

# Veterinary advisory: Bovine anaplasmosis in Ontario

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The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has been notified of positive antibody results for bovine anaplasmosis in Southwestern Ontario, detected through a surveillance research project.

Anaplasmosis does not pose human health or food safety risks.

On February 8th, 2021, OMAFRA was notified of one animal with a confirmed positive serology but negative PCR result for bovine anaplasmosis from a dairy herd after surveillance testing of a purchased animal. On February 22<sup>nd</sup>, 2021, laboratory testing confirmed 2 other animals from the same herd with antibody for bovine anaplasmosis. Positive antibody tests are suggestive of animals being asymptomatic carriers for the disease, but with no evidence of active infection.

Anaplasmosis is caused by *Anaplasma marginale* (*A. marginale*) and has been reported sporadically across Canada and infrequently in Ontario with cases confirmed in 1996, 2013, 2016 and 2019. Anaplasmosis is endemic in the United States.

Anaplasmosis is an immediately notifiable disease under the federal *Health of Animals Act* and the provincial *Animal Health Act* and therefore laboratories are required to report suspect or confirmed cases of anaplasmosis.

OMAFRA is working with the herd veterinarian to provide assistance in managing the disease on the farm.

*A. marginale* is a bacterium that parasitizes red blood cells. Among livestock, only cattle are a host for *A. marginale*. *A. marginale* can be spread from animal to animal by ticks or biting flies, or by needles and dehorning equipment that become contaminated with the blood of infected cattle and then used on other animals. Transplacental (infected cow to in-utero calf) spread is also possible. Anaplasmosis is widespread in tropical and subtropical regions and is an endemic, non-reportable disease in the U.S. When anaplasmosis first infects a naïve herd, significant illness and mortality may occur especially in older cattle. Subclinical infection in cattle may severely reduce productivity. The increasing distribution of *A. marginale* in North America is predominantly a result of unrestricted movement of infected carrier cattle.

Clinical signs may include fever, anemia, weight loss, weakness, abortion and death. Affected dairy cattle have a rapid decline in milk production. Illness is rare or mild in animals under one year of age. Recovered animals become lifelong carriers of the disease.

Producers can protect their animals and their industry by knowing the health status of animals introduced to their herd, including testing animals prior to introduction, and by adhering to biosecurity best management practices, including single use needles for

injections. Producers should contact their veterinarian for questions regarding their herds' health or if they suspect animals in their herd may be infected.

The resources listed below contain more information on the disease and infection control.

Resources:

- [CFIA Anaplasmosis Factsheet](#)
- [Merck Veterinary Manual](#)