Hantavirus Syndrome

Background

Hantavirus syndrome is an infection caused by hantavirus. It is a zoonosis that is transmitted directly or indirectly from animals to humans. The transmission between humans is very rare. In humans, there are two fatal diseases caused by hantavirus: Hemorrhagic Fever with Renal Syndrome (HFRS) and Hantavirus Pulmonary Syndrome (HPS). HFRS is found in Europe, Asia, and Africa, and HPS is found in North, Central and South America. In Taiwan, the number of sporadic cases (HFRS) range from 0 to 4 each year.

Hantavirus is a small single-stranded RNA virus. It could infect some animals, especially rodents, and be transmitted to human mainly through inhaling the aerosolized rodent excreta, including feces, urine, saliva. It is also transmitted through touching rodent excreta that contain the virus and then touching their eyes, nose, or mouth. Therefore, rodent distribution in the residence and work area is the critical risk factor.

The most effective protective measures are to eliminate or minimize contact with rodents at home or in the workplace, and clean up rodent urine, saliva and feces with a mixture of bleach and water.

Epidemiology

In Taiwan, the number of sporadic cases (HFRS) range from 0 to 4 each year. Although Hantavirus syndrome is not endemic to Taiwan, the rodents are found throughout Taiwan. Infected rodents could lead to local transmission and outbreaks in Taiwan. Detection of Hantavirus syndrome cases by surveillance at an early stage is needed to implement early response activities and reduce risk for local transmission.

Hantavirus Syndrome Surveillance in Taiwan

1. Taiwan National Infectious Disease Statistics System–Hantavirus Syndrome
2. Self-reporting through the toll-free 1922 hotline .

Prevention and Control

- Rodent control in areas frequented by humans.
- 1.Prevet rodent infestation by using snap traps and poison baits.

- 2.Keep rodents out of the house.
- 3.Clean up dead rodents or the excreta.

FAQs

1. **What is Hantavirus syndrome?**
    - Hantavirus syndrome is an acute virus disease caused by hantavirus. The incubation period is 14-21 days (range, 5–42 days). It is divided into two strains: Hemorrhagic Fever with Renal Syndrome (HFRS) and Hantavirus Pulmonary Syndrome (HPS).The HFRS Symptoms include fever that's last from 3-8 days, headache, nausea, vomiting, and abdominal or back pain. The case fatality ranges from 5% to 15%.The HPS symptoms include fever, fatigue, severe muscle ache, headaches, dizziness, chills, nausea, vomiting, diarrhea, and stomach pain. The case fatality is up to 35% to 50%.
2. **How are Hantavirus syndrome transmitted?**
    - Hantavirus syndrome is rarely transmitted directly from person to person and transmitted by specific rodent species that is infected with Hantavirus. The infected carrier rodents are most probably asymptomatic and may excrete the virus in their excreta (faeces, urine, saliva). People become infected mainly through inhalation of aerosolized rodent excreta.
3. **What can be done to reduce the risk of Hantavirus syndrome?**
    - The best way to ward off infection is to eliminate contact with potentially infected rodents and the surroundings that might be contaminated with rodent excreta.