

# EXOTIC

## Foot-and-mouth disease (general information)

### Fact sheet

#### November 2023

---

### Key points

- Foot-and-mouth disease (FMD) is **not present** in Australia.
- FMD is a highly contagious viral infection of domestic and wild cloven-hoofed animals.
- Serious production losses can occur, but deaths are unlikely except among young animals.
- Wild and feral populations of animals generally pose a low risk of transmitting FMD to domestic livestock or originating new FMD outbreaks <sup>[1]</sup>. Feral wildlife have been assessed as a more significant risk to the epidemiology of FMD in Australia than native wildlife, although still low compared to domestic livestock.
- Australian native species are considered unlikely to play a role in the epidemiology of foot-and-mouth disease (see WHA Fact Sheet “Foot-and-mouth disease in native wildlife”).
- Foot-and-mouth disease is a **nationally notifiable disease**; you must notify animal health authorities if you suspect an animal has FMD (see below).

For more, see WHA Incidents page (<https://wildlifehealthaustralia.com.au/Incidents/Incident-Information/foot-and-mouth-disease-information>) and FMD Information Sheet Aug 2022 [https://wildlifehealthaustralia.com.au/Portals/0/Incidents/WHA FMD Information V1.2 150822.pdf](https://wildlifehealthaustralia.com.au/Portals/0/Incidents/WHA_FMD_Information_V1.2_150822.pdf).

**Movement of infected animals** is an important means of spread for FMD. Other sources of spread include aerosols (over short distances), contaminated products, equipment and people <sup>[2]</sup>. Long-distance wind-borne movement is also possible under certain conditions <sup>[3]</sup>. FMD virus can remain infective in the environment for several weeks if conditions are favourable <sup>[2]</sup>.

**Pigs** are important amplifying hosts because of their susceptibility to oral infection and their capacity to excrete large amounts of virus. **Cattle** are good indicators of the presence of the disease because of their high sensitivity to infection. **Sheep** and **goats** are often considered maintenance hosts because disease can be present with few clinical signs <sup>[2]</sup>.

Ruminants, but not pigs, can become carriers of the virus (i.e. the virus may persist in the absence of any obvious sign of disease). The role of **carrier animals** in the transmission of FMD virus has been uncertain, and transmission from carrier to susceptible cattle has never been experimentally

demonstrated. However, there is evidence from Africa of transmission from carrier buffalo and cattle under field conditions <sup>[5]</sup>.

**Susceptible wild animals** include cattle, African buffalo, water buffalo, sheep, deer, pigs, goats, camelids (camels, llamas and alpacas), and Australian native species such as marsupials and rodents <sup>[2]</sup>. The WHA fact sheet “Foot-and-mouth disease in native wildlife” (<https://wildlifehealthaustralia.com.au/Resource-Centre/Fact-Sheets>) presents information on FMD and Australian native animals. **African buffalo** are the only wildlife species, globally, to play a significant role in the epidemiology of FMD.

Globally, wild and feral populations of animals generally pose a low risk of transmitting FMD to domestic livestock or originating new FMD outbreaks <sup>[1]</sup>. Feral animals are unlikely to play a significant role in maintaining and spreading foot-and-mouth disease in Australia. The only exception is the water buffalo, due to the potential to develop a carrier status. Feral water buffalo have a relatively limited distribution in the Top End of the NT.

If you suspect a case of FMD you should immediately call the **Emergency Animal Disease Hotline (1800 675 888)**.

## References and other information

1. Bunn C (2013) Foot and Mouth Disease (FMD) Risks Relating to Wildlife - Scope, Gap Analysis and Future Priorities.
2. Animal Health Australia (2023) Disease strategy: Foot-and-mouth disease (Version 5.2). In 'Australian Veterinary Emergency Plan (AUSVETPLAN), Edition 5.2.' (Standing Council on Primary Industries: Canberra, ACT)
3. DAFF (2022) Potential for wind-borne spread of FMD in Australia - Report Summary Available from: [www.agriculture.gov.au/biosecurity-trade/pests-diseases-weeds/animal/fmd/wind-borne](http://www.agriculture.gov.au/biosecurity-trade/pests-diseases-weeds/animal/fmd/wind-borne)
4. Ward M, Garner M et al. (2015) Modelling foot-and-mouth disease transmission in a wild pig–domestic cattle ecosystem. *Australian Veterinary Journal*, **93**(1-2): 4-12
5. Thomson GR, Bengis RG et al. (2001) Picornavirus infections. In 'Infectious Diseases of Wild Mammals.' (Eds E. Williams and I. Barker) pp. 119-130. (Blackwell: Ames, Iowa)

The latest information on FMD is available from the **World Organisation for Animal Health (WOAH)** <https://www.woah.org/en/disease/foot-and-mouth-disease>. WOAH detection, reporting and control measures are located at [www.woah.org/fileadmin/Home/eng/Health\\_standards/tahm/3.01.08\\_FMD.pdf](http://www.woah.org/fileadmin/Home/eng/Health_standards/tahm/3.01.08_FMD.pdf).

Australia’s Disease Strategy for the control and eradication of foot-and-mouth disease, version 5.2, 2023 is available as part of the **AUSVETPLAN** series. Wildlife considerations are addressed in the **Wild Animal Response Plan (WARS)** of the AUSVETPLAN. Both can be found at: <https://animalhealthaustralia.com.au/ausvetplan>.

Information available on distribution and abundance of susceptible feral hosts in Australia can be accessed through “*Significant invasive species (vertebrate pests) - Status of information for*

reporting against indicators under the National Natural Resource Management Monitoring and Evaluation Framework” (2008) [https://pestsmart.org.au/wp-content/uploads/sites/3/2020/06/NLWRA\\_Invasive\\_Animals\\_Booklet.pdf](https://pestsmart.org.au/wp-content/uploads/sites/3/2020/06/NLWRA_Invasive_Animals_Booklet.pdf).

The WHA has an incident page with further information about foot-and-mouth disease <https://wildlifehealthaustralia.com.au/Incidents/Incident-Information/foot-and-mouth-disease-information>.

## Acknowledgements

We are grateful to the people who contributed to this fact sheet. Much of the information has been drawn from the AUSVETPLAN Disease Strategy for foot-and-mouth disease.

*Wildlife Health Australia recognises the Traditional Custodians of Country throughout Australia. We respectfully acknowledge Aboriginal and Torres Strait Islander peoples’ continuing connection to land, sea, wildlife and community. We pay our respects to them and their cultures, and to their Elders past and present.*

Updated: 1 November 2023

## To provide feedback on fact sheets

Wildlife Health Australia welcomes your feedback on fact sheets. Please email [admin@wildlifehealthaustralia.com.au](mailto:admin@wildlifehealthaustralia.com.au). We would also like to hear from you if you have a particular area of expertise and are interested in creating or updating a WHA fact sheet. A small amount of funding is available to facilitate this.

## Disclaimer

This fact sheet is managed by Wildlife Health Australia for information purposes only. Information contained in it is drawn from a variety of sources external to Wildlife Health Australia. Although reasonable care was taken in its preparation, Wildlife Health Australia does not guarantee or warrant the accuracy, reliability, completeness or currency of the information or its usefulness in achieving any purpose. It should not be relied on in place of professional veterinary or medical consultation. To the fullest extent permitted by law, Wildlife Health Australia will not be liable for any loss, damage, cost or expense incurred in or arising by reason of any person relying on information in this fact sheet. Persons should accordingly make and rely on their own assessments and enquiries to verify the accuracy of the information provided.



Find out more at [wildlifehealthaustralia.com.au](https://wildlifehealthaustralia.com.au)

Email: [admin@wildlifehealthaustralia.com.au](mailto:admin@wildlifehealthaustralia.com.au)

Or call +61 2 9960 6333