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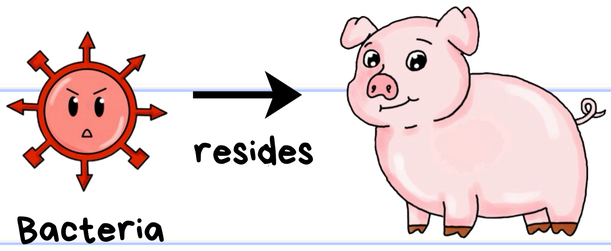
Streptococcus suis:

A danger among our swines and... among us!

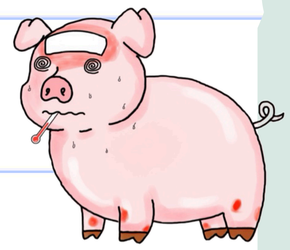


What is this?



HOWEVER !

Streptococcus suis (S. suis) can become PATHOGENIC under certain circumstances (e.g., stress) and cause: meningitis, sudden death, arthritis, endocarditis, etc.



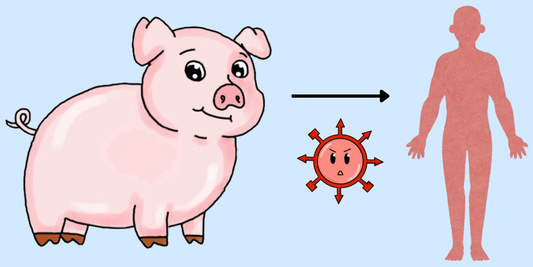
The source of the problem:

The capsular polysaccharide (CPS) of *S. suis*



- The main element enabling the bacteria to cause severe disease **(it is a virulence factor)**.
- It allows **evasion of the immune system**.
- It allows *S. suis* to be classified into "**serotypes**".

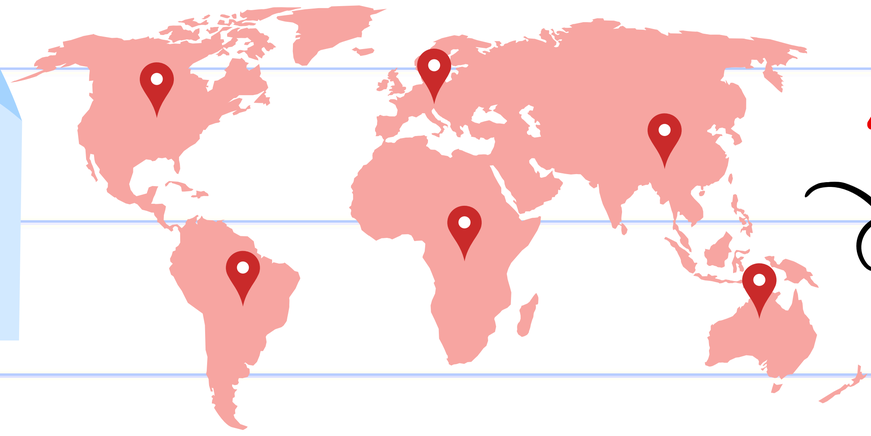
S. suis is transmitted to humans!

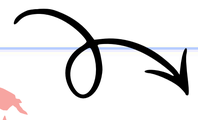


- meningitis
- septic shock
- hearing loss
- etc.

Where do we find it?

(everywhere!)

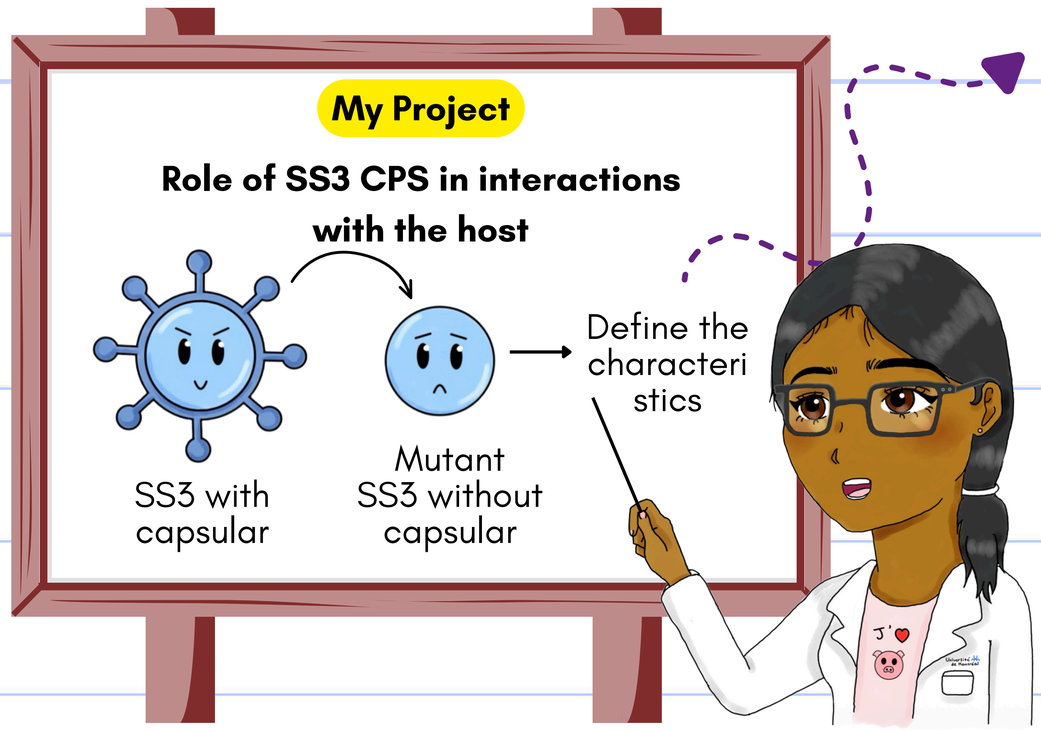




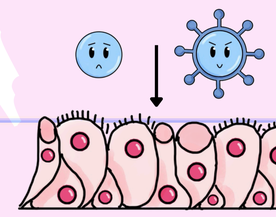
The predominance of serotypes varies from one continent to another!

To know:

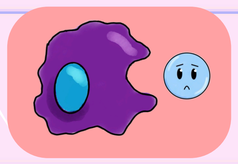
- Serotype 2 (SS2) is the most virulent and the most studied.
- Serotype 3 (SS3) remains less studied.
- The CPS of SS2 and SS3 differ significantly.
- SS3 is the third most dominant serotype worldwide.



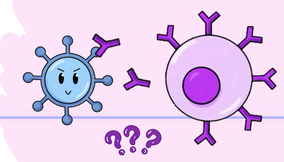
WICH ONES?



How does it adhere to and invade the cells?



Is it destroyed, or does it survive in the blood?



Which antibodies are produced?

For what purpose?

- **Deepen the knowledge of SS3**
- **Acquire the essential foundations for developing vaccines targeting serotypes other than SS2.**
- **Reducing antibiotic use in swine production and limiting antibiotic resistance**

