

Topical Issues

Lameness and Pneumonias In Housed Sheep

Sponsored by



Neil Roberts

20th January 2015

Hilary O'Keife

Shearwell Data Tags UK





One sheep is another sheep's
worst enemy

Spread of Infectious Disease

- ◉ Lameness
- ◉ Respiratory Disease
- ◉ Lice/Scab
- ◉ Abortion
- ◉ Rattlebelly/Joint ill
- ◉ Orf

Lameness



10% of national flock (3,000,000 sheep)
lame at any one time

Causes of Lameness

- Footrot
- Scald
- CODD
- Abscess
- Toe Granuloma
- Shelly Hoof



Causes of Lameness

- Identification
- Causes and route of spread
- Treatment
- Prevention and control in housed sheep



Lesion 1

- Varying severity of lameness
- Ewes and lambs affected
- Can be epidemic
- Pink/red, wet interdigital space
- White/grey pasty scum - smells



Lesion 2

- Varying degrees of lameness
- Can be several in flock affected
- Separation of horn from the underlying live tissue
- Foul smelling, greyish, oozing pus



Footrot very variable,
but smell typical



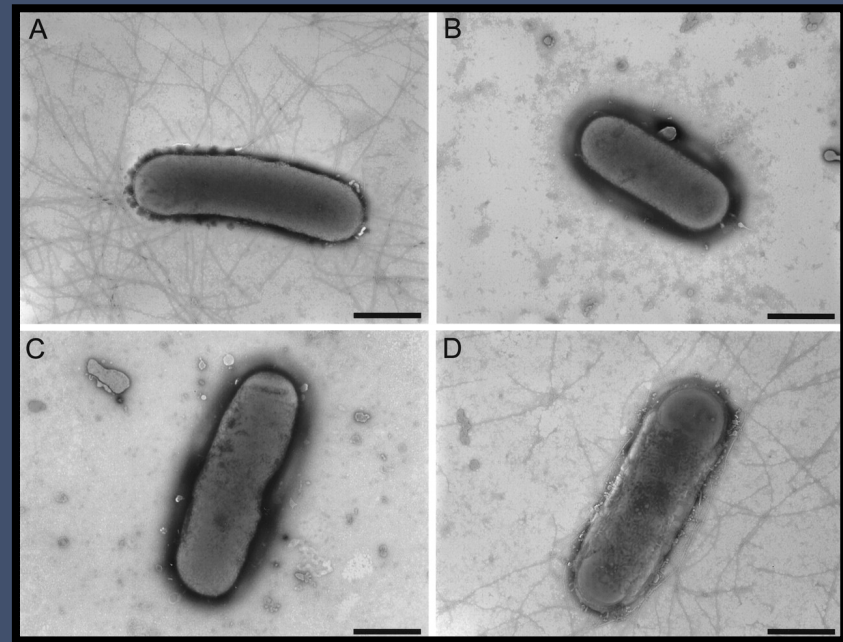
Lesion 3

- Severe lameness
- Up to 40% flock affected initially – ewes and lambs
- Red raw lesion starts at the top of the hoof, rapidly leads to horn separation
- May smell



Footrot

- Caused by bacteria - *Dichelobacter nodosus*
- Off the sheep survives 7 – 10 days on pasture, 6 weeks in horn clippings
- Likes warm, moist environment
- Carrier sheep



Scald

- Bacterial infection of interdigital skin, *Fusiformis necrophorum* or *D. Nodosus*
- Scald = early stage footrot



CODD

- Contagious Ovine Digital Dermatitis
- Related to digital dermatitis in cattle (Treponemes)
- Infection starts at top of hoof
- Whole hoof can drop off

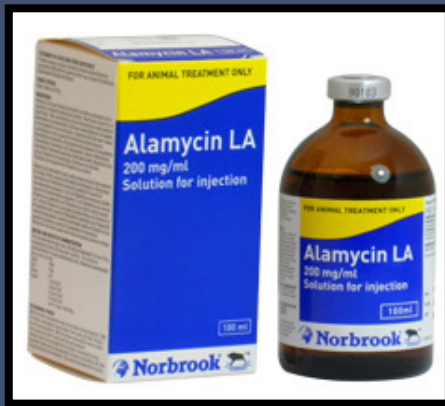


Treatments

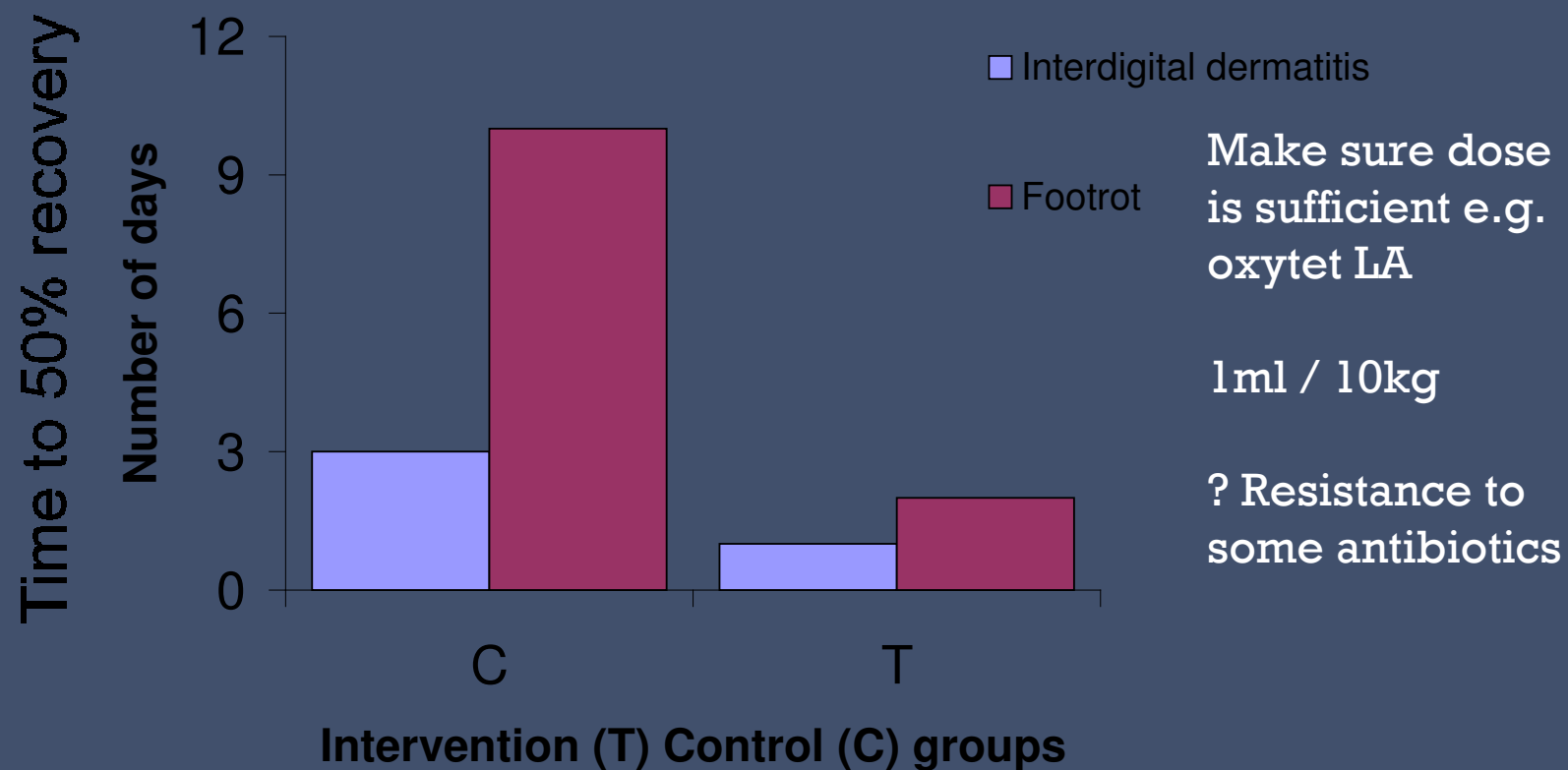
- Footrot Antibiotic injection & spray
all 4 feet
- CODD Antibiotic injection & spray
all 4 feet
- Scald Lambs – spray all 4 feet
ewes – antibiotic injection &
spray all 4 feet

Antibiotic Injections

- ◉ Alamyacin LA 9 day meat withhold
- ◉ Hexasol LA 5 day cover & painkiller
- ◉ Micotil (Zactran)



50% recover within 2 days after antibiotic injection compared to 10 without injection

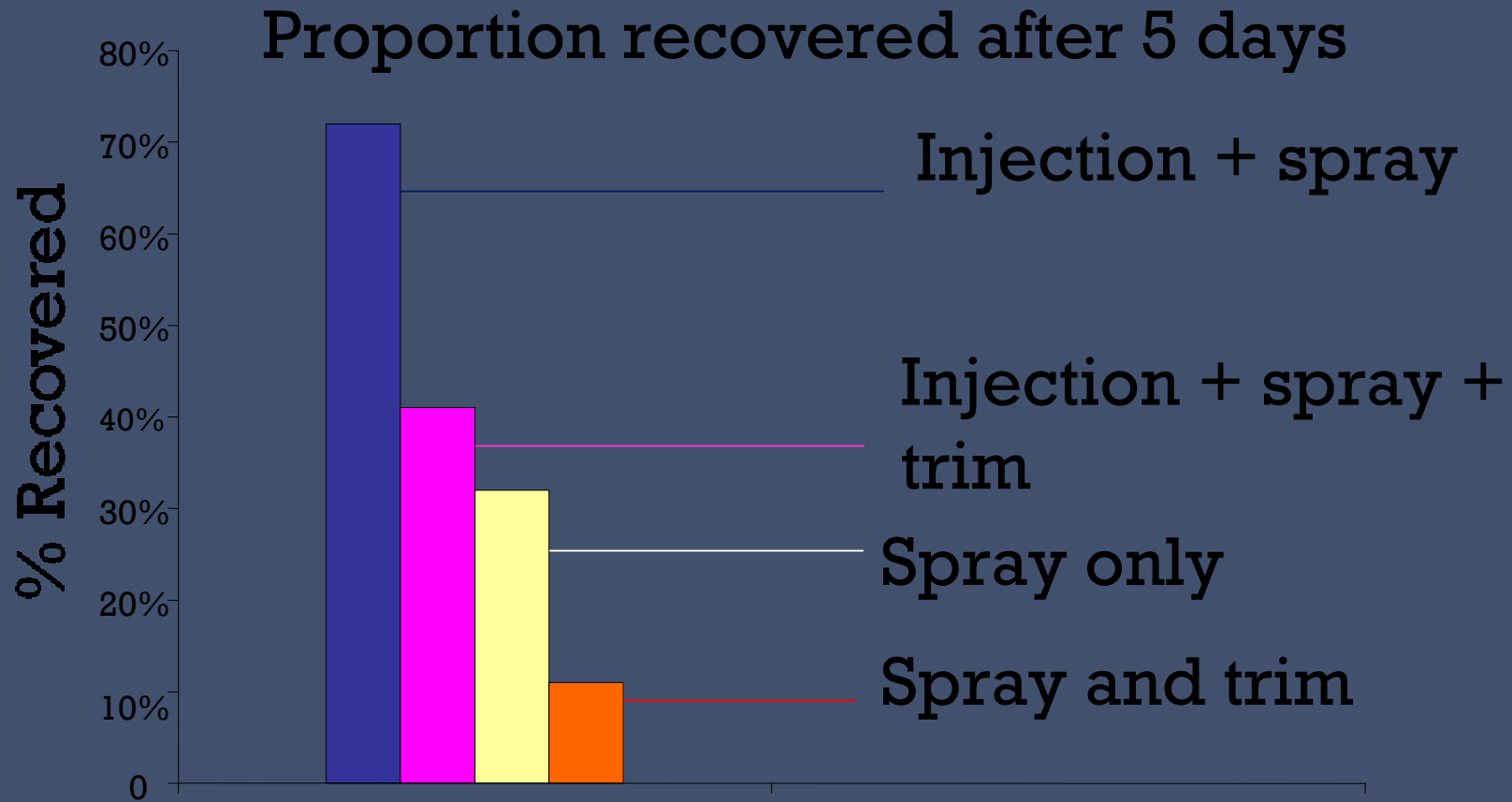


Footparing

- ◉ Do not pare feet with active infection present
- ◉ Allows infection into foot
- ◉ Causes pain
- ◉ Infection spread on foot trimming shears
- ◉ Weight should be taken on wall of hoof



Trimming feet with footrot delays healing



Avoid Trimming

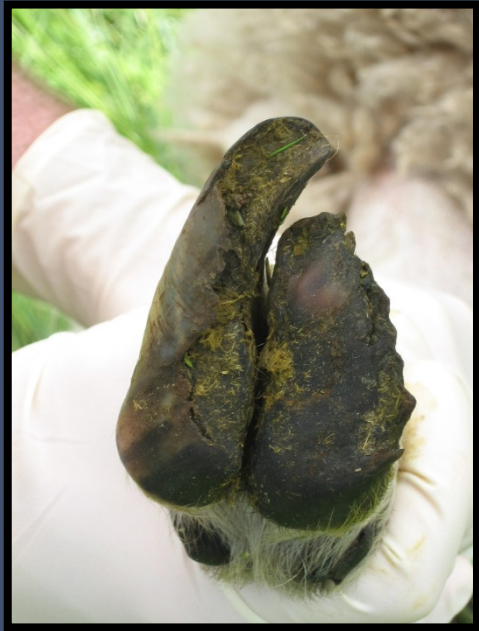
- ◉ Use time to inspect and treat lame ewes
- ◉ If not convinced, try leaving feet and see what happens (35% of random sample of 1300 farmers not routinely foot trimming in 2013)



Avoid Trimming

Two examples of overgrown horn the integrity is good and the sheep is sound

Horn grows at 3 inches / year!



Very Overgrown Feet- Shelly Hoof

- If very overgrown –
 - Use sharp clean trimming equipment
 - Trim leaving the wall edge $\frac{1}{4}$ inch below sole all around the claw for sheep to walk on
 - Clean clippers with disinfectant spray between feet



Results of Lameness Quiz

- Farmers can recognise lame sheep – even mildly lame
- 20% did not catch and treat individual sheep at all lameness – **reported 15% lameness in their flock**
- Those that catch all lame sheep (even one in a field), catch -
 - within 3 days
 - when less severely lame
 - Level of lameness in flock **<5% lame**
- Those that wait until several lame **10% lameness**

Lowest levels of Lameness

- Treat within 3 days
- Appropriate treatment
- CODD, footrot and scald in ewes
- Antibiotic injection and spray
- Correct dose, long acting antibiotic
- **Do not trim feet**



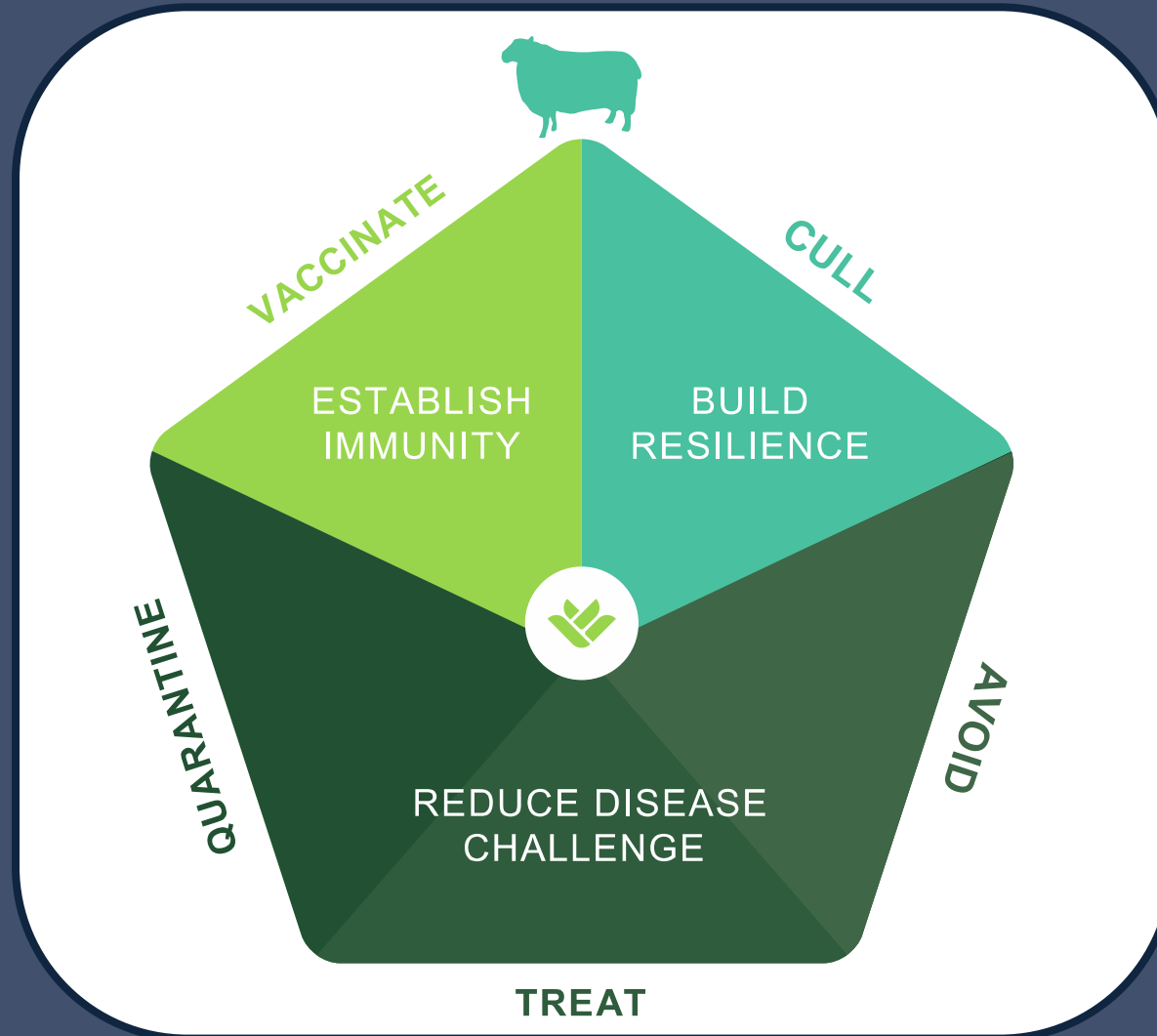
Footbath to manage scald epidemics

- Plan ahead and ensure equipment is in excellent order
- Ensure feet are clean before footbath
- Stand sheep on a hard surface for at least one hour after footbath
- Always follow the instructions of the products used
 - Using chemical concentrations that are too high will cause damage to the sheep's feet and cause lameness
 - 10% for zinc sulphate for at least 2 minutes, depending on the product
 - Maximum of 3% formalin as a walk-through solution (can be painful on exposed lesions)
- Uses – lambs in spring, housed sheep if necessary
- **NOT EFFECTIVE** to treat footrot



This was reported to be the
footbath for a 600 ewe flock

The 5 Point Plan



Cull

- **Lame ewes spread infection to the rest of the flock**
- **Keep a record of lame sheep – ear tag, spray mark**
- **Cull:**
 - **Sheep treated for footrot more than once**
 - **Sheep with badly misshapen feet, including replacement lambs**
- **Do not breed from:**
 - **Lambs from ewes/rams repeatedly lame with footrot**
- **BE TOUGH – Two strikes and she is out!**

Avoid spread of Disease

- ⦿ Inspect, treat and separate lame sheep at housing
- ⦿ Improve underfoot conditions – clean bedding/lime
- ⦿ Footbath clean group if appropriate and facilities allow



Treat

- Disease spreads quickly
- Catch lame animals asap – even mild cases
- Focus on a minimum of 1/3 flock each day
- Inspect and Diagnose
- Treat appropriately
 - Footrot / Scald / CODD
 - Do not trim
 - Use appropriate antibiotic injection and spray
- Mark and record

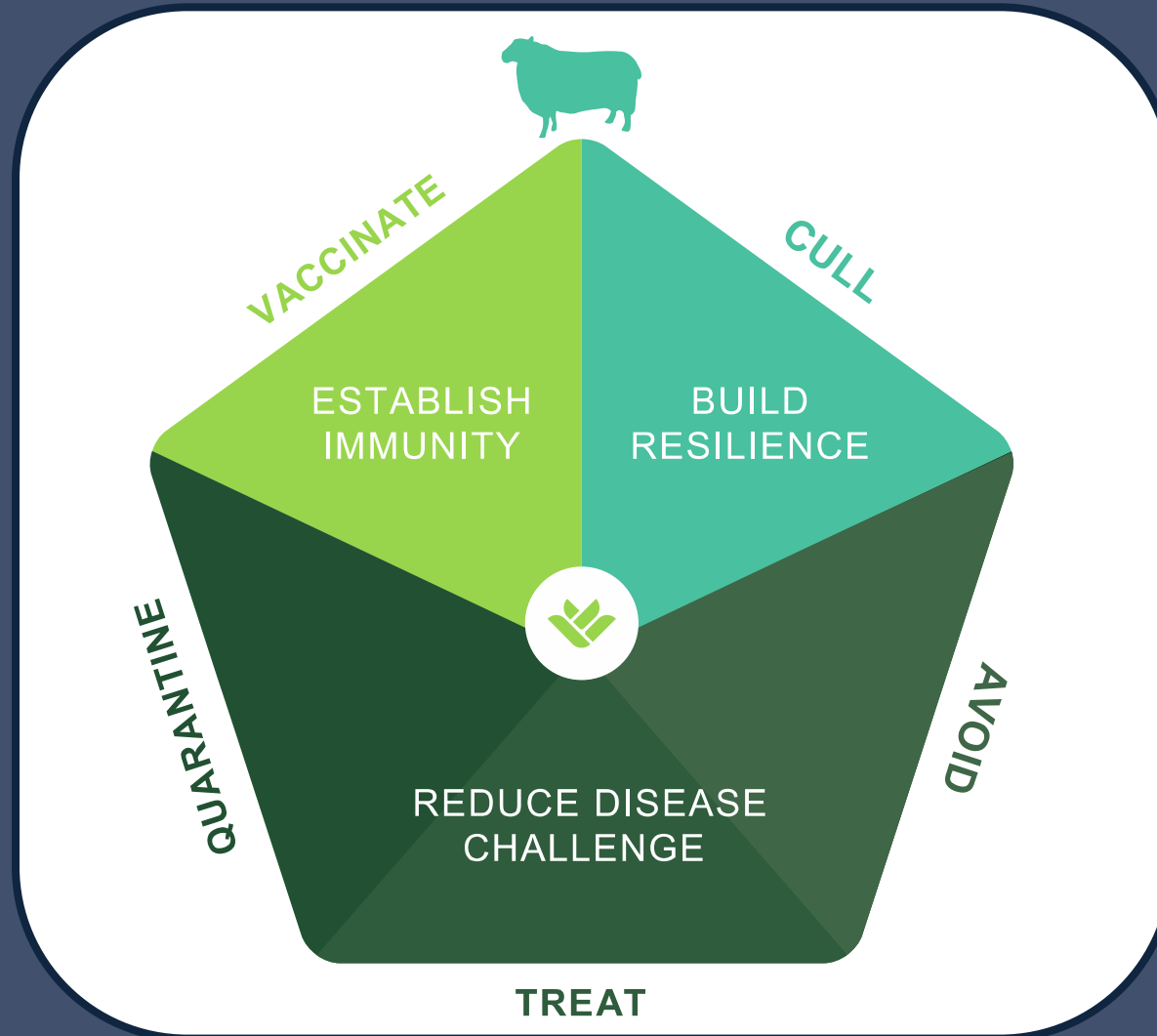
Quarantine

- ◉ Buy in from known source (ideally visit farm!)
 - Reject any lame sheep
 - Avoid CODD
 - Enquire about vaccination status and vendors lameness policy
- ◉ Quarantine returning/new sheep for >21 days
 - Inspect all feet and footbath / treat on arrival
 - During quarantine treat promptly if become lame
 - Consider vaccination in discussion with vet
 - Only add to flock once sure healthy

Vaccination

- Licensed vaccine available
- Timings should coincide with high risk periods
- Vaccine should be used as part of a 5 point plan
- Vaccinate whole flock (including rams)
 - Once / twice per year before expected peaks in footrot
- Care when using vaccine
 - Wear gloves and use a safety vaccinator, lumps at injection site can occur
- Discuss strategic use and timings with your vet

The 5 Point Plan



Respiratory Disease in Housed Sheep

- Pasteurellosis
- Mycoplamas
- Lungworm *
- Jaagsiekte



Pasteurellosis

- ◉ Pasteurella pneumonia (Mannhaemia Haemolytica)
- ◉ Pasteurella septicaemia (Pasteurella Trehalosi)
- ◉ Found in tonsils of healthy sheep
- ◉ Stressors/trigger factors cause bacteria to multiply up → clinical disease

Pasteurella Septicaemia

- Sudden death
- Horned hoggs away wintering on lowland farms or store lambs finished on lowland farms
- Trigger factors:
 - Transport
 - Change in plane of nutrition
 - Cold, wet weather



Pasteurella Pneumonia

- ◉ Dull, high temperature, breathing heavily and not eating. Watery discharge from eyes and nose. Stand back from group.
- ◉ Trigger factors:
 - PI3
 - Mycoplasma infection
 - Clipping, shearing, worming, housing



Treatment and Control

- Antibiotics and anti-inflammatories for treatment
- Preventive antibiotics in face of outbreak (septicaemias)
- Vaccination
- Ventilation in buildings
- Management of fluke, worms, trace elements etc

Vaccinations

- Heptavac P, Ovivac P, Ovipast Plus
- Contains most common strains
- Initial 2 doses 4-6 weeks apart from 3 weeks of age
- Annual
- Colostral protection passed to lambs for \approx 3 weeks
- Aid in the control of Pastuerellosis

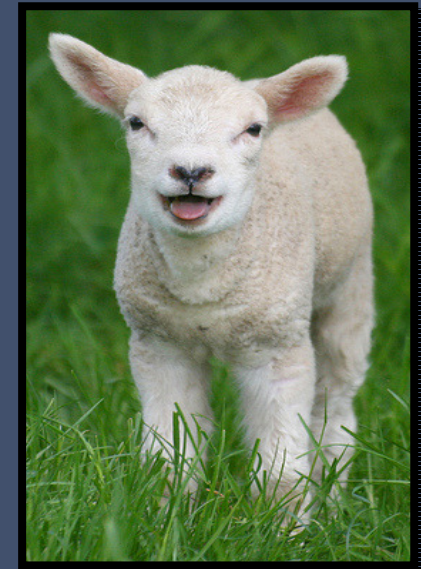
Ventilation in Buildings

- Maximise fresh air, avoid draughty buildings
- Reduce dust/ammonia levels in air
- Reduce bacterial/viral concentration in air
- Reduce air humidity
- Avoid over crowding (1.5m²/ewe)



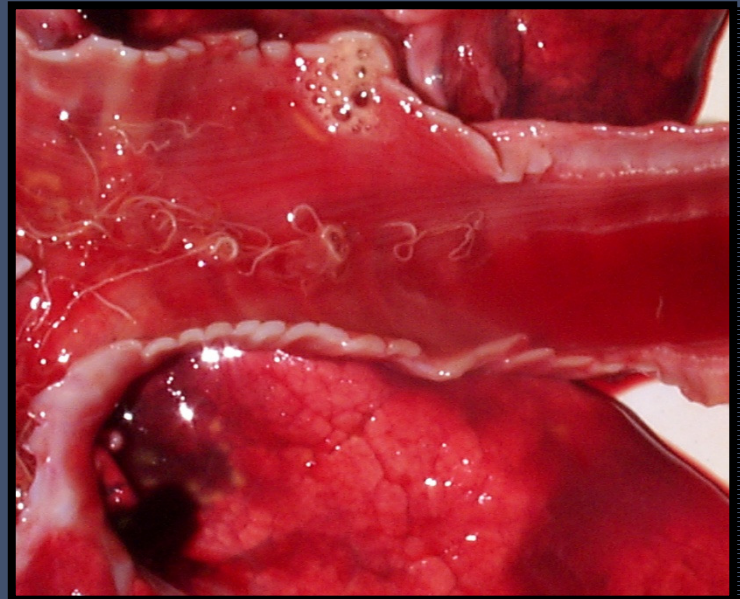
Mycoplasma Pneumonia

- ◉ Lambs less than 1 year old especially when housed
- ◉ Coughing, reduced growth rates, not ill
- ◉ Increased susceptibility to pasteurellas
- ◉ No vaccine – sensitive to antibiotics
- ◉ Avoid mixing with older sheep when housed



Lungworm*

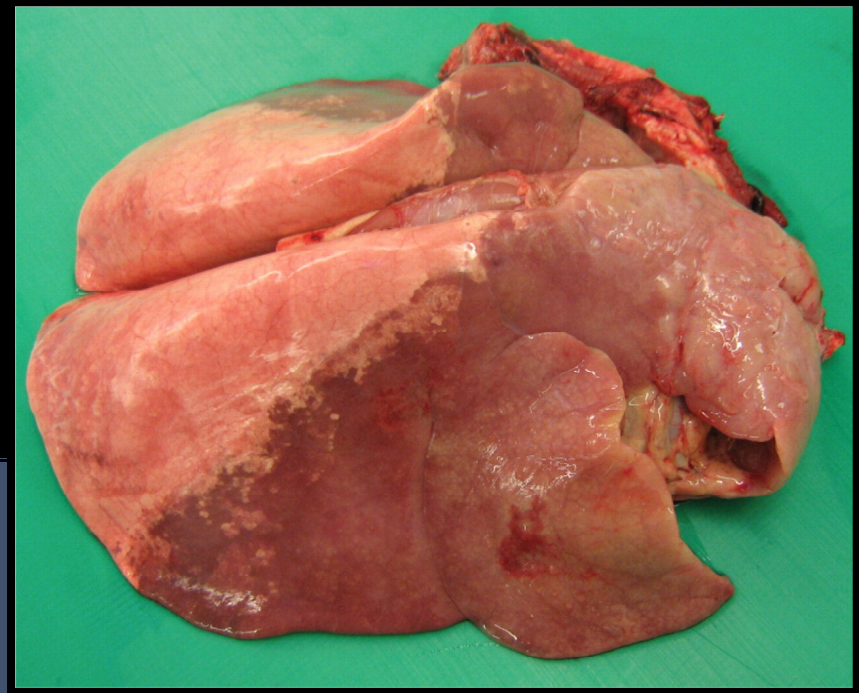
- Very rarely causes clinical disease in lambs or sheep
- All wormers effective against lungworm



Jaagsiekte

- Chronic viral disease of sheep
- Causes tumour development in lungs
- Incubation period 2-4 years
- Weight loss, progressive respiratory distress, excessive nasal discharge
- 11% Scottish flocks affected
- Can also cause sudden death
- 'Wheelbarrow' test

Jaagsiekte



Jaagsiekte Control

- ◉ Spread by nasal secretions
- ◉ Cull suspect cases
- ◉ Do not breed off offspring of suspect cases
- ◉ Minimise trough feeding, reduce housing period
- ◉ Separate age groups

Any Questions?



Shearwell Data Tags UK

