



# FOOT-AND-MOUTH DISEASE

## WHAT IS FOOT-AND-MOUTH DISEASE?

Foot-and-mouth disease (FMD), is a highly contagious viral disease that affects cattle, sheep, pigs, goats, deer, and other cloven-hooved (two-toed) species. It does not affect horses, dogs, or cats. There are seven known types and more than 60 subtypes of the FMD virus. Finding FMD in the U.S. could cause a major loss in production, may stop movement nationwide, and likely lead to significant international trade restrictions.

Humans cannot get FMD, therefore the virus does not pose a public health or food safety concern. FMD is not related to hand, foot, and mouth disease, which is a common childhood illness caused by a different virus. FMD is a worldwide concern as it can spread quickly and cause significant economic losses. The United States has been FMD-free since 1929.

## CLINICAL SIGNS

Clinical signs of FMD can mimic symptoms of several other vesicular diseases that can cause blister type lesions on the skin or mucous membranes like vesicular stomatitis (VSV) and bluetongue virus. Clinical signs of FMD may include:

- Depression
- High fever
- Blisters or lesions can be present on the line where the skin meets the top of the hooves (coronary band), between the toes, in the mouth, on the snout/muzzle, on the teats, or on the tongue
- Nasal discharge
- Excess sticky, foamy, stringy saliva
- Loss of appetite or eating less due to painful tongue and mouth blisters
- Lameness with reluctance to move
- Sudden death in young animals

Most affected animals will not die from FMD, but the disease leaves them weakened and unable to produce meat and milk as they did before becoming sick.

## TRANSMISSION

FMD can spread widely and rapidly. The virus survives in living tissue and in the breath, saliva, urine, milk, and other excretions of infected animals.

It can also survive in contaminated materials and in the environment for several months under the right conditions. FMD can be transmitted through infected animals, contaminated trailers, pens, or buildings, contaminated hay, feed, or water, contaminated clothing, footwear, or equipment, or newly introduced animals on a premises.

Animals can shed FMD virus for up to four days prior to the onset of clinical signs. Animals can be infected for 2-14 days before showing clinical signs, depending on the strain of the virus and the route of infection. The time between infection and showing clinical signs varies between species.

## DIAGNOSIS

The first signs of FMD are often fever associated with lethargy, anorexia, and reduced milk production. The only way to tell if an animal is sick with FMD virus is through laboratory testing.

FMD virus can be found in all secretions and excretions from acutely infected animals. The virus can be detected in the throat area 1-3 days before it can be found in the blood and before clinical signs, like blisters.

Producers who observe mouth or feet associated blisters or other typical disease signs in animals or carcasses, should report them immediately to a veterinarian or a TAHC region office.

## REPORTING FMD

The Texas Animal Health Commission (TAHC) must be notified within 24 hours of all suspected and confirmed cases of FMD. Reports can be made to any TAHC region office.

## PREVENTION

Practicing strong biosecurity can help mitigate the spread of disease on and off your premises. When traveling outside the United States, do not bring back prohibited animal products or other at-risk materials. Avoid sharing equipment with other premises and buy healthy animals from trusted sources. Watch for clinical signs of FMD in your herd.



Isolate animals that are showing signs of illness and immediately report any unusual or suspicious signs of disease to a veterinarian.

### TREATMENT

In the event of an outbreak, The United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service, (APHIS) may authorize the use of a vaccine to help prevent further spread and protect healthy animals. Vaccines for FMD are available but must be matched to the specific type and subtype of virus causing the outbreak. Other disease control methods and strategies may be used to effectively eliminate the disease.

### TESTING REQUIREMENTS

If your animals are showing clinical signs of FMD, call your veterinarian to ensure the situation is reported to either the TAHC &/or the USDA APHIS. This way a Foreign Animal Disease Diagnostician (FADD) can investigate the clinical signs and perform any necessary testing for FMD as appropriate.

