

# White Spot Disease (WSD)

Disease agent: White Spot Syndrome Virus (WSSV), a virus of the genus *Whispovirus* within the family Nimaviridae.



Presence in Australia: **Exotic**

Presence in Queensland: **South East QLD**



White spot disease was confirmed in Moreton Bay in December 2016, and an emergency response to contain and attempt to eradicate the disease is ongoing.

## Signs of Disease:

Crustaceans infected with this virus may exhibit the following signs:



- white spots (calcium deposits) in the carapace
- reddish tinge to tail or appendages
- unusual swimming near the water surface
- loose carapace with external fouling
- delayed or no clotting of haemolymph
- high mortalities



### White Spot Disease (WSD):

Top. A farmed black tiger prawn from the Logan River, Moreton Bay with WSD.

Below. Note the numerous white calcium deposits on the cuticle of the carapace. These are classical signs of WSD, however prawns infected with the virus may not have any white spots.

Photo: Ben Diggles

**Host Species affected may include:**

Prawns (all)                      Crabs (all)  
Lobsters (all)                  Freshwater crayfish  
Bait worms (polychaetes)

**Imported seafood including:**

Uncooked prawns (all)  
Uncooked crabs              Uncooked lobsters  
Uncooked crayfish

**Ornamental crustaceans including:**

Shrimps                      Crayfish

**At risk fisheries in QLD may include:**

Crayfish and Rock Lobster Fishery  
Bait Worm Fishery  
Blue Swimmer Crab Fishery  
Mud Crab Fishery  
Spanner Crab 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 or crabs) or ornamental crustaceans for bait or berley or release ornamental crustaceans into waterways.

**Basic decontamination information:**

This disease agent can be inactivated by the following treatments: Dessication (drying out for 3 hours), temperatures above 70°C for over 5 minutes , 75 mg/L benzalkonium chloride for 10 minutes, 200 mg/L chlorine for 10 minutes, 200 mg/L iodine for 10 minutes, 30% ethanol for 1 minute, UV light > 250 mJ/cm<sup>2</sup> or 5 mg/L/min ozone.

**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, or frozen.

**Learn more**

For more information about WSD 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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