

The Ontario Animal Health Network is a program focusing on early disease detection so as to identify trends in animal health issues. Information was obtained from a quarterly survey of practicing veterinarians and laboratory data from the Animal Health Laboratory. It is the intent of this program to improve the health of small ruminants in Ontario.

TOP 3 DISEASES / ISSUES OF CONCERN* (Q4 2014) *RESULTS SIMILAR FOR SHEEP AND GOATS

Young stock (<1 year old):

- pneumonia
- coccidiosis
- cryptosporidiosis

Adult stock (>1 year old):

- abortion
- caseous lymphadenitis
- listeriosis

SMALL RUMINANT INFECTIOUS ABORTIONS

Abortions in small ruminants can be due to either infectious or non-infectious causes. **Results from a 2013 Ontario study most common causes of infectious abortion are listed below.**

Sheep (in descending order):

- *Toxoplasma gondii*
- *Campylobacter fetus* or *jejuni*
- *Chlamydia abortus*
- *Coxiella burnetii*.

Goats (in descending order):

- *Chlamydia abortus*
- *Toxoplasma gondii*
- *Coxiella burnetii*

These agents not only cause abortion but **also cause early embryonic death (females are open), mummified fetuses, stillbirths, and weak lambs/kids that rarely survive the first week of life.** Sources of infection include: aborted fetuses, placenta, uterine fluids, vaginal secretions at estrus, milk, urine and manure. Rams/bucks may be temporarily infected depending on the organism and may transmit the infection between flocks/herds. Immunity following an abortion can be lifelong, partial (years) or immunity may not be complete, resulting in carrier females that appear normal but continue to shed organisms. **The acceptable abortion level in a flock/herd is less than 5%, with the target in unaffected flocks/herds being less than 2%. There is concern if rates are greater than 5%, abortions are clustered, or if flocks/herds experience abortion rates of 2-5% every year.**

Since many infectious abortion agents are **zoonotic** (can be transmitted from animals to people), care should be taken when assisting lambings/kiddings and handling aborted fetuses and placentas. Pregnant women, individuals with a compromised immune system, the very young or very old should not assist with lambings/kiddings and should avoid contact with sheep/goats during the lambing/kidding season.

Management of the immediate problem

Initially, consider all abortions as infectious and zoonotic. Aborting animals shed organisms, contaminating their environment and may continue to shed for weeks. Move pregnant females to a clean area and isolate aborted animals until discharges cease. Dispose of abortive materials (burial, compost) and remember to follow strict personal hygiene to lower chances of becoming ill. Decrease the stocking density of pregnant ewes/does if possible and keep pens well-bedded. Contact your veterinarian for further control measures.

Investigation of the cause of abortion

Contact your veterinarian to start the investigation process. If abortions have occurred in multiple years, do not assume the cause of abortion will be the same each year. It is important **to submit both fetus AND placenta** to a diagnostic lab. Do not freeze samples. The diagnostic rate is high, approaching 80%, provided placenta is submitted with the fetus/fetuses.

Control of abortion in the future

For more information about controlling abortions, contact your veterinarian. Depending on the cause, vaccination may be an option. Develop, follow or enhance flock/herd biosecurity plans. Sheep and goat producers are encouraged to review their National Biosecurity Standards and Producer Planning Guides at <http://www.inspection.gc.ca/animals/terrestrial-animals/biosecurity/standards-and-principles/eng/1344707905203/1344707981478>

If you are concerned about your health, or the health of family members, please contact your family doctor.