



Foot-and-mouth disease – Frequently asked questions

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1. What is foot-and-mouth disease?

Foot-and-mouth disease (**FMD**) is a highly contagious viral disease that affects cloven-hoofed (two-toed) animals including cattle, sheep, goats, pigs, buffalo, camels, alpaca, llama and deer. FMD **does not** affect people and it is **not** the same as [hand, foot and mouth disease](#) that affects people.

Although many infected animals may survive FMD, they take a long time to recover and often do not regain their full productivity. Surviving animals may also become carriers of the virus which means they can transmit the virus but not show signs of disease.

2. Is FMD in Australia?

No. The last FMD outbreak in Australia was in 1872. In May 2022, an outbreak of FMD was reported in cattle in Indonesia which had been FMD-free since 1986.

3. How widespread is FMD?

FMD is widespread in Asia, Africa, some parts of Europe and South America. The World Organisation for Animal Health currently lists 65 countries with the same FMD-free status as Australia. Some other countries have zones that are recognised as being free of the disease. ([World Organisation for Animal Health FMD status map](#))

4. Which animals does FMD affect?

Susceptible farm animals include cattle, buffalo, sheep, goats, pigs, alpaca, llamas and deer.

5. Why is FMD such a serious problem?

FMD is a major animal health and production disease and is therefore a major consideration in international trade in livestock and their products. The disease can also create serious animal welfare issues in affected animals.

A FMD outbreak would severely impact Western Australia's access to livestock and livestock product export markets, worth about \$2 billion annually.

An outbreak could lead to immediate closure of Australia's live animal and meat and animal product export markets. Impacts have been estimated at more than \$80 billion dollars over 10 years which is mostly due to the impact on market access. Even an isolated, rapidly controlled outbreak could result in impacts in the billions of dollars.

The impacts of FMD may be felt well beyond agriculture. Tourism, community spirit and other social and environmental impacts in the wider community would be felt.

6. What are the signs?

Signs of FMD vary depending on the species infected and the strain of the virus.

Blisters form in the mouth, nostrils, on teats, and on the skin between and above the hoofs of cloven-footed animals. FMD results in significant weight loss, reducing productivity and may result in death in young animals and cause abortions. Note that in sheep and goats the signs are often mild and difficult to see; lameness may be the only visible sign.

Signs include:

- blisters (vesicles) in the mouth, nostrils, teats or on the feet. These blisters are often not obvious until they have ruptured. Blisters in sheep are usually small and difficult to see
- slobbering/drooling
- lameness, reluctance to move
- severe depression
- lack of appetite
- sudden death in young animals
- a large drop in milk yield in dairy animals
- abortion.

Animals usually show signs of FMD within 3–5 days of infection, but signs can take up to 14 days to appear. Infected animals spread the virus up to 4 days in milk and semen before they show signs of the disease.

7. How is FMD spread?

FMD is highly contagious. The virus is present in large amounts in the blisters, saliva, urine, manure, milk and breath of infected animals.

The virus spreads between animals by:

- direct contact with an infected animal
- air-borne particles from infected animals
- movement of infected animals
- movement of contaminated animal products (such as wool or manure), vehicles, equipment and people.

The virus can remain viable in the environment for several weeks, especially in cool, damp environmental conditions. Low humidity, high temperatures and acidic soils help to inactivate the virus. Virus particles have been detected in the human nasal cavity 28 hours following exposure.

All livestock owners should have good biosecurity measures in place on their property, including accurate records of livestock movement. To access farm

biosecurity advice and resources visit farmbiosecurity.com.au.

8. What do I do if I suspect FMD disease in my livestock?

Early disease detection is essential for successful disease control and eradication.

Livestock producers must be alert for signs of the disease in their animals. The sooner FMD disease is recognised and reported, the sooner its spread can be controlled.

If you see any of the signs of FMD in cloven-hooved animals, call:

- your veterinarian
- your [DPIRD veterinarian](#), or
- the Emergency Animal Disease Watch hotline on **1800 675 888**.

Minimising the spread of the disease through early detection and reporting will reduce the economic and social costs of an outbreak to livestock producers, the livestock and regional industries and the national economy.

9. Does FMD affect humans?

FMD infection in humans is very rare and does not result in a serious disease. There is no evidence that FMD can be caught by members of the general public. There is a human condition known as “Hand Foot and Mouth disease”. It is not related in any way to FMD of animals.

10. How could FMD be introduced into Western Australia?

The most likely way that FMD could enter Australia is by the illegal importation from an FMD infected country, of meat and dairy products, which can carry foot-and-mouth disease virus, and the subsequent feeding of that to pigs. The act of feeding food scraps or food waste that contains meat or has been in contact with meat to pigs is termed prohibited pig feed (or swill) and is illegal in Australia. See the [prohibited pig feed page](#) for more information on what and what not to feed pigs.

Pigs are highly susceptible to FMD and can become infected if they eat products carrying the virus. Once infected, pigs produce large quantities of virus, which can spread to other livestock.

FMD could also enter Australia by people from infected countries returning with the virus on their footwear or equipment and then having contact with animals.

FMD is endemic in several popular tourist destinations, such as in the south-east Asian region, and it is critical that footwear in particular is thoroughly cleaned prior to leaving these countries on return to Australia. On return from overseas travel, always declare food products and whether you have been in a country where FMD is present.

11. How to protect your livestock from FMD?

Livestock producers must be alert for signs of disease in their animals. If animals are showing signs of disease that are consistent with FMD, this needs to be reported as a matter of urgency to the **Emergency Animal Disease Watch Hotline on 1800 675 888** or to your local veterinarian.

To reduce the risk of foot-and-mouth disease occurring in your animals:

- do not feed pigs anything that contains or has had contact with meat, meat products or other products from mammals
- prevent feral pigs from accessing your property, or if not practicable, at least prevent them from accessing on-property disposal sites
- ensure visitors who have arrived from overseas wear clean clothes and disinfected shoes and do not contact Australian livestock for 7 days or have declared no contact with overseas animals as per the “incoming passenger card” when arriving in Australia.
- If staff are travelling internationally to countries that have diseases such as FMD, businesses should implement biosecurity protocols to ensure staff that have had contact with livestock in these countries do not work with at risk livestock for 3 days after their return.

Other standard biosecurity practices that will help to prevent the introduction of many other diseases as well as foot-and-mouth disease include:

- isolate new animals for 7–10 days
- keep fences secure to ensure stray animals do not enter
- have an allocated area away from livestock where contractors/farm visitors park
- after visiting another farm, clean and disinfect vehicles and footwear and change outer clothes before having contact with your own animals
- A stand-down period between animal contact on different properties should also be considered. The duration of the period is dependent on the species and is dependent on the diseases of consideration. Contact your local veterinarian for advice.

Protect your industry by reporting signs of disease early. If you see any signs of foot-and-mouth disease:

- isolate the affected animal(s)
- do not move any livestock off your property
- call your private veterinarian, [DPIRD veterinarian](#), or the Emergency Animal Disease hotline on **1800 675 888**.

Good biosecurity practices and early detection are essential to prepare for and reduce the potential impact of these diseases. Producers are urged to exercise vigilance on farm, including being aware of the symptoms of LSD and FMD and reviewing [on-farm biosecurity plans](#).

- DPIRD provides useful biosecurity checklists for livestock producers. See the webpages: [Farm biosecurity checklist for sheep producers](#), [Keep pigs healthy - follow the biosecurity checklist](#).
- The Farmbiosecurity website has a range of biosecurity planning resources to help you prepare an on-farm biosecurity plan as well as preparing your business to survive an emergency animal disease outbreak.

Western Australia has a mandatory livestock ownership, identification, and movement system. There is also a legal responsibility to report signs consistent with FMD and other reportable diseases.

If an outbreak occurred, traceability of infected or exposed livestock would be critical for Australia to control and eradicate the disease so DPIRD and industry knows where animals are and who is responsible for them. Producers should ensure their property and livestock registration details are up to date, as this assists with effective and rapid communication in a biosecurity emergency response where quick action is required.

Livestock owners should visit our [Livestock ownership, identification and movement in Western Australia webpage](#) to learn more about how to meet these requirements.

12. What can I do to stop FMD coming onto my property on vehicles or footwear?

Australia is free from FMD and an effective biosecurity plan, which addresses all farm biosecurity factors on Animal Health Australia's (AHA) [Farm Biosecurity site](#) is the best means to protect against the entry of unwanted pests and diseases. Producers and allied industries should implement or update their farm biosecurity plan via the above Farm Biosecurity link.

Good hygienic practices are important at all times to reduce the likelihood of disease introduction onto your property. You should follow the recommendations for people and vehicles at [Farm biosecurity - people, vehicles and equipment](#). This means hands should be thoroughly washed with soap or household detergent and hot water. If soap and water are not available, a commercially available hand sanitiser should be used.

Footwear should be thoroughly cleaned using a brush and hot soapy water. This includes removing soil and manure from the treads. Using a broad-spectrum disinfectant after cleaning will further reduce the likelihood of introducing disease onto your property. Footbaths may be considered as an additional measure to reduce the likelihood of introducing diseases onto your farm. For more information on how to make and use a footbath visit [Farm biosecurity - make your own footbath](#).

Vehicle tyres, undercarriages, grills, floors and trays can carry pests and diseases in soil, plant material and manure. Vehicle wheels and undersides should be visibly clean before entering a farm.

Vehicles used by visitors should be clean and parked in a designated area away from livestock and crops.

To prevent the introduction of unwanted diseases onto your farm, in addition to the above, the following measures should be considered:

- Where appropriate, establish a vehicle high pressure wash down facility well away from livestock and crops to clean vehicles and equipment that need to enter the property.
- The wash down area should have a sump to collect wastewater.
- Ensure run off is directed away from livestock pens, paddocks, crops and waterways.
- Use soap and water to clean machinery and any borrowed or second-hand vehicles, then apply a broad-spectrum disinfectant.
- Follow the wash down by applying a broad-spectrum disinfectant. Allow for the recommended contact time, then rinse with clean water.
- Keep an up-to-date record of equipment and vehicle cleaning.

An effective farm biosecurity plan will address several other factors, such as:

- limiting the number of access points to the farm
- requiring people entering Australia from overseas to wait 7 days before entering a farm
- complying with livestock identification and traceability requirements
- biosecurity signage should be used.

Remember, footbaths can be part of an effective biosecurity plan but are insufficient on their own. To protect farm biosecurity, producers should address all Farm Biosecurity risk factors that apply to their farms.

It is important to note that some disinfectants present risks to human health and safety. The permitted uses and efficacy of chemical products, together with information on occupational health and safety, are included in the product label. In case of any doubts, producers should seek advice from a veterinarian. Information on the chemicals that are approved for disease-control purposes can be found at the website of the Australian Pesticides and Veterinary Medicines Authority (APVMA) [PubCRIS](#).

In the event there is a case of FMD in Australia, directions will be provided for the use of specific disinfectants which are approved for use against FMD virus. Information on these disinfectants can be sourced by going to the APVMA permits database ([AVPMA Permits](#)) and searching for foot-and-mouth disease or PERMIT 83649.

13. What is being done to protect Australia from FMD?

Australia has detailed FMD response plans and arrangements in place. The [Australian Veterinary Emergency Plan \(AUSVETPLAN\)](#) contains Government's and Industry's pre-agreed response strategies to an incident. These plans are continuously reviewed to ensure Australia is prepared to effectively respond to an emergency animal disease incursion.

The Department of Agriculture, Fisheries and Forestry (DAFF) has suspended import permits for animal products from Indonesia that may carry FMD.

State and Territory Governments and the Commonwealth Government and livestock industries have worked to increased awareness of the signs of FMD and continue to work collaboratively to enhance the level of biosecurity and preparedness at a property, state and national level to detect disease and respond effectively in the event of a disease incursion.

Australia has a long standing FMD vaccine bank, located internationally, and vaccine is available for use if there is an incursion in Australia.

DPIRD and WA industry have established a preparedness task group which is looking at response arrangements and planning, traceability and supply chain continuity to minimise the impact of disease if an incursion occurs.

14. What can I do to prevent FMD entering Western Australia?

West Australians benefit from Australia's and Western Australia's well-established border and post-border biosecurity systems. Individual Australians need to play their part as well – biosecurity is everyone's responsibility.

If you are planning an overseas trip, make sure you know [what you are not allowed to bring back into Australia and declare, at the airport customs, anything you are in doubt about](#). DAFF has released a ['traveller and mail pathway intervention'](#) overview, which contains measures being implemented at the border to reduce the likelihood of disease introduction into Australia.

Travellers who have had contact with livestock or farms in infected countries need to declare this when arriving in Australia and ensure all footwear, clothing and equipment is free of mud and animal manure. They should not have direct contact with livestock for 7 days after arrival.

Maintaining good biosecurity practices when you visit farms ANYWHERE also reduces the chances of you bringing something unwanted back to WA. Cleaning boots and equipment used on animal before returning and changing your clothes before coming in contact with your animals is a useful habit to get into.

The UK outbreak in 2001 was most likely started by a farmer who fed his pigs meat food scraps/prohibited pig feed (swill), which included FMD-virus contaminated meat that had come from overseas. The feeding of prohibited pig feed) is banned in Australia.

15. What would happen if an FMD outbreak occurred in Australia?

Australian commonwealth and state and territory governments and peak industry bodies are signatories to the national [Emergency Animal Disease Response Agreement \(EADRA\)](#). This is a contractual arrangement between Australia's governments and industry groups to collectively reduce the risk of disease incursions and manage a response if an outbreak occurs.

The EADRA commits all signatories, including industry, to preparedness and early detection activities, including good on-property biosecurity, reporting any suspicion of disease, and maintaining good traceability. All parties that are signatories to the EADRA commit to the participation in an EAD response and to contribute to funding

the eligible costs of responding to an EAD by which they are affected.

Australia's Veterinary Emergency Plan ([AUSVETPLAN](#)) contains the nationally agreed approach for the response to an outbreak of FMD in Australia. Government and industry signatories to the EADRA have agreed to a detailed contingency plan for responding to the outbreak of any of the major exotic animal diseases, including FMD. For full details see [AUSVETPLAN - Disease Strategies](#).

The national objective is to eradicate an incursion of FMD as quickly as possible.

This nationally agreed policy of eradication would involve the depopulation of infected livestock, in addition to the use of other response tools, such as the control of movement of livestock and associated products. Following a detection of FMD, movement controls to reduce the likelihood of spread of disease would be immediately implemented in WA and may be applied to susceptible animals, animal products and by products vehicles and equipment. Vaccination will be considered as a component of the response.

The length of time taken to control and eradicate the disease will depend on how long the virus has been present before it is detected and the degree of spread. If there is a small outbreak authorities may be able to contain and eradicate the disease quickly. If the disease has established and spread across a state or over borders, it will likely take much longer. This is why early detection and reporting by everyone is critically important.

Further information on national response frameworks can be found at [Animal Health Australia](#) and National pest & disease outbreaks - <https://www.outbreak.gov.au/how-we-respond-to-outbreaks>

16. Is there a vaccine for FMD?

There are vaccines available overseas but there are currently no vaccines registered for routine use in Australia. However, as part of preparedness for an outbreak of FMD, Australia has a contract for the emergency supply of vaccine in the event of an outbreak, with import and emergency use permits in place for the vaccine as part of this arrangement.

Further information can be found at Australia's national foot-and-mouth disease vaccination policy: https://www.agriculture.gov.au/biosecurity-trade/pests-diseases-weeds/animal/fmd/review-foot-and-mouth-disease/national_foot-and-mouth_disease_vaccination_policy

17. Can I vaccinate my livestock now to help protect them from FMD?

Pre-emptive vaccination for FMD is currently not an option in Australia. There is no vaccine that is registered for routine use in Australia. Under existing trade rules, vaccinated animals may not meet importing country requirements for trade.

18. What role does traceability play during a potential LSD incursion?

In the event of an emergency animal disease incursion, for disease tracing and response planning purposes, it is essential DPIRD knows where susceptible animals are, their prior movements as well the party who is responsible for them. Producers should ensure their livestock ownership registration details are up to date and NLIS livestock transfers are current.

19. Will I receive compensation if my livestock get FMD?

Compensation arrangements are in place to ensure that people who report suspicion of disease early are not financially disadvantaged.

AUSVETPLAN and state legislation provides details on compensation arrangements while Australia's Emergency Animal Disease Response Agreement (EADRA) documents nationally agreed arrangements for the cost sharing of compensation paid to affected livestock enterprises.

For more information see: https://www.animalhealthaustralia.com.au/wp-content/uploads/dlm_uploads/Fact-sheet_Compensation-and-valuation-in-an-EAD-response.pdf

20. Where can I get more information?

- Department of Agriculture, Fisheries and Forestry:
<https://www.agriculture.gov.au/biosecurity-trade/pests-diseases-weeds/animal/fmd>
- DPIRD webpage: <https://www.agric.wa.gov.au/livestock-biosecurity/foot-and-mouth-disease-recognise-and-report-signs?nopaging=1>
- QLD LSD and FMD engagement hub:
<https://daf.engagementhub.com.au/animal-disease-preparedness>