

## Brucella melitensis

## **Background**

Brucellosis caused by *Brucella melitensis* is an infectious disease which primarily affects goats and sheep. It can cause abortions in females and infertility in males. The disease can also affect humans. Human infections can be contracted through contact with infected animals or their body fluids, or through consumption of uncooked meat and raw dairy products. Symptoms in humans include fever, headaches and aches and pains in the back and other body parts. *Brucella melitensis* has never been reported in Ireland.

## **Legislative basis**

Surveillance is carried out in accordance with Article 8.4.6 of the OIE Terrestrial Animal Health Code. A herd level design prevalence of 0.2% is used, and the prior confidence of freedom (based on the previous year's results) is taken into account when assessing the overall confidence of freedom following the testing of the current year's samples. Through its *B. melitensis* testing programme, Ireland demonstrates freedom from the disease each year.

## **Active surveillance**

The majority of animals sampled for this programme are ovine. The table below shows the number of ovine samples tested yearly for *B. melitensis* in recent years. For 2019, the ovine samples were collected on farm in 378 different flocks. A smaller number of samples from goats are also tested annually. In 2019, 130 samples from 9 different goat herds were tested, and all produced negative results.

Year	Ovine Samples Tested for B. melitensis	Positives	Negatives
2014	7,750	0	7,750
2015	6,546	0	6,546
2016	7,268	0	7,268
2017	7,448	0	7,448
2018	7,544	0	7,544
2019	7,500	0	7,500

An Roinn Talmhaíochta, Bia agus Mara Department of Agriculture, Food and the Marine

Passive surveillance

It should be noted that the active surveillance outlined above is supplementary to the passive surveillance

which Ireland regards as its mainstay in detecting incursions of exotic disease.

Brucellosis is a notifiable disease in Ireland, meaning that anyone who suspects that a ruminant or swine

may have the disease is legally obliged to notify DAFM.

Beyond disease reporting, DAFM operates a network of regional veterinary laboratories, strategically

located around the country. Farmers and private veterinary practitioners (PVPs) submit large numbers of

samples, including aborted foetuses, to the laboratories every week, and therefore DAFM can be confident

that in the event that disease reporting was not effective in detecting an incursion of brucellosis, then

laboratory-based passive surveillance would achieve this result instead.

Farmers are encouraged to have their PVP examine and test sheep and goats which have aborted, to report

suspicions of brucellosis in either species to their local Regional Veterinary Office, and to make use of their

local Regional Veterinary Laboratory to aid with diagnosis of disease conditions.

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