

Heat stress in Livestock Chris Daykin MRCVS

It's been a warm few weeks and we are expecting more to come. During this time, it can be difficult for cattle, sheep, goats, alpacas and pigs to maintain a constant body temperature. As the temperature increases, they are all sensitive to factors which influence their thermal exchange with the environment. This includes air temperature, velocity and relative humidity. If they lose control of their ability to maintain a stable internal temperature, it can tip them into heat stress and ultimately death.

Signs of heat stress in cattle and sheep include refusing to lie down, reduced feed intake, high temperatures (over 39°C in cattle and over 41°C in sheep), open mouth breathing, extending heads down (nose to the floor), protruding tongue, excess salivation and increased respiration rate. To increase lung volume, they also stand with their front legs held out wide. Counterintuitively, they also tend to bunch together and stand in tightly packed groups. In terms of production, it can also impact feed intakes, growth rates, ovulation, conception and bull/ram fertility. As ambient summer temperatures are set to increase with climate change, managing heat stress in our animals is going to be an increasing challenge.

Some top tips for reducing the risk of heat stress during this hot period, improving welfare and productivity.

- 1) Access to clean, cool water water intakes can increase by up to 20% in hot weather so it is important that your animals have access to clean drinking water, out of direct sunlight. Milking cows need 120-140 litres of water a day, whereas a sheep needs 7 litres a day. Consider placing an extra trough or two in the fields or by the parlour. This will take the pressure off the demand on the troughs already present. Check the troughs regularly as algae can proliferate quickly. Algal contamination will reduce water intake.
- 2) **Avoid unnecessary handling** handle animals calmly and quietly in the cooler conditions of the day. Avoid keeping animals too tightly stocked in collecting areas or pens.
- 3) Consider feeding later in the day rather than morning it allows the heat from rumen fermentation to dissipate during the cooler evening/night time. In dairy cows, you can improve the feed intake of your cattle by feeding 60% of the summer ration between 8.00pm and 8.00am. Dairy cows will tend to consume more feed when it is cooler and pick food that produce less heat during digestion. This would normally be grains and proteins over forages. Discuss this with your nutritionist to reduce the risk of acidosis.

- 4) Provide grazing stock with access to fields that have **sufficient shade** from hedges/trees. For grazing dairy herds, it may be well worth housing them during the day and letting them outside at night.
- 5) Take steps to **control flies** it can spread disease and cause animals to congregate
- 6) Cool cattle by using a water sprinkler system to wet their coats before or after milking. Take care with this around cubicles/bedding area as this can have implications on mastitis levels. A sprinkler system would be easily applicable in the collecting yard where animals are closely confined (and ambient temperatures can rapidly increase).
- 7) **Pay attention to sick animals** they are more likely to benefit from oral fluids and electrolytes.
- 8) **Ensure buildings are well ventilated** and reduce stocking densities (where possible) to increase space allowances. In a hot, humid shed, bacteria will proliferate, increasing the risk of infection.
- 9) In already well-ventilated buildings, **using fans** to generate at least 1.5m-2m/s air movement aids skin cooling and evaporative heat loss. Studies have shown that this can reduce respiration rates in heat stressed animals by up to 50%.

## **Camelids**

Alpacas and llamas love to cool off in a paddling pool or with a gentle hose down. It allows them to cool their feet and their bellies.

#### **Pigs**

The best way you can help pigs cool down is by providing a wallow. It should be more liquid than mud as they lose excess heat by water evaporating from the skin. Prevent the wallow from drying out by replenishing with water when required. Ensure you provide a separate supply of clean water for drinking as well.



**S** Scarsdale Vets

Farm

# Leptavoid-H Vaccine Discontinued

Below is an extract from an email sent to us from MSD Animal Health. Please do speak to us if you have any questions or concerns about leptospirosis control on your farm - there is an alternative vaccine available and we're happy to talk it through with you!

At MSD Animal Health, we are deeply committed to the vital role that vaccination plays in safeguarding animal welfare, reducing disease incidence and severity, and supporting efficient livestock farming.

#### About Bovilis<sup>®</sup> Leptavoid<sup>®</sup>-H

Bovilis® Leptavoid®-H has been a trusted product for over 30 years, known for its strong safety and efficacy profile. However, we have faced ongoing challenges in its manufacturing process, leading to recurrent supply disruptions. Despite our extensive efforts over the years to improve and remediate these issues, we have not been able to ensure a consistent supply to the market.

As part of our commitment to optimising our manufacturing network, we have made the difficult decision to discontinue the production of Bovilis® Leptavoid®-H. This decision was not made lightly, and we understand the impact it may have on your practice and the farmers you serve.

### Support for Our Customers

We recognise that discontinuing a product can be challenging, and we want to assure you that our team is here to support you. Many of our colleagues are veterinarians who understand your needs and can provide guidance on alternative options for your veterinary practice.

Thank you for your understanding and continued partnership. If you have any questions or need assistance, please do not hesitate to reach out.

MSD Animal Health

# Welfare in Transport Legislation -Transport of bovines using leg shackles

Animal and Plant Health Agency (APHA) have asked us to make our clients aware of the rules concerning the use of shackles during transport.

In summary, cattle that need shackles are not fit for transport. Those that suffer an injury where the use of shackles aids management and supports recovery should remain on farm till they are fully recovered and fit for transport unassisted. If not, on farm culling should be considered.

APHA has been made aware of this issue by Official Veterinarians (Ovs) working for the Food Standards Agency (FSA) and Food Standards Scotland (FSS) in abattoirs. They have identified multiple occasions where cows were transported using/wearing shackles, sometimes over long distances, taking several hours to reach their destination.

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In some instances cows became recumbent during transport and were unable to stand back up at the abattoir.

The APHA letter to hauliers is as follows:

Welfare in Transport Legislation - Transport of bovines using leg shackles

Assimilated Council Regulation (EC) 1/2005 on the protection of animals during transport and related operations

The Welfare of Animals (Transport) (Scotland) Regulations 2006 The Welfare of Animals (Transport) (England) Order 2006 The Welfare of Animals (Transport) (Wales) Order 2007

We are writing to remind all transporters that under the animal welfare in transport legislation, it is not permitted to transport bovine animals using leg shackles.

Assimilated Council Regulation (EC) No 1/2005, Annex I, Chapter I, states no animal shall be transported unless it is fit for the intended journey, and all animals shall be transported in conditions guaranteed not to cause them injury or unnecessary suffering.

Animals that are injured or that present physiological weaknesses, or pathological processes shall not be considered fit for transport. Cattle that are fitted with shackles to assist with locomotion are presenting with a physiological weakness and are not considered fit for transport.

Official Veterinarians working on behalf of the Food Standards Agency (FSA) and Food Standards Scotland (FSS) in abattoirs will report all incidences of bovines being transported in shackles to APHA and the Local Authority for any investigation deemed necessary and/or further regulatory or enforcement action.

Using the link below you can find the guide to good practices for the transport of animals. These guides have been produced by the European Commission to address all aspects of the welfare of animals during transport and are a useful reference tool. They should be read in conjunction with the legislation: Animal Transport Guides - European Commission.

Further information on the transport of animals can be found on the following websites: https://www.gov.uk/guidance/animalwelfare-in-transport.

If you have any queries, please contact wit@apha.gov.uk.

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