

The Prevalence of *Yersinia Enterocolitica* in Ontario Finisher Hogs

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Background

Certain bio/serotypes of *Yersinia enterocolitica* can cause infection in humans. Symptoms of disease depend on the person's age and immune status, as well as the bio/serotype of *Y. enterocolitica*. Generally, the disease causes diarrhea of varying severity. The most important serogroups for human illness are 0:8; 0:3, and 0:9. Pork is frequently identified as the source of human illness.

Objectives

- To determine the prevalence and bio/serotype of *Yersinia enterocolitica* present in finishing hogs in Ontario.
- To evaluate risk factors for the presence of *Yersinia enterocolitica* on hog farms in Ontario.

Results

Yersinia enterocolitica was cultured from fecal samples collected directly from pigs on 15.2% of farms in 2001 and 16.7% in 2002. The total number of farms examined was 92 and 78 in 2001 and 2002, respectively.

Table 1: Prevalence of fecal shedding and distribution of serotypes in 2001 and 2002

Serotype	2001	2002
2, 0:5, 27	7	13
4, 0:3	15	23
4, 0:3 and 2, 0:5, 27	1	0
Negative	1358	1134
Prevalence	1.67%	3.08%

Samples in 2001 were cultured from frozen samples and may be the reason for slightly lower prevalence.

Take Home Message

- *Yersinia enterocolitica* is present on some Ontario farms and the prevalence appears to be lower in herds that operate grower-finisher barns on an all-in/all-out manner with washing and disinfecting between fills.

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