



Porcine Reproductive and Respiratory Syndrome (PRRS)

Background

Porcine Reproductive and Respiratory Syndrome (PRRS), also known as blue ear disease, is caused by an RNA virus in the arterivirus family. Pigs, both domestic and wild, are the only species known to be susceptible to the disease. There are two forms of the disease, a reproductive form and a respiratory form. Reproductive signs include stillbirths, mummification, abortions, lower farrowing rates and litters of piglets which are weak at birth. The respiratory disease can be severe and can cause high death rates. PRRS does not affect humans. A number of positive cases have been detected in Ireland from 2016 to 2020.

Surveillance design

Ireland takes account of articles 15.3.13 to 5.3.16 in the OIE animal health code in carrying out surveillance for PRRS in pigs.

A substantial number of samples is tested each year by the Department of Agriculture, Food and the Marine (DAFM) at its virology laboratory in Backweston. Samples tested include submissions from sick pigs which may be suspected of having PRRS, samples related to trade (import or export) and samples which are required to be tested prior to the export of semen from stud pigs.

Laboratory surveillance for PRRS

| Year | Test | Total | Positive | Negative | Inconclusive |
|------|------------|-------|----------|----------|--------------|
| 2016 | PRRS ELISA | 1,809 | 303 | 1,506 | nil |
| 2016 | PRRS PCR | 2,060 | 149 | 1,901 | 10 |
| 2017 | PRRS ELISA | 814 | 141 | 673 | nil |
| 2017 | PRRS PCR | 1,534 | 65 | 1,469 | nil |
| 2018 | PRRS ELISA | 943 | 168 | 775 | n/a |
| 2018 | PRRS PCR | 1683 | 18 | 1662 | 3 |
| 2019 | PRRS ELISA | 564 | 89 | 475 | n/a |
| 2019 | PRRS PCR | 1745 | 49 | 1691 | 5 |
| 2020 | PRRS ELISA | 721 | 51 | 670 | n/a |
| 2020 | PRRS PCR | 1848 | 28 | 1817 | 3 |



Disease reporting

It should be noted that the laboratory based surveillance outlined above is supplementary to the disease reporting system which Ireland regards as a central component in detecting incursions of exotic disease.

PRRS is a notifiable disease in Ireland, meaning that anyone who suspects that an animal or animal product is affected by the disease is legally obliged to notify DAFM.

Farmers are encouraged to report suspicions of PRRS to their local Regional Veterinary Office, and to make use of their local Regional Veterinary Laboratory to aid with diagnosis of disease conditions.