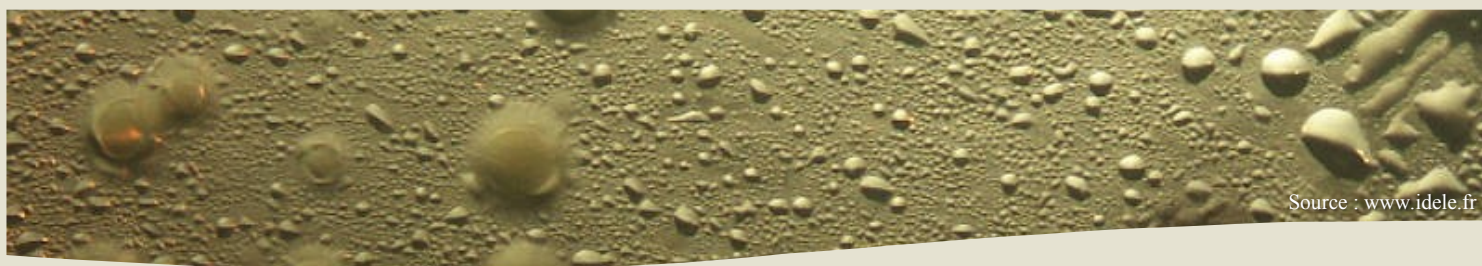


# ABORTIONS SUMMARY



●● Sheep and goats



Source : [www.idele.fr](http://www.idele.fr)

**ABORTIONS REPRESENT A REAL THREAT IN SMALL RUMINANT FARMING, BOTH FOR ANIMAL HEALTH AND HUMAN HEALTH.**

## INTRODUCTION ●●

Abortive diseases often manifest themselves as serious epidemics that may affect more than a third of pregnant females. The economic impacts of these diseases can be substantial.

## DEFINITION ●●

An abortion can be defined as : any fetus expelled during gestation or parturition of a stillbirth, excluding cases of dystocia due to maternal fetal disproportion or malposition. In addition, many abortive diseases also lead to the birth of moribund lambs or kids.

The percentage of abortion is considered « normal » if it ranges between 1 and 5 %.

Unlike other species, abortions in sheep and goats often occur in late gestation. Embryonic mortalities are also common, but more difficult to recognize, since we are talking here about losses of embryos in the first days or weeks of life. The only significant manifestation of affected females is a return to heat.



## DIAGNOSIS...

Aborted fetuses look very similar. Therefore, diagnosis should consider the history of the case, the clinical signs observed before, during and after the abortion, and the laboratory test results.

To improve the chances of identifying the cause of abortion, proper specimens must be provided. Aborted fetus and their placentas with cotyledons, should ideally be sent fresh to the laboratory.

### MAJOR CAUSES OF ABORTION IN SMALL RUMINANTS IN CANADA :

- TOXOPLASMOSIS
- CHLAMYDIOSIS \*
- COXIELLOSIS (Q FEVER) \*
- LISTERIOSIS
- CAMPYLOBACTERIOSIS
- VIRAL ABORTIONS : eg. BORDER'S DISEASE, CACHE VALLEY VIRUS
- METABOLIC ABORTIONS : IODINE, ENERGY AND PROTEIN DEFICIENCY



\* Conditions considered the most frequent or most often diagnosed in Canada.

### CRITERIA FOR IDENTIFYING THE CAUSE OF AN ABORTION :

- ◆ Appearance of the fetus and placenta;
- ◆ Moment of pregnancy where abortion occurred;
- ◆ Clinical state of the aborted female or group of females affected;
- ◆ Usual percentage of abortion in the herd;
- ◆ Percentage or number of abortions in the group where abortion occurred;
- ◆ Treatment administered in the last weeks, handling in the last 2 weeks, etc.

In small ruminants, almost 60% of abortion cases submitted to the laboratory receive a precise diagnosis, identifying the causative agent involved. For other cases, the absence of etiological diagnosis can be explained in different ways, including :

- ◆ Decomposition of the aborted fetus and placenta is too advanced (significant delay between fetal death and expulsion by the female or submission to the laboratory);
- ◆ Mother's disease caused a cessation of pregnancy;
- ◆ Abortion due to nutrition or toxic problems;
- ◆ Submission of insufficient placental tissue.

# Summary of abortions

## BASIC PREVENTIVE MEASURES TO APPLY ON THE FARM :

- Limit animal purchases. If purchasing animals, be very careful in your choice of the source flock or herd;
- Ensure adequate quarantine for animals returning from an outside stay (i.e. livestock exposition) or for purchased animals;
- Never place young ewes / goats in the same housing group as adult ewes / goats;
- Perform a clinical examination of the rams / male goats before breeding;
- Avoid presence of cats, dogs and birds in livestock buildings;
- Vaccinate females before breeding if a precise diagnosis has been made and if an effective vaccine is available for the identified disease;
- Make sure that females are in perfect condition at breeding;
- Send females with chronic diseases or whose health would not allow a problem-free pregnancy to slaughter;
- Provide optimal nutrition throughout gestation.



## IMPORTANT CONTROL MEASURES :

- Working with the laboratory and a veterinarian are essential to clarify the diagnosis and establish an appropriate treatment plan and preventive approach;
- Abortions should be reported to the veterinarian when a second abortion occurs in the same group of lambing;
- The first aborted fetus and placenta can be kept cold or frozen so they can be added to fresh specimens for submission to the laboratory if subsequent abortions occur;
- Vaccines are available in Canada for campylobacteriosis and chlamydia; they can help reduce abortions caused by these two agents but should not be the only preventive measure;
- A highly effective vaccine exists for Q fever, but its use requires a special import permit (vaccine not licensed in Canada);
- Antibiotics should not be used to control or prevent abortions if their use is not supported by a veterinarian who relies on a clinical diagnosis confirmed by the laboratory.

N-95 mask



## WARNING ZONOSIS!

Most infectious abortion agents in sheep and goats are potential zoonotic agents. Here are some basic measures to implement to limit the risks :

- Wear disposable gloves when handling infected aborted fetuses and placentas;
- Remove placentas from lambing pens as soon as they are expelled and dispose of them properly;
- During abortions, limit access to the flock or herd to regular staff only;
- If vulnerable people visit the farm (i.e. pregnant women, children or people with compromised immune system), it is recommended to require gloves and N95 mask to be worn;
- Keep clothes and boots worn in the livestock buildings on the farm and wash them on site;
- Clean and disinfect parturition areas after each period of parturition;
- Remove and apply manure only when conditions are optimal to prevent the formation of airborne dust containing infectious agents (i.e. Q fever agent). ●●



Source : www.idete.fr

Cultivons l'avenir 2  
Une initiative fédérale-provinciale-territoriale

Growing Forward 2  
A federal-provincial-territorial initiative

Canada

Québec

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