Herd Health Planning
Leptospirosis

Leptospirosis is an infectious and contagious bacterial disease of most farm animals and many wildlife species. Cattle, sheep and goats can get infected, but the disease is not normally obvious in sheep and they become carriers. Leptospirosis is a zoonoses, which may go unrecognised because of its flu-like symptoms, but occasionally causes fatal meningitis. *Leptospira hardjo* is the main cause of disease in cattle in Wales.

How does Leptospirosis affect cattle?

- One of the most common causes of reproductive losses
- Can cause an abortion rate of up to 30% during the final 1/3 of pregnancy
- May be responsible for stillbirths and high mortality among young calves.
- The first sign is often a drop in milk yield in infected cows. This can be accompanied by transient fever, blood-contaminated or mastitis-like changes in the milk and a sudden loss of all milk with flaccid udder (flabby bag).

How does Leptospirosis spread?

- By chronic carrier cows and sheep
- Shed via urine
- Shed in semen and can then pass to unborn calves.
- Via streams and other water sources from contaminated pasture.

Is Leptospirosis a problem in your herd?

- Is your herd is experiencing reproductive problems such as failure to conceive and abortions?
- Are calves being born sickly and weak?

Up to 30% of the animals may abort when herds become infected for the first time. Low pregnancy rates and high culling rates for fertility are also common when infection is first introduced to the herd, or when the infection becomes active and acute. In endemically infected herds the abortion rate may be around 5% and first service conception rates may fall to16-32%.

Replacement heifers, dry cows and animals which join the herd after infection are also susceptible. This means that abortions and infertility problems can go on for a long time causing major losses.

New infections are most likely to occur in replacement heifers. In beef suckler herds the majority of the replacement heifers are likely to been exposed to infection as calves and will have developed immunity so that problems with infertility, abortions etc are less likely to occur. However, a small proportion of heifers will not have been exposed to Leptspirosis at breeding age and subsequent infection causes abortion or embryo loss.

How do I control Leptospirosis or reduce the risk of infection?

- Operate a closed herd policy.
- Buy breeding stock from an accredited herd.
- Keep bought-in breeding animals in isolation until they have been tested. Discuss antibiotic treatment of any potential carrier animals with your vet.
- Restrict access to watercourses and wet areas
- Prevent nose-to-nose contact with neighbouring farms cattle or between separately managed groups.
- Limit contact between sheep and the breeding stock
- Test the stock bull to prevent transmission via semen.
- Discuss the merits of vaccination of your breeding stock with your vet.

Managing the risk of Leptospirosis

Lowest risk

1. Free from Leptospirosis and strict biosecurity to keep it out.
2. Leptospirosis in herd but test and removal of positive animals plus vaccination
3. Leptospirosis in herd but no testing and no vaccination
4. Free from Leptospirosis but poor biosecurity, mixed grazing with sheep, use of watercourses and regular purchase of animals of unknown leptospira status.

Highest risk

Caiff y Ganolfan Datblygu Cig Eidion a Defaid, a gaiff ei rhedeg gan Hybu Cig Cymru, ei reoli gan Lywodraeth Cynulliad Cymru fel rhan o Cyswllt Ffermio

The Beef and Sheep Development Centre, run by Hybu Cig Cymru, is managed by the Welsh Assembly Government as part of Farming Connect.

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Herd health planning – Leptospirosis decisions

Is there a problem? **Date:** _____

Results – this year	Number	Percentage Lepto positive	Target for next year
No. of abortions			
Weak and/or sickly calves			
Milk drop syndrome			
Blood tests - Lepto antibodies			
Tests on aborted foetuses			
Other signs of Leptospirosis			

Is any action planned? **Yes/No**

Vaccination		
Product Used	**Target groups**	**Dates**

Testing		
Dates	**Target groups**	**Results**

Biosecurity

Double fencing	Yes/No
Fence off common watercourses and marshy land	Yes/No
Avoid mixed grazing with sheep	Yes/No
Quarantine of purchased animals	Yes/No
Blood testing of purchased animals before mixing	Yes/No
Treatment of purchased animals before mixing	Yes/No
Treatment of stock bulls before breeding season	Yes/No

Purchase policy

Closed herd policy	Yes/No
Buy stock from Leptospirosis Accredited herds in CheCS Health Scheme	Yes/No
Find out health status of the herd of origin	Yes/No

Join accreditation programme **Yes/No**

Herd health planning Leptospirosis review date: _____