

Infection with *Perkinsus marinus*

Disease agent: *Perkinsus marinus* is a protozoan parasite from Family Perkinsidae, Phylum Perkinsozoa within the Alveolata (dinoflagellates, apicomplexans, and ciliates).



Presence in Australia: **Exotic**

Presence in Queensland: **Exotic**



Perkinsus marinus is exotic to Australia and has never been reported from any State. Related species of *Perkinsus* (e.g. *P. olseni*, *P. chesapeaki*) have been recorded in several States. Any new diagnosis of *Perkinsus* 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 with watery appearance of the flesh and shrunken gonad
- high cumulative mortalities when water temperatures exceed 20°C at salinities > 10 ppt



Infection with *Perkinsus marinus*:

American oysters from the USA. The oyster on the right is in poor condition with thin watery tissues, a typical sign of infection with *Perkinsus marinus*. The specimen on the left is normal.

Photo: E. Burreson.

Host Species affected may include:

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

Imported seafood including:

Pacific oysters American oysters
Suminoe oysters Blue mussels

At risk fisheries in QLD may include:

East Coast Otter Trawl Fishery
Rock Oyster Industry
Trochus Fishery

Introduction Pathways to avoid:

Do not translocate molluscs of unknown disease status from areas where *Perkinsus marinus* 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 >7 days), temperatures above 60°C for over 1 hour, 300 mg/L chlorine for 30 minutes, freshwater (0 ppt salinity) for 30 minutes, and UV light > 28 mJ/cm².

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 *Perkinsus marinus* 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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