

Foot and Mouth Disease

What is Foot and Mouth Disease?

Foot and Mouth Disease (FMD) is an extremely contagious disease affecting cloven-hoofed livestock and wildlife species, including cattle, pigs, sheep, bison, elk, deer, wild boar, llamas, etc. It is a viral disease causing fever and vesicles that rupture in the mouth and on the skin of the udder and feet.

While adult animals rarely die from the disease, they stop eating, become lame and very ill. Human infection is rare, although people can be carriers, as the virus can live up to 36 hours in the human throat. FMD is a reportable disease in Canada under the Health of Animals Act.

How is it spread?

FMD is one of the most infectious viruses known to man and is spread by direct contact between infected animals, by humans who have been in contact with infected animals, contaminated animal products, clothing, footwear, vehicles and equipment. Animals that have been exposed to the virus, but are several days away from showing signs, can shed/spread the virus. The virus can survive up to 14 days on clothing and for months in meat or dairy products. It can also survive up to 200 days in manure, straw and soil as well as 398 days on wood contaminated with fat.

Does Canada have FMD?

No. The last outbreak occurred in Saskatchewan in 1952, as a result of illegally imported contaminated meat. Since the eradication of FMD, Canada has been listed as free of FMD by the Office International des Epizooties (OIE).

How could FMD enter Canada?

The most common ways that FMD enters a country are through infected animals, infected animal products (meat, dairy, hides, semen, embryos, wool, etc.) and mechanical transmission from infected clothing, footwear, equipment, etc.

What are the implications of this disease?

Aside from obvious losses in livestock production, FMD is a trade issue and its occurrence would result in immediate loss of our export markets for livestock and livestock products. International trade markets could be shut down for a minimum of 18 months, and clean-up could cost billions of dollars.

How would FMD be controlled/eradicated if it entered Canada?

The Canadian Food Inspection Agency (CFIA) is responsible for the control and eradication of FMD. Control measures would involve eradicating the disease, requiring the destruction of large numbers of livestock. Both infected as well as healthy animals within a quarantine zone would be destroyed.

Other controls include stopping the sale and movement of livestock and livestock products. Serious environmental concerns would arise related to the destruction and disposal of thousands of animals.

Why aren't herds being vaccinated?

Vaccination is effective in preventing clinical signs of the disease; however, it does not

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always prevent infection, allowing some animals to be carriers. There are several different strains of FMD, with little cross protection by vaccine. The vaccine's protective effect does not last long, so animals would need to be inoculated frequently.

Most importantly, the vaccine produces antibodies that are the same as those produced by the actual disease. Therefore, blood tests used to confirm the disease would not be able to distinguish between infected animals and those that had been vaccinated. This situation would extend the period before Canada could be recognized as disease-free, and all vaccinated animals would eventually have to be slaughtered.

What is the CFIA doing to prevent FMD from entering Canada?

The CFIA has prohibited the importation of livestock and livestock products from infected countries into Canada. Farm vehicles and equipment from the UK and the EU are also banned from entering Canada. The CFIA and Canada Customs have increased surveillance of passengers and baggage from international flights. Detector dogs are employed to discover any hidden meat, dairy or other "at risk" products. All passengers must walk through a disinfectant foot bath before entry into Canada.

Compliance investigations for the handling and disposal of international garbage from airports and seaports has been increased. The Department of National Defence, in cooperation with the CFIA, has developed a national directive for biosecurity measures for incoming British military personnel and equipment.

How can the public prevent the occurrence of FMD in Canada?

Travellers must declare all meat, dairy or other animal products (e.g. semen, embryos, hides) brought into Canada. Anyone entering Canada from a country with FMD should avoid all contact with livestock, farm equipment, feed operations, slaughter plants, wilderness areas and national parks (e.g. Banff, Jasper) and zoos for 14 days. Anyone who must visit one of the above mentioned areas within two weeks of entering Canada must take appropriate sanitary precautions, which include:

- clean and disinfect all footwear using a 50 per cent vinegar solution or Virkon
- dry clean all clothing worn abroad
- thoroughly shower and clean under fingernails, rinsing with vinegar

- disinfect all equipment and personal effects (e.g. cameras, luggage) using a 50 per cent vinegar solution or Virkon
- wear disposable boots and coveralls supplied by the establishment

If your home is on a livestock farm, book yourself and your family into a hotel in the city or make arrangements to stay with friends for at least 36 hours before going home. Have someone bring a complete change of clothing to wear home, and dry clean your clothing at your first opportunity. Do not feed pigs human food waste (e.g. garbage, restaurant) or any meat or dairy products from outside Canada.

What about visitors to my farm?

Allow visitors only if necessary. Use a visitor log and require that all visitors sign in and list their previous livestock contacts. If you suspect they have recently arrived from a country affected by FMD, do not let them out of their vehicle.

All visitors should be provided with boots and coveralls, which need to be disinfected before being used by another visitor. Do not allow visitors to contact susceptible animals. Workers moving from one farm or ranch to another should take sanitary precautions by disinfecting their boots with Virkon. If you have many visitors to your farm, make them walk over a piece of carpet soaked with a 50 per cent vinegar solution or Virkon. This device should be recharged frequently, as Virkon contaminated with soil is not as effective. Do not allow imported meat, dairy or animal products onto your farm.

What should I do if I suspect FMD in my animals?

FMD is a federally reportable disease, requiring livestock owners and veterinarians to report any suspicion of the disease to CFIA authorities immediately. Quick action to confirm, contain and eradicate the disease is necessary to mitigate massive economic consequences to Alberta. Do not transport any animals to and from your farm, and restrict visitors and travel until you are confident that FMD is not present.

For further information, contact:

Your local CFIA office
Toll free FMD hotline 1-877-227-0677
CFIA website: <http://www.cfia-acia/agr.ca>

Your local AAFRD office
AAFRD website: <http://www.agric.gov.ab.ca>