

Infection with *Bonamia ostreae*

Disease agent: *Bonamia ostreae* is a small (2-3 micron) “microcell” protozoan parasite from the Order Haplosporidia within the Phylum Cercozoa.



Presence in Australia: **Exotic**

Presence in Queensland: **Exotic**



Bonamia ostreae has never been recorded in Australia and is considered exotic. However given the presence of other species of *Bonamia* in Australia, any diagnosis of *Bonamia* spp. requires specific confirmation using molecular techniques.

Signs of Disease:

Molluscs infected with these parasites may exhibit the following signs:

- gaping and weakened shell closure
- stunted growth and poor condition
- watery appearance of flesh and shrunken gonad
- high mortalities



Infection with *Bonamia ostreae*:

Left. Flat oysters from Europe infected with *Bonamia ostreae*. Note gaping in some oysters.

Photo: D. Alderman

Host Species affected may include:

Flat (angasi) oysters Pacific oysters
Sydney rock oysters

Imported seafood including:

European flat oysters Pacific oysters
New Zealand Flat oysters
Argentinian flat oysters

At risk fisheries in QLD may include:

Rock Oyster Industry

Introduction Pathways to avoid:

Do not translocate oysters of unknown disease status from areas where *Bonamia ostreae* infections are known to occur. Do not use imported seafood (including mollusc products) for bait or berley.

Basic decontamination information:

This disease agent can be inactivated by the following treatments: Dessication (drying out), temperatures above 60°C for over 15 minutes, or exposure to 10-50 mg/L (0.001-0.005%) acetic acid (vinegar). *Bonamia ostreae* is also likely to be inactivated by freshwater and common disinfectants including chlorine, ozone, hydrogen peroxide and benzalkonium chloride, however effective doses/durations for these chemicals have not been published.

What to do if this disease is suspected:

If you suspect this disease is present please contact the Department of Agriculture and Fisheries (13 25 23) or the National 24 hr Emergency Animal Disease Hotline (1800 675 888) immediately.

How to collect and store samples for diagnosis:

If you are taking samples to help authorities to test for this disease, whole molluscs should be provided alive (if possible) or chilled and on ice.

Learn more

For more information about *Bonamia ostreae* and other diseases of aquatic animals of significance to Australia, download the **Aquatic Disease Field Guide App** available for iOS, android and windows devices at these locations:

IOS<https://goo.gl/9UJNp9>**ANDROID**<https://goo.gl/T4Tn1X>**WINDOWS**<https://goo.gl/Y8Vibi>

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