

Mycoplasma gallisepticum (Infectious Sinusitis)



Mycoplasma gallisepticum (MG) is a bacterium belonging to the class Mollicutes and the family Mycoplasmataceae. It is the causative agent of chronic respiratory disease (CRD) in chickens and infectious sinusitis in turkeys, chickens, game birds, pigeons, and passerine birds of all ages.

M. gallisepticum causes respiratory infection in turkeys which can induce sinusitis, pneumonia, and airsacculitis. With infectious sinusitis, the birds have symptoms of coughing, swollen sinuses, nasal and ocular discharge, tracheal rales, labored breathing, impaired vision, depression and weight loss. The disease can even cause death and found to especially occur if combined with *E. coli*. Outbreaks in turkeys occur at an early age usually between 8 and 15 weeks.

With breeding females, there could be a decline in egg production.

M. gallisepticum can be transmitted within some poultry eggs, which can come from infected breeders to progeny. Also, *M. gallisepticum* can be transmitted via infectious aerosols and through contamination of feed, water, and environment as well as human activity which can come from equipment and shoes. When birds are stressed transmission can occur more rapidly through aerosols and respiratory which spread through the flock. When they are in a flock, transmission occurs by direct and indirect contact from the movement of the birds, people and fomites from infected species. With many outbreaks, the source of the infection in the flock is unknown.



Treatment

Antibiotics may reduce clinical signs and vertical transmission but do not eliminate infection. Most strains of *M. gallisepticum* are sensitive to a number of broad-spectrum antibiotics, including tylosin, tetracyclines, and others but not to penicillins or those that act on the cell wall. Tylosin or tetracyclines have been commonly used to reduce egg transmission or as prophylactic treatment to prevent respiratory disease in broilers and turkeys.

Medication is not a good longterm control method but has been of value in treating individual infected flocks.

Control requires good biosecurity, and prevention is typically through sourcing chicks or poults from *M. gallisepticum*-free breeder flocks.

References

<https://www.merckvetmanual.com/poultry/mycoplasmosis/mycoplasma-gallisepticum-infection-in-poultry>

https://en.wikipedia.org/wiki/Mycoplasma_gallisepticum#:~:text=Turkeys,vision%2C%20depression%20and%20weight%20loss.

