



Bovine Genital Campylobacteriosis

The Disease

Bovine genital campylobacteriosis is caused by *Campylobacter fetus ssp venerealis*. Infection with this organism can result in decreased fertility, early embryonic death and less frequently, midterm abortions. Bovine genital campylobacteriosis can cause substantial economic losses and is both OIE listed and notifiable in Ireland.

Legislative Background and Testing Protocol

The basis of the active surveillance carried out in Ireland is Directive 88/407/EEC, which sets out certain standards for animals used for semen collection in AI stations.

Under this directive, bovine animals must spend 28 days in approved quarantine accommodation prior to entry to the AI station. During the quarantine period, at least 3 tests for *Campylobacter fetus spp.* are performed at weekly intervals on a preputial specimen (sheath washing). Animals less than 6 months of age or those which have been kept in single sex groups from six months of age only require a single test during the quarantine period.

Apart from pre-entry test requirements, bovine animals in approved AI centres and pedigree bull centres in Ireland also undergo routine health tests. These tests must be carried out at least once a year, but it is common practice for the tests to be carried out more often than this. As one component of the yearly testing, bulls in production (or having contact with animals that are in production) must be tested for *Campylobacter fetus*.

If bulls are in a period of rest (i.e. lay off) they must be tested for *Campylobacter fetus* no more than 30 days before resuming production. This situation only occurs where the layoff is within the centre (or is itself an approved centre), otherwise the full rigors of the entry conditions into a centre (quarantine period and associated tests) apply.

In the event of a positive test result, a bull would have to be removed from the station, as affected bulls are not suitable as donors and cannot remain in approved centres.



Summary of Test Results for Recent Years

Year	Number of samples tested	Positive samples
2017	611	0
2018	726	0
2019	559	0

Passive Surveillance

It should be noted that the active surveillance outlined above is primarily aimed at facilitating trade in semen from Irish bulls and is supplementary to the passive surveillance which Ireland regards as its mainstay in detecting notifiable diseases.

Bovine genital campylobacteriosis is a notifiable disease in Ireland, meaning that anyone who suspects that an animal 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 from sick animals to the laboratories every week. It is anticipated that any substantial increase in the prevalence of bovine genital campylobacteriosis in Ireland would be detected through this laboratory based passive surveillance system.

Farmers are encouraged to report suspicions of bovine genital campylobacteriosis to their local Regional Veterinary office, and to make use of their local Regional Veterinary Laboratory to aid with diagnosis of disease conditions.

Thanks to Limerick Regional Veterinary Laboratory for providing the relevant testing results data.

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