

## Poultry Mycoplasma Surveillance:

## **Background**

The Poultry Health Programme operated by DAFM includes surveillance for poultry mycoplasmosis. Mycoplasmas in poultry, whilst of no public health concern, can present significant problems both commercially and potentially for bird welfare. Three important serotypes of mycoplasmas which can infect poultry worldwide are as follows:

**Mycoplasma Gallisepticum (MG):** This mycoplasma is associated with a chronic respiratory disease. Typically, it is slow in onset and can result in significant commercial losses in production. This mycoplasma can infect chickens, turkeys and game birds. Ducks and geese can also become infected particularly when associated with infected chickens.

**Mycoplasma Meleagridis (MM):** With this mycoplasma vertical transmission in the egg can be a significant factor. It is a disease of breeding turkeys with clinical disease possible in the progeny chicks. Again, respiratory symptoms are the main cause of economic loss.

## Active surveillance- DAFM's Poultry Health Programme

The DAFM Poultry Health Programme seeks to provide a surveillance platform for MG and MM. As part of this programme all trading and non-trading breeding flocks and traded commercial flocks of both turkeys and chickens are routinely sampled and tested. The plan for each poultry subgroup varies but typically flocks are subject to serological testing for these mycoplasmas at the following stages of production:

- Pre movement tests (From rearing)- Export
- Point of lay
- During production

The frequency of sampling is set out in the 'COMMISSION DELEGATED REGULATION (EU) 2019/2035 supplementing Regulation (EU) 2016/429 of the European Parliament and of the Council as regards rules for establishments keeping terrestrial animals and hatcheries, and the traceability of certain kept terrestrial animals and hatching eggs' replacing the previous Directive 2009/158, and the 'EU commission Decision



2011/214/EU'. The sample size is based on a representative sampling strategy: 60 birds per house in houses of 1000 birds or more, with design prevalence of 5%.

The following number of serum samples was processed in CVRL relating to the two serotypes of Mycoplasma as part of DAFM official sampling:

Summary of DAFM Serological Sampling				
Year	TEST	No. of samples tested	Positive	
2015	Mycoplasma Gallisepticum (MG)	36,473	0	
	Mycoplasma Meleagridis (MM)	2,099	0	
2016	Mycoplasma Gallisepticum (MG)	38,766	43	
	Mycoplasma Meleagridis (MM)	2,226	0	
2017	Mycoplasma Gallisepticum (MG)	33,863	0	
	Mycoplasma Meleagridis (MM)	1,731	0	
2018	Mycoplasma Gallisepticum (MG)	30,620	0	
	Mycoplasma Meleagridis (MM)	1,730	0	
2019	Mycoplasma Gallisepticum (MG)	31,124	0	
	Mycoplasma Meleagridis (MM)	1,899	0	
2020	Mycoplasma Gallisepticum (MG)	24,601	0	
	Mycoplasma Meleagridis (MM)	1,301	0	
2021	Mycoplasma Gallisepticum (MG)	25955	0	
	Mycoplasma Meleagridis (MM)	1630	0	
2022	Mycoplasma Gallisepticum (MG)	29484	0	
	Mycoplasma Meleagridis (MM)	1685	0	



Up to Nov 2023	Mycoplasma Gallisepticum (MG)	22953	0
	Mycoplasma Meleagridis (MM)	1653	0

## **Passive surveillance**

The active surveillance outlined above is supplementary to the passive surveillance and diagnostics, which Ireland regards as its mainstay in detecting incursions of exotic disease. This passive surveillance includes M. Gallisepticum and M. Meleagridis testing in samples submitted by PVPs from both, commercial and backyard flocks.

Mycoplasmosis 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.

Farmers are encouraged to report suspicions of mycoplasmosis 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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