

# Avian Botulism

## What is avian botulism?

Avian (bird) botulism is a disease that causes progressive weakness, paralysis and eventually death in waterbirds.

## What causes avian botulism?

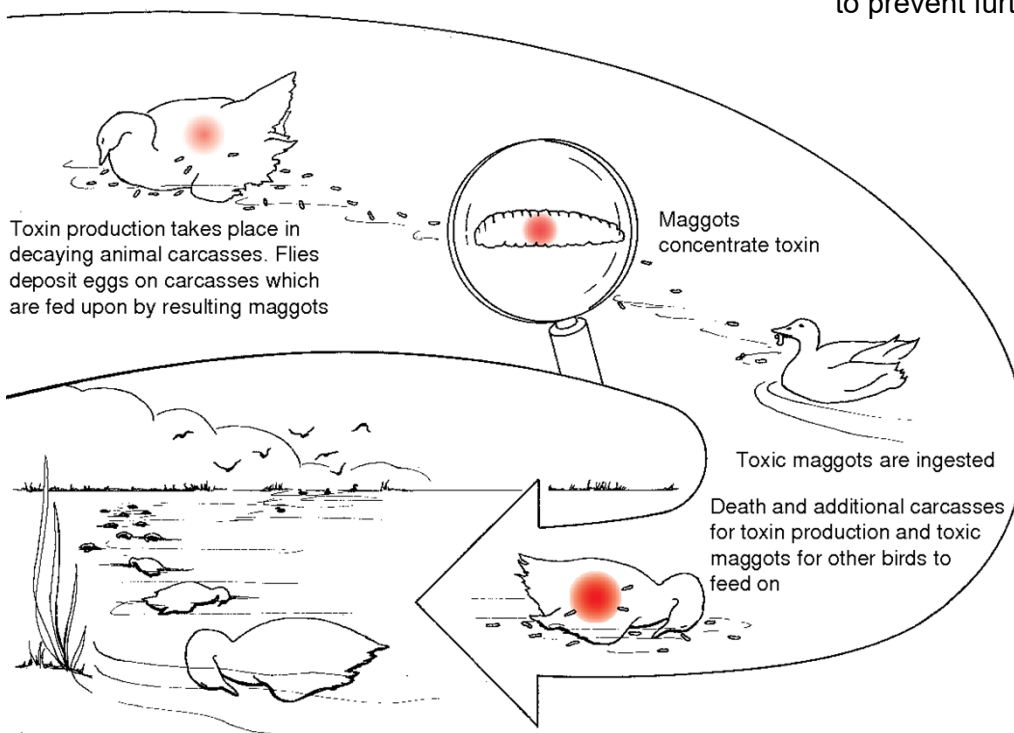
The disease is caused by waterbirds eating plants and invertebrates, such as maggots, insects and worms, from water bodies and in the process ingesting the botulism toxin released by the bacteria *Clostridium botulinum*, a bacterial species that is naturally present within wetlands and lakes around the world.

During warmer periods of the year, when water and soil temperatures are also warmer, bacterial numbers increase and therefore the risk of birds becoming exposed to the toxin also increases.

## How do you prevent avian botulism?

As *Clostridium botulinum* is natural and always present, it is difficult to prevent the disease. However, to reduce the risk of birds contracting botulism, wetlands and waterways should be managed as naturally as possible. This includes:

- Reducing excess nutrients to reduce algal blooms and excess decaying organic material
- Promoting the growth of native submerged, fringing and overhanging vegetation to shade and cool the water body and to take up nutrients
- Promoting the natural growth of aquatic plants, beneficial algae and bacteria by retaining fallen logs and branches that become habitat
- Removing sudden and large deaths in fringing vegetation to prevent decaying organic material building up and
- Removing affected birds as soon as possible to prevent further spread of the disease.



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## Am I at risk?

Human botulism is rare due to minimal or no contact with botulism contaminated materials, foods and other animals that have become exposed to decaying materials (i.e. birds, fish).

However, exposure is still possible through open wounds or ingestion, predominantly by small children playing around lake edges and other areas which may contain the botulism toxin (i.e. in water, mud or soil around lakes).

If you or someone you know has come into contact with the sediment of a wetland, and you suspect a break in the skin has been exposed to the sediment (scratch, cut, graze etc.), antiseptic measures should be applied as soon as practicable and the wound cleaned. At the sign of any medical symptoms seek medical advice from a doctor or hospital.

## Where can I find more information?

There are various places you can find information on botulism. Below are sources recommended to ensure the information you receive is correct.

**Phosphorous Awareness Project** – advice on reducing nutrient inputs into lakes and waterways- [www.sercul.org.au/our-projects/pap](http://www.sercul.org.au/our-projects/pap)

**Wildlife Health Australia** – Fact Sheet > Birds > Botulism in Australian Wild Birds Jan 2019 [www.wildlifehealthaustralia.com.au](http://www.wildlifehealthaustralia.com.au)

You can also call the **WILDCARE Helpline** on **08 9474 9055**. The WILDCARE Helpline operates 24 hours a day, seven days a week to provide advice on sick, injured or displaced native animals.

## What can I do?

The first sign of avian botulism is usually a drooping head followed by inability to 'flap' and then appearing very limp.

**If you see any sick or dead water birds in the City's lakes or waterways, please contact the City of Belmont Parks, Leisure and Environment Department on 9477 7257.**

