

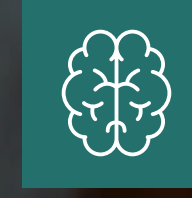
Streptococcus suis

recognized by

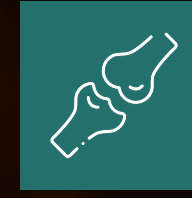
Streptococcal disease in pigs is an endemic problem caused by *S. suis*

S. suis is highly present in the pig's oral cavity and transmission occurs across productive phases.

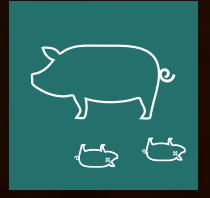
PRRS can also increase the incidence of meningitis caused by pathogenic strains when it first enters in the farm.



Neurological clinical signs associated with meningitis



Stiff joints



Mortality in the post-weaning phase.^{1,2}



Economic impact

¹ Lun et al., 2007.
² Goyette-Desjardins et al., 2014.

S. suis is considered **one of the most important bacterial swine pathogens leading to important economic losses** to the porcine industry worldwide. It has been reported globally in both traditional and intensive swine operations.³



It is also an important globally emerging zoonotic disease for swine industry workers (occupational disease).⁴

³ Gottschalk M. and Segura M., 2019.
⁴ Segura M., 2015.



Prevalence

Up to 100% of pigs in a herd are carriers of this bacterium

meaning they are colonized without demonstrating clinical signs (these carrier pigs can still pass on the bacteria to other animals).³

S. suis varies in its genetic makeup around the world complicating its diagnostic and epidemiological surveillance.

³ Gottschalk M. and Segura M., 2019.



Diagnosis

Affected piglets suffer inadequate uptake of nutrients early post-weaning with some villous atrophy, and afterward (3-7 days afterward) they abruptly consume large amounts of feed.⁵

Lactating piglets, nursery and fattening pigs may show:



Occasional arthritis



Sudden death



Lateralized head



Seizures



Lameness



Lateral twitching eye movements (nystagmus)



Abscesses



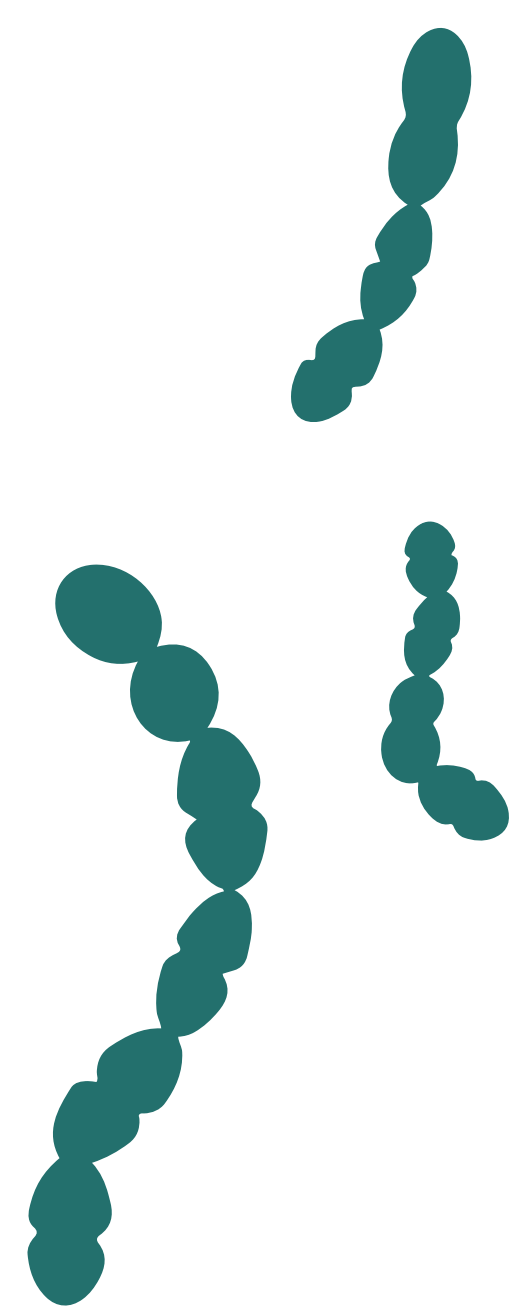
Polyserositis



Septicemia



Animal is sideways, it has a pedaling movement and produces foam in the mouth.



A history of recurrent presence of meningitis in weaned pigs is **very indicative**.

It is confirmed by isolation of the organism from the brain.⁶

⁵ Fabà L. *Streptococcus suis: is nutritional intervention possible?*, pig333.com. 2021.
⁶ *Streptococcal infections. Diseases manual.* pig333.com



Treatment and prevention

Prophylactic/metaphylactic use of antibiotics is being limited all over the world.⁴

Penicillins have shown good efficacy on controlling symptoms, but **resistances are increasing worldwide**.

Vaccination in gestation and management measures in the farrowing room and nurseries **should be considered**.

The carrier status of *S. suis* in healthy sows is important for the control of infections in pigs, **especially in suckling and growing pigs.**⁷

⁷ Zhang C. et al. *Prevalence of Streptococcus suis Isolated from Clinically Healthy Sows in China.* Agricultural Sciences in China. 2009.