

# Infection with *Marteilioides chungmuensis*

Disease agent: *Marteilioides chungmuensis* is a protozoan parasite from the Order Paramyxida within the Phylum Cercozoa.



Presence in Australia: **Exotic**



Presence in Queensland: **Exotic**

*Marteilioides chungmuensis* is exotic to Australia and has never been reported from any State. Related species of *Marteilioides* have been detected in Sydney rock oysters from northern NSW, blacklip rock oysters (*Saccostrea echinata*, syn. *Striostria mytiloides*) from the NT and milky oysters (*Saccostrea cucullata*) from WA. Any diagnosis of *Marteilioides* spp. requires specific confirmation using molecular techniques.

## Signs of Disease:

Molluscs infected with these parasites may exhibit the following signs:

- protozoan parasites infect the eggs inside the gonad causing spawning failure
- visible nodule-like lesions on the gonad surface and distension of the mantle surface
- high cumulative mortalities



### Infection with *Marteilioides chungmuensis*:

A Pacific oyster infected with *Marteilioides chungmuensis* showing numerous creamy nodular lesions visible in the gonad tissues.

Photo: N. Itoh.

**Host Species affected may include:**

Pacific oysters          Milky oysters  
Sydney rock oysters  
Black-lip rock oysters

**Imported seafood including:**

Pacific 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 *Marteilioides chungmuensis* 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). *Marteilioides chungmuensis* is also likely to be inactivated by heat, freshwater and other common disinfectants including chlorine, ozone, hydrogen peroxide and benzalkonium chloride, however effective doses/durations for these latter processes or 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 *Marteilioides chungmuensis* 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/Y8Vibj>

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