--

##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.

Published Date: 1999-07-31 23:50:00
Subject: PRO/AH> Nipah virus - Malaysia: clinical & pathology
Archive Number: 19990731.1302

NIPAH VIRUS - MALAYSIA: CLINICAL & PATHOLOGY
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus - Malaysia: lab identification not yet archived
Nipah virus - Malaysia 990415153739
Nipah virus - Malaysia (20) not yet archived
Nipah virus (Hendra-like) - Malaysia 990410222844
Nipah (Hendra-like) virus - Malaysia (05) 990418203525
Nipah virus, pigs - Malaysia 990415164709
Nipah virus, pigs - Malaysia (14) 990707004159
Hendra-like virus? - Malaysia: RFI 990319071030
Hendra-like virus? - Malaysia (02) 990319084147
Hendra-like virus - Malaysia (21) 990408163833
Date: Sat, 31 Jul 1999
From: Chan Yow Cheong mailto:chanyowcheong@pacific.net.sg
ProMED-mail Regional Moderator for Asia
Source: Lam Sai Kit, Kenneth mailto:lamsk@medicine.med.um.edu.my and
M Vadivale SMTP:vale@pop.jaring.my, 30 Jul 1999 [edited

[Abstracts of selected scientific papers presented at a Nipah Virus Encephalitis seminar held on 26 July 1999 at the University of Malaya Medical Centre (UMMC) in Malaysia. - Mod.CYC

NIPAH VIRUS ENCEPHALITIS

Clinical Features of Nipah Virus Encephalitis: The UMMC Experience
---
Goh KJ, Tan CT, Tan PSK, Kamarulzaman A, Chew NK, Tan KS, Delikan AE*
Department of Medicine and * Anaesthesiology and Intensive Care.
>From February to April 1999, 96 patients were admitted to the University of Malaya Medical Centre (UMMC) from the Nipah virus encephalitis outbreak areas. Ninety-one patients were found to have the disease based on clinical findings and on cerebrospinal fluid (CSF) examination. The male: female ratio was 5.1: 1. Age range was 13-58 years (mean 36.5). The ethnic breakdown was 82.4% Chinese, 14.3% Indian, 1.1% Malay and 2.2% others. The majority (95.6%) had direct contact with pigs. Main presenting symptoms were fever, headache, nausea/vomiting, and drowsiness. Focal neurological signs observed included segmental myoclonus, cerebellar signs, tremors, ptosis and tendon aflexia. Seizures occurred in 22%. 59.3% of patients had deterioration of consciousness. Forty -four (48.4%) were ventilated. CSF was abnormal in 77.5% of patients - 33.7% CSF lymphocytosis, raised protein and 43.8% raised protein only. Hendra serology was positive 73.4% and equivocal in 2.2%. Electroencephalograph (EEG) shows diffuse slow waves with/without bitemporal independent sharp waves. 28 (30.8%) patients died,

52 (57.1%) discharged while 11 (12.1%) remained in hospital. Poor prognostic factors included low Glasgow coma scale score at nadir, high maximum heart rate and blood pressure, seizures, segmental myoclonus, small pin-point pupils and abnormal doll's eye reflex and sharp waves on EEG. Flaccid tetraplegia during recovery was observed in some cases. Four cases had neurological relapse.
Conclusion: The Nipah virus causes a febrile encephalitic illness. Severe cases were characterised by reduced conscious level, seizures, focal neurological signs and signs of brain-stem dysfunction. Neurological relapse may occur.
******
Nipah Virus Encephalitis : Imaging Features

Sarji SA, Abdullah BJJ, Goh KJ*, Kamarulzaman A*. Departments of Radiology and *Medicine.
This study describes the findings on imaging in 26 patients who were admitted into the UMMC with clinical features of encephalitis and were from the outbreak areas. Their brains were imaged by computed tomography (CT) or magnetic resonance imaging (MRI). There were no abnormalities found in those who were imaged by CT, but MRI demonstrated abnormalities in the brains of all 26 patients. In both the acute and later phases of encephalitis, the main MRI finding was the presence of multiple, small, asymmetrically distributed focal lesions in the subcortical and deep white matter, likely areas of infarcts. In patients who had neurological relapse or worsening of neurological symptoms, diffuse continuous involvement of the cortical gray matter was demonstrated and this extended into the deep white matter on follow-up imaging. Widespread cerebral vasculopathy resulting in areas of demyelination or a direct attach on the neurons by the virus may be the underlying cause.
In conclusion, MRI was found to be a sensitive and useful imaging process for diagnosing Nipah encephalitis and for following the progression of the disease in the brain. The MRI features appear distinct from MRI descriptions of other viral encephalitides.
****
Pathological Changes In Nipah Virus Infection

Wong KT, Looi LM
Department of Pathology
This study describes the pathological changes in tissues of patients who died of the Nipah virus infection, and postulates on its pathogenesis. Eighteen autopsy brains and 4 sets of other organs were examined after formalin fixation, routine processing and H&E staining. Material gathered from 14 autopsies performed in the Ministry of Health and 4 performed in the UMMC. All the patients had direct contact with pigs and presented with clinical features typical of Nipah virus encephalitis. Sixteen had anti-Hendra antibodies either in the serum and/or CSF. In addition 4 cases had virus isolated from the CSF. The main pathological change was vasculitis in small blood vessels (venules, capillaries, arterioles, and muscular arteries), particularly in the brain. Other organs involved included the lung, heart and kidney. Vasculitis-induced thrombosis appeared to cause widespread, focal infarction/ischaemia. Occasionally, endothelial syncytia formation was noted. Syncytial formation was also noted in the Bowman's capsule. Neuronal inclusions, presumably viral, were observed in the brain. The pathogenesis of Nipah virus infection appears to be primarily due to endothelial damage resulting in vasculitis, thromboses and infarction which is especially severe in the brain but direct neuronal infection may also play an important role.
******
Nipah Virus Outbreak : Clinical Management At The UMMC

Kamarulzaman A, Goh KJ, Tan PSK, Delikan AE, Imran ZA, Tan CT Departments of Medicine and Anaesthesiology
The Nipah virus outbreak and the identification of a new causative agent whose properties were largely unknown at the onset of the outbreak provided an enormous challenge to those involved in the clinical care of patients.

A multidisciplinary approach involving neurologists, infectious disease physician, intensivists, nurses and physiotherapists was essential in the overall management. Supportive care was the mainstay of treatment which included intensive care monitoring and the initiation of mechanical ventilation as needed for airway protection with the onset of neurological deterioration.
With the recognition that arterial thrombosis may play an important role in the pathology of the disease anti-thrombotic agents aspirin and pentoxyfyline were used in all patients.
Ribavarin, a nucleoside analogue which has in vitro activity against Hendra was used in an open labeled nonrandomised trial in 73 patients admitted to UMMC. The results of its clinical activity in Nipah encephalitis will be discussed.
Given the limited treatment options and high case fatality rate of Nipah encephalitis, prevention of the disease particularly in the health-care setting was paramount, infection control measures involving standard and droplet precautions were employed in the outbreak as soon as the identification of a new potentially highly infectious agent was recognised.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
.....jw/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-07-31 23:50:00
Subject: PRO/AH/EDR> Nipah virus - Malaysia (20)
Archive Number: 19990731.1300

NIPAH VIRUS - MALAYSIA (20)
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus - Malaysia 990415153739
Nipah virus - Malaysia (19) 990728160123
Date: Fri, 30 Jul 1999 21:34:09 +0800
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: Associated Press ex Fox News, 31 Jul 1999
<http://www.foxnews.com/>

A new virus that has killed more than 100 people in Malaysia has claimed the life of one more victim on the outskirts of Kuala Lumpur, a news report said today.
The latest victim was a worker at a slaughterhouse in the central state of Selangor, The Sun newspaper reported. The man, who had been hospitalized since July 27 after being infected with the deadly Nipah virus, died on Friday.
The virus, which is transmitted from pigs to humans, swept through more than half of Malaysia's thirteen states earlier this year.
It first surfaced in Negri Sembilan state, 60 miles southeast of Kuala Lumpur, where it killed 84 people and sickened hundreds. To prevent its spread, the government ordered the destruction of about 1 million pigs.
The latest death troubled health officials.
"We are curious how he could be infected, since his official work was to mark carcasses,'' Veterinary Services Department director general Dr. Mohamad Nordin Mohamad Nor was quoted as saying by newspaper.
"The risk of infection for those at the end of the slaughter process is low, compared with those who handle live pigs," he said.
Health officials warn that there are still pigs across Malaysia that are infected by the deadly virus. Malaysia has been conducting random tests on pigs nationwide and any hog farm found with even one infected pig must destroy its entire stock.
The viral outbreak was initially attributed to Japanese encephalitis, which is transmitted from pigs to humans by the culex mosquito. Later, scientists identified a new virus, named Nipah after the Malaysian village where it claimed its first victim.
The nine-month outbreak has ruined the pig-farming industry in many parts of Malaysia.
--
ProMED-mail
e-mail: promed@usa.healthnet.org
[With a virus as widespread around the country as this one, there are bound to be cases where a virus-positive pig farm is missed and an infected

animal reaches the slaughterhouse. We are, of course, assuming that this case has been confirmed by laboratory tests. Now the important thing is to identify the points of risk in the carcass-marking process. It would also be interesting to know if the fatal case was immunodeficient, making him susceptible to a very low infective dose of the virus. - Mod.JW
.....jw/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-08-21 23:50:00
Subject: PRO/AH> Nipah virus - Malaysia: bats, cats infected
Archive Number: 19990821.1454

NIPAH VIRUS - MALAYSIA: BATS, CATS INFECTED
****
A ProMED-mail post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus, natural history (03) 990523113630
Nipah virus (Hendra-like) - Malaysia (03) 990414110325
Nipah virus (Hendra-like) prevention - Malaysia: horses 990410234339,
Nipah virus, dogs positive 990421000350
Nipah virus, fruit bat reservoir? - Malaysia 990519231704,
Nipah virus, horses - Malaysia 990429220334
Nipah virus, nationwide sampling - Malaysia 990519230105,
Nipah virus, pigs - Malaysia (14) 990707004159
Nipah virus, pigs - Malaysia (Penang) 990523104524
Nipah virus, prevention - Taiwan 990423224243
Nipah virus, remote infections - Malaysia 990519231817,
Nipah virus, transmission mechanism - Malaysia 990423211015
Nipah virus - Malaysia (20) 990731220012
Nipah virus - Malaysia: clinical & pathology 990731225222
Nipah virus - Malaysia: lab identification 990731225633
Nipah virus - Malaysia: official report 990606113005
Nipah virus - Malaysia: unnatural event? 990411212416
Nipah virus infection prevention - Singapore (02) 990517225013
Date: Mon, 16 Aug 1999 23:03:02 +0800
From: "Dr.M.Vadivale" <vale@pop.jaring.my>
Source: CSIRO Media Release Mond 9 Aug 1999 Ref 1999/172
[edited
http://www.csiro.au/page.asp?type=mediaRelease&id=VirusPuzzle

Scientists at CSIRO's Australian Animal Health Laboratory (AAHL) and the Queensland Department of Primary Industries (QDPI) took part in an international effort to help control the outbreak.
CSIRO research to be presented today at the 11th International Congress of Virology, in Sydney, has shown that the virus is present in nasal mucous and saliva of pigs with the disease.
"Our research into transmission of the virus shows that farm workers who became ill may have breathed in or ingested fine particles coughed up by Nipah infected pigs, which carried the virus," says CSIRO Animal Health Veterinary Scientist, Dr Deborah Middleton.
"The result is important, as it tells us that people involved in any future outbreaks should wear breathing masks to avoid infections."
The research also demonstrates that cats can be infected, and that the virus is present in their urine and mouth fluids.
Dr Middleton says that the Australian research also provides proof that the disease in pigs is caused by the same agent as the disease in humans.
"This confirms that the strategy of culling pigs was needed to stop human

infections," Dr Middleton says.
The researchers drew on work done in Australia on the related Hendra virus to find out where the virus came from. The Hendra virus has killed two people and sixteen horses in Australia since 1994.
QDPI's Dr Hume Field worked in Malaysia during the outbreak for six weeks, looking for the natural 'host' of the virus. Samples were taken from a range of species, including wild boar, rodents, shrews, squirrels and bats.
In Dr Field's survey of over 300 Malaysian bats, CSIRO testing found twenty animals within 4 species of fruit bat had antibodies to Nipah virus. This means that they had been infected with the virus and their immune systems had mounted a defence against it. No other wild-life species had antibodies to the virus.
In a paper to be presented to the Congress on Wednesday 11 August, CSIRO Animal Health's Dr Bryan Eaton will review the evidence for the connection with bats for the two diseases, and discuss genetic differences in the viruses of between 20 to 60 per cent.

Other papers:

Dr Middleton will present a paper on 'Experimental Transmission of Nipah Virus Infection to Pigs and Cats'.
CSIRO Animal Health's Dr Bryan Eaton will present a paper on 'Hendra, Nipah and Menangle viruses: three new zoonotic members of the family Paramyxoviridae' .
CSIRO Animal Health's Dr Peter Daniels and Dr Alex Hyatt will present posters at the Conference on aspects of Nipah disease in animals, in conjunction with sessions on emerging infectious diseases. Dr Hume Field, Dr Johara Mojd Yob, Dr Paul Selleck and Mr Chris Morissy will also present a poster on 'Surveillance of wildlife for evidence of infection with Nipah virus'.
.....jw
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-09-07 23:50:00
Subject: PRO/AH> Nipah virus - Malaysia (21)
Archive Number: 19990907.1568

NIPAH VIRUS - MALAYSIA (21)
****
A ProMED post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus - Malaysia (15) 990518194240
Nipah virus - Malaysia (16) 990606113035
Nipah virus - Malaysia (17) 990630230024
Nipah virus - Malaysia (18) 990711155147
Nipah virus - Malaysia (19) 990728160123
Nipah virus - Malaysia (20) 990731220012
Date: Sun, 5 Sep 1999
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: New Sunday Times, 5 Sep 1999 [edited
<http://www.nstpi.com.my/>

Thirteen employees from the Veterinary Services Department tested positive [sic for Nipah virus during efforts to contain the viral outbreak [in Malaysia this year. Veterinary Services Department director-general Datuk Dr Mohd Nordin Mohd Nor said they were from different levels of the department including those working in laboratories and overseeing the pig culling operations. "They contracted the virus in the early stages of the outbreak."
He refused to reveal the status of their health and the States they were from. However, it is understood they are in good condition.
Mohd Nordin said the workers who tested positive for the virus [sic were presently undergoing counselling and regular medical examination as a precautionary measure.
The director-general added that they were initially inoculated against Japanese encephalitis [virus before carrying out their duties. "It was only after further research that the department discovered and realised that we were actually facing the Nipah virus and not JE. That is why staff from the department were infected by the Nipah virus," he added.
He added that although the worst had been overcome in the outbreak, the department was still investigating the virus and would always be on the alert in tackling future cases. "Investigations on the viral outbreak may continue for several more years."
--
ProMED
e-mail: promed@usa.healthnet.org
[This is a troubling report. Laboratory workers? Previous reports indicated that no laboratory workers had become infected. This must have been based solely on clinical observations, i.e., no one ill, so all well.
I simply had assumed that adequate serologic surveillance had been and was being carried out. If the names and locations of residence of these

workers are not being released, why is there a problem revealing the status of their health?
"Tested positive" must mean "have antibody". Is there any evidence that humans can become subclinically infected with Nipah virus and shed virus in urine, saliva, and other body fluids? - Mod.CHC
.....chc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.

Published Date: 1999-09-16 23:50:00
Subject: PRO/AH> Nipah virus, human pathology
Archive Number: 19990916.1665

NIPAH VIRUS, HUMAN PATHOLOGY
****
A ProMED post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus - Malaysia: clinical & pathology 990731225222
Date: Date: Fri, 3 Sep 1999
From: Chan Yow Cheong <chanyowcheong@pacific.net.sg>
ProMED-mail Regional Moderator for Asia
Source: Annals of Neurology September 1999
Via: Reuters ex Fox News, 2 Sep 1999 <http://www.foxnews.com/>

Infection with Nipah virus, named for the Malaysian village where it was first identified, results in a particularly serious form of brain inflammation along with signs and symptoms that include vomiting, fever, muscle aches, and malaise, according to a group of Singapore researchers. In humans, the infection is often fatal -- of the 269 cases reported in Malaysia and Singapore through mid-1999, 102 patients died. And more than half of patients surviving the infection are left brain damaged, the team note in the September issue of Annals of Neurology.
Co-author Dr. Wei-Ling Lee of the National Neuroscience Institute in Singapore explained to Reuters Health that while "it is totally speculative whether (the virus) has been latent in pigs (or in other animals, such as) fruit bats for some years, or whether it is a new mutation of some previously harmless virus, it seems certain that this is the first time that humans have been infected and come down with (this) illness in such an epidemic manner."
The report describes the cases of 11 slaughterhouse workers in Singapore who have become infected over the past year. Although "two patients had only respiratory symptoms, 9 patients had encephalitis," the researchers write.
What distinguished these cases of encephalitis, the authors continue, is how the damage manifested itself in the brain. Upon reviewing magnetic resonance imaging (MRI) scans, the investigators determined that Nipah virus had damaged the cerebellum, a unique but expected finding, according to Lee, since [other viral; encephalitides usually do not affect this region of the brain.
The cerebellum, located at the back of the brain, is involved in maintaining balance and coordinating movement. According to the report, 5 patients displayed signs of cerebellar involvement such as gait abnormalities and the inability to properly control limb motions.
Other neurological problems found in the Singapore patient group included disturbances in vision, such as "impaired movement of the eyes" and "alteration in mental status ranging from confusion to coma," Lee explained to Reuters Health, noting that one patient "had vivid hallucinations of pigs running around his bed."

--
ProMED
e-mail: promed@usa.healthnet.org
[The July report, noted above, mentions cerebellar ataxia but does not mention cerebellar lesions, so this report provides the histopathologic correlate for the clinical sign. If I am not mistaken, tertiary syphilis affects the cerebellum. Are there other infectious diseases that target this part of the brain? - Mod.CHC
.....jw/chc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-10-12 23:50:00
Subject: PRO/AH> Nipah virus encephalitis - Malaysia, Singapore
Archive Number: 19991012.1822

NIPAH VIRUS ENCEPHALITIS - MALAYSIA, SINGAPORE
****
A ProMED post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus (Hendra-like) - Malaysia 990410222844
Nipah virus infection prevention - Singapore (02) 990517225013
Nipah virus - Malaysia (21) 990907203258
Nipah virus, dogs - Malaysia (05) 990606215157
Nipah virus, fruit bat reservoir? - Malaysia 990519231704
Nipah virus, horses - Malaysia 990429220334
Nipah virus, natural history (03) 990523113630
Nipah virus, pigs - Malaysia (14) 990707004159
Nipah virus, prevention - Taiwan 990423224243
Nipah virus, remote infections - Malaysia 990519231817
Nipah virus, transmission mechanism - Malaysia 990423211015
Nipah virus - Malaysia: bats, cats infected 990821212448
Nipah virus, human pathology 990916231500
Nipah virus - Malaysia: clinical & pathology 990731225222
Nipah virus - Malaysia: lab identification 990731225633
Date: 9 Oct 1999
From: Chan Yow Cheong chanyowcheong@promedmail.org
ProMED Regional Moderator for Asia
Source: The Lancet, 9 Oct 1999
http://www.thelancet.com/newlancet/sub/issues/vol354no9186/menu_NOD999.html
[The 9 Oct 1999 issue (Volume 354, No. 9186) of the Lancet contains two original papers on the Nipah virus encephalitis outbreaks in Malaysia and Singapore, respectively. Excerpts from the commentary by Jeremy J Farrar are reproduced below. It mentions the important role of ***** ProMED ***** during the outbreak in Malaysia. - Mod. CYC

Nipah-virus encephalitis -- investigation of a new infection

In 1997 an outbreak of an encephalitic illness among pig-farm workers was reported from the Kinta District in the state of Perak in Malaysia; one patient died. The region is endemic for Japanese encephalitis virus infections and, despite some uncharacteristic clinical features, the cases were assumed to have been caused by this virus.
In September, 1998, again in Perak, the numbers of adults presenting with a high fever and an encephalopathic illness rose sharply. All these patients either were pig-farmers or were directly associated with the pig industry.
By March, 1999, as Nicholas Paton and colleagues report in today's Lancet, similar cases were being seen in Singapore among abattoir workers processing pigs imported from Malaysia.
In May, 1999, the Malaysian Ministry of Health, in association with the Centers for Disease Control and Prevention (CDC), Atlanta, reported a total

of 258 cases of encephalitis in adults, with a case- fatality rate of almost 40%. The cause turned out to be a hitherto unknown virus, named Nipah virus because it was first isolated from a fatal case of encephalitis from the town of Nipah in the state of Perak. The causative agent was not Japanese encephalitis virus, and there is no unequivocal evidence that the epidemic was due to a mixed infection of these two viruses.

Although the number of new cases of Nipah-virus encephalitis in Malaysia has declined substantially from the peak in early 1999, new cases, with fatalities, were still being reported in June, 1999. It is possible, given the long latency of infection seen in the outbreak of the related Hendra virus in Australia, that further cases will present in the future despite apparent control of the epidemic [by slaughtering of most pigs in the region. [One Australian human case of Hendra virus infection appeared to have had an incubation period of a year - Mod.JW

It is now clear that the epidemiological features of Nipah-virus encephalitis are distinct from those of Japanese encephalitis. All the deaths were in adults who had been in direct contact with pigs, and many of the patients reported illness in their pigs in the preceding weeks. In endemic regions Japanese encephalitis virus affects mostly children, adults are presumably immune, and, although the pig is an amplifying host, the animals do not generally become ill. Furthermore, many of the patients in the Nipah-virus outbreak had been vaccinated against Japanese encephalitis. Family members of the affected individuals were not ill, and people living in the same area, but who were not directly involved in pig- farming, did not develop the illness. These features suggest that person-to-person transmission was unusual and that mosquitoes or other insect vectors did not spread the virus.

The ProMED project (http://www.fas.org/promed), established to monitor global emerging diseases, has been an invaluable source of information throughout this epidemic. During the early course of the epidemic, several press reports were confusing, as were statements by the Malaysian Ministry of Health, about the aetiological agent and the spread of infection. Much of the problem stemmed from the loose definitions of "a case", confusion over the interpretation of serological data, and the dogmatic assumption made early on that the epidemic was due to Japanese encephalitis.

Unequivocal confirmation of disease demands either isolation of the virus or a rising titre of specific antibody from serum taken during acute and convalescent phases. For confirmation that a virus is the cause of encephalitis, the virus should be isolated or demonstrated by amplification of viral nucleic acid by a specific PCR from the brain or, less convincingly, from the cerebrospinal fluid. Alternatively, there should be specific IgM antibody in the cerebrospinal fluid with no evidence of contaminating blood or serum leak into that compartment. Use of such diagnostic gold standards is essential in the description of a new clinical syndrome for which nothing is known about the natural history or the dynamics of the antibody response to the infectious agent.

Over-interpretation of the serological evidence and an assumption that Japanese encephalitis was the cause of the epidemic may have led to the implementation of inappropriate or even damaging interventions (ie, the mass vaccination of pigs against Japanese encephalitis infection, with reuse of needles) and a delay in the implementation of rational control measures.

--

Jeremy J Farrar
Wellcome Trust Clinical Research Unit, Centre for Tropical Diseases, Cho Quan Hospital, District 5, Ho Chi Minh City, Viet Nam; and Centre for Tropical Medicine, Nuffield Department of Clinical Medicine, John Radcliffe Hospital, Oxford, UK

.....jw

--

##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in

using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##########
##########

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 1999-10-24 23:50:00
Subject: PRO/AH> Nipah virus - Malaysia (22)
Archive Number: 19991024.1911

NIPAH VIRUS - MALAYSIA (22)
****
A ProMED post
<http://www.healthnet.org/programs/promed.html>

See Also

Nipah virus, pigs - Malaysia (11) 990519000721
Nipah virus, pigs - Malaysia (12) 990607234625
Nipah virus, pigs - Malaysia (13) 990618165659
Nipah virus, pigs - Malaysia (14) 990707004159
Nipah virus encephalitis - Malaysia, Singapore 991012164616
Nipah virus infection prevention - Singapore (02) 990517225013
Nipah virus - Malaysia (19) 990728160123
Nipah virus - Malaysia (20) 990731220012
Nipah virus - Malaysia (21) 990907203258
[1
Date: Thu, 21 Oct 1999 07:38:27 +0800
From: M. Vadivale <vale@pop.jaring.my>
Source: Report submitted to the OIE Chapter of Scientific and Technical Review, 8 Aug 1999

<http://agrolink.moa.my/jph/dvs/nipah/oie990808.html>
[This is a very inclusive report but it is far too long to be posted on ProMED. We suggest the interested reader go to the web site and see the article in its entirety. - Mod.CHC
******
[2
Date: Thu, 21 Oct 1999 09:14:32 -04
From: Marjorie P. Pollack <pollackmp@mindspring.com>
Source: Media reports, Oct 21, 1999

Singapore has no plans to lift a ban on Malaysian pig imports imposed after a deadly viral outbreak earlier this year, a government statement said on Thursday. "Although the disease situation in Malaysia has improved, the Nipah virus is still being detected in pigs in Malaysia," the Primary Production Department (PPD) said.
Experts were carrying out studies on the control and spread of Nipah virus disease and the ban would only be reviewed when there was sufficient scientific information available.
Singapore imposed the ban on March 19 after a viral outbreak in Malaysia, which led to the death of one abattoir worker in Singapore and more than 100 people in Malaysia. Prior to the ban, Malaysia supplied 800 pigs a day, or 18% of Singapore's requirements.
--
[The proposed technical name for the pig disease is Porcine Respiratory and Encephalitis Syndrome (PRES), the proposed common name is Barking Pig Syndrome (BPS). - Mod.CHC

****
[3
Date: Fri, 22 Oct 1999 18:27:28 +0000
From: Jamal Hassan <JAMAL@jphvri.po.my>

Congratulations and well done for your good work thus far. We really appreciate all your help to us thus far regarding the Nipah outbreak recently. We are very keen to develop an ELISA to test for IgM antibodies to Nipah virus in animals. The animals we are interested in are: canine, feline, goat, horse, mouse,
porcine, rabbit, rat, sheep, and bovine.
This is to establish whether the animals are carrier or at active infection stage (we had already established IgG assays with the help of Dr John White of CSIRO, Australia).
However, we are finding quite a problem to find a supplier for IgM conjugates for the animals. We would be really obliged if anybody who is interested can contact us over here. It doesn't matter whether the conjugates are horse radish peroxidae or alkaline phosphatase.
If there is anything we can do for you here in return, please don't hesitate to drop us a line.
--
Jamal Hassan, Research Officer
Biologics Development
Veterinary Research Institute (VRI)
No 59, Jalan Sultan Azlan Shah
31400 Ipoh
Perak Darul Ridzuan
Malaysia
e-mail: JAMAL@jphvri.po.my
web site: http://agrolink.moa.my/jph/vriph/
[The best assays for IgM antibody are capture assays. That is, one coats wells with an anti-species (whatever species is being tested) antibody, for example goat anti-canine. The serum to be tested for IgM antibody is then added and then, sequentially, Nipah virus antigen (inactivated or otherwise noninfectious), antibody to Nipah virus (produced in something other than goat or the species being tested; for example mouse anti-Nipah virus), and then conjugated anti-species (in this example, anti-mouse) antibody. Addition of substrate is the final step and we usually use many washes between additions of each reagent. Thus, if for a capture IgM enzyme-linked immunosorbent assay (MACELISA), one need only have an anti-species (being tested) antibody. These are what Dr. Hassan needs, not IgM conjugates. Many are available commercially but some are not readily available. Tom Ksiazek (CDC) is the likely expert in this area. - Mod.CHC
.....chc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##



Published Date: 2000-02-03 23:50:00
Subject: PRO/AH/EDR> Nipah virus - Malaysia (Selangor)
Archive Number: 20000203.0164

NIPAH VIRUS - MALAYSIA (SELANGOR)
****
A ProMED-mail post
<http://www.promedmail.org>
[see also
Nipah virus - Malaysia (22) 19991024002559]
Date: Thu, 03 Feb 2000 15:42:40 -0500
From: Malaysiakini.com
Source: <http://www.malaysiakini.com/Feb1-6/feb1/news4.htm> [edited]

Last Thursday [27 Jan 2000], a pig farmer of Selangor's Batu Satu died of Nipah [virus infection]. The fatality once again highlighted the plight of the pig farmers and their families. For about 200 people who had tested positive for the Nipah virus, news of the death was a bad omen. There is much confusion surrounding this disclosure, and the 200 are still unclear about the implications of testing positive.
"We are not sure whether we are carriers of the actual virus or simply its antibodies," said Lay Yong Tee, Chairperson of the Negeri Sembilan Nipah Virus Committee (NSNVC). A medical lecturer from a university told malaysiakini that "there is no evidence yet to conclude or seclude [exclude] whether they are carriers, but a positive reaction to the Nipah virus does not mean they are sick, it simply means that they have been infected."
--
ProMED-mail
<promed@promedmail.org>
{"Testing positive" undoubtedly indicates having antibody. This is good, not bad. Whether people can have antibody and be persistently infected is another, unlikely, story. What is significant about this news story is that the recent human infection indicates persistence of the virus in Malaysia, possibly in persistently infected animals, such as pigs. I wonder whether pig retroviruses could bring about an acquired immunodeficiency state, such that pigs could be persistently infected with
Nipah and other viruses. In any case, the virus has not been eradicated from Malaysia and red flags should be going up all over the place. - Mod. CHC]
.....ds/chc
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org



Published Date: 2000-02-04 23:50:00
Subject: PRO/AH> Nipah virus - Malaysia (Selangor): RFI
Archive Number: 20000204.0166

NIPAH VIRUS - MALAYSIA (SELANGOR): REQUEST FOR INFORMATION
****
A ProMED-mail post
<http://www.promedmail.org>

See Also

Nipah virus - Malaysia (Selangor) 20000203170733
[1
Date: Thu 03 Feb 2000
From: Charles H. Calisher <calisher@promedmail.org>

Since posting my comment to the above referenced report, I have had second thoughts about it. This could be what Tom Monath calls "an erythematous clupeid", a red herring. Until we hear from an authority in Malaysia, let us not consider this a valid case report. We would feel worse about the epidemiologic situation but better about the report if we had some confirmation of virus isolation, PCR evidence for the presence of Nipah viral RNA, or the presence of antibody in the patient.
Apparently, there have been other, similar reports, but none has been confirmed as legitimate.
--
Charles H. Calisher
ProMED-mail viral diseases moderator
<calisher@promedmail.org>
***
[2
Date: Fri 4 Feb 2000
From: Glen Otto <gotto@leland.Stanford.EDU>

I think it is very important to remember that "retrovirus" is not synonymous with "immunodeficiency," especially at a time when the endogenous pig retrovirus is being discussed in the context of xenograft safety. A wide variety of mammalian retroviruses have been described to date, but only a few induce clinical immunodeficiency in the host. Considering the number of host species in Malaysia that appear to have shown seroconversion to the Nipah virus, there is no reason to believe that the virus could not establish an endemic presence in the area, similar to the behavior of other paramyxoviruses. Persistence in the population does not require persistence in any one host.
--
Glen Otto, DVM
Dept. of Comparative Medicine
Stanford University
Quad 7, Bldg. 330 650/723-3876 voice
Stanford, CA 94305-5410 650/725-0940 fax
<gotto@leland.stanford.edu>
.....chc/ds



Published Date: 2000-02-17 23:50:00
Subject: PRO> Nipah virus infections - Malaysia: 2000
Archive Number: 20000217.0215

NIPAH VIRUS INFECTIONS - MALAYSIA: 2000
****
A ProMED-mail post
<http://www.promedmail.org>

See Also

Nipah virus - Malaysia (Selangor) 20000203170733
Nipah virus - Malaysia (Selangor): RFI 20000204150606
Date: Tue, 15 Feb 2000 00:18:57 +0800
From: ProMED-mail <promed@promedmail.org>
Source: <http://www.malaysiakini.com/Feb14-20/feb14/news2.htm>

Apparently, the most recent patient to die had been in hospital in Kuala Lumpur since last April. This clearly is not a new case, just the sad end of a long clinical history. The previously reported fatal case from Selangor died the end of January.
There is nothing new here, except that illness caused by Nipah virus can cause death remote from the acute illness. According to this article, people in Malaysia with antibody to Nipah virus are concerned that they might become ill sometime from now. That is unlikely. What is likely is that those are the only (about 200) people in Malaysia who are protected against Nipah virus infection.
The concern, of course, is that humans (and pigs) can be persistently and asymptomatically infected and then show signs of illness many months after primary infection. There is no evidence for that at this time.
--
Charles H. Calisher, Ph.D.
Moderator, Viral Diseases
ProMED-mail
e-mail: calisher@promedmail.org
.....chc/es
--
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send



Published Date: 2000-06-19 23:50:00
Subject: PRO/AH/EDR> Nipah virus, pigs - Malaysia
Archive Number: 20000619.0991

NIPAH VIRUS, PIGS - MALAYSIA
****
A ProMED-mail post
<http://www.promedmail.org>

See Also

Disease notification (03) 2000.1079
Disease reporting, importance (04) 2000.0191
1999

Nipah virus, pigs - Malaysia 19990415164709
Nipah virus, pigs - Malaysia (14) 19990707004159
Nipah virus - Malaysia 19990415153739
Nipah virus - Malaysia (22) 19991024002559
Date: Sun, 18 Jun 2000 11:20:59 +0800
From: M. Vadivale <vale@pop.jaring.my>
Source: The Star online, 17 Jun 2000 [edited
http://thestar.com.my/online/newsreport.asp?file=/2000/6/17/states/1714nipa.
asp&newspage=Search

The Veterinary Services Department began the operation to cull pigs infected with the Nipah virus at Ladang Weng Yoon in Gopeng, Perak, yesterday. The operation was a follow-up to the quarantine order issued on 26 May 2000 after pigs in the farm were found to have contracted the virus, it said in a statement. The culling of 1725 pigs is expected to be completed today.
It said a worker at the farm had been found to be infected with the Nipah virus, believed to be the first of such cases this year. It said the department was also monitoring Ladang Chuah Boon Swan in Simpang Halt, Taiping, Perak which had 300 pigs of which some were suspected to be carrying the virus. "This farm has been given the quarantine order. Movement of pigs from this farm is strictly prohibited," the department said.
--
ProMED-mail
e-mail: promed@promedmail.org
[A few days ago we received an unconfirmed report of the reoccurrence of Nipah virus infection and the planned culling of pigs in Perak. I tried to obtain confirmation, one way or the other, but was unsuccessful. The three parties I contacted, in Malaysia, in the U.S., and in Australia all denied knowing anything at all about this. The quarantine order was made more than three weeks ago and still no one was able or willing to say anything officially.
Nipah virus affects pigs in Malaysia and most or all of the pig farmers are Chinese, so there are political, economic, and racial connotations in all this. A very sensitive matter indeed. In addition, this is an election year in Malaysia.
Confirmation of the ELISA results was obtained by the Australian Animal

Health Laboratory, which used a neutralization test, hence the length of time it took to obtain a final report. I have seen no information regarding sick pigs and I am assuming that all culling was done on the basis of the presence of antibody. A human infection also was reported but that person might have had antibody from an infection contracted last year. Although the situation is understandably a sensitive one and reporting of preliminary results is never a good idea, keeping a lid on the official quarantine order and denial of a fact are not conducive to trust. This situation meets my definition of a failed cover-up. Sooner or later, the truth always comes out and, when it does, those governments that have attempted obfuscation always look bad. This is no exception. - Mod.CHC
.....chc/es

##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 2000-06-24 23:50:00
Subject: PRO/AH> Nipah virus, reservoir
Archive Number: 20000624.1037

NIPAH VIRUS, RESERVOIR
****
A ProMED-mail post
<http://www.promedmail.org>

See Also

1999

Nipah virus, fruit bat reservoir? - Malaysia 19990519231704
Nipah virus - Malaysia: bats, cats infected 19990821212448
Nipah virus, natural history 19990416162248
Nipah virus, natural history (03) 19990523113630
Date: Sat, 24 Jun 2000 07:38:07 +0800
From: Kenneth Lam Sai Kit <lamsk@medicine.med.um.edu.my>

Surveillance of wildlife species for evidence of the origin of Nipah virus was conducted during and immediately after the 1999 outbreak of viral encephalitis in Malaysia. The Veterinary Research Institute in Ipoh working in close collaboration with the Australian Animal Health Laboratory, Geelong and CDC, Atlanta found neutralizing antibodies to Nipah virus in Island flying foxes (_Pteropus hypomelanus_) and the Malayan flying fox (_Pteropus vampyrus_) as well as other bat species, but to a lesser extent. Blood and tissue samples were negative by virus isolation.
A recent expedition led Dr. K.B. Chua from the Department of Medical Microbiology, Faculty of Medicine, University of Malaya, Kuala Lumpur, resulted in over 1000 urine samples collected from the roost of the Island flying fox. One of the isolates in Vero cells produced characteristic cytopathic effect and reacted strongly with antibody to Nipah virus and less so with Hendra virus and not at all to other paramyxoviruses. Subsequent selective positive amplification of the cDNA derived from the isolate with 10 primers pairs designed based on the published sequence of Nipah virus yielded PCR products of the expected size to those from human Nipah virus. Further sequencing of the genetic material is underway.
Since this species of fruit bat is migratory, it is possible for the virus to spread to countries in Southeast Asia because of overlapping bat populations. Although the Island fruit bat has been implicated as a natural reservoir of Nipah virus in this study, it does not exclude other bat species, or indeed other wildlife species, as reservoirs.
This finding will have important implications during the re-organization of the pig-rearing industry in Malaysia.

--
Ken Lam
University of Malaya
Kuala Lumpur
Malaysia
<lamsk@medicine.med.um.edu.my>

[Congratulations to Drs. Chua and Lam. This was dangerous work requiring methodical assays. - Mod.CHC
.....chc/es
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 2000-06-24 23:50:00
Subject: PRO/AH> Nipah virus, antibody, pigs - Malaysia
Archive Number: 20000624.1036

NIPAH VIRUS, ANTIBODY, PIGS - MALAYSIA
****
A ProMED-mail post
<http://www.promedmail.org>

See Also

Nipah virus, pigs - Malaysia 2000.2189
Date: Thu, 22 Jun 2000 04:36:51 PDT
From: M. Cosgriff <mcosgriff@hotmail.com>
Source: Straits Times, 22 Jun 2000 [edited

The [Malaysian Cabinet has directed all relevant ministries to conduct closer surveillance into pig farming in Perak to prevent an outbreak of the deadly Nipah virus.
Health Minister Datuk Chua Jui Meng was commenting on public concern about the possibility that the virus, found in several hog farms in Perak recently, would spread. He was quoted in Utusan Malaysia as saying that the government was very concerned about the matter. It wanted immediate action to be taken to ensure that there would not be a recurrence of the outbreak in Bukit Pelandok, Negri Sembilan, last year.
"The Cabinet has directed the relevant ministries to contain the situation in Perak and to ensure that the virus does not spread to the other farms," he told reporters at the Health Dialogue 2000 ceremony here on Tuesday.
Perak is now on alert. To date, more than 1700 pigs infected in Gopeng and Taiping -- both in the state -- have been culled. All farm workers were told to undergo medical examinations. The government is waiting for the results of blood samples, collected randomly from 188 farms throughout the state, which are being tested in Australia.
According to Perak Veterinary Services Department director Abdul Kadir Osman, if the blood samples tested positive, all the pigs in the state would be culled.
The Nipah virus, which swept through more than half of Malaysia's 13 states early last year, first surfaced in Negri Sembilan. It was named after the badly-hit village of Sungai Nipah. It can infect a variety of animals and is lethal to about 40 per cent of human patients, causing severe encephalitis. In last year's outbreak, 100 people died and the RM1.5-billion (S$670-million) pig industry was crippled. However, Bukit Pelandok has been spared the recent virus attack.
Negri Sembilan Veterinary Services Department director Majid Awang on Tuesday certified that the whole of Bukit Pelandok and parts of Tanah Merah were free of the epidemic.
He said the virus in Perak would not spread to Negri Sembilan as about 700 000 pigs had been culled during the last outbreak. "In Negri Sembilan, there is not even one pig left," he said. "So, I do not think that the attack in Perak will happen here." Nevertheless, the state is not resting on its laurels [sic. Health Department director Ramlee Rahmat said his officers would monitor the cleanliness of former pig farms.

Dr Ramlee also said that follow-up treatment was being carried out on people who were infected by the virus previously.
--
ProMED-mail
e-mail: promed@promedmail.org
[Let me emphasize that we know of no reason to believe there is an outbreak of Nipah virus occurring in Malaysia or anywhere else at this time. The antibodies may be a result of remote infections, for example from last year. Epidemiologic information regarding not only illnesses but the ages of the pigs with antibody would be helpful. Additionally, some of the reports emanating from Malaysia have quoted Datuk Seri Abdullah Ahmad Badawi, the Deputy Prime Minister, as having mentioned Japanese encephalitis. Either the media have misunderstood or the people using these words have no idea what they are talking about or there is some Japanese encephalitis occurring in Malaysia. As we have flogged this for a year, we will not comment further than to say JE virus has nothing to do with Nipah virus.
It will, perhaps, be unfortunate if the authorities in Malaysia do not understand the significance of antibody to Nipah virus in healthy, recovered pigs. I am certain that Australian and U.S. scientists would provide needed information and background, if requested, and I am equally certain that neither of those groups will comment to ProMED-mail on any aspect of this sensitive situation; that is understandable and reasonable.
It is the Malaysian government authorities and media who must improve their grasp of the situation once and for all, and soon. If antibody alone will be used as a reason for culling pigs, then we have a political, not a scientific situation, and ProMED-mail will not comment further. Thanks to the many people who sent this and similar media reports. - Mod.CHC
.....chc/es
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 2000-06-30 23:50:00
Subject: PRO/AH> Nipah virus, antibody, pigs - Malaysia (02)
Archive Number: 20000630.1084

NIPAH VIRUS, ANTIBODY, PIGS - MALAYSIA (02)
****
A ProMED-mail post
<http://www.promedmail.org>

See Also

Nipah virus, antibody, pigs - Malaysia 2000.2668
Nipah virus, pigs - Malaysia 2000.2189
Date: Wed, 28 Jun 2000 12:03:00 +0800
From: Sharifah Syed Hassan <SHARIFAS@jphvri.po.my>

Probably I should highlight the facts regarding the recent culling of all pigs in one of the farms in Perak, Malaysia. After the outbreak of Nipah in 1998/99, a national swine surveillance program was implemented where in phase 1 and 2, we hoped to have rid off of all positive reactors to Nipah virus infection. In phase 3, we decided to see whether this is true and that we [had been successful in eradicating Nipah virus. To do this, we decided to have "sentinel" pigs in all farms throughout Malaysia. Sows were chosen as the sentinels (although, the sows belonged to the farm itself and were not actually SPF or MDF sows) as they will be kept for a long time in any pig farm compared to porkers and weaners and therefore will pick up infection if there is any during its 5 or more years life-span in the farm . The age of the sows varies, i.e. from about 1-5 years and the sows of today may be gilts chosen in 1998/99, i.e. just after the outbreak, and of course there were some imported from overseas (better status as sentinels). In phase 3 of the National Swine Surveillance for Nipah [virus, paired sera samples were collected at 3-4 weeks interval from the same 30 sows which has been tagged. By collecting these paired sera of 30 sows, we hope not to see any indications of active or whatever infection at all. However, we were quite shocked to see that the sera of 6 of the 30 sows exhibited positive ELISA OD values even at the first bleed. We are not sure when the sows were infected and whether these are residual antibodies from previous infection of 1998/99, but the SNT [serum neutralization titres are quite high, that is greater than 64 and as high as 256 or more, i.e. titres unlikely to be of the residual antibody type of yesteryears (probably it is possible for such titres, I am not sure).
To determine whether the virus is moving around in the pigs, RT-PCR was conducted to detect virus RNA from white blood cells of a few in-contact sows (with negative ELISA ODs), porkers and weaners and not surprising, a few of the sows, porkers and weaners were positive by PCR and nested PCR. The primers designed for the PCR (plus nested PCR) were based on the N-gene of Nipah virus (N-gene sequence of Nipah-human isolate were provided by Azaibi, T and W. Bellini of CDC). The PCR product sequenced and RE analyses [reanalyzed? - Mod.CHC conducted on the amplified product confirmed the virus as Nipah. ELISA was then conducted on sera of all 145 sows in the farm where a few more sows with equivocal ODs were detected. There were no ELISA positives detected from 30 porkers, 30 weaners and 7

boars in the farm. The pigs were culled based on SNT and PCR positives of sows, weaners and porkers.
Comparing the SNT results of the paired sera of the 6 sows, there is evidence of active infection from 2 of the sows and as for the other 4 sows of lagging and waning antibodies. However, since viruses were detected in other pigs, the farm was considered an infected farm and put under culling orders.
In another farm that consists of 300 pigs, 3 sows were positive by SNT at first bleed. The 3 sows therefore might be taken when they were gilts in 1999, and the antibody might be residual of 1999 infection, or there is virus currently lurking somewhere in some of the pigs in the farm. PCR conducted on a few samples of in-contact sows and porkers were negative. Maybe we did not get the right positive pigs or there is no farm infection. However, the 3 sows were culled. In infections by most viruses, animals with neutralizing titres should be safe from challenge by the same virus. However, we do not know the pathogenesis of Nipah virus, therefore, based on observations of human cases (unpublished reports) where relapses manifesting clinical signs can occur even in antibody positive-individuals, we did not want to take chances on these 3 pigs or for that matter any pigs with SNT titres. These pigs might be a source of virus later, as when they are stressed and the antibody low, the virus might flare-up and also be excreted (speculation). To look into the antibody profile of the herd, sera samples were collected from 18 more sows, the only boar, 10 weaners and 10 porkers for ELISA. 2 were with positive ODs and 3 were with equivocal ODs. The positives and equivocals were sent for SNT. The weaners, porkers and boar were clean. Votes were high that this farm should also go but some insisted that it should stay for further monitoring.
--
Dr. Sharifah Syed Hassan
Deputy Director
Veterinary Research Institute
Department of Veterinary Services
Ipoh, Perak
Malaysia
<sharifas@jphvri.po.my>
[We are grateful for this information regarding the reasons for culling pigs at certain locations in Malaysia. If the local authorities are trying to rid Malaysia of all pigs with antibody it may be that they suspect the possibility of persistent infections. The use of sentinel pigs certainly is a good idea. However, some questions remain: (1) Serum neutralizing antibodies likely would persist for the life of the infected animal and detecting antibody at titers of greater than 64 to 256 would not be unexpected. That is, such titers are likely, not unlikely. Could be that some of the animals had been infected when they were first used as sentinels, which would make them poor sentinels. (2) The presence of PCR positive pigs, i.e., those with ostensible Nipah virus RNA in their blood, is troubling, particularly in the absence of IgG (or IgM, the report only indicated "ELISA"). If IgM was the target of the ELISA, then a negative would not be surprising so many months after the outbreak. If IgG was the target, then either the PCR is specific and the infections are recent, or the PCR is not specific. (3) Antibody and (or) PCR positivity in the total absence of disease would be quite surprising. (4) If I read this correctly, paired serum samples from some pigs showed rises or falls in titer. These former do indicate recent infections and the latter might.
Given the huge economic impact of the 1998-1999 epizoodemic of Nipah virus, it is not surprising that the authorities are being cautious. All must await confirmatory assays being done in Australia before further comments are appropriate.
Finally, previous comments on ProMED-mail suggested that there is no evidence of Nipah disease at present in Malaysia; this remains correct. That Malaysian government spokespeople continue to talk about Nipah encephalitis and, worse, Japanese encephalitis, may be more a matter of education than anything else. Clearly the Malaysian scientific community has a firm grasp of the diagnostic needs. - Mod.CHC
.....chc/es



Published Date: 2000-07-01 23:50:00
Subject: PRO/AH> Nipah virus, pigs - Malaysia (02)
Archive Number: 20000701.1088

NIPAH VIRUS, PIGS - MALAYSIA (02)
****
A ProMED-mail post
<http://www.promedmail.org>

See Also

Nipah virus, antibody, pigs - Malaysia (02) 2000.2812
Nipah virus, antibody, pigs - Malaysia (03) not yet archived
Nipah virus, antibody, pigs - Malaysia 2000.2668
Nipah virus, pigs - Malaysia 2000.2189
Date: 30 Jun 2000 20:48:34 +0800
From: Dr. M. Vadivale <vale@pop.jaring.my>
Source: Star online Malaysia, 30 Jun 2000 [edited
<http://thestar.com.my/online/newsreport.asp?file=/2000/6/30/nation/3017ccpi
.asp&new spage=Search>

Vet dept classifies 15 pig farms as 'high risk'

KUALA LUMPUR: The Veterinary Services Department has quarantined 15 farms with 19 094 pigs nationwide to prevent a recurrence of the viral encephalitis [caused by Nipah virus which killed more than 100 people last year.
Department director-general Datuk Mohd Nordin Mohd Nor said the farms had been classified as "high risk" after the first stage of testing. He said 5 of the affected farms were in Penang, 4 in Perak, 3 in Malacca, 2 in Selangor and one in Kedah.
Dr Nordin said tests had been conducted on 796 pig farms since April and 24 414 blood samples sent for testing at the Veterinary Research Institute in Ipoh. "Currently, we are conducting two-stage tests. All blood samples will be tested in Ipoh and those found to be high risk will be sent for further testing in Australia. "We have sent 392 blood samples to the Australian Animal Health Laboratory, including those from the 15 farms and results will be known next month," he told a press conference yesterday.
Dr Nordin said only the infected pigs would be culled if only one or 2 in any of the affected farms are tested positive in Australia. He said all pigs in any of the affected farms must be culled if majority of them were tested positive (in Australia). Dr Nordin said the ban on the movement of pigs was still on, adding that there were no new cases of viral encephalitis [presumably Nipah virus in humans since the last outbreak.
--
Dr. M. Vadivale
<vale@pop.jaring.my>
[For a critical discussion of the interpretation of the testing procedure, see Nipah virus, antibody, pigs - Malaysia (02) 2000.2812, from 30 Jun 2000. - Mod.CP
.....cp/ds/es
##



Published Date: 2000-07-01 23:50:00
Subject: PRO/AH> Nipah virus, antibody, pigs - Malaysia (03)
Archive Number: 20000701.1086

NIPAH VIRUS, ANTIBODY, PIGS - MALAYSIA (03)
****
A ProMED-mail post
<http://www.promedmail.org>

See Also

Nipah virus, antibody, pigs - Malaysia 2000.2668
Nipah virus, antibody, pigs - Malaysia (02) 2000.2812
Nipah virus, pigs - Malaysia 2000.2189
[Moderator's comment: Please note that there is no epidemic of Nipah virus, no cases of Nipah virus, no confirmed infections with Nipah virus in pigs in Malaysia or anywhere else. The lack of adequate explanation of the surveillance methods plus the slaughtering of pigs with antibody seems to have aroused pig farmers. The science, politics, and poor communications seem to be a powerful mixture. - Mod.CHC
[1
Date: Wed, 28 Jun 2000 22:42:20 +0800
From: Muruga Vadivale <cyberdoc@maxis.net.my>
Source: <http://www.jaring.my/tribune/tribune/wednesday/news10.html> 28 Jun 2000 [edited

Members of the Kuching-Samarahan Divisions Livestock Breeders Association pigs sub-committee will hold a meeting on the recent reported outbreak of Nipah virus in some of the State's pig farms.
Its chairman Dr Ng Siew Thiam, when contacted yesterday, said its members who were mostly pig breeders would discuss matters pertaining to the current situation and the latest development. "We will also confer on what we need to do. Basically, we have no details of the situation or the results of the tests conducted by the State Veterinary Department," he added.
He revealed that the price of live pigs had so far remained normal at RM6 per kilogramme despite the slight dip in demand for the meat. Dr Ng said for now, they would leave it to the government to confirm whether the blood samples taken from pigs from the suspected farms actually contained the Nipah virus.
Assistant Minister of Environment and Public Health Datuk David Teng Lung Chi had said on Monday that results of blood samples sent for serum neutralisation tests in Australia would only be available in about two weeks' time. The outcome would determine whether the pigs at those farms were infected [sic: are or had been infected at some time in the past - Mod.CHC with the virus or not.
Last week, Datuk Teng had predicted that pork shortage in the State would be over by August this year since there would be ample supply of the meat by then. The 30% monthly shortage, he explained, was due to the closure of more than 20 pig farms as a result of the Nipah virus scare last year.
****
[2

Date: Fri, 30 Jun 2000 06:14:14 -0400
From: Marjorie P. Pollack <pollackmp@mindspring.com>
Source: China Press, Asia Pulse via COMTEX, 29 Jun 2000 [edited

Fifteen pig farms have been quarantined from today after initial tests by the Veterinary Research Institute showed animals there might carry the Nipah virus which claimed over 100 lives 2 years ago. Veterinary Services Department director-general Dr Mohd Nordin Mohd Nor said the farms were from Perak (4), Penang (5), Selangor (2), Malacca (3) and Kedah (1) which have over 19 000 pigs.
--
ProMED-mail
e-mail: promed@promedmail.org
[Some of these are new areas, so the quarantining and, one assumes, the slaughtering is or will be extended. - Mod.CHC
.....chc/es
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.

Published Date: 2000-07-02 23:50:00
Subject: PRO/AH> Nipah virus, antibody, pigs - Malaysia: OIE confirmed
Archive Number: 20000702.1095

NIPAH VIRUS, ANTIBODY, PIGS - MALAYSIA: OIE CONFIRMED
****
A ProMED-mail post
<http://www.promedmail.org>

See Also

Nipah virus, antibody, pigs - Malaysia 2000.2668
Nipah virus, antibody, pigs - Malaysia (02) 2000.2812
Nipah virus, antibody, pigs - Malaysia (03) 2000.2815
Nipah virus, pigs - Malaysia 2000.2189
Nipah virus, pigs - Malaysia (02) 2000.2817
1999

Nipah virus, pigs - Malaysia 19990415164709
Nipah virus, pigs - Malaysia (14) 19990707004159
Nipah virus - Malaysia 19990415153739
Nipah virus - Malaysia (22) 19991024002559
Date: 30 Jun 2000
From: ProMed-mail
Source: OIE website

Detection of virus reactors
See also: 31 Mar 2000, 28 May 1999
Text of a fax received on 28 Jun 2000 from Dr Mohd Nordin Mohd Nor, Director General, Department of Veterinary Service, Ministry of Agriculture, Kuala Lumpur:
Report date: 26 Jun 2000.
Nature of diagnosis: laboratory.
Date of initial detection of animal health incident: 14 Jun 2000.
The third phase of the Nipah virus surveillance programme has been ongoing since April 2000 (see Disease Information, 13 [12, 43). The programme involves testing of pigs at farms using ELISA(1) and virus neutralisation test (VNT) to screen the pigs.
Six pigs from a farm in the district of Kinta were found to be positive to both ELISA and VNT on the first screening, and a seventh pig on the second screening. Subsequently, all the pigs in the farm were destroyed on 17 Jun 2000.
Three pigs were also found to be positive to ELISA and VNT on the first screening in a farm in the district of Larut Matang. These reactors were immediately destroyed and no movement of pigs is allowed from the farm. A second test for all the pigs in the farm is now being undertaken. If the results show more positive reactors, it will be indicative of active infection and all the pigs in the farm will be destroyed.
Affected area:
Location / No. of affected farms
district of Kinta, State of Perak (4º 23' N - 100º 07' E) / 1
district of Larut Matang, State of Perak (4º 55' N - 100º 40' E) / 1

Total number of animals in the affected area:
species Sui
susceptible 2025
positive reactors 10
deaths 0
destroyed 1728
slaughtered 0
Diagnosis:
A. Laboratory where diagnosis was made: Veterinary Research Institute, State of Perak, Malaysia, and CSIRO(2) Laboratory, Geelong, Australia.
B. Diagnostic tests used: ELISA and virus neutralisation test.
Epidemiology:
A. Source of agent / origin of infection: further epidemiological investigations on the disease are being undertaken.
B. Mode of spread: contact.
Control measures during reporting period:
- quarantine measures and movement control;
- stamping-out policy;
- testing.
(1) ELISA: enzyme-linked immunosorbent assay.
(2) CSIRO: Commonwealth Scientific and Industrial Research Organisation (Australia).
--
A ProMED-mail post
<http://www.promedmail.org>
.....tg/es
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org (NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 2000-07-03 23:50:00
Subject: PRO/AH> Nipah virus, vaccine need
Archive Number: 20000703.1105

NIPAH VIRUS, VACCINE NEED
****
A ProMED-mail post
<http://www.promedmail.org>

See Also

Nipah virus, antibody, pigs - Malaysia 2000.2668
Nipah virus, antibody, pigs - Malaysia (03) 2000.2815
Nipah virus, antibody, pigs - Malaysia: OIE confirmed 2000.2825
Nipah virus, pigs - Malaysia 2000.2189
Nipah virus, pigs - Malaysia (02) 2000.2817
Nipah virus, reservoir 2000.2674
Nipah virus - Malaysia (Selangor) 2000.0207
Nipah virus - Malaysia (Selangor): RFI 2000.0209
Nipah virus infections - Malaysia: 2000 2000.0258
1999

Nipah (Hendra-like) virus - Malaysia (05) 19990418203525
Nipah virus (Hendra-like), natural history 19990412220834
Nipah virus (Hendra-like) - Malaysia 19990410222844
Nipah virus, fruit bat reservoir? - Malaysia 19990519231704,
Nipah virus, natural history 19990416162248
Nipah virus, natural history (03) 19990523113630
Nipah virus, pigs - Malaysia 19990415164709
Nipah virus, pigs - Malaysia (14) 19990707004159
Nipah virus, transmission mechanism - Malaysia 19990423211015
Nipah virus - Malaysia 19990415153739
Nipah virus - Malaysia (22) 19991024002559
Nipah virus - Malaysia: bats, cats infected 19990821212448
Date: Mon, 03 Jul 2000 23:12:59 +0700
From: Henry Wilde <henry@mail.redcross.or.th>

It seems that the porcine Nipah virus problem may still loom over us all in SE Asia. Recent reports suggest that there may even still be transmission among pigs, though final data on this are not yet back from reference laboratories in Australia. What is worrisome is that we know very little about natural hosts for this paramyxovirus that killed over 100 humans and resulted in culling of over one million pigs in Malaysia; almost killing the industry. Hopes that this virus can be contained at international borders, just by stopping pig imports, may not be justified. This is particularly true if there are bat or bird natural vectors, which is quite possible. Pork is an even more important food item in Thailand, Burma, Cambodia and Vietnam than in Malaysia and appearance of the virus there would be devastating.
It might be high time for animal vaccine researchers and manufacturers to develop at least a vaccine for pig farmers. Is this being done?
--

Henry Wilde, MD
Red Cross
Thailand
<henry@mail.redcross.or.th>

[We remind our readers once again that there is no solid evidence of Nipah virus transmission at this time. Nonetheless, Nipah virus certainly causes a serious disease in both humans and pigs and it is awful to think what might happen if the virus escapes from Malaysia. It is not at all clear that Nipah virus is restricted to Malaysia alone but may be an Asian virus. It also is fairly clear at this point that the natural vertebrate hosts (reservoirs) of Nipah virus are bats; on-going studies indicate that bats are naturally infected with this virus. To make matters even more confusing, two other paramyxoviruses (i.e., members of the family Paramyxoviridae), very newly recognized, have been isolated from bats in Malaysia and there already were two bat paramyxoviruses known in Australia, Hendra and Menangle viruses. So, now there are at least four, possibly five bat paramyxoviruses in Australasia, at least three of them are capable of causing human illnesses, and at least two of the five have been known to cause illness in pigs. At present, there is no evidence that birds are involved in the natural cycles of the viruses.
Henry also remarked on the need for a vaccine for pig farmers, and perhaps for others. I know of no on-going work that has such an intended end. The only rumors I have heard about a vaccine have involved Canadian Government facilities. Given the risks of spread of this highly pathogenic virus, it may be time that a public discussion was begun and plans made for the production and testing of such a vaccine. - Mod.CHC
.....chc/es

##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 2000-07-07 23:50:00
Subject: PRO/AH> Nipah virus - Malaysia (Sarawak)
Archive Number: 20000707.1127

NIPAH VIRUS - MALAYSIA (SARAWAK)
****
A ProMED-mail post
<http://www.promedmail.org>

See Also

Nipah virus, antibody, pigs - Malaysia 2000.2668
Nipah virus, antibody, pigs - Malaysia (02) 2000.2812
Nipah virus, antibody, pigs - Malaysia (03) 2000.2815
Nipah virus, antibody, pigs - Malaysia: OIE confirmed 2000.2825
Nipah virus, pigs - Malaysia 2000.2189
Nipah virus, pigs - Malaysia (02) 2000.2817
Nipah virus infections - Malaysia: 2000 2000.0258
Date: 5 Jul 2000
From: ProMED-mail <promed@promedmail.org>
Source: AFP English 5 Jul 2000 09:59 GMT [edited

Four people in the east Malaysian state of Sarawak have been confirmed to be infected [sic with the pig-borne Nipah virus that killed 105 people between 1998 and 1999, officials said Wednesday. State health director Yao Sik Chi, quoted by the official Bernama news agency, said the 4 were from the Sibu area. He said that 2 worked at a quarantined pig farm and the other 2 at an abattoir. They had tested positive for the Nipah virus [sic in the course of blood tests on 160 people and would be referred to hospital for further examination.
"At the time when their blood was taken, they were all healthy," he said.
Yao said the department was currently collecting blood samples from farm workers and family members at eight newly-quarantined pig farms.
David Teng, state public health assistant minister, said that as of Monday 15 pig farms in Sarawak were quarantined pending the result of blood tests conducted in Australia.
In peninsular Malaysia more than 1700 pigs were slaughtered recently after some were found to be infected, but there have been no reports of human infections.
--
ProMED-mail
<promed@promedmail.org>
[It does not take great sophistication to recognize that antibody to Nipah virus is what one wants, it is not a sign of illness, or of current disease or infectivity. There is a huge difference between "be infected" (the wording of the report) and "have been infected" (my words). Let me put it this way: You (the reader of this message) likely have antibody to the polioviruses, measles virus, mumps virus, and more. Does that mean you are now infected? Of course not. It means you likely are immune to infection with these viruses. That probably is the situation in Malaysia. Finding otherwise healthy people and pigs with antibody to Nipah virus no more means these people and pigs are infected than finding a person with

antibody to West Nile virus in New York City means that person is currently infected. This is Microbiology 101.
Another message to ProMED-mail indicated that newspaper reports that the virus had re-emerged rattled many Malaysians, especially the Chinese community, which consumes pork. What we have here is a lack of communication, and information. Alternatively, if these four healthy people seroconverted (from no antibody in the first blood collected to antibody in the next blood collected, that would be a different story. - Mod. CHC
.....jw/mp/chc/ds
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 2000-07-10 23:50:00
Subject: PRO/AH> Nipah virus - Malaysia (Sarawak) (02)
Archive Number: 20000710.1148

NIPAH VIRUS - MALAYSIA (SARAWAK) (02)
****
A ProMED-mail post
<http://www.promedmail.org>

See Also

Nipah virus - Malaysia (Sarawak) 2000.2864
Nipah virus, antibody, pigs - Malaysia 2000.2668
Nipah virus, antibody, pigs - Malaysia (02) 2000.2812
Nipah virus, antibody, pigs - Malaysia (03) 2000.2815
Nipah virus, antibody, pigs - Malaysia: OIE confirmed 2000.2825
Nipah virus, pigs - Malaysia 2000.2189
Nipah virus, pigs - Malaysia (02) 2000.2817
Nipah virus infections - Malaysia: 2000 2000.0258
Date: 8 Jul 2000 17:17:41 -0700
From: Jane Cardosa <jcardosa@mailhost.unimas.my> [Edited by Moderator CHC

[As you know, the media everywhere tend to simplify things, sometimes distorting the facts. The facts in Sarawak:
1. Sampling of pigs in farms throughout the country for IgG [antibody to Nipah virus is now routine. Most farms in Sarawak were negative in an April bleed (15 pigs tested per farm). By the May bleed a cluster of farms had IgG positive pigs - an example from one of these farms: from 0/15 pigs positive in April to 8/15 positive in May. ELISA tests were done at the Veterinary Research Institute in Ipoh using protocols jointly set up by Malaysian and Australian veterinary scientists.
2. At the end of June when these results became available, all humans working and living in these seroconverting farms were screened. Note that they were screened for specific IgG antibodies and IgM antibodies using reagents provided by the CDC Atlanta, with methods also provided by the CDC. Two humans from one farm had IgM, no IgG. This was a farm which had seroconverted in the previous month.
3. A set of "normal" sera obtained from the same risk group (people living and working in the vicinity of pig farms) collected in 1999 when there was no suspicion of transmission taking place in Sarawak, were also tested for specific IgG and IgM. No reactive sera were found. Based on this normal distribution, the four IgM positive sera in the context of seroconverting farms, some with coughing pigs, a decision was made to take the threat of Nipah virus transmission seriously in order to avert another outbreak.
4. Hence the serological results suggest the possibility of recent pig as well as human exposure to Nipah virus or a virus like Nipah. I think that the kind of disease we are talking about demands that we should not be complacent about exposure. Nobody knows enough about protective mechanisms in Nipah virus infection and it would be irresponsible of us not to follow up IgM positive individuals. Second specimens will definitely be taken and tested to confirm or negate the possibility of exposure by demonstrating seroconversion in individuals (as opposed to the current result of

seroconversion on a population basis). In the meantime, the health authorities would rather err on the side of caution (i.e. protecting human health) than act only if there are human deaths.
5. Media releases were probably inappropriately phrased and uninformed media coverage compounded the problem leading to totally garbled news reports.
In summary, nobody is saying that there is a Nipah virus outbreak in humans here in Sarawak, merely that the health authorities are attempting to make sure that there won't be one. The investigation underway at the moment is not a clinical investigation but a public health investigation to determine if there is/will be a problem, and measures are being taken to avert another disaster.
--
Jane Cardosa
<jcardosa@mailhost.unimas.my>
[We are grateful for Jane's clarifications. As has been stated repeatedly, there is no evidence of an epizootic of Nipah virus in Malaysia at this time and there have been no confirmed human cases of this disease. Whether these recent findings indicate the beginning of an epizootic will have to await further studies. - Mod. CHC
.....chc/ds
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##
########

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 2000-07-22 23:50:00
Subject: PRO/AH> Nipah virus - Malaysia (Sarawak) (03)
Archive Number: 20000722.1214

NIPAH VIRUS - MALAYSIA (SARAWAK) (03)
****
A ProMED-mail post
<http://www.promedmail.org>

See Also

Nipah virus - Malaysia (Sarawak) 2000.2864
Nipah virus - Malaysia (Sarawak) (02) 2000.2897
Nipah virus, antibody, pigs - Malaysia 2000.2668
Nipah virus, antibody, pigs - Malaysia (03) 2000.2815
Nipah virus, antibody, pigs - Malaysia: OIE confirmed 2000.2825
Nipah virus, pigs - Malaysia 2000.2189
Nipah virus, pigs - Malaysia (02) 2000.2817
Nipah virus infections - Malaysia: 2000 2000.0258
[1
Date: Mon, 17 Jul 2000 13:02:31 GMT
From: M. Cosgriff <mcosgriff@hotmail.com>
Source: The Star Online, 17 Jul 2000 [edited
Four workers to undergo 'Nipah' test

Four people here believed to be infected with the Nipah virus will be transferred to the Sarawak Hospital in Kuching for a thorough medical examination. State Assistant Minister for Public Health, Dr Soon Choon Teck, said the two farm workers and two abattoir workers had shown symptoms of the disease. According to the State Health Department the four had developed antibody against the virus after they were infected. Dr Soon, who visited them at the hospital here on Saturday, dismissed rumours that one of them was suffering mental distress. He said they were worried that their families might face financial difficulties, adding that the Welfare Department was looking into ways to help them.

State Veterinary authorities have decided to cull some 600 pigs from another farm at KM18, Jalan Oya, as some of the animals there were reported to have fallen sick. A similar exercise to destroy more than 4500 animals from two other pig farms owned by the same operator [at Jalan Oya entered its fourth day yesterday. The farms were among 15 which were placed under quarantine for suspected Nipah virus. Tests conducted in Australia from the blood samples were found to be negative and the government lifted the quarantine order for eight of the farms. Decision on the remaining farms is expected to be made after the results from the tests conducted on their owners, workers and family members are known.
****
[2
Date: Wed, 10 May 2000 04:01:53 -0700
From: T. Wong <twong@pc.jaring.my>
Further comment on the current situation in Sarawak

The current situation in Sarawak is that three farms with over 5000 pigs in Sibu have been culled due to "exposure" to the Nipah virus. The authorities apparently [have adopted the following main criteria (among others) to require culling of affected farms: (1) Samples of pig serum testing positive to both ELISA (done in the Veterinary Research Institute (VRI) and SNT tests (carried out in Australia); (2) Farm workers or owners living in/near farms detected with positive IgM titres. Any of the above conditions would result in the order to cull with financial relief provided by the government in line with those provided in Peninsular Malaysia.
For the farming community, the situation has [become confused by the fact that samples considered positive by ELISA test in Malaysia have been scored negative by SNT in Australia. Whether there is any problem in the processing or handling of the samples prior to despatch to Australia is something no one wants or is ready to answer. How good are the ELISA tests done by UNIMAS and VRI? Although these tests are undertaken [according to the guidelines of CDC and CSIRO, have they been properly validated? How specific and sensitive are the ELISA (IgM or IgG) tests used for screening? Are there any publised report or authorities that can be cited? Although acceptable for surveillance or monitoring, can ELISA tests (or serial positive ELISA tests) be used as the basis or culling? The VRI is carrying out PCR and immunoperoxidase tests on samples obtained from some of the farms in Sarawak. Early indications are that viral antigens similar to Nipah virus has been identified in samples obtained from Sibu farms. Up to this moment no clinical signs has yet been seen in the pigs in farms where the initial ELISA tests were positive and where workers/owners tested positive with IgM titres. Should the pigs in farms in this category be culled? Should we wait until we are sure that the "viral agent" does cause clinical disease in pigs and human? It is understandable that the authorities should choose to err on the side of caution and in the overall interest of human health. However,the impact of [such decisions, if the policies of the Federal government are followed, are not only going to cause great financial hardship and emotional distress in the pig farming community, but they may be a blow from which the pig industry here may never recover. Comments, proposals and directions are welcome by a farming community under great stress.

--
T. Wong
<twong@pc.jaring.my>
[The situation regarding Nipah virus infection in Malaysia remains unclear. The second post raises legitimate doubts about the scientific basis for some of the government of Malaysia's interventions. These two postings have been held up briefly to see if further clarification would materialize. Unfortunately the situation remains unclear: as yet there appear to be no confirmed cases of human or animal disease. - Mod.CP
.....mpp/cp/es
##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org (NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.



Published Date: 2000-07-30 23:50:00
Subject: PRO/AH> Nipah virus, rationale for culling pigs
Archive Number: 20000730.1262

NIPAH VIRUS, RATIONALE FOR CULLING PIGS
****
A ProMED-mail post
<http://www.promedmail.org>

See Also

Nipah virus, antibody, pigs - Malaysia 2000.2668
Nipah virus, antibody, pigs - Malaysia (02) 2000.2812
Nipah virus, antibody, pigs - Malaysia (03) 2000.2815
Nipah virus, antibody, pigs - Malaysia: OIE confirmed 2000.2825
Nipah virus, pigs - Malaysia 2000.2189
Nipah virus, pigs - Malaysia (02) 2000.2817
Nipah virus, reservoir 2000.2674
1999

Nipah virus, natural history 19990416162248
Nipah virus, natural history (03) 19990523113630
Nipah virus, pigs - Malaysia 19990415164709
Nipah virus, pigs - Malaysia (14) 19990707004159
Nipah virus, pigs - Malaysia (Penang) 19990523104524
Nipah virus - Malaysia (22) 19991024002559
Nipah virus - Malaysia: clinical & pathology 19990731225222
Nipah virus - Malaysia: lab identification 19990731225633
Nipah virus - Malaysia: official report 19990606113005
Date: Sat, 29 Jul 2000 10:24:15 +0800
From: Kenneth Lam Sai Kit <lamsk@medicine.med.um.edu.my>

To cull, or not to cull? That is the question.

I have been inundated with questions from locals as well as from ProMED-mail readers about the surveillance program for Nipah virus in Malaysia and the rationale for culling animals in pig farms. As I am not directly involved with the laboratory testing of either animal or human samples at this stage, my response must be interpreted with caution. Here are some of the most frequently asked questions.
1. Is it justified to cull the animals based on IgG ELISA? This test is a non-specific test and can give rise to cross-reactivity with Hendra virus and possibly other paramyxoviruses. The results should be confirmed by the more specific serum neutralization test (SNT). If there is a difference in the two tests, then the result of SNT is more acceptable. [The test is "non-specific" only in that it is not Nipah virus-specific. The decision to cull these animals is [based on the uncertainty as to whether antibody-positive animals still harbor the virus [i.e., are persistently infected and are therefore infectious. The evidence in humans so far does not suggest [persistent infections. Previously infected patients have not transmitted the disease to their family members nor have we been able to isolate the virus in follow-up Nipah patients. In the case of subacute

sclerosing panencephalitis due to [persistent infection with measles virus (another paramyxovirus), transmission of the virus to contacts has not been reported. [But this is not the case, of course, with acute measles. It will not be difficult to test these animals by virus isolation or to demonstrate seroconversion in antibody-negative young pigs (weaners and porkers) in infected farms.
2. Why is there no evidence of sick animals in infected farms? From the 1999 Nipah virus outbreak, it was estimated that more than 80% of animals in a farm become infected and about 3-5% of these become ill. Yet, farmers who are good at recognizing this disease because of the prominent respiratory and neurologic symptoms have not seen such animals this time. If indeed there are, then they should be confirmed to be due to Nipah virus by virus isolation or by significant antibody increase. [Of course, if the serologic test results are aberrant and there are no sick animals, then there is no evidence of disease.
3. Does [an IgM positive [serology from humans indicate recent infection? It depends on the sensitivity of the ELISA test. We tell our students that IgM is transient, and by the nature of the test it should decrease to an undetectable level after a few weeks. In the case of the Nipah virus ELISA, we have detected the persistence of specific IgM even one year after infection. There is also the problem of non-specificity of the test because samples confirmed to be positive for other [paramyxoviral? viral infections (measles included) give rise to a false positive in the Nipah virus ELISA. Positive results, therefore should be interpreted along with epidemiological information and clinical history.
The decision to cull or not to cull is not an easy call as it affects human lives and the livelihood of many. However, such a decision should be based on strong scientific evidence.
--
Ken Lam
<lamsk@medicine.med.um.edu.my>
[That IgM antibody can persist even for a year after infection supports the contention of former Moderator C. H. Calisher, who was and is strongly insistent that serological confirmation of a viral infection cannot be made with a single serum sample, not for West Nile virus infection, not for yellow fever virus infection, not for Nipah virus infection, not for any virus infection. Many years ago Barry Beaty and Don Burke, studying La Crosse virus infections and Japanese encephalitis virus infections, respectively, demonstrated that IgM antibody to those viruses can persist in a small proportion of individuals and concluded that not only might virus be persisting in these people but that there was a correlation of persistence of IgM antibody and severity of outcome. In any event, finding IgM antibody is not a clear-cut indication of recent infection. Paired acute- and convalescent-phase samples are required if one is to have the opportunity to make a confirmed serodiagnosis.
These comments by Ken Lam are straightforward and informative and we are grateful to him for sending them along. Given the obvious and extensive antigenic cross-reactions among the many paramyxoviruses, serodiagnosis of Nipah virus infections, Hendra virus infections, and other paramyxovirus infections in humans (and perhaps in pigs, bats, and other species) is a difficult task, one requiring experience and consideration. It may even become a field of study.
Recent postings on ProMED-mail concerning the Nipah situation in Malaysia have lacked essential details, and it has seemed at times that humans in Malaysia were serving as sentinels for pig infections. Ken Lam's authoritative comments and analysis are reassuring, because in the past it had seemed that non-university government laboratories in Malaysia have been unable to undertake IgM antibody capture ELISA tests that could be confirmed in an independent (Australian) laboratory. For several months after the first recognition of Nipah virus in Malaysia the authorities were still insisting that affected people (and pigs) were infected with Japanese encephalitis virus, based on IgM capture ELISA tests specific for antibody to that virus. Open and continued consultation between Malaysian and non-Malaysian scientists is essential to maintain confidence in the efforts of the Malaysian government to control Nipah virus infection in humans and

domestic animals. - Mods.CHC/CP
.....chc/cp/es
##
ProMED-mail makes every effort to verify the reports that
are posted, but the accuracy and completeness of the
information, and of any statements or opinions based
thereon, are not guaranteed. The reader assumes all risks in
using information posted or archived by ProMED-mail. ISID
and its associated service providers shall not be held
responsible for errors or omissions or held liable for any
damages incurred as a result of use or reliance upon posted
or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your
full name and affiliation, it may not be posted. Send
commands to subscribe/unsubscribe, get archives, help,
etc. to: majordomo@promedmail.org. For assistance from a
human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 2000-08-03 23:50:00
Subject: PRO/AH> Nipah virus, rationale for culling pigs: comment
Archive Number: 20000803.1295

NIPAH VIRUS, RATIONALE FOR CULLING PIGS: COMMENT
****
A ProMED-mail post
<http://www.promedmail.org>

See Also

Nipah virus, rationale for culling pigs 2000.3036
Date: 2 Aug 2000 11:40:59 -0400
From: David Morens <DMORENS@niaid.nih.gov>

Requirements for serological confirmation of a viral infection
---
The 30 July posting on Nipah virus [Nipah virus, rationale for culling pigs 2000.3036 from Dr. Ken Lam contained supporting comments from former Viral Diseases Moderator C.H. Calisher, who was and is strongly insistent that serological confirmation of a viral infection cannot be made with a single serum sample... not for any virus infection". This statement is correct, important, and needs to be more widely appreciated by ProMED readers.
In this modern era of proliferating serologic testing for viral antibody, often performed by private laboratories or based on mass-produced kits and reagents, it is important to remind ourselves periodically that serologic tests for anti-viral antibody are, at best, imperfect and subject to many potential errors that can only be adequately dealt with by cautious informed interpretation. Drs. Calisher and Lam have mentioned some of the things that can go wrong with IgM testing, but there are others. That's just the state of the art in IgM and whole serum serology: the problem is not so much poor tests as the reality that in serology almost anything that could possibly go wrong eventually will. To put it in the context of American football, there is the old injunction [referring to incompletions and interceptions, that anytime you pass the ball three things can happen, and two of them are bad. So it is with serologies, which too often produce false negatives and false positives, may sometimes do so at a high rate, and may do so in a setting where "gold standard" or "brass standard" confirmation (e.g., by viral isolation or PCR) is not always easy to get.
One of the common problems seen nowadays in public health and commercial settings, and of great importance for public health surveillance and epidemic detection, is false positivity in IgM antibody detection. One could probably fairly say that in almost all tests for IgM antibody to virtually all viruses, if enough samples are tested -- and "enough" might only be 20 or so for certain tests -- some of them will turn up as false positives. While it may be important to err on the side of over-interpretation in a clinical setting which demands a prompt decision to start or withhold therapy, in public health contexts there are consequences to a trigger-happy approach. There have been, in recent years, any number of epidemic false alarms based on single IgM positive tests for epidemic viruses. Some of these have caused anxiety, confusion, and wasted action. False alarms also destroy public confidence.

There can be no single equation for how to deal with IgM positive results in surveillance settings when confirmatory serologic, virologic, and epidemiologic information are lacking. I would suggest, however, that they should always be interpreted with caution and that, where possible, consequent public health decisions be delayed until more information can be assembled.

--
David M. Morens, M.D.
National Institutes of Health
NIAID, DMID, VB
Room 3258
6700-B Rockledge Drive, MSC 7630
Bethesda, Maryland 20892-7630
301 496 7453 (phone/message)
301 480 1594 (fax)
<dm270q@nih.gov> or
<morensr@aol.com>
.....cp/ds

##
ProMED-mail makes every effort to verify the reports that are posted, but the accuracy and completeness of the information, and of any statements or opinions based thereon, are not guaranteed. The reader assumes all risks in using information posted or archived by ProMED-mail. ISID and its associated service providers shall not be held responsible for errors or omissions or held liable for any damages incurred as a result of use or reliance upon posted or archived material.
****
Visit ProMED-mail's web site at <http://www.promedmail.org>.
Send all items for posting to: promed@promedmail.org
(NOT to an individual moderator). If you do not give your full name and affiliation, it may not be posted. Send commands to subscribe/unsubscribe, get archives, help, etc. to: majordomo@promedmail.org. For assistance from a human being send mail to: owner-promed@promedmail.org.
##
##

©2001,2008 International Society for Infectious Diseases All Rights Reserved.
Read our privacy guidelines. Use of this web site and related services is governed by the Terms of Service.



Published Date: 2000-08-15 23:50:00
Subject: PRO/AH> Nipah virus, reservoir (02)
Archive Number: 20000815.1359

NIPAH VIRUS, RESERVOIR (02)
****
A ProMED-mail post
<http://www.promedmail.org>

See Also

Nipah virus, reservoir 2000.2674
1999

Nipah virus, fruit bat reservoir? - Malaysia 19990519231704
Nipah virus - Malaysia: bats, cats infected 19990821212448
Nipah virus, natural history 19990416162248
Nipah virus, natural history (03) 19990523113630
Date: 15 Aug 2000 11:50:16 GMT
From: M. Cosgriff <mcosgriff@hotmail.com>
Source: NY Times, 15 Aug 2000 [edited

Isolation of Nipah virus from the Island flying fox {_Pteropus hypomelanus_)

SINGAPORE: Researchers in Malaysia have confirmed a link between fruit bats and Nipah virus, the recently discovered novel paramyxovirus that killed more than 100 people last year and compelled authorities to slaughter roughly a million pigs. Prof. Kenneth Lam Sai Kit, of the Department of Microbiology at the University of Malaya, confirmed that his research team had successfully isolated Nipah virus from urine samples collected from [colonies of the Island flying fox [_Pteropus hypomelaunus_, one of the many species of fruit bats that live throughout Southeast Asia. Professor John S. Mackenzie, of the Department of Microbiology and Parasitology at Australia's University of Queensland stated that this finding confirms that bats are carriers or reservoirs for the virus, which last year crossed over to pigs and then to humans. Professor Lam's findings constitute a breakthrough in understanding [of the biology of the virus.
Professor Lam's finding came just after a [suspected outbreak of Nipah virus in June in Northern Malaysia. Health authorities in Northern Perak killed more than 1 700 pigs to prevent the disease from spreading after a woman living nearby was found to have the virus [It is not known on what basis this statement is made. We have not received notification of any recent human cases in which viral isolation has been documented, there has been detection of viral nucleic acid, or seroconversion has been demonstrated. -Man. Ed. DS. While it remains unclear exactly how the virus is transmitted from fruit bats to pigs, numerous opportunities exist for the rare crossover to occur, Professor Lam said. Fruit trees in which bats forage for food are often near pigsties, he said, and Malaysia's pig farmers tend to live very close to their pigs. Malaysia is considering measures to protect its $400-million-a-year pig farming industry, which was crippled by last year's outbreak.
Nipah virus infection first appeared as a pandemic early last year when it

hit pig farms in Malaysia and slaughterhouses in nearby Singapore. Health workers initially believed they were dealing with an outbreak of Japanese encephalitis, which is transmitted from pigs to humans by mosquitoes. The symptoms were similar: high fever, aches and coma. Roughly 4 of every 10 sufferers died. Confounding this early diagnosis was the fact that some victims had been inoculated against Japanese encephalitis and that most lived near or worked on pig farms. The virus was also killing some pigs, and Japanese encephalitis virus is not associated with mortality in pigs. After a Malaysian microbiologist isolated the virus from the brain and spinal fluid of Nipah victims, scientists at the Centers for Disease Control (CDC) in Atlanta determined that the virus [given the name Nipah virus after the village at the epicenter of the 0utbreak was not Japanese encephalitis virus but a novel virus belonging to the family _Paramyxoviridae_. Its closest relative [appeared to be another recently discovered paramyxovirus called Hendra virus, which was isolated in 1994 after killing 14 horses and their trainer in Australia. Hendra virus was carried by fruit bats, so researchers began searching for a similar link between Nipah virus and bats. Scientists from the CDC, Taiwan, Japan and Australia flew to Malaysia, scouring pig farms and villages and trapping bats. Tissue samples from roughly 300 fruit bats revealed antibodies against Nipah virus, [but no infectious virus was isolated. A year later, Professor Lam and his team set out to search themselves. In early June, he said, they spent 3 nights laying plastic sheets under trees full of flying foxes, collecting urine samples. Back in the lab, they found isolates of Nipah virus that matched those recovered from humans. Professor Lam said that only 3 of his 1,000-odd samples contained the virus, which indicated that bats were by no means infested by the virus. Professor Mackenzie, who researched the Hendra virus's transmission from bats to horses and to humans, said infections took place only under very rare circumstances, usually by direct contact with infected blood. In Nipah's case, no transmission between people appears to have occurred. Professor Lam said that because Nipah can also be found in saliva, it was possible that pigs may have [become infected by eating fruit that the bats had nibbled on. How the virus moves from pigs to humans remains unclear, but researchers believe one possibility is that people [inhale infected particles of saliva coughed up by Nipah virus-infected pigs. Professor Lam's findings raise concern about the possibility that the bats, which are migratory, could carry the disease beyond Malaysia. Southeast Asia is home to several species of fruit bat, many of which are considered delicacies and have been hunted nearly to extinction. In Malaysia, for example, fruit bats are now protected by law. Professor Lam said antibodies against Nipah virus had been found in other species of fruit bat. Moreover, Nipah is also known to infect dogs, cats and horses, presenting the possibility that pig farms may not be the only venues for crossover.
(Byline Wayne Arnold)
--
ProMED-mail
<promed@promedmail.org>
[Molecular analyses have confirmed that Nipah virus and Hendra virus are closely related, but different viruses. The N, C, P, V, M, F and G genes of Nipah virus have nucleotide sequence homologies ranging from 88% to 70%, and predicted amino acid homologies ranging from 92% to 67%, in comparison with Hendra virus. The intergenic regions and start/stop signals of the 2 viruses are identical. They are substantially different from and have larger genomes than previously known paramyxoviruses (measles virus, mumps virus, the parainfluenza viruses, Newcastle disease virus, respiratory syncytial virus, etc.). Consequently, taxonomically these 2 bat viruses are likely to constitute a new genus in the family _Paramyxoviridae_. - Mod.CP
.....cp/ds
##
ProMED-mail makes every effort to verify the reports that
are posted, but the accuracy and completeness of the
information, and of any statements or opinions based
thereon, are not guaranteed. The reader assumes all risks in
using information posted or archived by ProMED-mail. ISID