

Reducing lamb mortality on sheep farms

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The fact is that only 85% of all lambs conceived are alive at weaning time. Lamb mortality is a drag on output. It is possible to significantly increase lamb survival rates.

Causes of mortality

We can divide these into the following categories:

- 1. Lambs lost during pregnancy where there are no obvious signs of this loss and ewes end up empty at lambing time.
- 2. Late pregnancy losses, generally abortions where the ewe is seen lambing a premature foetus.
- 3. Still births: lambs that are born full term but are born dead.
- 4. Lambs born alive but die within 48 hours of birth.
- 5. Lamb mortality in lambs two days old and older.

A study on UK farms showed that 79% of lamb losses occurred between scanning and the first 48 hours of the lamb's life. See Figure 1.

It is possible for every sheep farmer to establish the facts relating to his/her flock. This will form the basis for a plan to reduce mortality on the individual's farm. Identifying when the mortality happens is important when trying to reduce it in subsequent years.

Reducing losses

Between scanning and lambing: Losses between scanning and lambing will mostly be associated with abortions.

There are lots of reasons or causes for ewes to abort their fetuses, some of which are simply natural causes about which very little can be done. However, where this number is large (>2%), then there is generally an infectious agent causing the ewes to abort.

It is surprising how few aborted lambs and placentas are submitted

to Regional Veterinary Laboratories each year to establish the cause of abortions.

For most infections that cause abortions, there are steps that can be taken to prevent or reduce the incidence of abortions in subsequent years.

However, these steps can only be taken where a diagnosis has been confirmed by laboratory tests.

Losses in the first 48 hours

In the UK study, this category accounted for almost half of all lamb losses (49%). These are lambs that are born alive, but for one reason or another die within the first 48 hours of birth.

With better attention to detail, improvements are possible on most sheep farms:

- **Birth weight** – lambs that are too heavy or too light have higher mortality rates. The ideal birth weight of a lamb will vary somewhat by breed and litter size. Where birth weights are either too low or too high for a significant proportion of the lambs, then pre-lambing nutrition needs to be changed. The following are useful birth weight parameters to aim for:
 - Single born 4.5kg-6.5kg.
 - Twin born 4kg-5.5kg.
 - Triplet born 3.5kg-4.5kg.

- **Infections** – lambs are born with virtually no immune system. Consequently, they are very susceptible to challenge from bugs in the environment. Hygiene is very important around lambing time. Plenty of straw, lime to disinfect the pens and clean gloves when handling ewes are essential.

Make sure that any utensils that are being used to assist in the lambing process (ropes and lamb pullers) are cleaned and disinfected between uses.

Bottles and stomach tubes that are used to feed lambs should be thoroughly cleaned and disinfected between use to avoid transferring harmful bugs between newborn lambs.

- **Starvation** – this occurs where a ewe has insufficient milk or where lambs are unable to suck. Making sure that each lamb gets 5% of its body weight



Aborted / dead lambs and afterbirths should be submitted to the Veterinary Laboratory to try to identify the cause of mortality. Source: MSD.

of ewe's colostrum in the first four hours of life is critical to getting the lamb off to a good start.

For most lambs, 5% of bodyweight is between 200ml and 300ml of colostrum. Most farmers probably give two or three 60ml syringes per lamb, which is totally inadequate for all but the smallest of lambs.

- **Exposure** – lambs succumb to hypothermia due to exposure to inclement weather or insufficient colostrum. Even when indoors, small or weak lambs may need an artificial heat source to prevent hypothermia until they are up and running properly.

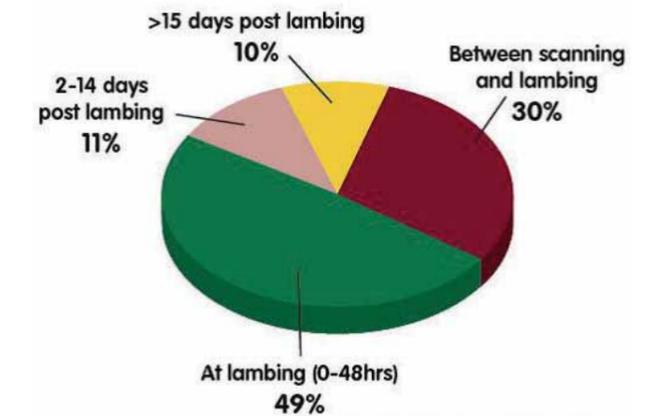
- **Misadventure** – where lambs are accidentally killed by drowning, being crushed or mismothering. Having enough individual lambing pens (8/100 ewes), fostering pens (1/50 ewes) and group pens to allow for supervision and mothering up of lambs prior to turnout to grass will help to reduce mortality in this area.

Conclusion

While it is not possible to save every single lamb, on most farms there is huge scope to reduce mortality levels. Look at the critical areas such as hygiene, nutrition, and work organisation in advance of this year's lambing. Extra lambs surviving = extra sales/profit. Teagasc has published a number of videos on lambing management, you'll find these on the Teagasc website.

Figure 1

When lamb losses occur (% of total losses)



Source: HCC lambing project 2010/11

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