

## **Common Goat Ailments**

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***An XL Vets Best Practice Article***

Goats are becoming increasingly popular in the UK, both as pets and as commercial milking animals, and current estimates of goat numbers in the UK are around 98,000 animals. This newsletter will highlight a few key aspects of goat management but will by no means cover the breadth of all subjects pertaining to goat health and welfare. Please contact your vet if you would like further details on any of the conditions mentioned below.

### **General Health Considerations**

Goats are susceptible to many of the same diseases as cattle and sheep, however many diseases behave slightly differently in goats; furthermore goats have their own unique diseases and ailments that are not seen in the other domestic species. General principles of purchasing from healthy sources, quarantine for new and sick animals, good biosecurity and good hygiene should be applied equally as importantly to goats as to any other species. Your veterinary surgeon will be happy to offer further advice on any of the topics mentioned below, as well as compose a general health plan, even for the smallest of herds. This would include advice on vaccinations, worming, foot trimming, feeding and nutrition, breeding and much more. Many drugs, wormers and vaccines are not licensed for use in goats, and your vet can guide you to the most appropriate choice from the myriad of cattle and sheep products available.

As well as medical considerations, it is EC regulations that goats must be ear tagged with a registered tag number, and the holding where the goats are kept must be registered and assigned a CPH number. This is the case even for an individual pet goat. A holding number can be obtained from your local Animal Health office.

It is good practice to regularly handle your goat from “head to toe”. This will allow you to get a feel for the normal, healthy coat quality and body condition of your goat, as well as training it to be handled and held which will make treatment much easier if your goat does become sick. It will also allow you to detect abnormalities or changes early, increasing the chances of rapid appropriate treatment and a good outcome.

## **Vaccinations**

In general, immunity in goats is short-lived compared to sheep and cattle, hence more regular booster vaccinations are appropriate in this species to prevent clinical disease.

One of the most common group of preventable diseases seen in the UK, which often result in sudden death, are the clostridial diseases. In goats *Clostridium perfringens* type D (the cause of pulpy kidney in sheep) is by far the most common cause. These bacteria live normally in the guts, but can produce harmful toxins after a gut upset or imbalance. Disease from the toxin of this bacterium can range from watery diarrhoea often with blood and mucus, milk drop and anorexia, to sudden death. Lambivac (a sheep vaccine) should be used, initially with two doses 4-6 weeks apart, but boosters will be needed at least every 6 months and even more frequently in areas where disease is common or outbreaks likely. Avoiding sudden changes in diet will also help to prevent this disease from taking hold.

Pasteurella vaccination can also be considered (although the joint Pasteurella-Clostridial vaccines should be avoided in goats), which may help prevent respiratory diseases. Many show goats return home with a 'post show cough' which tends to be mild and clear up with time, however more severe respiratory infections can occur, especially if many goats are housed in crowded conditions, which should therefore be avoided.

Bluetongue vaccination should also be considered as the UK is still at risk from this disease.

For all vaccinations, the timing of vaccination may be important, both in terms of protecting at the highest-risk times of year, and in terms of protecting the young for breeding females. Ask your vet about the best time to vaccinate.

## **Reproduction and Kidding Time**

Goats are seasonal breeders, from September to February. The expression of oestrous, or "heat", in females can be dramatic, and may be mistaken for pain by inexperienced eyes. Breeding can be very rewarding but should not be embarked upon without thorough research and preparation, as there are many things to consider to ensure a smooth pregnancy, birth and growth of the young. Gestation lasts around 150 days, however some goats can get a "false pregnancy", also known as hydrometra or cloudburst, where the doe act as if she is pregnant,

with enlargement of the abdomen and some udder development, so this is worth bearing in mind if pregnancy has not been confirmed.

It is vital to have an understanding of the potential complications of kidding, as well as the requirements of the newborn kid so you can prevent problems before they arise and know when to call the vet if things do not go to plan. Colostrum is vital to ensure a strong and healthy kid, and it is essential that all kids receive a good volume (~300-500 ml) in the first 6 hours of life. The navels of newborns should be dipped in 2-3% iodine tincture to prevent infections and care should be taken to ensure the kids do not become hypothermic, which is a major risk factor in the first few weeks of life. If you are thinking of breeding from your goats for the first time, give your vet a call to discuss the process and ask any questions you may have.

Goats are susceptible to many of the causes of infectious abortion that sheep are. It is imperative that pregnant women are not involved in kiddings and do not handle dirty overalls or towels which have been around the goats, as there is the risk that these diseases can be transmitted across to women. If you have any cases of abortion or weakly kids, contact your vet for further advice.

## **Parasite Control**

### ***Internal Parasites***

Goats tend to be less resilient against internal parasites compared to sheep or cattle; they tend not to build up long-term immunity after exposure and therefore regular worming strategies are important and must include goats of all ages including adults. Due to increasing resistance in the worm population against our common wormers, targeted dosing at the appropriate dose rate for the animal is vital to ensure we continue to have artillery against these potentially devastating parasites. Principles of the *Sustainable Worm Control Strategies for Sheep* (SCOPS, 2004) program should be equally applied to goats. Many of the parasites are transmissible between goats, sheep and cows, so if your goats co-graze with other species bear this in mind when planning a worming regime.

Signs of weight loss, with or without diarrhoea and mucky backsides, are common presentations of these parasitic diseases, however infections due to some worms may show only subtle signs such as anaemia, so parasite infections should be considered in the case of any sick goat. If the areas where the goats live and graze are prone to flooding or near watercourses, they may also be at risk of picking up liver fluke infection. If diarrhoea is present,

this will put the animal at risk of “fly strike”, where maggots hatch out and start to eat away at the skin, which can be devastating.

Another important point is that goats generally require higher dose rates of wormers compared to sheep or cows (often at double the sheep dose). Your vet will be able to guide you on which wormers to use, and when. Goat weights are often underestimated, try to get an accurate weight where possible, and always dose to the heaviest goat in the group. Worm egg counts undertaken on faecal samples collected throughout the year, together with appropriate dosing and the rotation of pastures to clean grazing if possible, all play a role in effective parasite control.

### ***External Parasites and Skin Conditions***

Goats are susceptible to lice, mange mites, fly bites, ringworm and ticks. Treatments come in a variety of pour-ons, injectables and sprays, some of these will treat internal parasites at the same time. Dose rates vary from those of sheep or cattle, so consult your vet for further advice.

Goats can pick up bacterial skin infections as well as viral infections such as orf, which can potentially be transmitted to humans. If you notice your goat to have any skin lesions, or if it is very itchy, it is worth getting it examined as soon as possible, so the appropriate treatment can be initiated.

### **Other Miscellaneous Conditions and Considerations**

- **Foot Problems**
  - Routine foot care is essential to ensure a happy goat. The horn of the feet grows throughout their lives, and may need regular trimming. Get your vet to show you how to do this if you do not have experience. Any lame goat should be examined promptly and treated appropriately.
- **Poisoning**
  - Due to the inquisitive nature of goats they are likely to ingest toxic plants and substances as they browse. Goats are reasonably resistant to many common toxins but certain plants will still cause disease. One of the most dramatic is Rhododendron toxicity, which will cause projective vomiting! Other plants can be deadly. If your goats have access to garden plants it would be worth checking with your vet if there is any risk of poisoning from them.

- **Disbudding of Kids**

Disbudding of kids is a dangerous procedure with a much higher risk than disbudding of calves, and under current UK legislation, can only be legally undertaken by a veterinary surgeon. Naturally polled goats can be bred, but by doing this you risk breeding 'intersex' goats which have the genes of a female but may have male genitalia. It should be mentioned that dehorning adult goats is a major procedure and should be avoided if at all possible. Before deciding to have your kids disbudded, consider the necessity. Horned and polled goats should not be kept together, as bullying will often ensue. The risks are high and include:

- Anaesthetic risks during the first few days of life (must be done around 3-7 days of age)
- Risk of brain damage as goats have very thin skulls
- Risk of infection or tetanus post-operatively
- Potential that horn buds may still grow back

- **General Husbandry**

- Goats are social animals and should ideally not be kept alone.
- Their coats lack the lanolin that sheep have and are therefore not waterproof, so adequate shelter should be available for them at all times.
- Electric cables and fixings may prove attractive to the curious goat, make sure these are well out of reach. Also make sure gate catches are 'goat-proof' as they have a cunning knack of opening these!
- Enrich their living space with objects for climbing and exploration and non-poisonous branches and hedge trimmings
- Nutrition is a complex subject and for full details consult your vet; however briefly, goats are selective feeders and if goats are kept together the higher ranking goats may pick out all the best bits, leaving the poorer quality remains for the other goats. Bear this in mind when feeding, monitor for bullying and ensure goats have enough feeding space to all have access to the feed. Goats will require more energy if growing, pregnant or lactating, and the diet should be tailored to each goat's individual needs. Goats store fat internally, so checking condition may be harder than for other species.

- **Notifiable Diseases**

- Goats are susceptible to Foot and Mouth disease, Scrapie, Bluetongue and Tuberculosis, as well as other notifiable diseases. Contact your vet immediately if you see any worrying signs such as ulcers on the mouth/feet, swollen lips/faces or long-term coughing.

- **Urolithiasis**
  - Uroliths are small stones that can obstruct the bladder or may be found lower down the urinary tract as far as the penis, blocking the outflow of urine. They can be encountered in males or all ages (and rarely in females), and in castrated or entire males. Affected goats will show signs of discomfort, and may kick their abdomens, stretch, pace or strain. This is a potentially life-threatening condition, and emergency surgery may be necessary. Call your vet immediately if your goat is showing any of these signs, particularly if it is a male. To help minimise the chance of problems, ensure there is always a good, clean supply of fresh water, good palatable fibre and a varied diet.
- **Zoonoses**
  - As previously mentioned some conditions goats can suffer from can be transmitted to people. These include the abortion agents, mange, orf, ringworm and parasites and bacteria that cause diarrhoea including *Cryptosporidium* and *E. coli*. General hygiene measures should be practiced routinely, and young, old, ill and pregnant people should not be around sick goats. Bear in mind that if you are drinking your goat's milk without pasteurisation there is also the risk that certain bacteria including TB can be transmitted to you.

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A useful source of further information is the book *Goat Health and Welfare: a Veterinary Guide* by David Harwood, published by Crowood Press.