

# The Northern Ireland BVD Eradication Programme: A Review of Year One

## Context

Bovine Viral Diarrhoea (BVD) is the first disease to be addressed by Animal Health and Welfare NI (AHWNI), which is an initiative by farmers' organisations and the wider cattle industry to promote improved cattle health and welfare within Northern Ireland (NI).

BVD is a highly contagious viral disease of cattle. The programme is based on testing ear punch samples collected using tissue sample-enabled official identity tags for BVD virus and is designed to identify calves persistently infected (PI) with BVD virus as soon as possible after birth, to enable their rapid culling. Where PI calves are detected in a herd, further testing is required to identify any other PI cattle that may be present and to prevent spread of infection through trade. Identification and removal of PI cattle is the key to control.

## Year One Results

### Programme Uptake

During the first year of the compulsory programme, 12,599 herds joined the scheme, leading to a total of 18,091 herds in the Scheme. Programme herds ordered 667,043 tissue tags, sufficient to tag and test the whole of the calf crop. Of the participating herds, 19% were classified as dairy, 52% as beef and 29% as dual purpose herds.

### Reporting of results and access to herd data

All testing laboratories transfer results to the programme database, developed on behalf of AHWNI by AFBI. The database reports results daily on the web service (which can be logged onto at [www.animalhealthni.com](http://www.animalhealthni.com) using government gateway details) and also sends them to herd owners' mobile telephones. Letters are issued for non-negative results. Negative letters were issued up to 31 December 2016; negative declaration letters can be printed off the database directly by herd owners.

In addition, results are sent to the herd's veterinary practitioner where the necessary permission has been granted. All farmers are encouraged to provide a mobile phone number and to nominate a veterinary surgeon by contacting AHWNI.

## Results of testing

### Animal level

- Overall, 0.68% of all tests during the first 12 months of the programme were positive, relating to approximately 3,500 animals.
- There were 517,819 tests uploaded to the database, with laboratory turnaround times of 97.81% within 7 working days and 98.76% within 10 working days (target levels are 95% and 99% respectively).
- A Direct Negative status was returned for 511,735 tests and approximately 300,000 animals received an Indirect Negative status (that is, dams of negative calves).
- Of those animals with initial test positive results that were retested (2,325), 87.4% had a positive result on retest, 0.2% had an inconclusive result on retest and 12.4% had a negative result on retest. These results indicate that almost 9 in every 10 calves retested will be Persistently Infected with the BVD virus.

### **Herd level**

- Overall, approximately 11% of testing herds had one or more positive results. Analysis has shown that the likelihood of herds having positive results can be correlated with herd size irrespective of herd type. Thus only 5.0% of herds with 10 or fewer females were positive, whereas 38.4% of herds with over 250 females were positive. Reflecting their tendency to be larger, 18.8% of dairy herds tested positive compared with 9.3% and 10.8% of beef and dual purpose herds respectively.
- The number of PI animals detected in positive herds is typically small, with a single PI being detected in 71% of positive herds while 96% contained four or fewer positives.

### **Challenges**

The main challenges over the next year are to:

- (i) Maintain farmer interest and compliance with the programme
- (ii) Deter retention of PIs and maximise the number of PI animals that are culled
- (iii) Engage farmers and PVPs in epidemiological investigations
- (iv) Work with DAERA to deliver necessary legislative and IT changes
- (v) Build on the consensus that exists to develop the programme.

### **Programme Developments**

- DAERA, laboratories and tag suppliers are issued with monthly updates, highlighting key current issues.
- AHWNI has commenced the issue of reminder letters to herd owners with untested animals.
- An enforcement initiative by DAERA has raised the profile of the disease and subsequent communications have helped to increase farmer awareness of scheme requirements.
- On 1<sup>st</sup> February 2017, a financial incentivisation scheme was introduced to encourage the removal of PI calves.

### **Programme Technical Support and Oversight**

The technical aspects of the AHWNI programme are designed by the all-island BVD Technical Working Group (TWG). The TWG comprises experts in BVD and experienced veterinary practitioners and is tasked with drawing up factual resources, the development of decision-making tools, and the identification of areas for further research and development. The implementation and monitoring of the BVD programme is overseen by the NI BVD Implementation Group which comprises representatives from across the NI Agri-Food industry.

### **Key objectives for Year Two of the programme**

A key aim is to reduce the extent to which PI animals are retained on farm. It is anticipated that the exceptional aid programme will facilitate this. AHWNI, in partnership with industry and DAERA, will continue to look at additional mechanisms to facilitate the timely destruction of PI calves.

### **Review of comparable regional programme**

The NI figures are in line with expectations, being similar to those generated by the testing of over 2.1 million calves in the first year of the ROI's compulsory programme (2013). At that stage of their programme, approximately 11% of testing herds had a positive result and the positive test rate was 0.77%.

The prevalence of BVD has dropped significantly in the ROI since 2013. During 2016, approximately 2.3 million calves were tested revealing a disease prevalence of 0.17% and a herd level prevalence of 3.2%. Of the 83,000 breeding herds, 65,000 now have a Negative Herd Status for BVD.

### **Conclusions**

Farmer compliance with the programme has been excellent overall. During the year, all stakeholders have worked well together to achieve the progress that has been made, with good co-operation from all parties and broad consensus on the strategy being used, with the focus remaining firmly on BVD eradication.