

Information for zoos & petting zoos

ON FOOT AND MOUTH DISEASE (FMD)

About Foot and Mouth Disease (FMD)

Foot and mouth disease (FMD) is a serious and highly contagious animal disease that affects all cloven-hoofed animals, both domestic and wild including cattle, sheep, goats, pigs, camelids (such as camels and alpacas), deer and buffalo/bison. Cloven-hoofed animals are those with divided hooves. Other susceptible wild and zoo animals found in NSW include giraffe, Asian elephants, Himalayan tahr, Barbary sheep, antelopes and banteng. Horses, donkeys and zebras are not affected.

FMD is a highly contagious virus carried by live animals and in contaminated meat and dairy products, bones and untreated hides. The virus can be present and transmitted through animal waste (urine and faeces), soil, vehicles and equipment used with infected animals and carried on people's clothing and footwear. It can survive in frozen, chilled and freeze-dried foods. The virus can also be carried by the wind.

Know the signs

FMD has serious welfare consequences for affected animals.

Signs of FMD may be more difficult to detect in animals with darker pigmentation and thicker skin, such as feral pigs, goats, deer and cattle (buffalo). The most common signs of FMD are:

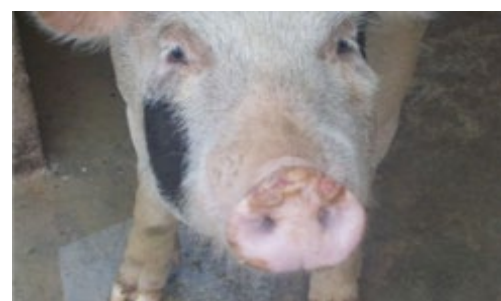
- Lameness or reluctance to walk
- Fever
- Salivation (drooling)
- Reduced appetite
- Blisters may be intact or ruptured, exposing raw tissue which is very painful. Blisters may be present on the:
 - Snout (of pigs) and mouth of all species (including the tongue and dental pad),
 - Hoof – the top of the hoof or between the toes, and on the heels, and
 - Teats of females



Goat with blister in mouth. Image: FAO-EUFMD



Cow with blisters on hoof. Image: Mark Stevenson



Pig with blisters on snout. Image: FAO- EUFMD

How is FMD transmitted

Movement of infected animals is widely recognised as one of the most important routes by which FMD spreads between herds and farms. Transmission occurs most readily when animals are in close proximity, such as at watering and feeding points, and congregation points such as stockyards and milking sheds.

FMD virus is excreted in breath (aerosol) and all other secretions and excretions including saliva, mucus, milk, faeces, urine and semen.

Pigs, including feral pigs can become infected from eating contaminated food products, known as prohibited pig feed or swill. Food waste containing meat, meat products or mammalian by-products or food that has had contact with these can carry the FMD virus causing infection in pigs if eaten.

Cattle are considered to be the best indicators of FMD presence in an area as they are more likely to show significant signs. Sheep and their movements are particularly important because they can be infected but only show mild or no easily identifiable signs of disease. FMD can spread through:

- Close contact between animals,
- Being carried short distances by the wind or animal products (wool, hair, grass or straw),
or
- Mud or manure sticking to footwear, contaminated clothing, livestock equipment or vehicle tyres.

What can I do?

Zookeepers and petting zoo operators should be mindful of good hygiene practices around animals. Look, Report, Protect:

- *LOOK for and know the signs of FMD*
- *REPORT suspect cases to your veterinarian and the Emergency Animal Disease Watch Hotline on 1800 675 888 immediately*
- *PROTECT your animals and livelihood:*

1. Have a biosecurity management plan in place. For more information refer to
 - a) The National Zoo Biosecurity Manual represents the industry's best practice guidelines on developing a zoo-specific biosecurity plan. It is targeted at the unique operations of zoos of differing sizes and species composition - <https://www.farmbiosecurity.com.au/wp-content/uploads/2019/03/National-Zoo-Biosecurity-Manual.pdf>
 - b) Australia's National Zoo Biosecurity Manual Self-audit Checklist - <https://www.farmbiosecurity.com.au/wp-content/uploads/2019/03/Australias-National-Zoo-Biosecurity-Manual-Self-audit-Checklist.pdf>
 - c) Farm Biosecurity Action Planner - <https://www.farmbiosecurity.com.au/extension/aha-livestock-extension/property-biosecurity/>
2. If you keep one or more domestic cattle, sheep, goats, pigs, bison, buffalo, deer, camelids or equids (horses, donkeys) you must have a registered Property Identification Code. For more information go to: <https://www.lls.nsw.gov.au/i-want-to/apply-for-a-property-identification-code>
3. Wash your hands before and after feeding and petting animals.

4. Provide visitors with advice about the safe handling and feeding of animals and have appropriate wash stations and products available for people to practise personal hygiene before and after interacting with animals.
5. Thoroughly check and clean the soles of your shoes so you're not transferring manure or mud between animal holding pens or when you leave the premises.

Operating clean takes commitment. Ensure all vehicles, equipment, people and animals are clean when entering a zoo or petting zoo premise and clean when leaving, preventing the spread of any and all unwanted pests and diseases. Call 1300 795 299 to speak to your Local Land Services office for further assistance in managing your biosecurity risks.

Spotted anything unusual?

If you see any unusual signs of disease or death in your livestock animals or wildlife, report it immediately to your veterinarian and the **Emergency Animal Disease Watch Hotline on 1800 675 888**.

For further information

NSW DPI Foot and Mouth disease: <https://www.dpi.nsw.gov.au/fmd>

Foot and Mouth Disease and Lumpy Skin Disease, Local Land Services:
<https://www.lls.nsw.gov.au/biosecurity/footand-mouth-disease-and-lumpy-skin-disease>