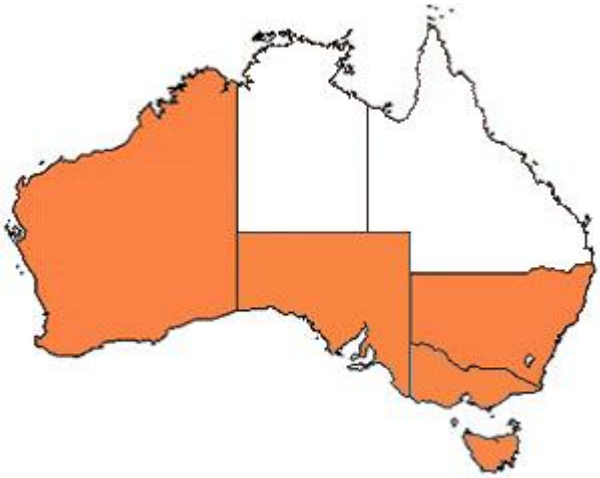
Infection with *Bonamia exitiosa* or *Bonamia* spp.

Disease agent: *Bonamia* are various species of small (2-3 micron) "microcell" protozoan parasites from the Order Haplosporidia within the Phylum Cercozoa.

Presence in Australia: Endemic



Presence in Queensland: Exotic

Bonamia exitiosa has been recorded from flat oysters (*Ostrea angasi*) in Victoria and NSW as well as in a very low percentage of Sydney rock oysters in NSW. It is likely that the *Bonamia* spp. previously recorded in flat oysters in Tasmania, SA and WA is also *B. exitiosa*, however any diagnosis of *Bonamia* spp. infection in Australia 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* spp:

Above. Flat oysters from New Zealand infected with *Bonamia exitiosa*. Note gaping and weakened shell closure in some oysters.

Bottom. Flat oyster from New Zealand infected with *B. exitiosa*. Note the poor condition with watery appearance and shrunken gonad.

Photos: Ben Diggles (top), Brian Jones (bottom)

Host Species affected may include:	
Sydney rock oysters	Pacific oysters
Flat (angasi) oysters	
Imported seafood including:	
Flat oysters	Pacific oysters
Suminoe oyster	Crested oyster

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* spp. 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* spp. are 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* 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	ANDROID	WINDOWS
https://goo.gl/9UJNp9	https://goo.gl/T4Tn1X	https://goo.gl/Y8Vibj