

## Swine Influenza ('Pig Flu')

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Swine Influenza, also known as 'Pig Flu', is caused by infection with the Influenza A virus resulting in respiratory signs and weight loss. Individually affected pigs usually recover within two weeks but the 'flu virus lowers resistance of stock to other infections so that secondary complications can occur. This means clinical signs can vary between farms depending on what other infectious agents are present, and that recovery can take longer following secondary bacterial involvement.

There are 3 main influenza virus strains that affect pigs in the UK, but the virus mutates meaning previously affected herds can be re-infected with different strains.

The virus is spread between pigs through the air and nose-to-nose contact. A pig can be infected for 1-2 days before showing clinical signs but, as it can still shed the virus during this time, disease can spread rapidly. Clinical disease is common throughout the UK, particularly during the winter months as the virus survives best in cold weather.

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### Clinical Signs

The influenza virus affects all ages of pigs. In an influenza outbreak on farm, clinical signs can be explosive, affecting all or part of a herd in a very short period of time.

Affected pigs can have a variety of signs including a fever, respiratory signs (coughing and breathing with noticeable effort), sneezing, nasal discharge, and will have a reduced feed intake so you may observe weight loss. They can have a persistent dry cough – this may be severe enough to cause them to vomit mucous.

Although in groups of grower pigs up to 100% of the pigs may be affected, mortality is usually low unless there is a secondary infection present. Recovery takes place over a 2-3 week period which, since growth can be much slower during this time, can lead to an extra 14 days to reach slaughter weight.

Sows affected with a high temperature may have lower feed and water intakes. This can result in a smaller volume of milk available for sucking piglets and lead to variability in piglet size.

Abortions can occur due to persistently high temperatures and this can occur after the main clinical signs are seen on farm, sometimes up to 3 weeks later. Returns can increase by up to 50% during an outbreak. Litter sizes can also be reduced, and piglets born to sows affected during pregnancy may show clinical signs 2-5 days post farrowing.

Boars can show sub-fertility for up to 6-8 weeks as high temperatures damage the sperm production and it takes 6-8 weeks for new undamaged sperm to be produced.

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Disease can be spread by recently infected pigs that no longer show clinical signs. Sales from a multiplication unit are usually suspended therefore, not only during an outbreak but also for up to 3 weeks after the last case seen on farm. Isolation/quarantine of bought in stock on your farm provides additional security.

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## Diagnosis

Dependent on the stage of the disease on farm, the process of diagnosis of the disease differs. In the very early acute stages of the disease, nasal swabs can be taken from pigs showing clinical signs and these swabs would be tested for virus itself. If the disease is more progressed, blood samples can be analysed to see if there are antibodies (produced by the immune system) to any of the UK circulating Influenza viruses which allows the strain of the virus involved to be determined.

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## Treatment

Swine Influenza is a viral infection, so antibiotics are not effective against the virus itself. 'Flu virus does suppress the immune system allowing secondary infections to take hold. Antibiotics are used to control secondary bacterial infections, particularly of the lungs and upper respiratory tract. The choice of antibiotic used depends on what other disease agents are present on farm. Anti-inflammatory medicines can also help to reduce fever and so improve appetite.

Overall treatment for uncomplicated 'flu is largely a combination of time and symptomatic treatment.

Please note that pigs with a fever cannot be sent to slaughter.

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## Prevention

There is no satisfactory way of preventing the disease arriving on farm. Proper isolation of incoming stock and monitoring of disease on the supplying farm (if possible) may be of help. Symptomless carrier animals may be involved in the introduction of the disease to a herd.

Influenza viruses are sensitive to heat, drying, detergents and disinfectants, making them relatively easy to kill in the environment.

Swine Influenza is a zoonosis – various strains of the virus can infect people, so the washing of hands after handling affected pigs is important. A 'flu vaccine is now available for pigs, but it contains only certain strains so it is important to check what strains are present on your farm before using it.

The virus can also be passed from humans to pigs, so staff affected with 'flu-like' symptoms (fever, respiratory signs or severe tiredness with muscle aches) should avoid contact with pigs. 'Flu vaccinations are available for people through doctors or pharmacists, and the human vaccine is updated each year to include the latest circulating strains. 'Flu vaccinations of people working with pigs is recommended in order to decrease the level of circulating virus and the potential for crossover infection

**Please speak to your Vet to discuss any questions you may have about Influenza on your farm**

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