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NIPAH VIRUS DISEASE ALERT IN THE ASEAN REGION

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Issue by Demand

NIPAH VIRUS DISEASE ALERT IN THE ASEAN REGION

Summary of Recent Events

As of July 14, 2023, the WHO reports a significant increase in mpox cases in the Nipah Virus (NiV) has recently been reported in the Kerala district, India. As of September 15, 2023, there were 6 cases confirmed positive after laboratory tests were carried out. Of the 6 cases, 2 of them died and 1080 contacts were identified, including 297 high-risk contacts [1]. Several disease reduction strategies have been attempted, but the main source of the disease is still under investigation. Previously, from January 4, 2023, to February 13, 2023, 11 cases (10 confirmed and oneprobable) including eight deaths (Case Fatality Rate (CFR) 73%) were reported in two divisions of Bangladesh [2].

Background

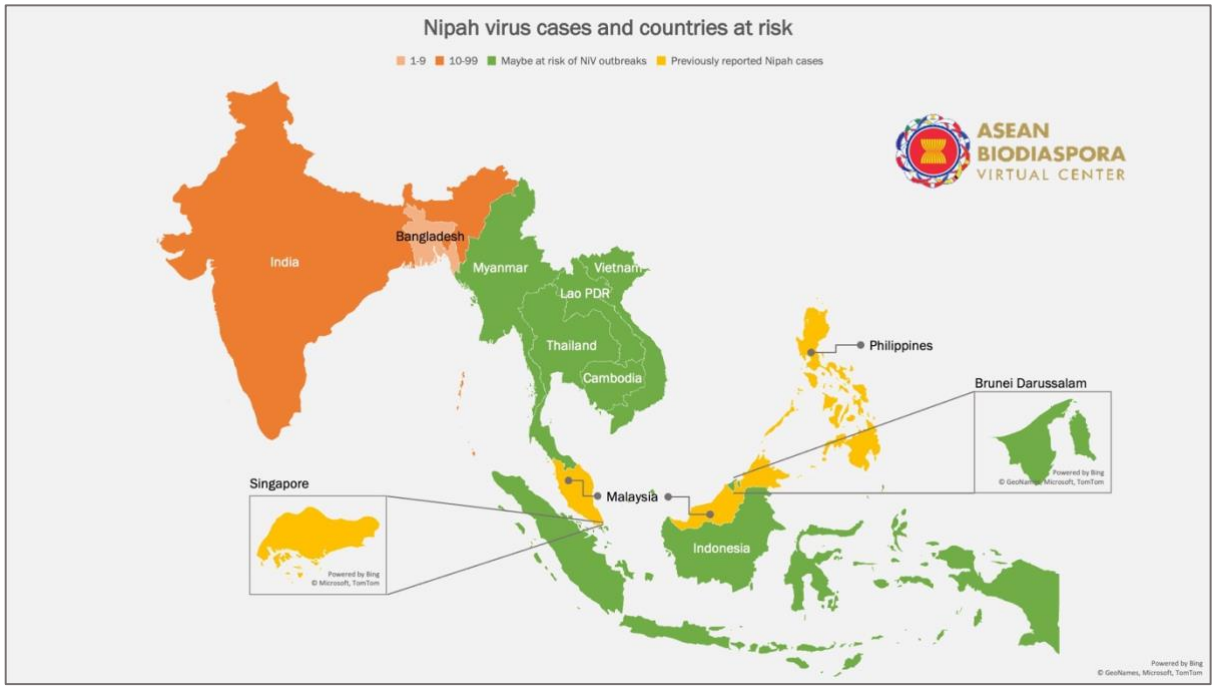

Figure 1. Nipah Virus Cases and Countries at Risk

NiV is part of the *Paramyxoviridae* family, a type of *Henipavirus*. The host of this disease is fruit bats (*genus Pteropus*).Bats infected with this virus can transmit it to humans or other animals such as pigs. Humans can be infected if they have close contact with animals infected with the virus and through body fluids such as saliva and urine ofinfected animals [3].

NiV was first discovered in a 1999 outbreak that infected pigsand humans in Malaysia and Singapore. That year, there were 300 cases of which more than 100 people died. Although there have been no further outbreaks since then, NiV is monitored every year in several regions of Asia, especially in Bangladesh [3]. In 2014, henipaviral infection caused severe illness among 17 case patients and 10 horses in southern Philippines; the case-fatality rate among those with acute encephalitis syndrome was 82%; no patient with ILI or meningitis died. Of acute encephalitis syndrome survivors, 1 experienced residual severe cognitive and neurologic impairment. Horse-to-human and human-to-human transmission

occurred. The most likely source of horse infection was fruit bats [4].

Nipah virus infection outbreaks are seasonal in Bangladesh, with cases typically occurring annually between December and May [5]. Since the first case report in 2001, the number of annual cases has ranged from zero to 67 cases, although in the last five years, reported cases have been relatively lower, ranging from zero in 2016 to eight cases in 2019.

Recent Actions

- Kerala has adapted to the current outbreak through early activation of emergency procedures, such as activating isolation centers, establishing emergency treatment using monoclonal antibodies to help those in the earlystages of the disease, and preventing dis/misinformation.
- With the release of a flowchart showing all physical locations that symptomatic NiV patients have visited, there is growing concern regarding the potential and likelihood of other cases of community transmission.
- The current outbreak continues to experience rapid escalation and containment responses are adapting to meet local regional needs. Neighboring districts have also put in place appropriate emergency procedures to prevent the spread of the disease.

Recommendations

To reduce the risk of contracting the disease, several preventive measures can be taken [4]:

- In areas where the NiV have occurred (Bangladesh, India, Philippines, Malaysia, and Singapore), people should:
    1. Practice handwashing regularly with soap and water.
    2. Avoid contact with sick bats or pig.
    3. Avoid areas where bats are known to roost.
    4. Avoid eating or drinking products that could be contaminated by bats, such as raw date palm sap, raw fruit, or fruit that is found on the ground.
    5. Avoid contact with the blood or body fluids of any person known to be infected with NiV
- Locations may be at risk for NiV outbreaks in the future, such as regions where flying foxes (bat genus *Pteropus*) live. These bats are currently found in all ASEAN Member States. To reduce the risk of contracting the disease, governments and communities at risk may do some initiatives as follow:
    1. Increasing surveillance of animals and people in areas where NiV is known to exist.
    2. Evaluation of novel technologies or methods to minimize spread of the virus

within bat populations.

3. Improving tools to detect the virus early in communities and livestock.
4. Reinforcing protocols for healthcare settings on standard infection control practices to prevent person-to-person spread.
5. Raising awareness about the signs, symptoms, and risk of NiV among populations at higher risk due to:
    - Geographic location.
    - Contact with fruit bats or items contaminated by fruit bats.
    - Contact with pigs or animals that could encounter fruit bats.
    - Work in a healthcare setting or as a caregiver for people infected with NiV.

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