Episode 159 – Hantavirus and Ebola Disease June 26, 2026

Introduction

Outbreaks of Ebola disease in Central Africa and hantavirus infections associated with an international cruise ship have attracted significant global media attention. On May 17, 2026, the Ebola disease outbreak, caused by the Bundibugyo virus strain in the Democratic Republic of the Congo and Uganda, was declared a Public Health Emergency of International Concern (PHEIC) by the World Health Organization (WHO). While hantavirus outbreaks currently remain localized and not classified as a WHO PHEIC, recent global discussions have highlighted the importance of strengthening surveillance and preparedness for zoonotic diseases. [1] [2]

Hantavirus

Hantaviruses are a group of zoonotic viruses carried by rodents (e.g., rats, mice) that belong to the family *Hantaviridae*, within the order *Bunyavirales*. Although many hantavirus species have been identified worldwide, only a limited number cause disease in humans, such as Andes virus, Hantaan virus, Seoul virus, Dobrava-Belgrade virus, Puumala virus, and Sin Nombre virus. These viruses are highly pathogenic to humans and can cause hantavirus pulmonary syndrome or hemorrhagic fever with renal syndrome. [3] [4] [5]

Hantaviruses are RNA viruses primarily transmitted to humans through inhalation of aerosolized particles from infected rodent urine, droppings, or saliva, especially when contaminated spaces are disturbed during cleaning. However, transmission may also occur during routine activities in heavily infested areas. [6] [7]

Based on their geographic distribution, hantaviruses pathogenic to humans have been categorized into Old World and New World hantaviruses.

- Old World hantaviruses, such as Hantaan virus, Seoul virus, and Dobrava-Belgrade virus, are the primary causative agents of hemorrhagic fever with renal syndrome and are mainly distributed in Asia and Europe.
- New World hantaviruses, including Andes virus and Sin Nombre virus, are the major causative agents of hantavirus pulmonary syndrome and are mainly distributed in South America and North America. [4] [5]

Each hantavirus is typically associated with a specific rodent host, in which the virus causes long-term infection without apparent illness to the rodent. [5] [8] [9]

Currently, human-to-human transmission has only been reported for hantavirus pulmonary syndrome associated with Andes virus infection. Andes virus is endemic in South America, with confirmed circulation and human cases reported primarily in Argentina and Chile, and additional cases and related strains identified in Uruguay, southern Brazil, and Paraguay. [5] [7] [8]

Transmission

Hantavirus can be spread to humans through:

- Inhaling virus particles from rodent urine, droppings, or saliva that have been aerosolized, for example from vacuuming or sweeping.
- Touching objects or eating food contaminated with urine, droppings, or saliva of infected rodents.
- Rodent bites or scratches, which is less common.
- Human-to-human contact, which has been documented only for the Andes virus in some parts of South America, remains uncommon. Transmission between individuals is associated with close, prolonged contact, particularly among household members or intimate partners, during the early phase of illness, when the virus is more transmissible. [3] [5] [9] [10]

Rodents

Various rodent species carry different types of hantaviruses. In North America, five known carriers include the deer mouse, cotton rat, rice rat, white-footed mouse, and red-backed vole.

In Canada, common rodent species in some regions include the deer mouse, white-footed mouse, and red-backed vole. Hantaviruses are also carried by rodents in other parts of the world, so avoiding close contact with rodents is important both in Canada and abroad. The hantavirus species endemic to Canada and most common in North America is the Sin Nombre virus, for which the deer mouse is the primary host. In southern South America, Andes virus is most common and is primarily associated with the long-tailed pygmy rice rat. [10] [11]

Hantavirus infection

Hantavirus infection in people can result in severe illness and often death, although the diseases vary by type of virus and geographical location. [12]

Two major diseases associated with hantaviruses include:

- Hantavirus pulmonary syndrome, also called hantavirus cardiopulmonary syndrome.
- Hemorrhagic fever with renal syndrome, which is found mainly in Europe and Asia. [5] [10] [11]

Hantavirus pulmonary syndrome and hemorrhagic fevers are reportable diseases in Ontario and should be reported immediately to the local Medical Officer of Health. [13]

Globally, approximately 150,000 to 200,000 cases of hemorrhagic fever with renal syndrome or hantavirus pulmonary syndrome are reported annually, with case fatality

rates ranging from 1 to 15% for hemorrhagic fever with renal syndrome and 30-50% for hantavirus pulmonary syndrome. [4]

Approximately 200 cases of hantavirus pulmonary syndrome are reported each year in North and South America. Infections are more common in rural areas but can also occur in urban areas. Cases are most often in people whose occupations increase exposure to rodents, including trappers, hunters, forestry workers, farmers, and military personnel. Activities that involve contact with rodents, such as cleaning enclosed or poorly ventilated spaces and sleeping in rodent-infested dwellings, also increase exposure risk. Males aged 20 to 40 are at a higher risk of infection compared to females, likely attributed to occupational exposure. [3] [11]

Symptoms vary by hantavirus type. The incubation period is typically 2 to 4 weeks; for hantavirus pulmonary syndrome, it generally ranges from 14 to 17 days. [11]

Hantavirus pulmonary syndrome
Hantavirus pulmonary syndrome can lead to life-threatening lung and heart problems. Symptoms typically appear one to six weeks after being exposed to the virus and often begin with flu-like symptoms. [9] [14]

Symptoms
Symptoms of hantavirus pulmonary syndrome include:
- Fatigue
- Dizziness
- Fever and chills
- Muscle aches, especially in large muscle groups (e.g., thighs, hips, back, shoulders)
- Headaches[1]
- Nausea, vomiting, and diarrhea
- Abdominal pain

Four to 10 days after these early signs of infection, symptoms may progress rapidly as the lungs fill with fluid. Severe respiratory symptoms include:
- Coughing
- Shortness of breath
- Tightness in the chest
- Severe difficulty breathing [9] [14] [15]

Hemorrhagic fever with renal syndrome
Hemorrhagic fever with renal syndrome is a severe life-threatening disease that affects the kidneys. The severity of the disease varies depending on the virus causing the infection. Symptoms appear one to two weeks after exposure and, in rare cases, can take up to eight weeks to develop. [9] [15]

[1] Refer to Episodes 148 and 149 for additional information on headache disorders.

Symptoms
Initial symptoms begin suddenly and may include:

- Intense headaches
- Back and abdominal pain
- Fever and chills
- Nausea
- Blurred vision
- Flushed face
- Inflamed or red eyes
- Rash

Later symptoms include:

- Hypotension[2]
- Acute shock
- Internal bleeding
- Acute kidney failure, which can cause severe fluid overload [9] [14] [15]

Individuals should seek immediate medical attention if they have had contact with rodents or their excreta and are showing signs of infection. They should inform medical providers of their contact with rodents or rodent excreta so they can be tested for rodent-associated diseases, such as hantavirus pulmonary syndrome and hemorrhagic fever with renal syndrome. [14]

Risks
The risk of hantavirus infection in Canada and elsewhere is low. However, anyone exposed to infected rodents can contract the disease; even healthy people can become seriously ill. Individuals who are immunocompromised, pregnant individuals, and children aged 5 and younger are at the highest risk of serious illness from hantavirus infection. [9] [16]

As of May 1, 2026, the National Microbiology Laboratory confirmed 168 hantavirus cases in Canada since active surveillance began in 1994. Canada reports an average of five new cases each year. Cases of hantavirus pulmonary syndrome tend to peak in the spring and summer, when deer mouse populations increase due to seasonal reproduction. The disease is caused by contact with rodent excreta infected with Sin Nombre hantavirus. Most reported cases occur in the southern rural regions of Manitoba, Saskatchewan, Alberta, and British Columbia. No cases of hantavirus pulmonary syndrome have been reported in Ontario. [11] [16]

Rodent infestations in and around the home remain the main source of exposure. However, exposure can occur anywhere rodents are present, including cottages, trailers, and garden sheds. [16]

[2] Refer to Episode 137 for additional information on hypotension.

Canada works with national and international partners to monitor hantavirus-related diseases in Canada and the U.S. Risk assessments for hantaviruses and related diseases in North America are ongoing. [16]

Diagnosis
Hantavirus infections are diagnosed based on symptoms and laboratory testing. Diagnosing hantavirus can be difficult in the early stages, as symptoms can be mistaken for influenza, other respiratory conditions, or sepsis. A careful history is thus crucial, with particular attention to possible rodent exposure, occupational and environmental risks, travel history, and contact with known cases in areas where hantaviruses are present. Repeat laboratory testing may be required to establish diagnosis if the initial test is done before the virus can be detected in the body. [3] [9] [11] [17]

The only laboratory in Canada that does diagnostic testing for hantavirus infection in humans is the National Microbiology Laboratory in Winnipeg, Manitoba. [11] [17]

Treatment
Infection with a hantavirus can be fatal. No vaccine is currently available to prevent hantavirus infection, and there is no specific treatment to cure the disease. Early supportive medical care is key to improving survival. Treatment should focus on close clinical monitoring and managing respiratory, cardiac, and kidney complications. Complete recovery from hantavirus infection can take several weeks to months. [9] [15] [18]

Treatment to improve symptoms includes:
- Supportive care (e.g., rest)
- Maintaining oxygen levels
- Preventing dehydration [17]

Extracorporeal CO_2 elimination may be considered in the management of hantavirus pulmonary syndrome, particularly to help reduce the risk of life-threatening pulmonary edema and cardiogenic shock. Early detection of hantavirus pulmonary syndrome is essential to improve health outcomes. Individuals with severe respiratory distress require oxygen therapy and intensive care unit support. [11] [17]

Hemorrhagic fever with renal syndrome can disrupt kidney function. Individuals with this disease may need dialysis to remove toxins from the blood and maintain fluid balance when the kidneys are not functioning well. [15]

Prevention and control
Prevention and control of hantavirus infections depend largely on:
- Reducing contact between people and infected rodents.
- Preventing rodent infestations in the home, workplace, cottage, or campsite, as all rodent droppings are potentially harmful.
- Properly cleaning and disinfecting rodent-contaminated areas.
- Following proper hand hygiene practices.

- Early identification and isolation of cases, monitoring close contacts, and applying infection prevention measures are essential to limit further spread during an outbreak or when cases are suspected. [3] [18] [19]

Rodent control

Rodent control is the first measure for preventing hantavirus infections. This can be done by controlling rodent populations near human communities. Individuals should avoid contact with rodent urine, droppings, saliva, and nesting materials. The virus can survive for 12-15 days in contaminated bedding. Safety measures for proper cleaning and disinfection of rodent-infested areas should be followed. [11]

To help prevent rodent infestation in homes, workplaces, and other sites:

- Seal openings where rodents may enter.
- Store food, water, and garbage in containers with tightly fitted lids.
- Use mousetraps.
- Keep the yard clean.
- Stack woodpiles away from buildings.
- Place dead rodents, nesting materials, rodent waste, and any potentially contaminated materials into a tightly sealed plastic bag and discard into a covered garbage can that is regularly emptied
- Contact a professional exterminator to remove rodents that have accessed heating and cooling ventilation systems. [9] [11] [19]

Cleaning and disinfection

Routinely inspect areas for rodent excrement and nesting materials and immediately clean and disinfect. Steps to properly clean and disinfect areas contaminated by rodent droppings involve the following:

- Ventilate an enclosed area for 30 minutes before cleaning.
- Wear a fitted filter mask (e.g., high-efficiency particulate air [HEPA] filtered respirator, available at safety supply stores), rubber or plastic gloves, and goggles.
- Do not sweep or vacuum rodent droppings, as this will aerosolize particles, which could be breathed in.
- Spray droppings with a general-purpose disinfectant (i.e., 1 part bleach to 9 parts water; make the bleach solution fresh before use) or use a Health Canada approved household disinfectant.[3] Let the area soak for 10 minutes to ensure any virus within the droppings are killed.
- Wipe up wet droppings with paper towels or a wet mop if dealing with a large area. Discard paper towels in a covered garbage can that is regularly emptied.
- Wash gloves in disinfectant and hot soapy water before removing. Afterwards, wash hands thoroughly.
- If a wet mop was used to clean the area, use disinfectant and hot soapy water to clean the mop.[4] [9] [11] [19] [20]

[3] Health Canada approved household disinfectants.
[4] For additional information on cleaning rodent infestations visit: https://www.cdc.gov/healthy-pets/rodent-control/clean-up.html

2026 hantavirus outbreak

- On May 2, 2026, the World Health Organization (WHO) received notification of a cluster of severe acute respiratory illness, including two deaths and one critically ill passenger aboard the cruise ship MV Hondius, travelling from Argentina to Cape Verde. The first person who died had a 3-month history of travel to Argentina, Chile, and Uruguay before boarding the cruise.
- On May 6, 2026, WHO confirmed the hantavirus species responsible for the outbreak on the cruise ship was the Andes virus. Andes virus can cause hantavirus pulmonary syndrome and is the only hantavirus known to be transmitted human-to-human in select settings, usually limited to people who have close contact with an ill person, including direct physical contact, prolonged time spent in close or enclosed spaces, or exposure to the ill person's body fluids.
- On May 8, 2026, eight cases of hantavirus pulmonary syndrome, including three deaths, were linked to the outbreak.
- On May 15, 2026, ten hantavirus cases, eight confirmed and two probable, including three deaths, were reported among passengers aboard the cruise ship.
- On May 17, 2026, the Public Health Agency of Canada (PHAC) confirmed one case of Andes hantavirus in Canada through laboratory testing. This person was among the passengers on the MV Hondius cruise ship. The individual, as well as other potential contacts in Canada, followed public health protocols, including monitoring by local public health authorities.
- On May 25, 2026, the Government of Spain reported a confirmed Andes virus case in an asymptomatic individual evacuated from the cruise ship on May 10, 2026, marking the second confirmed Andes virus case identified in Spain. The first person developed mild symptoms shortly after arrival in Spain and was confirmed one day after evacuation.
- As of May 27, 2026, a total of 13 cases, including three deaths, have been reported.
- Based on currently available information, the hypothesis is that the first case acquired the infection prior to boarding the cruise, through exposure on land, leading to human-to-human transmission onboard the ship.
- Given the long incubation period of up to six weeks, it is not unexpected that cases will continue to be reported for up to six weeks after the last exposure. [6] [7] [21] [22] [23]

Reducing Andes virus risk while travelling

Precautions to help reduce the risk of acquiring the Andes virus during travel include:

- Avoid areas infested with rodents, including the long-tailed rice rat, while visiting countries in South America.
- Wash hands frequently while travelling.
- Avoid kissing and intimate contact with someone who may have Andes virus.
- Avoid sharing cigarettes, hookah, vapes, drinks, eating utensils, or eating food from the same plate or bowl as someone who may have the virus.
- Maintain distance from someone who may have the virus. Typically, individuals are only infectious while they have symptoms. [23]

Ebola disease
Ebola disease is the term for a group of rare severe illnesses caused by viruses that belong to the *Orthoebolavirus* genus of the *filoviridae* family.

Six species of *Orthoebolaviruses* have been identified to date, with four known to cause disease in humans:

- Ebola virus causing Ebola virus disease
- Sudan virus causing Sudan virus disease
- Bundibugyo virus causing Bundibugyo virus disease
- Taï Forest virus [24] [25]

Ebola virus, Sudan virus, and Bundibugyo virus have caused large outbreaks. Ebola virus and Sudan virus are associated with higher case fatality rates. Bundibugyo virus It is associated with a lower-case fatality rate than Sudan virus and Ebola virus. Taï Forest virus has only been identified as the causative agent for one case of Ebola disease, in which the individual survived. [24] [26]

Ebola disease affects humans and nonhuman primates (e.g., monkeys, gorillas, chimpanzees). It is thought that fruit bats of the *Pteropodidae* family are natural hosts of the *Orthoebolavirus*.

The virus is transmitted to people from wild animals (e.g., fruit bats, porcupines, nonhuman primates) and then spreads in the human population through direct contact with the blood, secretions, organs or other bodily fluids of infected individuals, and with surfaces and materials (e.g. bedding, clothing) contaminated with these fluids. Early stages of the disease are characterized by flu-like symptoms, which can progress to bleeding, organ dysfunction, and death.

There has never been a case of Ebola disease reported in Canada. Since the discovery of *Orthoebolaviruses* in 1976 in the Democratic Republic of the Congo, outbreaks have been documented in several African countries, primarily in sub-Saharan Africa. The average case fatality rate for Ebola disease is approximately 50%, although it has varied between 25% and 90% in past outbreaks. Treatment can decrease the case fatality rate. However, death still occurs commonly, usually 7 to 12 days after symptom onset. [27] [28] [29] [30] [31]

The initial Ebola outbreaks occurred in remote villages in Central Africa, close to tropical rainforests. The Ebola virus disease outbreak from 2014 to 2016 in West Africa was the largest and most complex outbreak recorded since the virus was identified. This outbreak resulted in more cases and deaths than all previous outbreaks combined, spreading from Guinea to neighboring countries, including Sierra Leone and Liberia. [29]

Transmission
Ebola disease is spread through:

- Contact with body fluids or tissues (e.g., blood, urine, feces, vomit, saliva, sweat, semen, amniotic fluid, breast milk) from a symptomatic or deceased person.

- Vertical transmission during pregnancy, delivery, and breastfeeding (including during convalescence).
- Sexual transmission during the acute phase.
- Contact with semen or breast milk from a person who recovered from Ebola disease.
- Contact with contaminated objects (e.g., surfaces, bedding, clothes, medical equipment, needles). The virus may remain viable on surfaces and in liquids for several days, depending on environmental factors.
- Animal-to-human transmission via direct contact with the body fluids or tissues of an infected live or dead animals from endemic areas. Animal to human contact can include eating or handling live or dead infected animals or their body fluids (e.g., gorillas, monkeys, chimpanzees, bats, porcupines, forest antelope, pigs). [31] [32]

No animals in Canada have been found to be naturally infected with a virus that can cause Ebola disease. Ebola infection is not spread through airborne transmission. [31]

Symptoms
Symptoms of Ebola disease begin 2 to 21 days after contact with the virus. A person infected with the virus cannot spread the disease until they develop symptoms. Ebola disease often progresses to severe illness that can be fatal. [28] [33]

On average, people begin showing symptoms 8 to 10 days after exposure. Initially, symptoms are generic and are known as "dry" symptoms. These symptoms can start suddenly and include:
- Fever and chills
- Severe headache
- Sore throat
- Fatigue and weakness
- Malaise
- Joint and muscle pain

After four to five days of illness, "wet" symptoms can develop as the disease progresses, including:
- Nausea
- Vomiting
- Diarrhea
- Abdominal pain
- Loss of appetite
- Internal and external bleeding, including blood in feces and vomit, bleeding from the gingiva, nose, and vagina, bruising, and bleeding at sites where needles have punctured the skin. Despite a perception that bleeding is a common symptom, bleeding is less frequent and can occur later in the disease. [24] [28] [31] [33] [34]

Other symptoms may include:
- Chest pain
- Shortness of breath
- Confusion, irritability, and aggression from impact on the central nervous system

- Red eyes
- Skin rash
- Hiccups
- Impaired kidney and liver functions
- Seizures [24] [25] [31] [33] [34]

Diagnosis
Diagnosis can be difficult to clinically distinguish Ebola from other more common infectious diseases such as malaria, influenza, typhoid fever, dengue, Lassa fever, and meningitis because early symptoms are similar. Ebola disease may be suspected based on symptoms and travel history. A range of diagnostic tests have been developed to confirm the presence of the virus. Samples collected from individuals are an extreme biohazard risk. Laboratory testing on non-inactivated samples should be conducted under maximum biological containment conditions. [24] [28] [33] [34]

Testing negative for Ebola disease within 72 hours of symptom onset does not rule out Ebola disease, and in this case, testing should be repeated. [31]

Ebola virus disease is a reportable disease and should be reported immediately to the local Medical Officer of Health. Confirmed cases of Ebola disease in Canada would be hospitalized in specialized Ebola disease treatment centres with the capacity to provide appropriate treatment and effective isolation. [13] [31]

Treatment
Ebola disease is a severe, often fatal illness. Individuals with Ebola disease should receive care in highly specialized centres, to ensure appropriate supportive care to maintain blood pressure, electrolyte balance, and organ systems function, and treat any secondary infections. These designated treatment centres work under strict infection prevention and control precautions. Early intensive supportive care improves survival. Individuals typically receive oxygen, intravenous fluids, and other drugs to help with symptoms.

Currently, there is no approved treatment for Ebola disease in Canada. However, in outbreak situations, investigational therapeutics have been used under an ethical framework developed by the WHO. Clinical trials for some treatments have shown positive results for Ebola disease caused by Ebola virus. However, none have been approved for use in Canada. [28] [31] [35]

WHO recommends the use of the monoclonal antibodies Inmazeb and Ansuvimab for patients with laboratory-confirmed Ebola virus disease infection and for neonates 7 days old or younger with unconfirmed Ebola virus disease status, who are born to mothers with confirmed Ebola virus disease. For other Ebola diseases, there are no approved therapeutics, but candidate products are under development. [25] [35]

Vaccines
Two vaccines have been approved for Ebola virus disease caused by Ebola virus:
- Ervebo® vaccine, administered in one dose.

- Zabdeno® and Mvabea® vaccine, administered in a two-dose regimen. [36]

The Ervebo® vaccine is intended for adults aged 18 and older and is administered as a single intramuscular injection in the shoulder or thigh. It is used in response to Ebola virus outbreaks, as only one dose is needed to stimulate an immune response. During an outbreak, the Strategic Advisory Group of Experts that advises WHO recommends revaccination for individuals who were vaccinated more than six months ago, especially if they are contacts or contacts of contacts of a confirmed Ebola case. [25]

The Zabdeno® and Mvabea® vaccine is delivered as 2 doses. The first dose, Zabdeno®, is given, followed by a second dose, Mvabea®, 8 weeks later. Both doses are administered as intramuscular injections in the shoulder or thigh. This vaccine can be used in adults and children over one year old. Because the vaccine requires 2 doses, it is not suitable for use in outbreak response where immediate protection is necessary. Individuals who previously received this vaccine more than 4 months earlier and are at immediate risk of infection can receive a booster dose of Zabdeno®. [25]

These vaccines were used in investigational trials and on compassionate grounds during Ebola virus outbreaks in West Africa from 2014 to 2016 and the Democratic Republic of the Congo in 2018. These vaccines may also be offered to frontline humanitarian workers deploying to Ebola disease-affected areas as an outbreak management measure. [31]

The vaccine Ervebo® is approved in Canada to prevent Ebola disease caused by Ebola virus. It is not part of recommended routine immunizations or vaccinations prior to travel. Instead, it could be used to help control an outbreak in Canada. Ervebo® vaccine is not approved or recommended to prevent Ebola disease caused by Sudan virus, Taï Forest virus, or Bundibugyo virus. Several candidate vaccines are at various stages of development for other viruses that cause Ebola disease. [28] [35]

Complications

Full recovery from Ebola disease occurs over a long period of time and is associated with long-term complications. The timing, severity, and duration of these complications vary and may include:

- Joint and muscle pain
- Headaches
- Eye and vision problems (e.g., blurry vision, pain, redness, light sensitivity)
- Hearing loss
- Tiredness
- Weight gain
- Stomach pain or loss of appetite
- Psychological symptoms (e.g., anxiety, depression, post-traumatic stress disorder [PTSD]). [28] [31] [34]

Other health problems can include memory loss, neck swelling, dry mouth, tightness of the chest, hair loss, pain or tingling in the hands and feet, inflammation of the tissues around the heart, inflammation of one or both testicles, changes in menstruation,

impotence, decreased or lost interest in sex, and difficulty falling or remaining asleep. [34]

Prevention

The following precautions can reduce the risk of infection when in an area experiencing an Ebola outbreak or exposed to travellers returning from an affected area:

- Practice good hand hygiene. Wash hands frequently with soap and water or use an alcohol-based hand sanitizer if soap and water are unavailable.
- Avoid unprotected contact with body fluids and tissues of individuals who are ill with Ebola disease, or who have died from Ebola disease or an unexplained illness.
- Avoid contact with objects potentially contaminated with infected body fluids (e.g., toilets, linens, clothing, surfaces, toiletries).
- In outbreak areas, avoid unprotected contact with ill people, unsafe burial practices, and handling or eating animals (alive, sick, or dead), including bushmeat.
- If high-risk areas or activities are unavoidable, reduce risk by taking proper precautions, such as wearing masks, gloves, gowns, and goggles.
- Avoid sexual activity with anyone who is ill. Avoid contact with semen from anyone who has recovered from Ebola disease until testing confirms the virus is no longer present, as it can remain in semen for at least 12 months.
- Avoid contact with live or dead wild animals, including meat, feces, and body fluids.
- Follow safe burial practices by maintaining good hand hygiene and using personal protective equipment, including masks, gowns, gloves, and goggles. [32]

Travellers

Under the *Quarantine Act*, travellers must self-identify to a Canada Border Services Agent on arrival in Canada if they have:

- Reasonable grounds to suspect that they have or might have Ebola disease.
- Recently been in close proximity to a person who has or is reasonably likely to have Ebola disease.

Travellers with any risk of exposure are to call the appropriate public health authority during the first business day following arrival in Canada to self-identify. [31]

Individuals should immediately separate themselves from others and call their public health authority if anyone in their household has:

- Any symptoms, and
- Has travelled in the last 21 days to an area affected by Ebola disease.

Individuals should follow the public health authority's instructions and not visit a doctor or hospital right away to prevent the spread of infection. The public health authority will arrange for assessment. [28]

2026 Ebola disease outbreak

On May 17, 2026, WHO issued a statement declaring the Ebola disease outbreak, caused by the Bundibugyo virus in Democratic Republic of Congo (DRC) and Uganda, a public health emergency of international concern. [1]

The Bundibugyo virus disease outbreak in the DRC and Uganda continues to evolve rapidly, with increasing case numbers, geographic spread, and ongoing cross-border transmission. As of May 27, 2026, a total of 906 suspected cases and 223 deaths among suspected cases have been reported in the DRC. As of May 29, 2026, a total of 134 confirmed cases, including nine in Uganda, with 18 deaths among the confirmed cases, have been reported across both countries. In addition, a U.S medical doctor who was exposed as part of their work caring for patients in the DRC tested positive on May 17, 2026, and was transported to Germany for treatment and care.

In the DRC, transmission is concentrated in Ituri province, as well as in North Kivu and South Kivu provinces, with challenges in contact tracing and follow-up, insecurity, inadequate isolation, care, and referral systems for patients complicating response efforts.

National authorities, in collaboration with WHO and partners, are implementing response measures including deployment of rapid response teams, delivery of medical supplies, strengthened surveillance, laboratory confirmation, infection prevention and control, the set-up of safe and optimized treatment centres, and community engagement. [37]

Risk in Canada

PHAC posted a Travel Health Notice for DRC and an Outbreak Monitoring Alert for Uganda. Canada has also put into place enhanced health screening border measures for Ebola. The current global risk remains low. [38] [39]

The overall risk to the general population in Canada remains low at this time, in line with the risk assessment conducted on May 21, 2026, now extended to July 2, 2026. If an infected person were to arrive in Canada, transmission is expected to be limited due to established public health measures, enhanced border screening measures and because the virus requires direct contact with body fluids or tissues of infected individuals.

If a case or contact were identified in Canada, public health authorities at all levels would respond accordingly. PHAC works closely with national and international partners to monitor Ebola disease activity worldwide and continuously assesses Ebola disease risk in Canada. PHAC is required to report confirmed cases to WHO as part of Canada's commitments under the International Health Regulations (2005).

PHAC is actively monitoring the current outbreak in close collaboration with international partners, including WHO, as well as provincial and territorial public health authorities. PHAC will continue to assess the risk to Canada and provide updates if the situation or the level of risk changes. [31] [40]

Controlling outbreaks

Community engagement is key to successfully controlling any outbreak. Outbreak control relies on using a range of interventions, such as clinical care, surveillance and

contact tracing, laboratory services, infection prevention and control in health facilities, safe and dignified burials, vaccination when possible, and social mobilization. [35]

Projecting transmission

The Bundibugyo virus driving the current outbreak in the DRC and Uganda has no specific vaccines or treatments. This outbreak could rival the largest outbreak on record, according to the U.S. Centers for Disease Control (CDC) models of possible trajectories over the next 3 months. [41]

In response to reports of high numbers of suspected cases and deaths in the current outbreaks in the DAR and Uganda, CDC conducted simulations to project outbreak growth over three months.

Model-based projections for the Bundibugyo virus disease outbreak indicate that, without large-scale and sustained public health interventions to reduce disease transmission, this outbreak could potentially reach the scale of the 2014-2016 West Africa Ebola virus disease outbreak, which resulted in over 28,000 cases and more than 11,000 deaths.

For example, if only 20% of patients isolate with no other interventions, there is a 65% likelihood the outbreak will exceed 20,000 cases within three months. However, if a significant proportion of patients (70%) were to enter isolation, the probability of the outbreak reaching 10,000 cases within the same timeframe lowers to one in twenty.

The authors concluded immediate and extensive public health action is needed to control the current outbreak, which is already the largest known Bundibugyo virus disease outbreak, to prevent it from becoming one of the largest Ebola epidemics in history. [41]

Take home messages:

- Health professionals should be vigilant to help detect emerging viral diseases. The recognition, reporting, and prompt investigation of symptomatic individuals is vital to prevent transmission and improve health outcomes.
- Global health requires equitable access to diagnostics, vaccines, and therapeutics. This is evident amid the current outbreaks of the hantavirus and Bundibugyo virus, both of which have no vaccine or specific treatment.
- How well the world collaboratively responds to these current outbreaks will not only protect the health, well-being, and lives of thousands of people but will also contribute to the prevention of future outbreaks.

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How to Clean Up After Rodents
https://www.cdc.gov/healthy-pets/rodent-control/clean-up.html

What Is Ebola?
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Additional Resources

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