

Vibrio risk management for NSW oyster farmers

Higher-than-normal water temperature can result in elevated Vibrio levels in oysters and pose a risk to consumers.

What is *Vibrio*

Vibrio are temperature-dependent bacteria that naturally live in estuarine waters. Numbers increase during periods of warmer water and moderate salinity. If present in high enough levels *Vibrio* may cause vibriosis illness in consumers.

How to minimise the risk

Oyster farmers should minimise the risk of a vibriosis outbreak by ensuring oysters are kept as cool as possible from the moment they come out of the water.

In addition to the storage temperature requirements outlined in the [NSW Shellfish Industry Manual](#) (PDF, 589 KB), the following measures are strongly recommended:

- Shellfish showing signs of stress, such as gaping or weeping, should not be harvested.
- Shellfish should be returned to the water for at least 48 hours to recover following culling or grading.
- Shellfish on intertidal leases should be harvested as soon as possible after they have become exposed on the outgoing tide.
- Shellfish should be shaded while being transported from the lease to the shed. Shade cloth may be used to protect them from direct sunlight. Water from the harvest area may be sprayed over them to help keep them cool.
- At the shed unload shellfish immediately and place them in the shade while awaiting further processing/packing.
- Place shellfish under temperature control as soon as possible.
- When the water temperature is greater than 20°C Pacific oysters should be placed under temperature control (less than 10°C) within 12 hours of harvest. When the air temperature is greater than 30°C the time from harvest to cool chain should be less than 7 hours.
- When the water temperature is greater than 20°C Sydney Rock Oysters should be placed under temperature control (less than 21°C) within 12 hours of harvest. When the air temperature is greater than 30°C the time from harvest to cool chain should be less than 7 hours.
- It is recommended that Sydney Rock Oysters are stored at less than 15°C while the water temperature remains above 20°C.

Relay requirements for harvest areas closed due to *Vibrio* risk

The [NSW Shellfish Program Relay Procedures](#) (PDF, 134 KB) outline withholding periods prior to harvest for human consumption for shellfish moved between harvest areas, however no withholding period is specified for managing *Vibrio* risk.

There is limited data on the clearance rates of *Vibrio* in Sydney Rock Oysters. Studies on other oyster species report highly variable clearance rates. Following a review, the Food Authority determined an interim 28-day withholding period will apply to shellfish relayed from harvest areas that are closed due to *Vibrio* risk. This may be reviewed as new information becomes available.

There are no biosecurity restrictions on the movement of oysters based on *Vibrio* detection in waterways. Various *Vibrio* species are naturally occurring bacteria that are present in all marine environments. All other biosecurity requirements must be followed.

What to do

1. Take additional precautions to protect harvested shellfish from extreme temperatures and place them under temperature control as soon as possible.
 2. Do not harvest shellfish that may be stressed due to environmental factors or recent handling such as grading.
 3. Ensure that shellfish relayed from harvest areas that are closed due to *Vibrio* risk are held on the destination lease for a minimum period of 28 days.
 4. Ensure that all other requirements in the NSW Shellfish Program Relay Procedures are followed.
 5. Ensure all other biosecurity requirements (including shipment logbook records) are complied with.
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More information

- Visit foodauthority.nsw.gov.au/industry/shellfish
 - Email food.nswsp@dpi.nsw.gov.au
 - Phone the Food Authority helpline on 1300 552 406.
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