

# Streptococcus suis Infection



Centre for Health Protection



Department of Health

## Causative agent

*Streptococcus suis* infection is a zoonotic disease caused by the bacterium *Streptococcus suis* (*S. suis*). It is a notifiable infectious disease in Hong Kong.

## Clinical features

The disease most commonly causes meningitis and presents with fever, headache and vomiting. It may also present with skin bleeding and less commonly, sepsis, endocarditis, arthritis, bronchopneumonia and toxic shock syndrome. The characteristic complication of *S. suis* infection is deafness which is likely to remain permanent.

## Mode of transmission

*S. suis* infection is a common disease among pigs. The bacterium is carried in the upper respiratory tract of pigs, and spread among pigs by nose-to-nose contact or by aerosol over short distances. Apart from pigs (including wild boars), it can occasionally be found in other animals such as horses, dogs, cats and birds.

Human infection by *S. suis* occurs mainly in adults. It is transmitted through direct contact and often related to exposure through wounds on the skin while handling infected pigs or other animals, raw pork and other pig products. But it may also be transmitted via ingestion or through mucous membranes.

## High risk groups

People at risk include pig breeders, abattoir workers, meat processing and transport workers, butchers and cooks. Persons who are immunocompromised including those with spleen removed, persons with diabetes mellitus, cancer and alcoholism, are also at greater risk of infection.

## Incubation period

Ranges from a few hours to two weeks, usually 2-3 days.

## Management

*S. suis* infection can be treated with antibiotics.

## Prevention

There is no human vaccine available for *S. suis*. The public should adopt the following measures to reduce the risk of infection:

### 1. Maintain good personal hygiene

- Perform hand hygiene frequently, especially before touching the mouth, nose or eyes. Wash hands with liquid soap and water, and rub for at least 20 seconds. Then rinse with water and dry with a disposable paper towel or hand dryer. If hand washing facilities are not available, or when hands are not visibly soiled, hand hygiene with 70 to 80% alcohol-based handrub is an effective alternative.
- Avoid contact with pigs (including wild boars) and other animals. Otherwise, wash hands with liquid soap and water as soon as possible after contact.

- Wear gloves when handling pigs or raw pork, and avoid injury.
- Cover wounds properly with waterproof adhesive dressings before handling raw pork.

### 2. Maintain good food hygiene

- Always adopt the “5 Keys to Food Safety” in handling food (including pork), i.e. Choose (Choose safe raw materials); Clean (Keep hands and utensils clean); Separate (Separate raw and cooked food); Cook (Cook thoroughly); and Safe Temperature (Keep food at safe temperature) to prevent foodborne diseases.
- Purchase food from hygienic and reliable sources. Do not patronise illegal hawkers.
- Raw pork should be kept in well covered containers and stored in refrigerator at 4°C or below.
- Raw pork and cooked food should be handled and kept separately.
- Surfaces, utensils and equipment that have been in contact with raw pork should be thoroughly cleansed.
- Pork should be cooked thoroughly before consumption.

People with suspected symptoms should consult their doctor as soon as possible and report their relevant exposure history.



Centre for Health Protection Website [www.chp.gov.hk](http://www.chp.gov.hk)

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