

INTRODUCTION TO THE GB CATTLE REPORT

This cattle surveillance report has been made possible through a partnership between Defra, the Scottish Government, the Veterinary Laboratories Agency (VLA) and Scottish Agricultural Colleges Veterinary Services (SAC VS).

A key objective for any cattle disease scanning surveillance system is to increase the likelihood of early detection of important changes in cattle health. Any major disease occurrence, such as the BSE epidemic, or an FMD outbreak, can have a major impact either by threatening public health and/or animal welfare, or through its economic impact on the agricultural industry and ancillary related industries like tourism across the whole of GB. The possibility of the incursion of exotic diseases, the emergence of a new disease, or changes in known diseases are all risks which scanning surveillance seeks to mitigate. Until now, the surveillance networks north and south of the Scottish border have reported their findings separately, which reduced the likelihood of early detection of important changes in health in this single epidemiological population. The newly unified GB-wide data resource, coupled with new collaborative analytical processes should make detection of all these scenarios both easier and quicker.

The network of 14 VLA Regional Laboratories (RLs) and two Surveillance Centres (at Veterinary Schools) in England and Wales and 8 SAC VS Disease Surveillance Centres in Scotland provides a diagnostic service to private veterinary practitioners across GB. Clinical scanning surveillance information derived from diagnostic samples and carcasses is collected and analysed to determine baseline disease levels in the cattle population. The aim is to provide an assessment of the current disease status of the GB cattle population and to warn of potential risks from changing disease trends or new diseases and of zoonotic diseases of human health significance.

Since 1975, diagnostic data from both the VLA and SAC has been merged in the veterinary investigation diagnosis analysis (VIDA) database. This database has been an invaluable source of epidemiological trends for over 30 years, but was limited in the range of data recorded and the analyses available. In 1998, the VLA started to produce a more detailed dataset within FarmFile - a powerful database, linked to the VIDA database, containing a greater amount of descriptive epidemiological data on all submissions and incorporating analysis tools used for disease surveillance purposes. These tools provide automated statistical analysis and built-in "alerters" which highlight statistically significant, and therefore potentially clinically significant, changes in diseases diagnosis and trends enabling more extensive analysis of data for England and Wales from 1999 onwards.

The harmonisation project was initiated in 2006 to allow the extension of FarmFile analysis to cover Scotland as well. This involved the development of a single, standardised data collection system; consistent diagnostic criteria and harmonised recording, which enables the collation of the disease surveillance data from all three countries. This has been achieved by collaboration between staff and disease consultants at the VLA and SAC VS, funded by Defra and the Scottish Government.

Detailed surveillance data from laboratory submissions for all three countries can now be collated, providing a far greater amount of data for analysis and interpretation by disease consultants at a GB level, resulting in improved disease understanding and efficient use of relevant expertise. This should enable action to be taken and resources to be appropriately targeted at an earlier stage than was previously possible, as the dataset is now much more extensive and drawn from the whole cattle population of GB.