



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 2022.

Surveillance design

Ireland takes account of articles 15.3.13 to 5.3.16 in the WOH (formerly 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



2021	PRRS ELISA	524	51	473	0
2021	PRRS PCR	1806	27	1773	6
2022	PRRS ELISA	464	37	427	0
2022	PRRS PCR	1902	76	1818	8
2023 (up to 23 November)	PRRS ELISA	370	15	335	0
2023 (up to 23 November)	PRRS PCR	1533	40	1481	12

Please note many animals are tested more than once, some test results are associated with more than one animal, and large submissions can skew summary insights. Results are not part of a formal, standardised surveillance system, so provide a rough snapshot only- they are not representative of the national herd.

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.