National Compulsory BVD Eradication Programme

New legislation is on the way
It will be illegal to sell calves born after the 1st January 2013, unless tested negative for BVD

Testing of calves will be simple
Samples are taken using the official ID tag

The eradication programme will be short
For the vast majority of farmers, 3 years of tissue tagging followed by 3 years of monitoring

The cost of BVD is enormous
The estimated cost of the disease to Irish farmers is over €100 million per year

Eradication is achievable
Successful eradication programmes in other countries and the success of the voluntary programme in Ireland show that it can be done.
BVD- the disease

National BVD Eradication Information Night

November 2012

Damien Barrett MVB
Sligo Regional Veterinary Laboratory
BVD

- Bovine viral diarrhoea
Outcomes of infection

Infection

Acute (transient; TI)

Persistent; PI
How common is infection?

• Animal level
  – 70-80% adult animals have antibodies

• Herd level
  – More than 98% herds have evidence of exposure
What is the cost of disease?

<table>
<thead>
<tr>
<th>ANNUAL losses BVD</th>
<th>(€m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suckler</td>
<td>27</td>
</tr>
<tr>
<td>Dairy</td>
<td>55</td>
</tr>
<tr>
<td>Beef</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
</tr>
</tbody>
</table>
Acute infections - reproduction

BVD VIRUS → Transient Infection → NATURALLY IMMUNE

Insemination → Month 1 → Embryo Death

Period of Gestation → Month 2-4 → Persistent infection → Abortion

→ Month 5-9 → Deformities → Normal Calves

Calving
Acute (transient) Infection

• Frequent
• Virus-positive
  – 5-10 days
• Become antibody positive
  – Protective
  – (Lifelong)
• Reduced immunity
  – Calves
    • Scour
    • Pneumonia
PI animals

- Rare
- Normal or stunted
- Lifelong virus positive
  - High levels
  - Antibody negative (colostrum)
- Virus in all secretions/excretions
- Efficient transmitters
- Primary source of transient infections
- Mucosal disease/early death
BVDV in early pregnancy

Calf born persistently infected (PI)

Only dam becomes immune

Calf house

IMPACT ON CALVES

Cow and calf infected

Fatal mucosal disease

Calf born persistently infected (PI)
BVDV in early pregnancy

Cow and calf infected

Calf born persistently infected (PI)

Fatal Mucosal disease

IMPACT ON BREEDING
Risks of introduction

- **Purchase**
  - PI animal
  - Cow/heifer carrying a PI calf (Trojan)
  - (Transiently infected)
  - Borrowed bull

- **Address by:**
  - Closed herd
  - Buy test-negative stock
  - Isolate and test post-purchase
  - Don’t buy in-calf animals
    - Isolate until calf born/tested
Risks of introduction

• Contact with cattle from other herds
  – Boundaries
  – Co-grazing
  – Break-in/out
  – Shows, sales
  – Do not spread slurry from other farms

• Visitors
  – Clean protective clothing
  – Footbath
  – Minimize contact with stock

• Borrowed/shared equipment
  – Trailer
  – Nose tongs
  – Clean and disinfect before use