Veterinary Investigation
Surveillance Report
2015
and 2008 - 2015

A tabulated summary of diagnoses
recorded at APHA Veterinary Investigation Centres
in England and Wales & Disease Surveillance Centres
in Scotland
## GLOSSARY

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td>Ad-hoc retrieval</td>
<td>Specific request for information from the VIDA database available from DoES, APHA Weybridge.</td>
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<td>APHA</td>
<td>Animal and Plant Health Agency (formerly APHA).</td>
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<td>DEFRA</td>
<td>Department for Environment, Food and Rural Affairs.</td>
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<td>Diagnostic submission</td>
<td>A submission for which a diagnosis is applicable (see ‘Bias in VIDA, p.1).</td>
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<td>DoES</td>
<td>Department of Epidemiological Sciences (formerly ESRG).</td>
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<td>DSC</td>
<td>Disease Surveillance Centre of Scotland's Rural College (SRUC) Veterinary Science Division.</td>
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<td>Incident</td>
<td>First diagnosis of a disease from a submission.</td>
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<tr>
<td>NR</td>
<td>Not recorded.</td>
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<tr>
<td>PRRS</td>
<td>Porcine reproductive and respiratory syndrome.</td>
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<td>Specimen</td>
<td>Material of one type, from one animal or a group of animals, or material from the environment of one animal or a group of animals. For example: blood, faeces, milk or a complete carcase or a bag containing hatchery debris.</td>
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SRUC  Scotland’s Rural College (formerly SAC).

Submission  This consists of only ONE SPECIMEN TYPE (except fetal diagnostic material) but may be more than one specimen.

TSE  Transmissible spongiform encephalopathy.

VIC  Veterinary Investigation Centre of APHA (formerly Regional Laboratory)

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INTRODUCTION

Source of Data
The Veterinary Investigation Diagnosis Analysis database - VIDA - contains a record of every submission made to the Veterinary Investigation Centres of the Animal and Plant Health Agency (APHA) and to Scotland’s Rural College (SRUC) in Great Britain and has been operating since 1975. In England and Wales during 2015 there were eight such centres that formed part of the veterinary surveillance teams of the Animal and Plant Health Agency; in Scotland there were eight centres, administered by Scotland’s Rural College. The total number of submissions received in 2015 was 68,571 of which 35,898 were received for diagnostic purposes (which is a decline of 11.5% and 17.9% respectively). This includes the total number of diagnoses listed in the tables plus submissions for which no diagnosis code was recorded. It should be noted that a submission could have more than one diagnosis. As well as the production of this booklet, VIDA is also used for ad hoc investigations; for further information please see the Tabulated Data section of this report.

Bias in VIDA
Total numbers of submissions recorded by VIDA represent only the material submitted for investigation to APHA Veterinary Investigation Centres and SRUC centres. This bias is influenced by many factors including, for example, the particular clinical presentation of a suspected disease, the level of awareness of a disease and its perceived importance, the value of the animal or animals affected, and the general economic climate. Particular diagnoses may be affected by improved scientific methods, and knowledge of this may also affect rates of submission; these factors will usually vary differentially with time. This
bias should be considered when interpreting both individual figures, and apparent trends, from VIDA data.

VIDA diagnosis totals are intended to represent only cases of clinical disease, hence the necessity for the categories “DIAGNOSIS NOT APPLICABLE” (code 991) and “SCREENING – No clinical problem” (code 980). Included under these are the results of, for example, samples sent to APHA Veterinary Investigation Centres for non-diagnostic testing, plus results of tests performed by one APHA Veterinary Investigation Centre (VIC) on behalf of another (often because of specialist facilities), when the diagnosis will be recorded by the APHA VIC to which the sample was originally submitted. When examining annual diagnosis figures for a particular disease, it is therefore advisable to relate them not just to the total diagnoses in that year and class, but also to exclude submissions where the diagnosis is 'not applicable' and those for “screening – no clinical problem” before comparing one year with another. Total submissions excluding ‘not applicable’ and ‘screening’ are referred to as ‘diagnostic submissions’ (see Table 1).
LIVESTOCK POPULATION TRENDS IN 2015

Changes in the total number of animals in each category of livestock may affect the overall disease situation, and thus the totals recorded in this publication. A summary is therefore given below.

The 2015 livestock data is taken from the June Agricultural Census figures (Defra statistics 2016) for Great Britain. In editions of this publication prior to 1997 the livestock figures published were taken from the December agricultural census and covered the United Kingdom. Because of this difference, the livestock data presented in this and future editions of the VIDA booklet cannot be directly compared to that in editions of the book before 1997. These data are provisional.

Livestock population

Cattle
There was a slight increase in the total cattle population, including calves, in Great Britain in 2015 (8.3 million animals) compared to 2014 (8.27 million animals).

Sheep
The total sheep population, including lambs, decreased by 1.6% in 2015 compared with 2014; there are now approximately 31.3 million animals recorded in Great Britain.

Goats
The total goat population in Great Britain remained stable in 2015 (96,916 animals) compared to 2014 (96,861) animals.
**Pigs**
There was a slight fall (2.3%) in the total GB pig population in 2015 compared with 2014 and there are now just under 4.2 million animals.

**Poultry**
Compared with 2014, the total number of poultry (chickens, turkey, ducks, geese and game birds) in Great Britain decreased by 2.0% in 2015 to just over 146.3 million birds. The total number of chickens (layers, broilers, other table fowl and breeding fowls) also decreased (by 2.2%) compared with 2014, and is now just under 135.8 million birds.
DISEASE TRENDS IN 2015

Veterinary comment on trends in VIDA diagnostic data can be found in the reports of the APHA Species Expert Groups: https://www.gov.uk/government/collections/animal-disease-surveillance-reports

There are reports for cattle, small ruminants (sheep & goats), pigs, birds (poultry & game birds), miscellaneous & exotic farmed species and wildlife. The species Expert Groups are made up of specialist APHA vets and scientists who have expertise in a particular species together with colleagues from the Scottish Rural College Veterinary Science Division and veterinary surgeons from the specialist BVA Divisions. These Groups take the lead in the investigation of new & emerging diseases identified by APHA scanning surveillance activities.
CATTLE

Fig 2: Total cattle submissions in GB 2008 - 2015

Fig 3: Diagnosis of bovine fetopathy in 2015 (excluding “fetopathy diagnosis not reached”) as a percentage of all bovine fetopathy diagnoses (n=560)
Fig 4: All incidents of salmonellosis other than fetopathy in cattle 2008 - 2015

Fig 5: All incidents of fasciolosis in cattle in 2008 - 2015
Fig 8: All incidents of mastitis in cattle in Great Britain as a percentage of total mastitis diagnoses in 2015 (n=885)

- **E. coli**: 19%
- **Str. uberis**: 19%
- **Str. dysgalactiae**: 6%
- **Tr. pyogenes**: 3%
- **Staph. aureus**: 11%
- **No microbial growth**: 5.9%
- **Findings suggestive of sample contamination**: 15.6%
- **Two organisms isolated, no other code applicable**: 1.7%

Other 16.6%
SMALL RUMINANTS

Fig 9: VIDA sheep diagnostic submissions vs total GB sheep population 2008 - 2015

Fig 10: All incidents of fasciolosis in sheep in 2008 - 2015
Fig 11: All incidents of PGE - including haemorrhage, nematodiriasis and not otherwise specified in sheep 2013 - 2015

Fig 12: Goat diagnostic submissions vs total goat population in Great Britain 2008 - 2015
Fig 14: VIDA diagnostic pig submissions 2008 - 2015

Fig 15: All incidents of Salmonella Typhimurium (including monophasic strains) and Salmonella Choleraesuis in pigs 2008 - 2015
BIRDS

Fig 16: Total bird submissions in GB 2008 - 2015

Fig 17: All incidents in birds in Great Britain as a percentage of diagnostic bird submissions 2010 - 2015
TABULATED DATA

As well as the information published in the annual VIDA book, there is a customised data retrieval service from the extensive VIDA database. Information can be retrieved for any number of years from 1975 to the current year, for cattle, sheep, pigs, birds, goats, horses, rabbits, fish, dogs and cats, and since 1990 for deer and badgers. Birds can be classified into a large number of different categories. Other variables include age, diagnosis from a specific sample type, and county of origin.

Further details of customised ad hoc retrievals, including a cost quotation are available from:

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