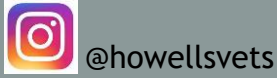




# RUMINANT WINTER 2024 NEWSLETTER



www.howellsvets.co.uk

York Road, Easingwold YO61 3EB

01347 823678

## HOUSING EDITION



## PNEUMONIA

**As housing approaches, so too does the threat of more pneumonia cases! There are steps we can take, both preventatively and in terms of treatment, that can help to reduce the effect that pneumonia has on your farm over this housing period.**

### Swab Testing

We can come out on farm and take some swab samples from untreated calves to help work out what pathogens are causing a problem on your farm. Call us and we can see about arranging a visit to test your stock.

### Treatment

All farms are different, and so are the treatment protocols. Please call us if you have any questions about antibiotic choice or use.

Use anti-inflammatories in every case. Using these drugs has been shown to improve treatment outcomes.

Treat early! If you suspect a case of pneumonia, the earlier you treat it, the better the outcome. If a calf shows two or more of the signs above, it's likely worth treating.

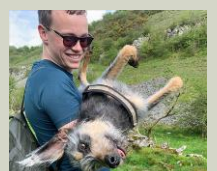
### Prevention

The best pneumonia case is no pneumonia in the first place! There are a couple of things we can do to help you avoid clinical cases:

- Vaccination – We stock multiple vaccine products that are effective against a range of pneumonia-causing bugs. Every farm is different though, so just give us a call and we'll work out which combination is right for you.
- Housing – Housing different age groups increases the risk of transmission between healthy and infected animals.
- Reducing stress – All animals experience a drop in immunity when stressed. Realistically, this means trying to not break or change housing groups over the time they are housed and avoiding stressful events (e.g. transport and weaning) where possible.

### Signs of Pneumonia:

- Depression
- Not eating
- Discharge from nose or mouth
- Cough
- Abnormal ear position
- Breathing fast or with excess effort
- High temperature (>39.5°C)



Written By Sam

Call us on 01347 823678, option 1 to speak to our reception team to arrange all visits including emergency work. Available 24/7, 365 days a year.



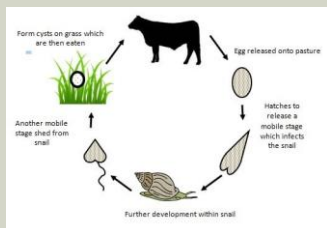
# LIVER FLUKE

At the time of housing, liver fluke (*Fasciola hepatica*) can become a concern.

## The lifecycle:

Mud snails (which are most numerous in summer) are vital for the liver fluke lifecycle. They act as an intermediate host. This means that the immature fluke stages require development within the snail to become cysts which attach to the grass. Grazing ruminants will then ingest these cysts.

Fluke infection presents in two ways - acute (from young fluke migration in the liver) or chronic (from adult burden in the bile ducts). The type expressed depends on the number of fluke cysts ingested and the period over which they are ingested.



## Clinical signs:

- **ACUTE** (more common in sheep) - Rapid weight loss, weakness, sudden death. Acute disease normally presents in late summer/autumn but is weather dependent.
- **CHRONIC** (more common in cattle) - Poor growth rates, reduced milk yield, weight loss, poor production, bottle jaw. Chronic disease is more common in Winter/Spring but, again, is weather dependent.

## Diagnosis

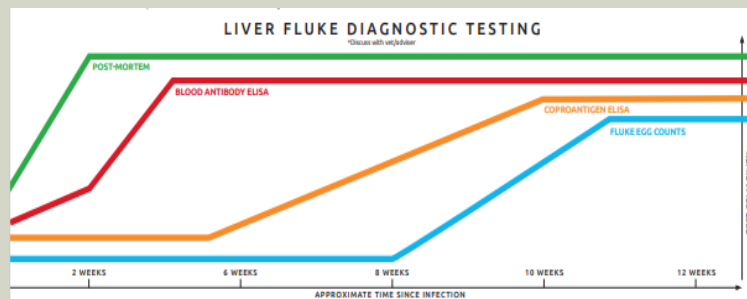
**Blood test for antibody** - This tests exposure of new season ('sentinel') lambs or calves to fluke and can identify exposure early (from 2 weeks after infection). Regular blood samples from youngstock guide when treatment may be needed.

**Faecal coproantigen** - Individual faecal samples can identify mid to late-stage infection.

**Fluke egg counts** - This test is only useful in chronic infections where adults are present producing eggs (8 to 12 weeks post-infection). Faecal samples can either be pooled or individual.

**Post-mortem** - This gives us a definitive diagnosis if we identify liver fluke in the liver

No flukicides have any persistent activity - there is no protection from reinfection. It is important not to always use the same flukicide and to be aware overuse of any individual flukicide will speed up the development of resistance.



## Treatment

Treatment depends on the type of infection:

- **ACUTE** - The only drug effective against both immature (from 2 weeks) and mature fluke stages is triclabendazole. There is some reported resistance to this drug, so action is needed to protect long-term efficacy.
- **CHRONIC** - Closantel is a useful drug to control immature fluke (from 6 weeks) in autumn, but alternatives such as nitroxynil, albendazole, oxcyclozanide or clorsulon can be used at other times of year when adult fluke predominate

Efficacy of flukicides available for use in sheep in the UK against susceptible fluke populations

Active ingredient	Age of fluke in weeks (% kill rate)														Optimum time of year to use	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Albendazole											50-70%	80-99%				Spring / summer
Oxcyclozanide											50-70%	80-99%				Spring / summer
Rafoxanide																
Closantel				23-73%	91%	91-95%			97-100%						Autumn	
Triclabendazole (assuming a fully susceptible population)	90-99%	99-99.9%													Autumn	

Thanks to Professor Diana Williams for this table.

## Prevention

- Get to know your 'risk areas and fence off bodies of water (mud snail habitat)
- When buying in sheep, liver fluke quarantine treatment strategies should be considered based on the risk posed by the incoming sheep and the risk status of the farm.
- Good drainage on pasture

Written By Ellie



# MANAGING LICE

Now that your animals are inside, it's the perfect time to check them over. The stock is closer together and more likely to pass issues to one another.

## Key points:

- Lice can negatively impact cattle production
- Infestations cause itchiness, irritation and hide damage
- Treatment depends on whether chewing or sucking lice are present
- Prevent by avoiding over-stocking, poor husbandry and underlying health conditions

As temperatures drop, housing has begun. Housing increases the risk of louse infestations (known as "pediculosis") due to the cattle's thicker winter coats, increased stocking density and direct contact between animals.

There are two main types of louse:

- 1) Biting - feed on skin, hair and debris
- 2) Sucking - feed on blood

Our vets will determine whether the infestation is due to biting or sucking lice by using hair plucks and a microscope to identify the species present. Knowing this will help us to advise the most appropriate treatment plan.

Both types of lice are visible to the naked eye by parting the hair along the back. As seen to the right, (L) *Bovicola* chewing louse and (R) *Linognathus* sucking louse with narrow head designed for piercing the skin.



Characteristic presentation of heavy louse infestation showing hair loss over back, neck and shoulders.

## Clinical Signs

Clinical signs are mainly seen in late winter and early spring. The condition usually affects individuals with underlying health issues. Chronic disease, poor husbandry and ventilation issues can contribute as well. This is why it is important to consider why you may be seeing signs in your herd as well as forming a treatment plan for current infections.

## Signs to look out for include:

- Itching, rubbing and hair loss especially over shoulders and neck region
- Self-trauma can cause secondary bacterial infections and downgrading of the hide value
- Sucking lice can also be associated with mechanical spread of other diseases such as ringworm
- Production losses from reduced feed intake, reduced milk yield and decreased live weight gain
- Anaemia in severe sucking louse infections - this can cause weakness and even death

## Treatment

- Treatment products are available as either topical pour-ons or injectables
- Be aware that injectables are ONLY effective against control of biting lice
- There are two main classes of product:
  - 1) Synthetic Pyrethroids (**Permethrin & Deltamethrins**)
  - 2) Macrocyclic Lactones (**Ivermectins & Moxidectins**)
- Check treated cattle 2-4 weeks post-treatment for the presence of lice. A second treatment may sometimes be required to kill any newly hatched eggs in this timeframe.

## Prevention

- **General health and welfare** - Regular condition scoring to monitor health of cattle, keep animals stress and disease-free especially during the housing period
- **Husbandry practices** - Reduce over-stocking, ensure good hygiene and bedding management
- **Biosecurity** - Assess treatment history of bought-in animals and quarantine those new to the herd
- **Clipping** winter coats at housing Cattle will usually recover from pediculosis on turn out when their winter coats are shed and stocking density decreases.

Written By Charlotte





# MASTITIS

**As housing approaches, now is the time to review udder health management and mastitis treatment choices. Winter housing can see a spike in clinical mastitis rates which is a significant welfare issue for cattle, and can lead to increased labour, costs and stress.**

Mastitis is inflammation of the udder usually caused by bacteria tracking up the teat canal. When the cow detects an infection, it recruits white blood cells to the udder resulting in milk clots or watery milk. To ensure enough white blood cells reach the udder, blood flow increases resulting in redness, swelling and pain.

If there is inflammation in the udder but no visible changes to it or the milk, the cow has subclinical mastitis. These cows produce less milk of poorer quality, can lead to clinical mastitis, and can spread infections to other cows. As the milk looks normal further diagnostic tests are needed, such as milk recording somatic cell counts (SCC), California Milk Test (CMT), or conductivity testing. SCC is a count of the number of cells in the milk, 98% of these cells will be white blood cells. An SCC of over 200,000 cells/ml indicate an infected quarter.

Successful resolution relies on quick detection, effective treatment, and ongoing monitoring. Cows that have had an episode of mastitis are 1.5 times more likely to have another case of mastitis in the future, unsurprisingly prevention is always better than a cure.

Mastitis pathogens can be split into 2 categories:

- **Environmental.** Cows pick up bacteria from the shed between milkings. Often this is due to muck splashing onto the udder or dirty lying areas. We can effectively prevent this with increased cleanliness of the living environment.

- **Contagious.** These pathogens are spread cow to cow during milking either through people's hands, milking cloths, or faulty machines. We can prevent this through parlour procedure and milking machine maintenance.

Faulty milking machines increase the risk of mastitis by damaging the teats or firing bacteria at the teat end during milking. Various things can be faulty, including pulsation, liner fit or the automatic cluster removal mechanism. If you suspect you have a faulty milking machine, we offer dynamic parlour testing through the practice. Although mastitis can occur at any time the risk is highest after dry off and around calving. Cows which get mastitis before 30 days in milk (DIM) have been infected in the dry period, after 30 DIM the mastitis has originated during lactation.

If the mastitis originates in the dry period, you may see:

- >10% of the cows calving with SCC >200,000 cells/ml
- 1 or more cows out of 10 having a positive CMT 4 days post calving
- 1 or more cows out of 8 having mastitis within 30 DIM

If lactation origin mastitis is the problem on your farm you may see:

- 5% or more of your cows move from having SCC below to above 200,000 cells/ml between milk recordings
- 2 or more cows out of 12 getting mastitis between 30 DIM and dry off

AHDB have developed a Mastitis Pattern Analysis Tool which can be used in conjunction with QuarterPRO to help determine your mastitis pattern.

Understanding the mastitis patterns on your farm is essential to developing a prevention and treatment plan. Contact us to discuss your farm this winter.

Written By Amy

