

Table 1: General goat health programme according to age		
Age	Treatment	Comments
1 day old	Iodine by mouth (1 drop per kid)	Ideally, Lugol's iodine (but if unavailable, any other brand will do)
Younger than 10 days old	Castrate males	Elastic method (mothers must already have been vaccinated with Multivax-P Plus to protect against tetanus)
3 to 6 months old	Castrate males	Burdizzo method
4 to 5 months old	Vaccinate with Multivax-P Plus	First dose
5 to 6 months old	Vaccinate with Multivax-P Plus	Booster

antibiotic, injected into the muscle of the hind leg every third day until cured.

"In severe cases, combine the antibiotic injection with intramammary antibiotic medicine for lactating cows. Insert the medicine into the goat's teat canals once a day after first milking out all milk. Continue this treatment until the mastitis has cleared up," says Rowe.

DEADLY HEARTWATER

Bont ticks can transmit the potentially deadly disease, heartwater, to goats. Find out whether heartwater is common in your local area and implement tick control measures if necessary.

Goats infected with heartwater have high temperatures and manifest nervous symptoms such as abnormal walking, hypersensitivity to touch, falling over and displaying a 'kicking action.' Unless treated rapidly, heartwater can result in death. Animals raised in heartwater-prevalent areas are more resistant to the disease, and moving goats not resistant to the disease to a known heartwater area could be risky.

Treat heartwater with a 10ml, short-acting, intravenous oxytetracycline antibiotic injection. It is important to inject directly into the vein, as the heartwater parasite adheres itself to vein walls. "An antibiotic injected intramuscularly takes too long to reach the veins to kill the parasite," explains Rowe.

Follow up with another 10ml of LA oxytetracycline (preferably),

injected intramuscularly. To treat a goat kid for heartwater, inject 3ml to 5ml, depending on its weight, as indicated above. In both cases, if LA is not used, animals should be injected daily for three days.

FOOT ROT

Foot rot is caused by bacteria, which are easily spread among goats. It is more likely to affect those kept on pasture or under intensive conditions. Minimise its development by keeping sheds clean and, once a week, sending all animals through a foot bath containing a 10% zinc sulphate solution. Goats should remain in the foot bath for five minutes. If goats become infected, they should be isolated from the rest of the flock until fully healed.

"Goats with foot rot should be injected intramuscularly with an appropriate antibiotic, such as oxytetracycline LA. An iodine foot rot spray should also be applied thoroughly to all four hooves, especially between the hooves," Rowe says.

Goats can also develop abscesses between their hooves. To prevent these, remove droppings from goat housing at least once a week, dip the animals against ticks, send them through a foot bath once a week, and regularly apply an iodine spray between the hooves.

Treat such abscesses with an LA tetracycline antibiotic injection until healed. For adult goats, the antibiotic dosage is 5ml every third day; for young goats, it is 2ml every third



Table 2: General goat health programme according to season		
Season	Treatment	Comments
Spring (September)	Bluetongue vaccination (not always necessary) Multivax-P Plus vaccination	A-B-C at three-week intervals. All goats. Repeat after one month
One month before mating season	Enzootic abortion vaccination	All females, but only necessary if there are abortions or a history of these in the flock
All year round	Foot bath with zinc sulphate	At least once a month
All year round	Check and trim hooves	Kidding is a convenient time

TOP:
A strict health programme to combat pests and diseases is essential for any goat flock.

day. Spray the abscesses with an iodine spray until fully healed.

Goats can also develop abscesses under the skin. Once the abscess is soft, cut it open on the lower side with a sterile blade, to allow the pus to drain. Keep the incision open and flush it daily with clean, warm salt water solution to remove any pus. The goat can also be injected with an antibiotic to aid healing.

Rowe stresses the need to wear clean, disposable gloves when treating an abscess to avoid getting infected or causing other animals to become infected.

"The bacteria in the pus is highly contagious and any pus must be carefully collected and immediately disposed of by burying or burning it. The incision should also be sprayed with a wound spray to keep flies away," he says.

- This presentation was given at the 2016 Goat Agribusiness Conference.
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