



# Vibrio species (*Vibrio spp.*)

## What are they?

- Vibrio species are uncommon causes of infectious intestinal disease and are extremely rare in Australia. One species, *Vibrio cholerae* is the cause of cholera, a severe diarrhoeal disease.
- *Vibrio parahaemolyticus* is the most common species causing food poisoning in Australia. This causes watery diarrhoea and abdominal cramps in the majority of cases, occasionally with nausea, vomiting fever and headache.

## Where are they found?

- Vibrios are one of the most common organisms in surface waters of the world. They occur in both marine and freshwater habitats and in associations with aquatic animals.
- Various Vibrio species can often be isolated from shellfish.

## Why are they a problem?

- *V. vulnifi* can cause septicaemia and gastroenteritis in humans. It can also cause wound infections, which are acquired through contact with contaminated shellfish or marine waters.
- *V. parahaemolyticus* can cause watery diarrhoea often with abdominal cramping, nausea, vomiting, fever and chills. Usually these symptoms occur within 24 hours of ingestion. This illness is usually self-limiting and lasts three days.

## Who is at risk?

- Healthy hosts who ingest large quantities of *V. vulnifi* will probably only experience gastroenteritis, whereas immunocompromised patients, particularly those with a history of liver disease, are more vulnerable to septicaemia.
- All individuals who consume raw or improperly cooked fish and shellfish are susceptible to infection by *V. parahaemolyticus* although more severe cases generally occur in people with weakened immune systems.

## How can the risk be reduced?

- Do not eat raw oysters or other raw shellfish.
- Avoid cross-contamination of cooked seafood and other foods with raw seafood and juices from raw seafood.
- Cook shellfish (oysters, clams, mussels) thoroughly. Eat shellfish promptly after cooking and refrigerate leftovers to 4°C or below.
- Avoid exposure of open wounds or broken skin to warm salt or brackish water, or to raw shellfish harvested from such waters.
- Wear protective clothing (e.g. gloves) when handling raw shellfish.