



Food and Agriculture  
Organization of the  
United Nations



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## Avian Influenza (Bird Flu)



agriculture, land reform  
& rural development  
Department:  
Agriculture, Land Reform and Rural Development  
REPUBLIC OF SOUTH AFRICA



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#### What is Avian Influenza (AI)?

Avian influenza refers to the disease of certain birds caused by infection with avian (bird) influenza (flu) viruses. There are many strains of avian influenza viruses which can generally be classified into two categories: low pathogenic (LPAI) that typically causes little or no visible signs in birds and highly pathogenic (HPAI) that can cause severe clinical signs and/or a high number of deaths in birds.

These viruses occur naturally among wild birds worldwide and can infect domestic poultry and other bird and animal species. Wild birds can be infected with avian influenza viruses, but usually do not get sick. However, avian influenza viruses are very contagious among birds and some of these viruses can infect and even kill certain domesticated bird species including chickens, ducks and turkeys.

#### Where is the disease found?

Avian influenza occurs worldwide and different strains are more prevalent in certain areas of the world than others.

#### How is the disease transmitted and spread?

All AI viruses can be transmitted among birds through direct contact with secretions from infected birds, especially faeces, or through contaminated feed, water, equipment, eggs and human clothing. They are readily

transmitted from farm to farm by the movement of domestic live birds, people (especially when shoes and other clothing are contaminated) and contaminated vehicles, equipment, feed and cages.

#### What are the signs of highly pathogenic bird flu?

The disease may cause a large number (up to 100%) of sudden deaths in a flock.

- Ruffled feathers
- loss of appetite
- quietness and extreme depression
- sudden drop in production of eggs
- wattles and combs become swollen and congested
- swelling of the skin under the eyes
- coughing, sneezing and signs of nervousness
- diarrhoea, haemorrhages on the hock.

These signs may be confused with other poultry diseases, for example Newcastle disease that frequently occurs in South Africa.

#### Can humans become infected?

Though some avian influenza strains are zoonotic (a disease which primarily affects animals, but causes disease in humans), the current strain that we are dealing with in South Africa, H5N8, is reported NOT to be a zoonosis by both the World Organization for Animal Health and the World Health Organisation.

Some other strains of the AI virus have caused human deaths; however, deaths only occurred among people who had very close contact with birds infected with AI. No human-to-human spread of AI has been proven yet.

#### How is the disease diagnosed in birds?

Avian influenza may be suspected on the basis of clinical signs and events leading to the disease. Laboratory tests are

required to confirm the diagnosis. If you suspect your birds may have AI, contact your State Veterinarian, Animal Health Technician or Extension Officer immediately for assistance.

#### How can we control the disease?

It is essential for poultry producers to maintain biosecurity practices to help prevent introduction of the virus to their flock. Contact your veterinarian for advice on how to improve your biosecurity. Measures that are recommended at the farm level include:

- Keep poultry away from areas frequented by wild fowl
- Keep control over access to poultry houses by people and equipment
- Do not provide elements on the property that may attract wild birds (e.g., open feed, large open water bodies, etc.)
- Try to prevent wild birds gaining access to your poultry houses
- Maintain sanitation of the property, poultry houses and equipment
- Avoid the introduction of birds of unknown disease status into flocks
- Report any AI-like illness and deaths in your poultry and any wild birds on the property
- Appropriate disposal of manure and dead poultry.

Avian influenza is a disease listed under the World Organisation for Animal Health (OIE) Terrestrial Animal Health Code. It is also a controlled animal disease listed under the Animal Diseases Act, 1984 (Act No. 35 of 1984). Therefore, you must immediately report any suspicion of AI to your local State Veterinarian or Animal Health Technician.



Why is it important?

- It is a trade sensitive disease and has a severe negative impact on the economy of the country.
- It is a controlled disease in terms of the Animal Diseases Act 1984, (Act No. 35 of 1984).
- Though it does not kill affected animals, owners lose money due to a sudden drop in production.

Where does Foot and Mouth disease occur?

- In South Africa, buffalo in the Kruger National Park live with the disease but show no signs. To stop the disease from spreading, there are several control measures, which include separation of infected animals, vaccination, inspections and movement controls.



What to do when animals get the disease?

- If you see any signs of Foot-and-mouth disease in your cattle, immediately contact your Animal Health Technician or State Veterinarian.



Foot and Mouth disease



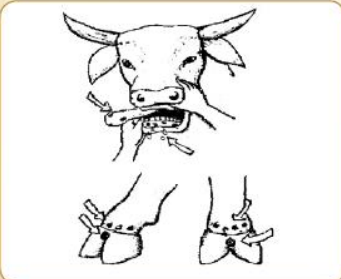
Foot and Mouth disease

Is a serious disease that spreads easily. It is caused by the virus that is found in all body fluids such as saliva, urine, faeces and milk.

- Animals get this disease when eating or breathing in the virus from these body fluids.
- People can also spread the virus by unclean clothing, shoes, hands and car tyres.
- It affects mainly cattle, pigs, goats, sheep and other cloven-hooved animals, including wildlife such as buffalo and antelope.

What are the signs?

- Blisters and sores in the mouth (gums, lips and tongue), are raw and painful, making it difficult for the animal to eat and often causes drooling.
- Blisters and sores between the toes and where the hooves join the skin can cause the animals to limp and not want to walk around. Sometimes they may lose their claws or hooves.
- Cows can develop sores on their teats. This results in a sudden drop in milk production.



Note:

People cannot get sick from Foot and Mouth disease

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# KNOW THE SIGNS OF FOOT AND MOUTH DISEASE



## FOOT AND MOUTH DISEASE SIGNS IN CLOVEN-HOOVED ANIMALS



- FMD causes fever, which is followed by the development of blisters chiefly in the mouth and feet. Therefore, animals may stop eating and become lame.
- Please contact your local state veterinarian, Animal Health Technician or Extension Officer to find out if your animals are within the FMD controlled area and what control measures you must adhere to.

**NB: All these measures have been put into place to prevent spread of Foot and Mouth diseases into the country, as well as to protect livestock.**

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Funded by the  
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**Important facts  
you should know about Foot and  
Mouth Disease**



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**Important facts you should know about  
Foot and Mouth Disease**

- ★ Foot and Mouth disease (FMD) is a controlled animal disease in terms of the Animal Diseases Act, 1984 (Act No. 35 of 1984).
- ★ FMD is caused by a virus, which only affects cloven-hoofed animals e.g. cattle, sheep, goats and pigs and cloven-hoofed wildlife such as buffalo and antelope. People do not get FMD.
- ★ FMD causes fever, which is followed by the development of blisters chiefly in the mouth and feet. Therefore, animals may stop eating and become lame.
- ★ It spreads rapidly if not controlled and can be transmitted by contact with infected animals or their products as well as by people or equipment, including vehicles, tools, gloves, clothes and ropes that have been in contact with FMD infected animals.
- ★ It is a herd disease. Therefore, if one animal in the herd is infected; the whole herd must be considered as potentially infected.
- ★ FMD has a severe negative impact on the economy of the country as it affects international and local trade in animals, animal products and related products such as feed and trophies.
- ★ Certain areas of South Africa have been legislated as the FMD controlled areas an area where control measures such as vaccination and movement control are implemented. Please contact your local state veterinarian, Animal Health Technician or Extension Officer to find out if your animals are within the FMD controlled area and what control measures you must adhere to.
- ★ All owners, managers and persons working with cloven hoofed animals must be vigilant and use good biosecurity practices to keep their herds safe.
- ★ If you think your animals may have FMD, please inform your Animal Health Technician, Extension Officer or State Veterinarian immediately. Do not move any animals from the property until the State Veterinarian has confirmed the animals do not have FMD.
- ★ In the event of an outbreak, different control measures may be proclaimed by the Director Animal Health and this normally includes, but is not limited to: quarantine, movement control of animals and animal products and vaccination.
- ★ Owners are responsible for the health of their animals and may be prosecuted under the Animal Disease Act, 1984 (Act No. 35 of 1984) and the Consumer Protection Act, 2008 (Act No. 68 of 2008) if they propagate the spread of FMD.

**We need YOU to help combat FMD**

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Provincial state veterinarian contact details are available at <https://www.dalrdd.gov.za/Branches/Agricultural-Production-Health-Food-Safety/Animal-Health/contacts/provincialveterinary>

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## PESTE DES PETITS RUMINANTS (PPR)



### What is peste des petits ruminants?

- Peste des petits ruminants (PPR) is a highly contagious viral disease (spreads easily), which mainly affects goats and sheep.
- Heavy losses can be experienced, especially in goats, with morbidity (number of animals that become sick) and mortality (number of animals that die) rates sometimes approaching 80% to 100%.
- PPR has a high economic impact in areas of Africa, the Middle East and Asia, where goats and sheep contribute to guaranteeing livelihoods.

### Species affected by PPR

- Among domesticated animals, PPR is primarily a disease of goats and sheep.
- The disease has also been reported in some wild animals and camels.



### How would my animal get the PPR virus?

- The PPR virus is mainly spread by close contact between animals.
- The virus is present in secretions from the eyes, nose and mouth and in faeces from infected animals.
- Most infections occur when an animal inhales the virus shed from an infected animal (aerosols from eye, nose and mouth discharges) or through contact with faeces from infected animals.

- Fomites (e.g., water troughs, bedding, ropes, etc.) may be contaminated with the virus and can infect animals. Tools and surfaces should be disinfected to make them safe for other animals.



### Incubation period (period between being exposed to the virus and developing symptoms of disease)

- The incubation period can range from two to 10 days in most cases.

### What are the clinical signs of PPR?

- Most animals suffering from PPR develop a sudden high fever that generally lasts between three to five days, after which the animal either dies or begins to recover.
- Other signs of PPR include restlessness, decreased feed intake, and discharge from the eyes and nose that often crusts over the nostrils making breathing difficult, and sores in the nose and mouth.
- Animals may also develop diarrhea leading to dehydration and extreme weight loss.
- Coughing can be seen later in the disease and abortion in pregnant animals.

### Can humans get PPR?

- No. Humans are not at risk of being infected with PPR.

### Treatment

- There is no specific treatment for PPR; however, supportive care and treatment of bacterial and parasitic co-infections may decrease mortality.

### Control

#### Disease reporting:

- PPR is not currently found in the Republic of South Africa and is a controlled animal disease in terms of the Animal Diseases Act, 1984 (Act No. 35 of 1984).
- Any suspicion of PPR must immediately be reported to the nearest state or private veterinarian.
- A quick response is vital for containing outbreaks in PPR virus-free regions.



### Prevention

- The PPR virus does not survive for long in the environment. It is usually introduced by infected animals and then spread through direct close contact.
- Do not source animals that have an unknown disease status or animals of unknown origin. Protect your herd by only obtaining animals from trustworthy sources.