

# Foot-and-mouth disease

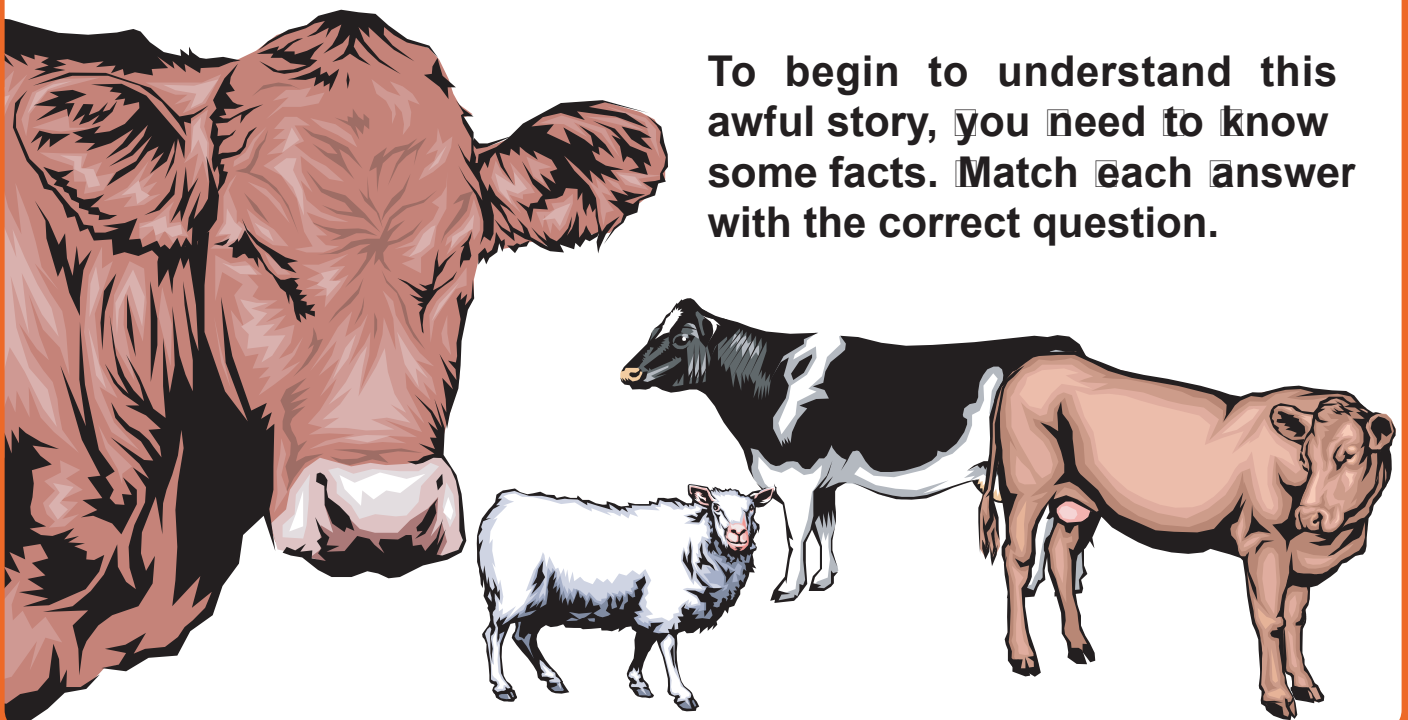
## *the facts*

You are going to find out about foot and mouth disease - a highly infectious disease which affects sheep and cattle. What is this disease, and how can it be controlled?

During 2001 an epidemic of foot and mouth disease spread throughout much of England, Wales and Scotland. The disease was out of control. There was a fierce national debate about how best to bring it under control. The government relied on two main control measures to stop it spreading:

- Stopping the movement of animals.
- Slaughtering whole herds (also referred to as 'culling') when new cases were identified.

Some people argued strongly that healthy animals should be vaccinated so that they could not become infected, but this was not done. By the end of 2001, after nine months, the disease was finally eradicated. By then almost 10,000 farms had been affected and over 4 million animals had been slaughtered.

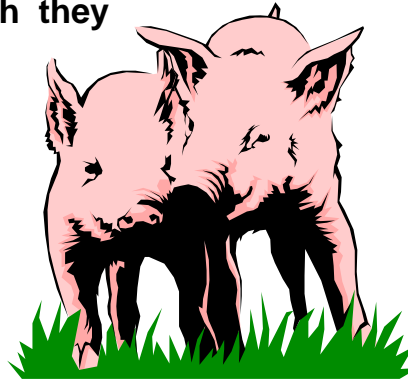


To begin to understand this awful story, you need to know some facts. Match each answer with the correct question.

**a**

**Despite painful symptoms adult animals usually recover, though they get very thin.**

Cows rarely regain full health. Young animals – calves, lambs and piglets – die, because the disease affects the heart.

**b**

**An animal may seem healthy, but can incubate the virus in its body for as long as two weeks before it shows any sores.**



The interval between infection of one animal and its ability to infect another can be as low as 2 days, but more often between 3 and 7 days, depending on the amount of invading virus and the species.

**c**

**Vets can test the blood of animals and detect the virus if it is present.**

This can be done during the incubation period, before any symptoms show up.

**d**

**Cows and pigs can catch the disease from a sick animal's saliva dribbling into the common feeding trough, or from touching its blisters.**

It is also passed on through an infected animal's breath, urine and faeces. Sheep in open pastures breathe in the virus.

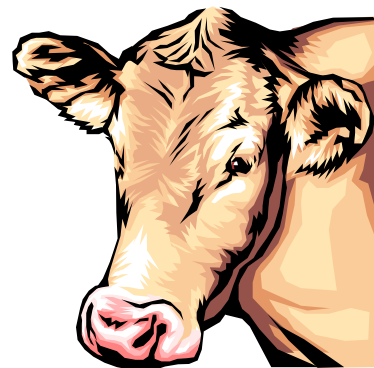
Young animals can get it from milk, while adults – especially pigs – can swallow it with their food. A short period of cooking does not necessarily destroy the virus.

Infection can linger in the carcasses of dead animals for months, which is why they must be burned and not buried. Recovered animals may carry the virus in their blood for up to 3 years.

**e**

**Blisters appear on the lips, nostrils and tongues of animals affected by foot and mouth disease.**

These burst to become big sore patches called 'lesions' which last up to two weeks. Their noses run and their mouths dribble. Cows also get lesions on their udders, making milking them difficult. They will have lesions all over their ankles and feet, and between their toes.

**f**

**The government decided that a total slaughter of all cloven-hoofed animals on a diseased farm (referred to as 'culling') was the best method of control.**

This was because the disease is so infectious (or contagious), and so economically damaging to farmers. They banned the moving of animals around the country, especially within 10 kilometres of an infected farm. They also enforced the use of disinfectants to clean buildings, vehicles and the footwear of vets, government officials and others.

**g**

**Vets can test the blood of animals and detect the virus if it is present.**



It is a notifiable disease, affecting animals with cloven hooves – cattle, sheep, pigs, goats and their wild relatives, like deer and buffalo. It is still not clear whether, or under what conditions, humans can become infected.

The virus lingers in the air and in mud or straw that healthy animals walk through or lie in. It can survive there for months, even years, especially liking the cold, damp, dull conditions of a British winter. Freezing does not kill the virus.

**h**

**The virus can travel in the wind up to 200 kilometres over sea and 60 kilometres over land.**

Cattle trucks can carry the germ around the country to livestock markets and abattoirs. Milk lorries can spread it between dairy farms. A farmer can carry it around on his clothes, boots or tractor tyres and on the undercarriage of his car. That is why people and vehicles were not allowed in or out of affected farms and why all over the country bridleways and footpaths were closed to horse-riders and walkers.

**1**

**What are the symptoms of the disease?**

**2**

**What kind of microbe is responsible for the disease?**

**3**

**How does the disease spread from one animal to another?**

**4**

**How does the disease spread around the countryside?**

**5**

**What happens to animals that get the disease? Can they be treated?**

**6**

**When does an animal become infectious (so that it can infect others?) Does this happen before it shows symptoms?**

**7**

**How can we tell if an animal has the disease during the incubation period?**

**8**

**Apart from vaccination, what other ways are there to prevent the spread of the disease?**