

Infection with *Enterocytozoon hepatopenaei* (EHP)

Disease agent: *Enterocytozoon hepatopenaei*, a microsporidian parasite belonging to the family Enterocytozoonidae.



Presence in Australia: **Exotic**

Presence in Queensland: **Exotic**



While superficially similar microsporidians have been recorded in a variety of crustaceans from some areas of Australia, *Enterocytozoon hepatopenaei* is exotic to Australia and has not been recorded in any State.

Signs of Disease:

Crustaceans infected with this parasite may exhibit the following signs:

- unusually slow growth, poor food conversion ratios and highly variable sizes at age
- white faeces packed with large numbers of microsporidian spores
- mortalities can occur when EHP occurs in the presence of other pathogens such as AHPND



Infection with *Enterocytozoon hepatopenaei* (EHP):

Left. Pacific white shrimp infected with EHP showing variation in size due to poor growth compared to a normal shrimp (top).

Right. Head of a small EHP infected shrimp showing white empty gut and discoloured hepatopancreas compared to a normal shrimp (on the right).

Photos: Rajendran et al. (2016). *Aquaculture* 454: 272-280.

Host Species affected may include:

Prawns (all)
Bait worms (polychaetes)

Imported seafood including:

Uncooked prawns (all)

At risk fisheries in QLD may include:

Bait Worm Fishery
East Coast Otter Trawl Fishery
River and Inshore Beam Trawl Fishery

Introduction Pathways to avoid:

Do not use imported seafood (particularly imported uncooked prawns) for bait or berley.

Basic decontamination information:

There is no published information on inactivation of this disease agent. Likely treatments will include dessication (drying out), while related species of microsporidians are inactivated by exposure to 100°C for over 3 minutes, 70% ethanol for over 10 minutes, or 25 mg/L chlorine for over 10 minutes.

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 crustaceans should be provided alive (if possible) or chilled and on ice (but not frozen).

Learn more

For more information about EHP 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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