

RISK FACTORS FOR *SALMONELLA* PERSISTENCE IN DANISH PIG HERDS

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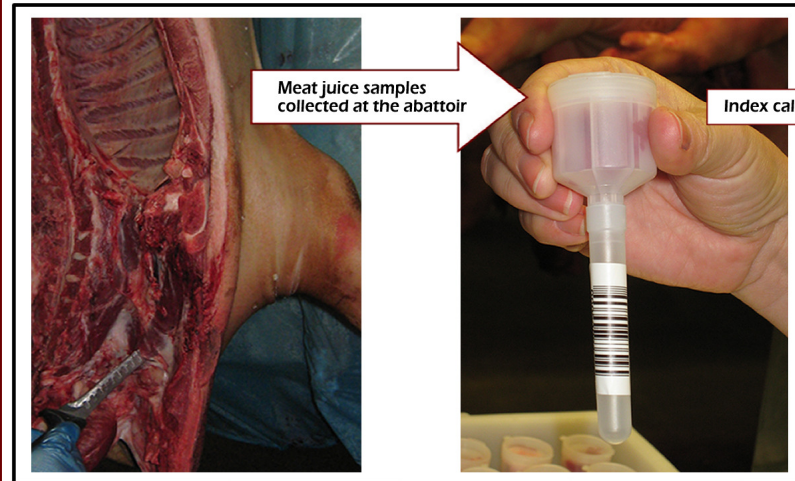


OBJECTIVE

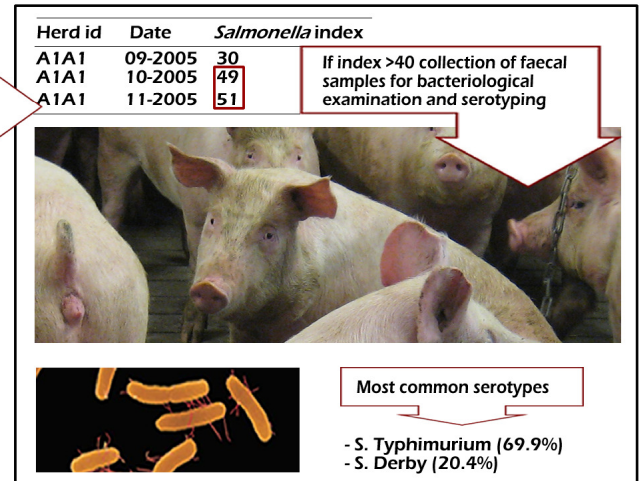
Identify potential risk factors influencing the time period pig herds have a high seroprevalence in herds infected with the most common *Salmonella* serotypes

MATERIAL & METHODS

Time frame: Jan 2005 - Nov 2007



Monthly serological data from all Danish finisher pig herds (N = 1,207,297 samples)



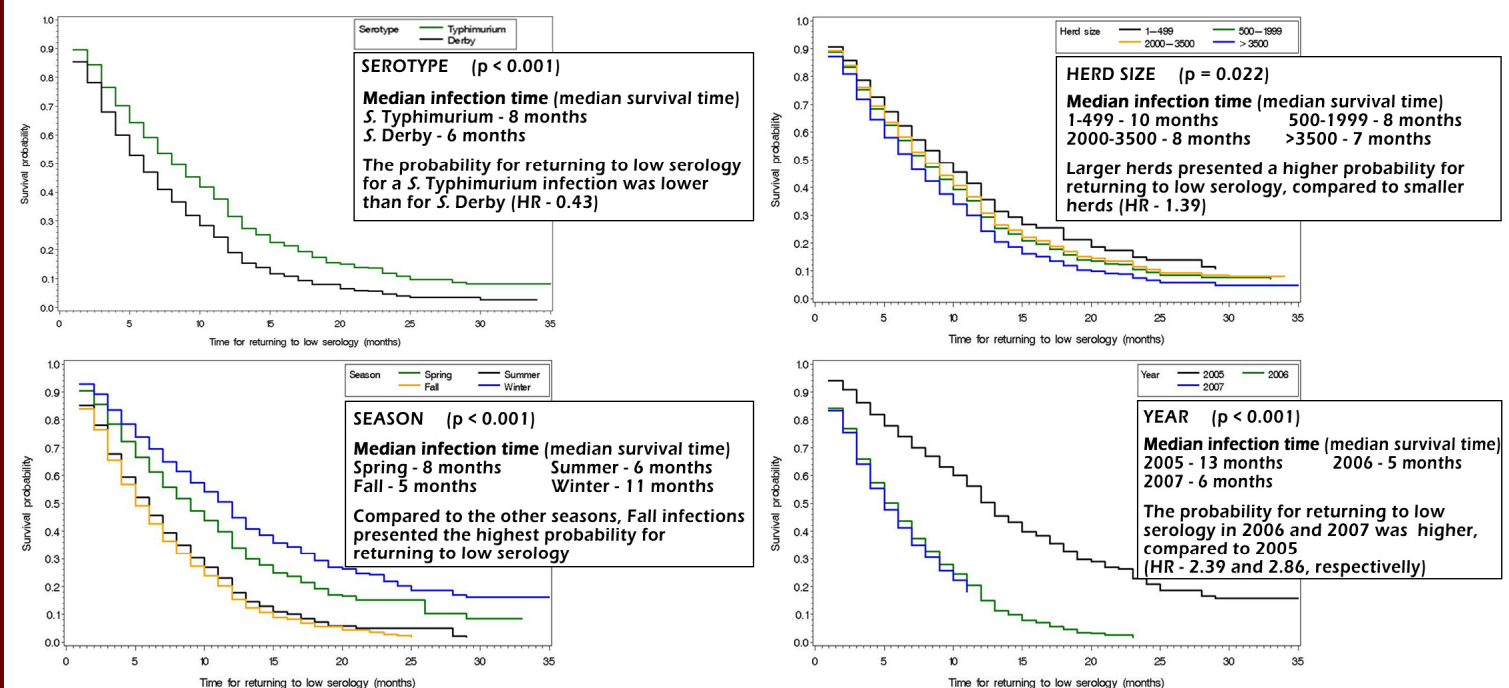
Mandatory bacteriological sampling (N = 3,691 samples)

Time of inclusion in the study: first month where the *Salmonella* index ≥ 40 (high serology)

Event of interest: return to low serology (if *Salmonella* index < 40 for at least 6 consecutive months)

The effect of SEROTYPE, HERD SIZE, SEASON and YEAR on the probability for returning to low serology was evaluated using a Cox Regression Model

RESULTS & DISCUSSION



CONCLUSION

- *S. Typhimurium* presented longer-term infections than *S. Derby*, which probably reflects more persistent infection
- Larger herds were in general infected for a shorter time period than smaller herds, which may indicate an effective implementation of biossecurity measures
- Infections starting in Summer and Fall were significantly shorter compared to other seasons
- Infected herds in 2005 presented longer periods of high seroprevalence than in 2006 and 2007, which may indicate improved handling of infections in the surveillance programme