Toxoplasmosis can cause severe damage to an unborn child if a woman catches it for the first time when pregnant. It is important that women sheep farmers, and partners of sheep farmers, know about this infection.

This leaflet explains how to reduce the risk of catching Toxoplasmosis from sheep at lambing time.

How do humans catch Toxoplasmosis from sheep?

A person can catch Toxoplasmosis by accidentally swallowing the parasite *Toxoplasma gondii* when handling a lambing ewe, newborn lamb or afterbirth. There is the possibility of catching Toxoplasmosis from the contaminated hair or clothes of another person involved in lambing. Infection can also enter the body by cuts on chapped hands.

How would I know if I had caught Toxoplasmosis?

Toxoplasmosis does not usually cause any symptoms and in most cases a person does not realise they have caught the infection. It can cause symptoms like flu or in severe cases an unpleasant illness similar to glandular fever. A blood test can show if you currently have, or have ever had, Toxoplasmosis. If you have had Toxoplasmosis in the past you will be immune. The risk to a baby is from an infection caught during pregnancy. If a woman has caught Toxoplasmosis in pregnancy, treatment can help reduce the risk to the baby. For more information contact your doctor.

Can I catch this from my husband or child if he/she has the infection?

One person cannot catch Toxoplasmosis from another, except when a pregnant woman passes it to her unborn baby. If one member of the family has caught the infection s/he is not a risk to other members of the family.

How does Toxoplasmosis affect sheep?

When sheep catch Toxoplasmosis in pregnancy they risk passing the infection to the unborn lambs. This may be a problem for the farmer in financial terms as it can be a major cause of abortion in the flock. Infection in sheep in early pregnancy invariably results in fetal death. Infection later in pregnancy typically could cause a live infected lamb to be born alongside a dead twin. Non-pregnant sheep that have been infected with Toxoplasmosis develop a life long immunity and are then not at risk of aborting due to Toxoplasmosis.

The *Toxoplasma* infection remains in the muscles of previously infected sheep as microscopic tissue cysts. The meat from these animals is then a risk to humans if eaten undercooked. Scientists at Moredun Research Institute helped develop a live vaccine, Toxovax, for sheep. Pregnant women should not handle either the vaccine or the recently vaccinated sheep.

How do sheep catch Toxoplasmosis?

Sheep catch Toxoplasmosis when they eat feed or bedding material contaminated with infected cat's faeces. The cat is the definitive host of the parasite (i.e. it is in the gut of any member of the cat family that the organism multiplies and reproduces millions of eggs (oocysts) which are then shed in the droppings). Although this usually only happens once for a short time in the life of the cat, soil contaminated with cat faeces can remain infective for up to 18 months in the right conditions. As infection in cats usually occurs after eating rodents and birds, feral and farm cats can be a significant source of infection. Domestic cats should not be fed raw meat.

What if I have no alternative and have to attend ewes that are lambing?

Protective clothing and masks will help to prevent infection, but there is still a potential risk to the health of the unborn baby. Cover any cuts on hands and forearms completely.

What about rearing orphan lambs?

It is wise to leave this job to others. If you have no alternative, you should be scrupulous about hygiene when handling the lamb.

What about handling sheep at other times e.g. shearing?

This should not present any risk of Toxoplasmosis.

Are pregnant women visiting farms at risk?

Toxoplasmosis is caught from ingesting (eating) the organism, so there is no risk from being in a field or pen with lambs. Toxoplasmosis cannot be caught from sheep droppings. There is a potential risk from handling a newborn lamb so it is best to stay out of the lambing sheds. It is always advisable to wash hands after handling animals and before eating, especially when pregnant.

Are there any other infections that can be caught from sheep?

Chlamydia, Listeria and Q fever are other infections that also present a major risk to a pregnant woman and her unborn child. These infections may be caught from sheep, and lambing ewes in particular. For further infromation on Chlamydia, Listeria and Q fever; contact your GP or local Veterinary Investigation Centre. Information on these infections is also available from the Department of Health.

The following hygiene measures help to reduce the risk of catching Toxoplasmosis from sheep

- Do not handle lambing ewes and do not bring lambs into the house
- Make sure that partners attending lambing ewes observe full hygiene procedures:
- Shower, bath or wash thoroughly, including hair, after handling a lambing ewe.
- Scrub hands and keep finger nails short and clean lambing clothes seperately. Pregnant women should not handle dirty overalls worn during lambing.

To reduce the risk of catching Toxoplasmosis from other sources while you are pregnant follow the precautions below:

- Only eat meat which has been thoroughly cooked all the way through
- Avoid raw cured meat such as Parma ham
- Wash hands, chopping boards and utensils thoroughly after preparing raw meat.
- Wash all fruit and vegetables thoroughly
- Don't drink unpasteurised goats' milk or eat dairy products made from it.
- Wear gloves when gardening and wash hands and gloves afterwards.
- Cover children's sandpits to prevent cats messing in them
- Clean cat litter trays every day wearing rubber gloves and wash hands and gloves afterwards or ideally, get someone else to clean the litter trays.



The information in this leaflet was first produced by The Toxoplasmosis Trust, now part of Tommy's. If you are pregnant and would like further information about Toxoplasmosis please visit their website www.tommys.org





Toxoplasmosis and Lambing