



Hantavirus Infection



Centre for Health Protection



Department of Health

Hantaviruses are a group of viruses belonging to the *Bunyaviridae* family that are mainly found in rodents (such as rats, mice and voles). There are two main groups of diseases in human caused by Hantaviruses, namely Haemorrhagic Fever with Renal Syndrome (HFRS) and Hantavirus Pulmonary Syndrome (HPS). HFRS is caused by Old World hantaviruses present in Europe, Asia and Africa. HPS is caused by New World hantaviruses and mainly occurs in North and South America.

Mode of transmission

Hantavirus is mainly transmitted through direct contact with the faeces, saliva or urine of infected rodents or by inhalation of the virus in their aerosolised excreta.

People may also get infected via:

- Being bitten or scratched by infected rodents
- Eating food contaminated with infected rodent's urine, droppings or saliva
- Touching the eyes, nose and mouth after contacting articles contaminated with an infected rodent's urine, droppings or saliva

Human to human transmission is extremely rare.

Clinical features

In HFRS, initial symptoms begin suddenly and include intense headache, back and abdominal pain, fever, chills, nausea, and blurred vision. Other symptoms may include flushing of the face, inflammation or redness of the eyes and rash. At later stage, there may be low blood pressure and acute kidney failure. The case fatality rate ranges from less than 1% to 15%.

In HPS, early symptoms include fatigue, fever and muscle ache, especially in the thighs, hips, back and sometimes shoulders. There may also be headache, dizziness, chills, nausea, vomiting, diarrhoea and abdominal pain. Respiratory symptoms such as cough and shortness of breath may appear 4 to 10 days later. A case fatality rate of as high as about 40% was reported.



Incubation period

Symptoms may start to develop around 1 to 8 weeks after exposure.

Management

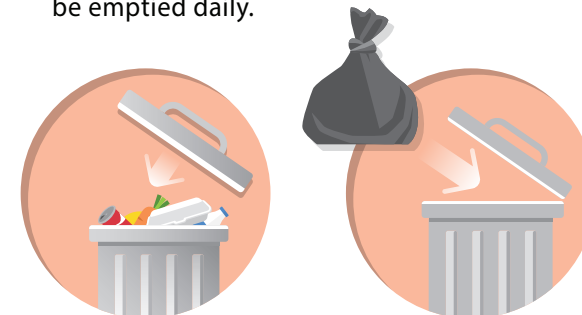
There is no specific treatment for hantavirus infection. Supportive care is the mainstay of management. It is important for patients to seek early medical management.

Prevention

No vaccine against Hantaviruses is available in Hong Kong at present. Rodent control is the primary strategy for preventing hantavirus infection. To prevent the infection, the public should adopt the following measures:

- Perform hand hygiene frequently, especially before touching the mouth, nose or eyes. Wash hands with liquid soap and water, and rub for at least 20 seconds. Then rinse with water and dry with a disposable paper towel or hand dryer. If hand washing facilities are not available, or when hands are not visibly soiled, hand hygiene with 70 to 80% alcohol-based handrub is an effective alternative.

- Eliminate sources of food and nesting places for rodents in our living environment:
 - Store food properly and handle pet food carefully so that it will not become food for rodents. Store all refuse and food remnants in dustbins with well-fitted cover. Dustbins must be emptied daily.



- Keep premises, especially refuse rooms and stairways, clean. Avoid accumulation of articles.
- Inspect regularly all flowerbeds and pavements for rodent infestation.
- Avoid the following high-risk activities to reduce contact with rodent:
 - Handling live or dead rodents with bare hands; entering rodent infested space; handling rodent excreta or nests; keeping wild rodents as pets; handling equipment or machinery kept in areas found with rodents, hand plowing or planting; lying on the ground, and living in residence frequented by rodents.



- Travellers should avoid visiting or living in places with poor environmental hygiene and avoid contacting rodents or their excreta. Adventure travellers and campers should take precautions to exclude rodents from tents or other accommodation and to protect all food from contamination by rodents.



Centre for Health Protection Website www.chp.gov.hk

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