

REPORT DISEASE AND HEALTH HAZARD NEWS OF INTEREST ALONG THE BORDER

March 28 - April 3, 2024

WEEKLY EVENTS

- On March 30, 2024, Bluedot Event Alerts reported that the Minnesota Board of Animal Health announced the detection of the H5N1 avian influenza virus in goats residing on a farm where an outbreak of avian influenza in poultry was detected. Subsequently, sick dairy cows were found on farms in Texas, Kansas, and New Mexico, exhibiting symptoms similar to avian influenza, including fever, changes in milk color, and decreased milk production. Upon investigation, dead wild birds were found in the vicinity of the farms. Most recently, on March 29, authorities in Idaho and Michigan discovered cases of avian influenza in dairy cows. The affected farms had imported dairy cows from Texas. On April 1, a person with conjunctivitis symptoms in Texas, who had close contact with dairy cows, tested positive for H5N1 avian influenza. Laboratory tests confirmed the infection at the United States Center for Disease Control and Prevention (CDC), prompting a public warning about the avian influenza outbreak. This disease, with its high mortality rate, adversely affects animal health and poses a risk of large-scale outbreaks across continents. The detection of the virus in dairy cows highlights the potential impact on agriculture and the potential for human-to-human transmission. Therefore, it is essential to monitor the development of the virus.
- On March 28, 2024, Bluedot Event Alerts reported that the National Health Commission of the People's Republic of China announced the situation regarding the influenza outbreak in the country. The number of patients has significantly increased, with 32,380 cases reported between January 2 and February 29, 2024, nearly 22 times higher than the same period in the previous year. Consequently, measures are being considered to enhance disease prevention efforts and to ensure sufficient vaccine management and distribution.

UNTREATED MELIOIDOSIS MAY LEAD TO DEATH

The Week 13 Disease Surveillance Report of the Department of Disease Control (March 25 - 31, 2024), reported four deaths due to melioidosis. There was one case in Mukdahan Province, one case in Roi Et, and two cases in Ubon Ratchathani Province during that period. The majority of the deceased were elderly with underlying diseases like cancer and diabetes. According to the Division of Epidemiology, from January 1 to March 22, 2024 there were 634 reported cases with 10 deaths. The age group with the highest number of cases were those over 65, followed by the age groups of 55-64 and 45-54, respectively. The majority of cases were farmers who regularly worked in muddy water. Unpredictable weather conditions, including flooding and moist soil can contribute to spikes in melioidosis, which is caused by *Burkholderia pseudomallei*. The bacterium can enter the body through skin wounds, inhalation of contaminated dust, soil, or water, and ingestion of contaminated food or water. The incubation period is approximately 1-21 days, but in some cases, it can be years. Common symptoms include fever and skin abscesses or swollen lymph nodes in the neck, with possible internal infections in organs such as the lungs, liver, spleen, kidneys, and even bloodstream infections, which can be fatal if not promptly treated. The severity of the disease depends on the patient's immune system and the amount of bacteria received. People at high risk include those who come into direct contact with soil and water, such as farmers and fishermen, and those with underlying diseases such as diabetes, chronic kidney disease, and thalassemia, increasing the risk of complications and death. This disease usually starts with fever, similar to common illnesses, and requires laboratory confirmation for diagnosis. Therefore, if there are abnormal symptoms, especially in individuals with high-risk exposures and underlying diseases, particularly diabetes, seeking immediate medical attention is advised.



RECOMMENDATIONS FOR OFFICIALS

Local administrative organizations should coordinate with public health agencies to disseminate information to residents about melioidosis, especially its causes and transmission. Basic self-protection measures should be promoted to reduce the risk of contracting the disease, such as avoiding wading through water, mud, or direct contact with soil and water. If necessary, wear boots, rubber gloves, long pants, or waterproof suits. After contact with soil and water, immediately clean the body with soap and clean water. Consume well-cooked food and drink clean or boiled water. Avoid exposure to dust or being in the rain for long periods of time. If experiencing high fever along with a history of contact with soil and water, especially for farmers and diabetic patients, seek medical attention immediately and inform the doctor of high-risk exposures and underlying diseases. This will assist in diagnosis by the physician and ensure prompt and proper treatment to reduce the risk of death from melioidosis.

INFORMATION COLLECTED AND ANALYZED BY

Multisectoral Capacity Development Program for Public Health Emergency Detection and Response in Border Areas

Office of International Cooperation, Department of Disease Control, Ministry of Public Health, Thailand
Supported by the Thailand MOPH - US CDC Collaboration on Public Health

CONTACT
oic.ddc@gmail.com
02-5903832
www.ddc.go.th/oic

Sources

- <https://www.pidst.or.th/A247.html>
- <https://www.thecoverage.info/news/content/1663>
- https://ddc.moph.go.th/disease_detail.php?d=99
- Image courtesy of:
<https://mgronline.com/local/detail/9620000077386>