

# Agenda

- BVD
  - Investigate
  - Control
  - Monitor
- Lepto
  - Investigate?
  - Control
- IBR
  - Investigate
  - Control

# Remove the Source

- Bio-security or Shut the Gate
- Reduce infections/reservoir
  - BVD
    - Cull PIs
  - Lepto
    - Vaccinate young stock
    - Vaccinate carriers
  - IBR
    - Vaccinate carriers
    - Cull carriers?

# BVD- Investigate

- Bulk Tank
  - BVD Virus (PCR)
- Sentinel Animals
  - BVD Antibodies
- Blood sample herd (pooled samples)
  - BVD Virus (PCR)
- Ear notching
  - BVD Virus (PCR)

# BVD- Investigate

- Bulk Tank
  - BVD Virus (PCR) *Cheap*
- Sentinel Animals
  - BVD Antibodies *Cheap*
- Blood sample herd (pooled samples)
  - BVD Virus (PCR) *Expensive*
- Ear notching
  - BVD Virus (PCR) *Expensive*

# BVD-Control

- Remove all PI's
- Test all incoming animals
- Vaccinate
  - 4 weeks prior to breeding

# BVD-Monitoring

- Bulk Milk
  - Twice per year
    - When all cows calved
    - Before drying off
  - Only tests those animals that are being milked
- Blood sample Sentinel Animals
  - 5 (or 10%) of each group
  - Over 8 months
  - Test for Antibody NOT Virus

# Lepto- Investigate

- Bulk milk antibodies
- Abortion enquiries

# What action should be taken on basis of bulk milk lepto results?

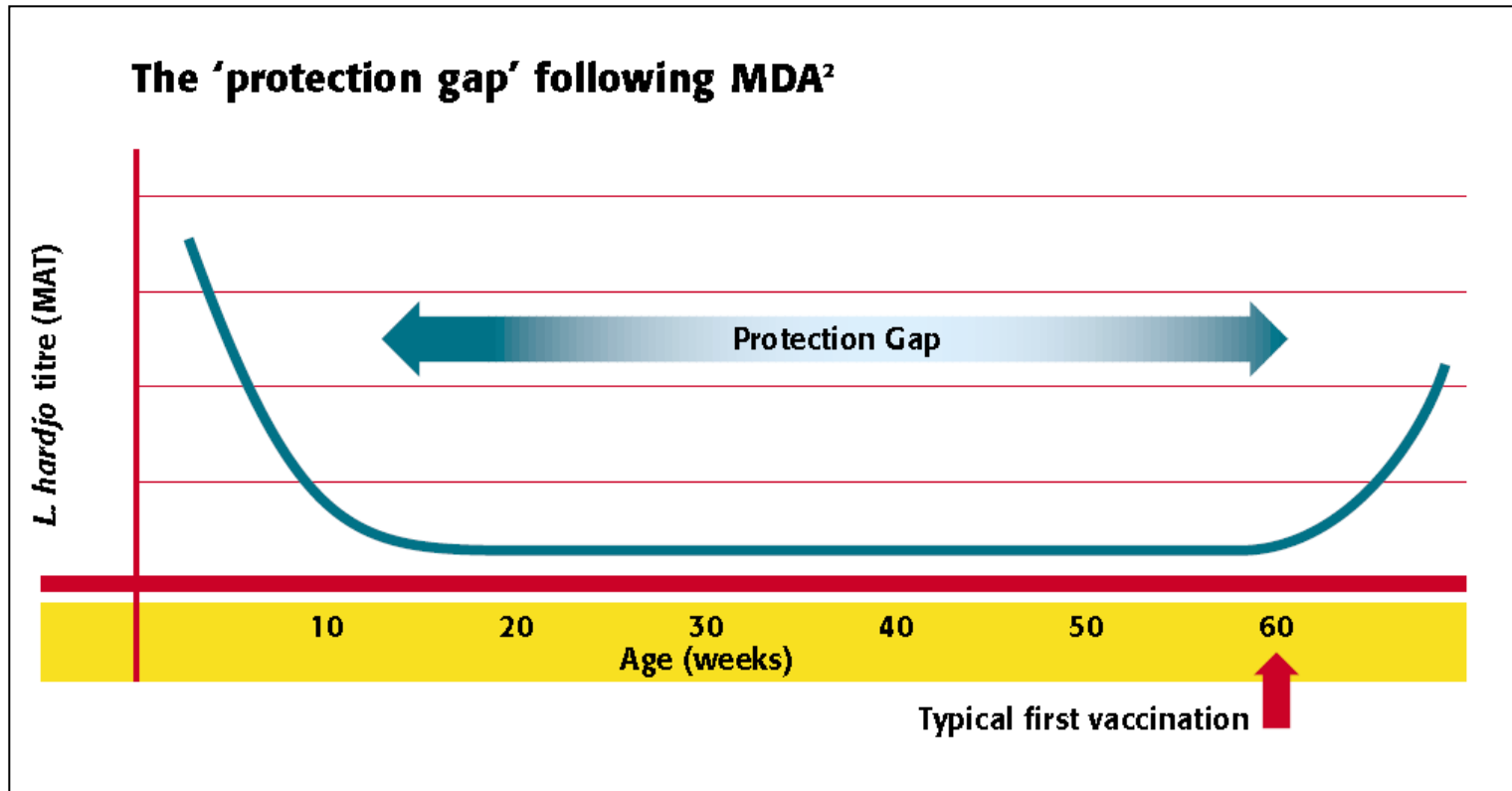
<b>Negative</b>	<ul style="list-style-type: none"><li>• <b>naïve herd</b></li><li>• <b>review risk factors- upgrade biosecurity</b></li><li>• <b>consider vaccination if in high risk area</b></li><li>• <b>monitor bulk milk every 3 mths</b></li></ul>
<b>Inconclusive</b>	<ul style="list-style-type: none"><li>• <b>Historical infection or cross reaction</b></li><li>• <b>As above/ retest in 2-3 wks</b></li></ul>
<b>Positive</b>	<ul style="list-style-type: none"><li>• <b>Infected herd</b></li><li>• <b>Vaccinate +/- treat with antibiotics</b></li><li>• <b>Be aware of zoonotic risk</b></li></ul>

# Lepto- Control

- Reduce reservoir
  - Sub clinical infection

But what age are cattle becoming  
infected?

# What age do calves become susceptible?



- 12 calves born to dams vaccinated late in pregnancy
- MDA was detected up to 13 weeks after birth → after this calves would be vulnerable to becoming infected

# Lepto- Control

- Reduce reservoir
  - Sub clinical infection
  - Waterways
- Reduce exposure
  - Shared bulls
  - Co grazing with sheep

# Bovine Leptospirosis – Zoonosis

- Flu like illness
- Severe  
headaches
- Depression
- (Meningitis)

# IBR- Investigate

- Bulk Tank
  - IBR antibodies
- Blood sample Sentinel Animals
  - Calves
  - Heifers
  - (Cows)
  - IBR antibodies

# IBR- Control

- Test all in coming animals
- Vaccinate
  - Clinical disease- Rispoval IBR Live
  - Latent infections-Rispoval IBR Inactivated







