How we can help you

Tommy's, the baby charity, publishes information for parents-to-be and for those who have experienced problems in pregnancy, such as miscarriage, stillbirth or premature birth, as well as providing information on toxoplasmosis. Please indicate below if you would like to be sent further information.

- ☐ Toxoplasmosis and pregnancy
- ☐ Toxoplasmosis and pregnancy: everything you need to know
- ☐ Toxoplasmosis: a handbook for health professionals
- ☐ Toxoplasmosis: information about congenital toxoplasmosis
- ☐ Toxoplasmosis: information about symptomatic acquired toxoplasmosis
- ☐ Healthy pregnancy: a guide for parents-to-be
- ☐ When a baby dies: information for parents, for family and for friends
- ☐ Premature labour: information for parents
- ☐ Premature labour: information for midwives
- ☐ Information sheet on miscarriage
- ☐ Information sheet on stillbirth
- ☐ Information sheet on premature birth
- ☐ Information sheet on pre-eclampsia
- ☐ Information on ways to donate regularly to Tommy's
- ☐ Research update

Please complete your details below and return the form to Tommy's, the baby charity, Nicholas House, 3 Laurence Pountney Hill, London EC4R 0BB, or contact Tommy's on our pregnancy information line (0870 777 30 60) or e-mail: info@tommys.org

Your details	Name
Address	
	Postcode
Telephone	
Email	

☐ Please tick this box if you do not wish to receive further mailings from Tommy's.

ToxoTA/04

Tommy's, the baby charity
Nicholas House
3 Laurence Pountney Hill
London EC4R 0BB
Tel: 08707 70 70 70
Fax: 08707 70 70 75
Pregnancy information line: 0870 777 30 60
E-mail: info@tommys.org
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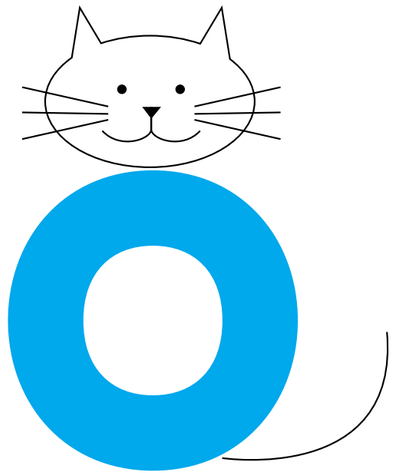
tommy's
THE BABY CHARITY

Toxoplasmosis

and animals



About Tommy's, the baby charity

Tommy's, the baby charity, aims to inform and educate all parents-to-be about health in pregnancy. By providing this information we hope to ensure that every pregnancy has the best possible chance of a healthy outcome and a healthy baby.

Tommy's was set up in 1992 with the goal of making pregnancy and childbirth safer for both the expectant mother and her child, by funding a national programme of medical research into miscarriage, stillbirth and premature birth.

Every parent-to-be hopes their baby will be born healthy but every year in the UK one in five pregnancies will end in miscarriage and around 4,000 babies will be stillborn. More than 100 babies are born too small or too soon every day and two percent are severely premature, arriving six weeks before their expected birthday. Premature birth is the most common cause of baby death and one in 10 premature babies will develop a permanent disability.

As the UK's leading baby charity we want to find the answers for parents who deserve to know why their baby died or had to fight for life after being born prematurely.

Tommy's is determined to find the causes of miscarriage, stillbirth and premature birth and to save tiny lives by discovering new ways to encourage healthy pregnancy and prevent problems. We support a nationwide programme of vital research and are already improving the chances of survival for hundreds of babies through our clinical trials. We are examining the processes underlying normal and premature labour, and are finding ways to identify women who are most at risk of giving birth prematurely. We are increasing understanding of conditions such as pre-eclampsia which endanger both mother and baby, and we are making progress in discovering ways to prevent health problems in premature and low birth-weight babies.

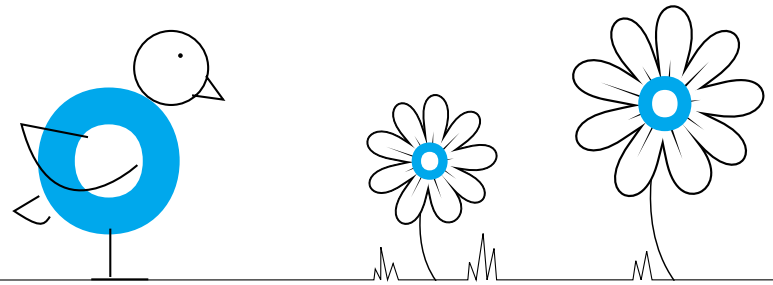
Tommy's also provides information about pregnancy health issues for health professionals, parents and parents-to-be. We aim to ensure that information on health in pregnancy and reducing the risks of problems is available to all parents-to-be in the UK, thereby reducing the number of babies' lives lost.

Contents

What is toxoplasmosis?

Toxoplasmosis is an infection caused by the parasite *Toxoplasma gondii*, a microscopic single cell organism that can be found in meat, cat faeces, the soil where cats defecate, and unpasteurised goats' milk. The parasite can infect most birds and warm-blooded animals, including humans.

Cats are the only animals that can have infected faeces. The organism completes its sexual cycle in the gut of members of the cat family, so when excreted it is in a form that is infectious. Following infection through eating birds, mice or other raw meat, a cat can shed infectious faeces for about 14 days and will not normally be a source of infection again. Sick cats may re-shed infected faeces.



Toxoplasmosis in animals

How do animals catch toxoplasmosis?

Toxoplasmosis is caught by swallowing anything infected or contaminated with the parasite. Soil where cats have defecated may remain infectious for up to 18 months, so farm animals can become infected with toxoplasmosis through grazing on contaminated land or eating feed contaminated by cats.

Cats can catch toxoplasmosis from eating an infected animal (e.g. a mouse or a bird) or from being fed raw meat. Feral and farm cats can be a significant source of infection. Kittens are sometimes born with the infection and can also shed infected faeces. Domestic cats should not be fed raw meat.

How does toxoplasmosis affect animals?

About 50% of cats contract toxoplasmosis at some stage in their lives but less than 2% will be shedding the parasite at any one time. Like human adults, cats can sometimes, but not always, become sick when infected with *Toxoplasma*, so care of a sick cat should be left to someone else. A healthy adult cat is unlikely to be a source of infection.

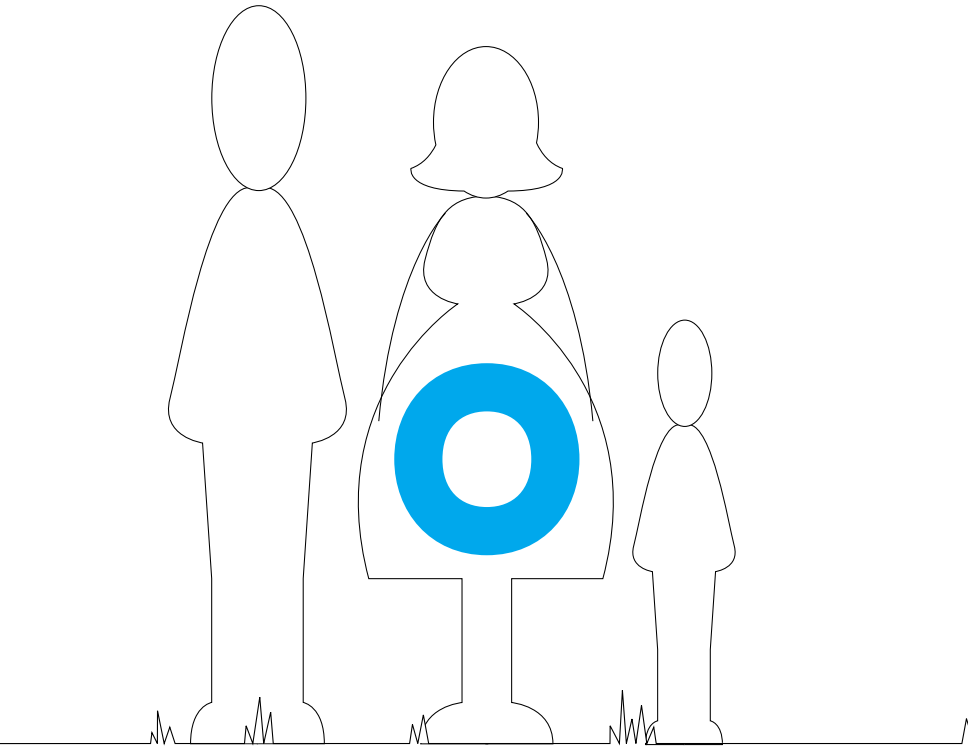
Infection in sheep in early pregnancy invariably results in fetal death. Infection later in pregnancy typically causes a live infected lamb to be born. Sheep that have been infected with *Toxoplasma* develop a life-long immunity and are then not at risk of aborting due to toxoplasmosis. The *Toxoplasma* infection remains in the muscles of a previously infected sheep as microscopic tissue cysts. The meat from sheep and other animals is then a risk to humans if eaten undercooked (i.e. showing any traces of pink or blood).

Toxoplasmosis in humans

How do humans catch toxoplasmosis?

Humans can catch toxoplasmosis by eating anything infected with or contaminated by the parasite. This could be:

- raw or undercooked meat (i.e. meat showing any traces of pink or blood) and including raw cured meat e.g. Parma ham, salami
- unwashed vegetables and fruit
- cat faeces and soil contaminated with cat faeces
- unpasteurised goats' milk and dairy products made from it.



Humans may become infected by any of the following routes:

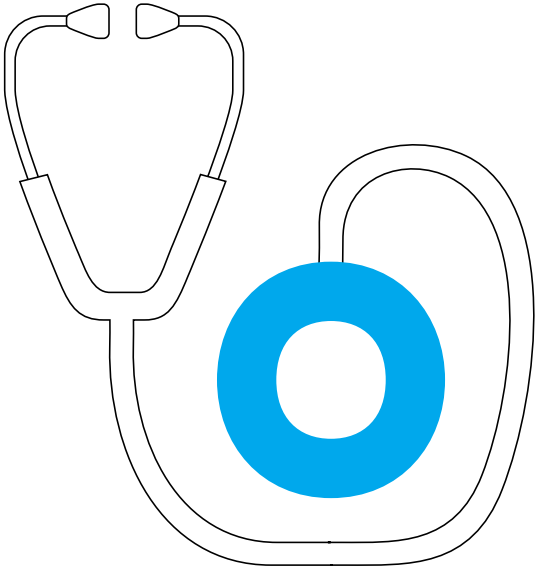
- eating the organism in soil or water which has been contaminated with cat faeces
- eating the organism in raw or undercooked meat from infected animals (e.g. cows or sheep)
- drinking unpasteurised milk from infected goats
- transmission of the organism across the placenta after maternal infection
- transmission of the organism from infected matter entering human body fluids, for example if during the process of lambing, material splashes into eyes, or open cuts *(A live vaccine, Toxovax, has been developed for sheep. Pregnant women should not handle either the vaccine or the recently vaccinated sheep)*
- transmission of the organism from transplanted organs or blood products from other humans with acute or latent toxoplasmosis

Person-to-person infection is not possible, except from mother to unborn child.

Toxoplasmosis is a significant cause of abortion in sheep and there is a risk of catching toxoplasmosis when lambing ewes or handling newborn lambs.

It is most unlikely that a person would catch toxoplasmosis from a cat scratch or bite.

Infection is followed by the replication of the parasite in the blood and the invasion of organs and tissues. The incubation period is 5–23 days.



Who is at risk?

Anyone who eats anything infected with the organism is at risk of catching the infection. Some women may be at increased risk due to the job they do such as catering, working on the land or farming. Lambing is a particular risk for pregnant women both from *Toxoplasma* and a number of other infections from sheep.

How does toxoplasmosis affect health in humans?

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 sometimes an unpleasant illness similar to glandular fever. Once a person has had the disease they are generally thought to be protected for life, unless they suffer an impairment of their immune system.

Toxoplasmosis can be dangerous to humans if their immune system is underdeveloped or compromised, as in the case of an unborn baby, somebody with HIV/AIDS or on immuno-suppressant drugs. In such cases, the immune system is unable to restrict the spread of the parasite, which can then cause damage.

Toxoplasmosis in pregnancy

Toxoplasmosis may cause damage to the unborn baby if caught by the mother during pregnancy. It can cause:

- miscarriage
- stillbirth
- damage to the baby's brain and other organs, particularly the eyes.

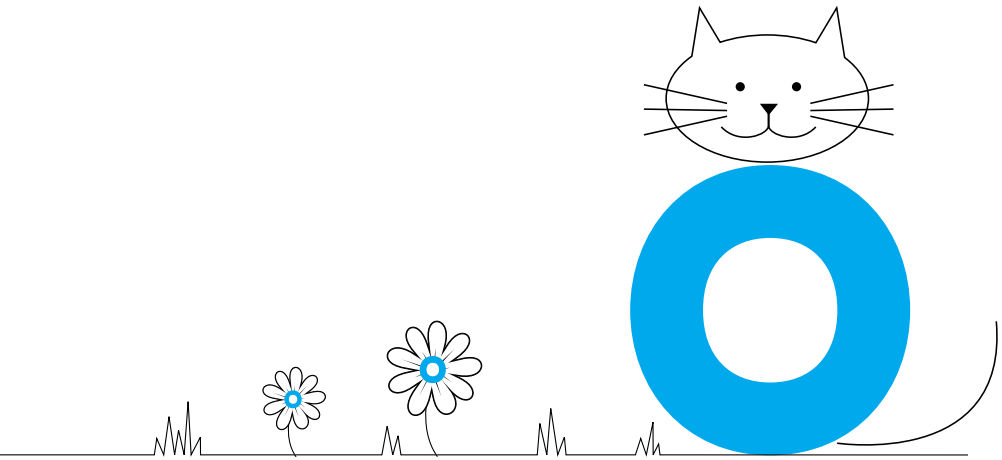
However, most babies born with toxoplasmosis have no obvious damage at birth but develop symptoms, usually eye damage, during childhood or even adulthood. A few will have more serious symptoms such as blindness or brain damage.

There is a risk to an unborn baby from an infection caught either during pregnancy or within 2–3 months before conception. If a woman catches toxoplasmosis for the first time during pregnancy, it does not mean that the child will definitely be infected. On average, only 4 in 10 such infections will pass to the unborn baby.

How to avoid catching toxoplasmosis

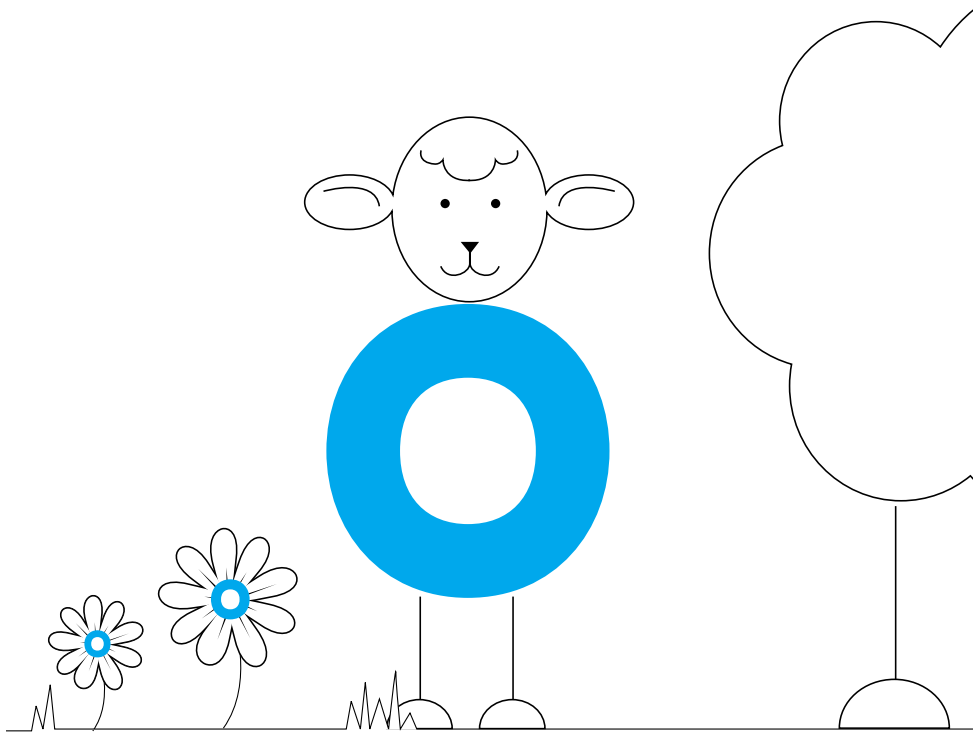
The following precautions help to reduce the risk of catching toxoplasmosis from animals during pregnancy:

- take care with hygiene when handling dirty cat litter – empty litter trays daily and sterilise the litter tray after emptying by filling it with boiling water for 5 minutes – wear rubber gloves, and wash hands and gloves afterwards. If possible, get someone else to do the job of clearing out the litter
- cover children's outdoor sandpits to prevent cats from using them as litter boxes
- if your cat is in poor health (e.g. has feline AIDS) consult your vet
- make sure that partners attending the lambing of ewes observe full hygiene procedures:
  - shower, bath or wash thoroughly (including hair) after handling a lambing ewe
  - launder clothes separately. Pregnant women should not handle dirty overalls worn during lambing
  - scrub hands, and keep fingernails short and clean



- stay out of lambing sheds if possible, as there is a potential risk of catching toxoplasmosis and other infections from handling a newborn lamb.

Pregnant women who have to attend ewes that are lambing, should note that wearing protective clothing and masks will help to prevent infection, but there is still a potential risk to the health of the unborn baby. It is important to cover cuts on hands and forearms completely. It is wise to leave the rearing of orphan lambs to others, but if there is no alternative then it is essential to be scrupulous about hygiene when handling the lamb. (These protective measures are also important to minimise the risk of catching other infections dangerous to pregnant women, such as *Chlamydophila, Listeria, Coxiella*/*Q-fever* and *Salmonella*.)



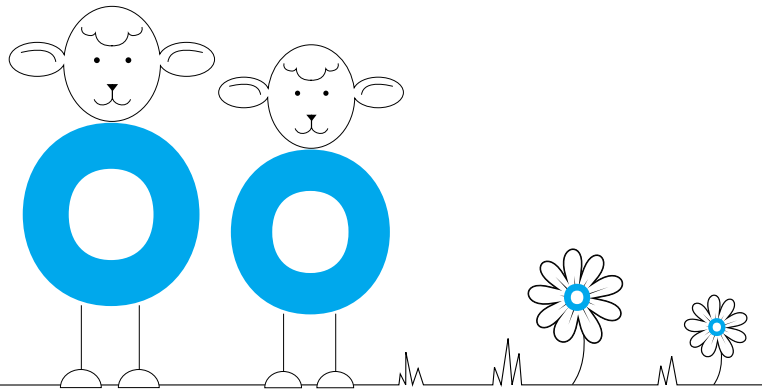
There is no risk from being in a field or pen with lambs and toxoplasmosis cannot be caught from sheep droppings.

Wild (feral) cats and farm cats are more likely to be infected than domestic cats as they are persistent hunters and often in poor condition. If wild cats are using a stable or barn, the hay and straw may be infected and it would be best to avoid cleaning an environment like this if pregnant.

Sensible hygiene precautions should be taken by pregnant women looking after cats in a cat rescue centre, to avoid any risk of catching the infection. Gloves should be worn when handling cats, cat faeces should be cleaned up by others, and pens should not be cleaned out with a high-pressure hose (because the spray might enter your mouth).

For women who work in a cat rescue centre, or on a farm, it could be helpful to take a blood test before trying to get pregnant, or as soon as you know you are pregnant to determine whether you are immune to the toxoplasmosis infection. For further information, please consult your GP or local Veterinary Investigation Centre who will be able to advise you on what action to take.

If you have concerns about your pets during your pregnancy, please telephone the RSPCA Enquiries Department on 0870 3335 999 (calls will be charged at the national rate).

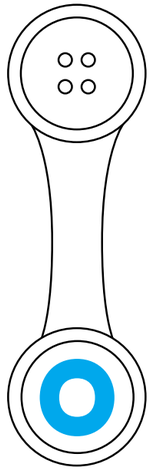


Avoiding toxoplasmosis
only eat meat which has been thoroughly cooked (i.e. with no trace of blood or pinkness)
avoid raw cured meat, like Parma ham
wash hands, chopping boards and utensils thoroughly after preparing raw meat
wash all fruit and vegetables thoroughly to remove all traces of soil
don't drink unpasteurised goats' milk or eat dairy products made from it
wear gloves when gardening and wash hands and gloves afterward – if you eat while gardening wash your hands first, and try to avoid gardening in areas which may have been soiled with cat faeces
cover children's sandpits to prevent cats using them as litter boxes
remove faeces from cat litter tray every day wearing rubber gloves and wash gloves and hands afterwards – or have someone else do this
do not handle lambing ewes and do not bring lambs into the house.
Cats are the only animals that can shed this parasite in their faeces. Provided precautions are taken, cats are not a particular risk to a pregnant woman. Like human adults, cats can sometimes, but not always, become sick when infected with the toxoplasmosis infection, so care of a sick cat should be left to someone else.

What is Tommy's doing to help?

Tommy's has taken over the work of the Toxoplasmosis Trust, an organisation set up to provide information and increase awareness about toxoplasmosis. We have various leaflets about toxoplasmosis which are available by contacting us on the details listed below. We are committed to raising awareness about toxoplasmosis, both symptomatic aquired toxoplasmosis and congenital toxoplasmosis.

Tommy's is also setting up a toxoplasmosis support network to enable those people affected by toxoplasmosis to contact others who have been in a similar situation. This will become a register of people who have had an experience with toxoplasmosis and are willing to discuss this with others to help and support them. If you have had an experience with toxoplasmosis and are willing to share your story and talk to other people in the same position, then please contact Tommy's with your details and we can tell you more about this network.



Where are the Toxoplasma Reference Laboratories?

The National PHLS Toxoplasma Reference Unit
Singleton Hospital
Sgeti
Swansea SA2 8QA
Wales

Tel: 01792 285055

The Scottish Toxoplasma Reference Laboratory

Highland Acute Hospitals NHS Trust
Raigmore Hospital
Old Perth Road
Inverness IV3 3UJ
Scotland

Tel: 01463 704000

For more information contact:

Tommy's, the baby charity

Nicholas House
3 Laurence Pountney Hill
London EC4R 0BB
Tel: 08707 70 70 70
Fax: 08707 70 70 75
Pregnancy information line: 0870 777 30 60
E-mail: info@tommys.org
Website: www.tommys.org

Help us save babies' lives

Our aim is to prevent the loss of babies' lives through miscarriage, stillbirth and premature birth. As well as providing information to parents-to-be, we also fund a nationwide programme of medical research to discover what causes problems in pregnancy and find out how to prevent them.

Your details Name Address

Postcode

Telephone Email

Giving regularly

Bank name Bank address

Postcode

Name of account holder

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Please pay Tommy's, the baby charity, the sum of £ per month/year (delete as appropriate)

starting from 0 1 / M M / Y Y and until further notice. (Please ensure the start date is at least one month from today's date.)

For bank use only, please quote reference

To the National Westminster Bank plc, PO Box 7929, 91 Westminster Bridge Road, London, SE1 7ZB for the credit of Tommy's, the baby charity. Account no 26142058, sort code 60-60-04.

Signature Date

Single gift To make an instant credit card donation, please call 0870 777 76 76 or visit our website at www.tommys.org. Alternatively, you can send a donation with this form. I enclose a cheque/postal order/CAF voucher (delete as appropriate)

payable to Tommy's, the baby charity, for £

Or, please debit my Access/Visa/CAF/Switch account (delete as appropriate)

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We promise never to pass your details to other organisations or charities.

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Date

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Please return this form to Tommy's, Nicholas House, 3 Laurence Pountney Hill, London EC4R 0BB