



DEPARTMENT: AGRICULTURE

Diarrhoea in sheep and goats



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WHAT IS DIARRHOEA AND WHAT CAUSES IT?

When sheep and goats have stomach diseases their droppings usually become soft, watery and smelly. There are many conditions that cause diarrhoea. These include colibacillosis, paratyphoid, Johne's disease, Rift Valley fever (Slenkdalkoors), coccidiosis, worms and poisonous plants.

COLIBACILLOSIS

This condition is caused by a germ (bacteria). It usually affects lambs/kids under 2 weeks of age. This age group is usually affected because of one or more of the following reasons:

- **Lambs/kids need to drink the first milk from their mothers, which is known as colostrum. This protects them to a certain extent from colibacillosis and a variety of other diseases. If lambs/kids do not drink this milk after they are born they are more likely to get sick.**
- **Paddocks or kraals are dirty and wet.**
- **Lambs/kids are already sick with another disease, which makes them more vulnerable to become infected with colibacillosis.**
- **Lambs/kids are placed under stress by moving them to another location (e.g. another paddock/kraal) or putting too many lambs/kids together.**

The germ causing colibacillosis is present in the droppings of sick sheep and goats. When lambs/kids eat food or drink water contaminated with these droppings they get sick.

Signs in live sheep and goats

The animals are depressed and not eating. They have a watery, whitish-yellow or greyish diarrhoea that is known as "white scours". The umbilical cord is sometimes red and swollen. The back legs are dirty with droppings. Lambs/kids usually die as a result of dehydration.

Signs in dead sheep and goats

There are no exact signs. The gut is usually redder than normal and filled with a greyish to yellowish liquid.

Treatment

Colibacillosis can be treated with antibiotics. It is important to give sick lambs/kids sufficient water and electrolytes to prevent them from dying of dehydration. Ewes and does can be vaccinated 6 to 8 weeks before birth to protect their lambs/kids.

PARATYPHOID (SALMONELLOSIS)

This disease is caused by a germ (bacteria). It usually affects older lambs and 2- to 4-tooth sheep and goats (1 to 2 years of age). The reasons for this include one or more of the following:

- **Stress caused by moving the sheep and goats, for example to a feedlot or an abattoir or keeping too many sheep and goats together.**
- **Sudden change in feed, e.g. they are usually put onto a high concentrate, low roughage feed when moved to a feedlot.**
- **High numbers of Salmonella germs present in the environment, e.g. at the abattoir or feedlot.**

Signs in live sheep and goats

They have a fever and do not eat. A watery green diarrhoea that is sometimes spotted with blood can be seen. They usually die within 7 days from dehydration or septicaemia. If they do not die within 7 days they become very thin and stand with their backs rounded and stomachs tucked in. Pregnant ewes may abort and these lambs/kids will already be in a decomposed or rotted condition.

Signs in dead sheep and goats

The whole intestine will contain a watery and smelly liquid.

Treatment

Antibiotics will help to reduce the number of deaths. In this disease it is also important to give sheep and goats enough water and electrolytes.

JOHNE'S DISEASE

The disease generally occurs in wet areas of South Africa. It is caused by a germ (bacteria) and is present in the droppings of sick and infected sheep and goats. Sheep and goats get sick by eating food or drinking water contaminated by the droppings.

Signs in live sheep and goats

Droppings can be normal but are sometimes soft and pasty. Sheep and goats do not always show signs of this disease. They may appear healthy and eat normally. However, they may be carrying the disease and spreading it in their droppings. The most frequent sign is that the animals appear to waste away. Sheep and goats get very thin even though they may be eating normally. Loss of wool may occur.

Signs in dead sheep and goats


The most important sign is thickening of the intestinal wall.

Treatment

There is no treatment for this disease. It is a controlled disease in South Africa because it causes the animals' condition to deteriorate to such an extent that the meat and skins are useless. If you suspect Johne's disease on your farm you should contact your local animal health technician or

veterinarian.

RIFT VALLEY FEVER (SLENKDALKOORS)

 It is caused by a virus and spread by mosquitoes. Sheep and goats do not infect one another. It mainly affects lambs/kids. This is an important disease because it results in a high number of deaths. It only occurs in certain areas of the country and during very wet weather.

Signs in live sheep and goats

Lambs/kids less than 2 weeks old are very vulnerable to this disease and die within 2 days of getting sick. They show signs of fever, not eating and stomach pain.

Lambs/kids older than 2 weeks and adult sheep and goats show signs of fever, not eating and vomiting. They also have a foul-smelling diarrhoea and pus can be seen around the nostrils. Pregnant ewes can lose their lambs/kids.

Signs in dead sheep and goats

In lambs/kids and adult sheep and goats the liver is bigger than normal, yellowish-brown to dark brown in colour with dark-red patches. The gall bladder is swollen with red spots. There are also grey to red spots on the liver.

Treatment

This is a controlled disease in South Africa because there is no treatment and there is a high death rate. It is an important disease because it can be spread to humans. People can die if they get infected. There is a vaccine available for use when an

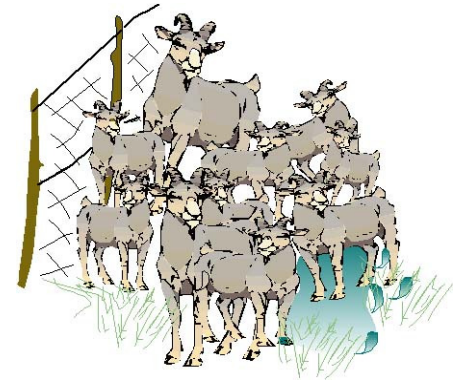


outbreak is expected. If you suspect that you have Rift Valley fever on your farm you should call your local animal health technician or veterinarian immediately so that they can help you.

COCCIDIOSIS

This is a common disease of sheep and goats, especially when they are placed under stress, e.g:

- **putting too many sheep and goats together**
- **keeping sheep and goats in dirty, wet kraals**
- **sudden changing of feed**
- **moving sheep and goats to a different farm or feedlot**
- **weaning (removing lambs/kids from their mothers).**



It is an important disease because it leads to economic losses as a result of deaths, poor growth and treatment costs. It usually affects younger animals. The disease is most severe in

- **lambs/kids 2 to 8 weeks of age**
- **lambs/kids 2 to 3 weeks after weaning**
- **adult sheep and goats moved to a feedlot or experiencing some other form of stress.**

Signs in live sheep and goats

The first sign is diarrhoea. The back legs are dirty (with droppings) and this may result in blowfly strike. Sheep and goats are depressed and do not eat. They become severely dehydrated



and may die.

Signs in dead sheep and goats

There are flat or raised, round white spots on the inside of the gut wall. In very sick animals the gut wall is swollen and thickened and may have red spots.



Treatment

Coccidiosis can be treated or prevented with antibiotics or ionophores. Ask your local animal health technician or veterinarian to help you diagnose, treat or prevent coccidiosis.

WORMS/DIBOKO/ISIBOMGO

It is essential to know about worms, because they are a major cause of losses in sheep and goats as a result of poor growth and deaths. There are three roundworm species frequently found in sheep and goats that cause diarrhoea: nodular worm,

brown stomach worm and bankruptworm. The brown stomach worm is most abundant in winter rainfall areas and the nodular worm in summer rainfall areas. Wireworms can also cause diarrhoea, as well as anaemia and death.

Eggs of the worms are present in droppings. They hatch and the young worms crawl up grass stems. Sheep and goats get infected when they are grazing. The worms grow into adults in the gut. They feed on the blood of sheep and goats by attaching to the walls of the gut.

Signs in live sheep and goats

Sheep and goats have occasional diarrhoea and show general ill health and malnutrition. The eyes and inside of the mouth become very pale if they are heavily infested with worms. They lose weight even though they eat normally. Ewes and does may stop producing milk and lambs/kids die of starvation. The area under the lower jaw becomes swollen. This is known as bottlejaw.

Signs in dead sheep and goats

Carcasses are very thin. The stomach and gut contain a foul-smelling liquid. Worms may be visible in the gut content.

Treatment

There are many remedies available to treat worms. Some worms may be resistant to the remedies. Therefore, if you see no improvement after deworming, ask for help. Examples of some remedies are seponver, seponver plus, valbazen.



Control

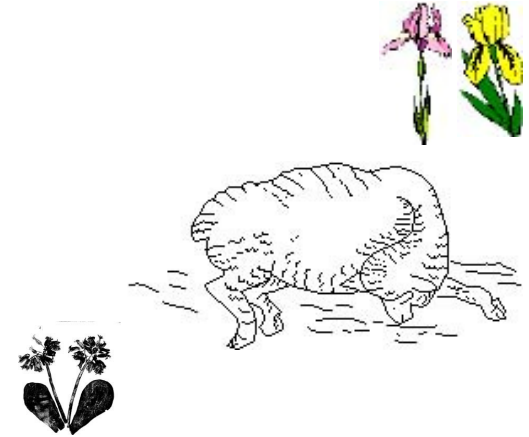
It is best to deworm your sheep and goats when there is a problem. This means that when you see signs of worm infestation, as mentioned above, then you should deworm.

Tapeworms may be seen in the droppings. These are usually small, white segments that look like rice granules in the droppings. These are different worms and do not cause as much harm to the animal as roundworms.

POISONOUS PLANTS

There are a variety of poisonous plants that cause diarrhoea in sheep and goats. These animals are selective feeders and will only eat unfamiliar plants if there is no other food available. These are some of the common poisonous plants:

- *Geigeria sp.*, which causes vermeersiekte
- chincherinchee
- castor-oil plant
- wild striped cucumber
- Januariebos
- harpuisbos
- plakkies, slangkop and wild tulip that also cause heart problems.



Signs in live sheep and goats

Sheep and goats have diarrhoea and become weak and dehydrated. In severe cases animals could die.

Signs in dead sheep and goats

Gut is filled with a watery, foul-smelling liquid. Parts of the plant are sometimes found in the stomach.

Treatment

Immediate treatment consists of giving enough clean drinking water. Giving activated charcoal sometimes also helps. If possible, take the animals to alternative grazing where poisonous plants do not occur.

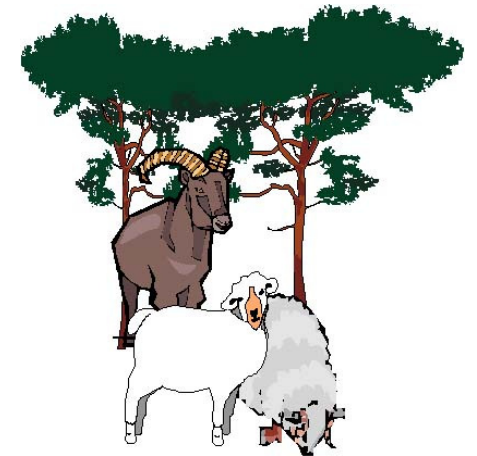
Control

Inspect your farm regularly for poisonous plants and remove them. Ensure that sheep and goats have enough food so that they need not eat the poisonous plants. Take special care when bringing new animals onto your

farm, because they would not yet know to avoid poisonous plants and are most likely to be affected. Also take special care during early spring when some poisonous plants start to grow before green grass becomes available.

WHAT DO I DO IF MY SHEEP AND GOATS HAVE DIARRHOEA?

- **Separate the sick sheep and goats from the healthy ones.**
- **If one or two are lying down, provide shade and fresh food and water.**
- **Try to give them activated charcoal and electrolyte solutions.**
- **Prevent blowfly strike by cleaning the back legs.**
- **Find out exactly what is making your sheep and goats sick so that you can give the correct treatment. You can do this by contacting your veterinarian for advice. You can also send in fresh droppings of both healthy and sick animals to a laboratory for testing.**
- **Electrolyte solutions are given to prevent dehydration and to give the sick animals energy. An example of an electrolyte solution that you can buy is lectade. You can make your own electrolyte solutions at home.**



Solution 1

- **2 tablespoonfuls of glucose (this can be bought from a pharmacy)**
- **2 teaspoonfuls of salt**

- **2 teaspoonfuls of baking soda**
- **2 teaspoonfuls of lemon juice**

Mix all of the above in 2 litres of water and give to sick animals.

Solution 2

- **◆ teaspoonful of salt**
- **4 tablespoonfuls sugar or honey**

Mix into 1 litre of clean water and give to sick kids and lambs.

Solution 3

- **◆ teaspoonful of salt**
- **◆ teaspoonful of baking soda**
- **3 tablespoonfuls of glucose or 50 ml (5 teaspoonfuls) glucose syrup (available from a pharmacy)**
- **Mix into 1 litre of clean water.**

Any **ONE of these solutions can be used. Use 1 or 2 litres every 24 hours for a lamb/kid of 10 kg.1 l**

HOW DO I PREVENT THESE CONDITIONS?

- **Keep kraals/paddocks clean and dry. Fix leaking troughs.**
- **Rotate paddocks if sheep and goats are on irrigated pastures. Sheep and goats on irrigated pastures have a higher risk of getting coccidiosis or worms.**

- **Remove droppings often from kraals/paddocks.**
- **Move sheep and goats away from low-lying marshy areas. This reduces the risk of mosquitoes, which can transmit Rift Valley fever.**
- **Vaccinations are available for some of these diseases.**

For further information contact your nearest animal health technician or state/private veterinarian
or

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