

InfoPak

What is Streptococcus sius?

- Streptococcus suis is a bacterial swine pathogen that can cause meningitis, arthritis, and septicemia in pigs, and is also a zoonotic agent, meaning it can infect humans, potentially causing severe diseases like meningitis and sepsis.
- *S. suis* is a naturally occurring bacterium in the upper respiratory tract of pigs, particularly in the tonsils and nasal cavities.
- While many pigs are colonized by *S. suis*, only certain virulent strains cause disease, often affecting nursery pigs (4-10 weeks of age).
- Newborn piglets can be exposed to *S. suis* in the birth canal, and pigs can also be exposed through direct contact or aerosol transmission, especially during outbreaks.
- Clinical signs in pigs include incoordination, paralysis, convulsions, septicaemia and arthritis.







Streptococcus sius in humans

- *S. suis* infection in humans typically occurs through skin wounds when handling infected pigs, during food preparation, or through the consumption of raw pork.
- S. suis infections in humans can manifest as:
 - ^o Meningitis: Inflammation of the membranes surrounding the brain and spinal cord.
 - Sepsis: A life-threatening condition caused by the body's overwhelming response to infection.
 - O Arthritis: Inflammation of the joints.
 - Endocarditis: Inflammation of the inner lining of the heart.
 - Streptococcal toxic shock-like syndrome (STSLS): A severe, potentially life-threatening condition.
- Certain groups are at higher risk of S. suis infection, including:
 - People who work with pigs or pork: Pig breeders, abattoir workers, meat processing workers, butchers, and cooks.
 - People with compromised immune systems: Individuals with spleen removed, diabetes, cancer, or alcoholism.
 - People who consume raw or undercooked pork.

The responsibilities of abattoir owners in terms of the Animal Diseases Act (Act 35 of 1984)



Prevention

- There is no human vaccine available for S. suis.
- Practicing good hygiene, including handwashing, and maintaining clean environments in pig farms and slaughterhouses, is crucial.
- Proper handling of pork: Thoroughly cooking pork products.
- Wear appropriate protective clothing (including gloves and mask) when handling sick pigs.
- Contact your doctor or clinic if you have headaches, fever, a stiff neck, dizziness or, joint pain. Let them know you work with pigs. Antibiotics are used to treat the infection in humans as well as animals.





Reference

Guntala R, Khamai L, Srisai N, Ounjaijean S, Khamduang W, Hongjaisee S. Contamination of Streptococcus suis and S. suis Serotype 2 in Raw Pork and Edible Pig Organs: A Public Health Concern in Chiang Mai, Thailand. Foods. 2024; 13(13):2119. https://doi.org/10.3390/foods13132119

Contacts:

TITLE	CONTACT NO.	E-MAIL	ADDRESS
State Veterinarian: George	044-803-3771/0	SVGeorge@westerncape.gov.za	4 Varing Avenue, George
State Veterinarian: Boland	021-808-5028/ 5253	SVB oland @westerncape.gov.za	Western Cape Department of Agriculture building, Muldersvlei road, Elsenburg
State Veterinarian: Swellendam	021-808-5059/ 028-425-4850	DOA.svswellendam@westerncape.gov.za	67 Voortrekker St, Swellendam
State Veterinarian: Beaufort West	023-414-9220/1	DOA.svbeaufortwest@westerncape.gov.za	Blyth St, Beaufort West
State Veterinarian: Vredendal	027-201-3514/-0	DOA.svvredendal@westerncape.gov.za	Cnr Matzikama and Noord St. Vredendal
State Veterinarian: Malmesbury	022-433-8915/0	DOA.svmalmesbury@westerncape.gov.za	Cnr Spoorweg and Munisipale St, Malmesbury
State Veterinarian: Oudtshoorn	044-203-9443/5	DOA.svoudtshoorn@westerncape.gov.za	43 Van Der Riet St, Oudtshoorn
State Veterinarian: Worcester	021-808-5052	DOA.svworcester@westerncape.gov.za	30 Van Arckel St, Worcester

Abattoirs: STREPTOCOCCUS SIUS







