### COLLECTING SHELLFISH IN NEW ZEALAND

Gathering kaimoana from the sea is a much loved tradition for many New Zealanders. Collecting shellfish is no exception.

Shellfish can sometimes make you or your children seriously ill. This pamphlet outlines the reasons why you might get ill and how to minimise the risks, so that you and your family can collect shellfish safely.

# SHELLFISH AND CONTAMINATION

**Bivalve shellfish** (shellfish with two shells) are filter feeders. They pose a greater health risk than other seafood. Bivalve shellfish include mussels, oysters, tuatua, pipi, toheroa, cockles and scallops. Normally they feed on phytoplankton, which are tiny algae, but if water is contaminated, they can pick up and store bacteria, viruses, biotoxins and other contaminants which could make you ill.

Some shellfish such as mussels can filter up to 360 litres a day so they can concentrate a lot of contaminants in a short time.

**Grazing shellfish** such as paua and pupu (catseyes) pose a much lower health risk because they are not filter feeders.

Other seafood where the guts (hua) are discarded before being cooked and eaten is also considered low risk. These include kina, crayfish, crabs and fish.

# TYPES OF CONTAMINATION IN SHELLFISH

**Biotoxins** are toxic chemicals which can cause serious illness if you eat affected shelfish. Biotoxins are produced by a few types of phytoplankton and become concentrated in shellfish when algae bloom. Symptoms may include tingling around the mouth and limbs, dizziness, headache, vomiting, diarrhoea, paralysis and has resulted in a number of deaths overseas. You cannot tell if shellfish are toxic by looking at them or smelling them.

#### Cooking shellfish will NOT remove biotoxins.

**Pathogens** (harmful bacteria, viruses and parasites) such as *E. coli, Salmonella*, norovirus or hepatitis, can accumulate in shellfish, especially when they are collected around outfall pipes or near rivers. Pathogens may result in vomiting and diarrhoea within a few hours or may result in longer-term complications.

**Chemical** contamination can be caused by heavy metals, fuel, paints and solvents. Dangerous levels of chemical contamination are very rare in New Zealand shellfish. The areas most likely to be contaminated are in harbours near wharves, industry, marinas and near sewage and storm water outlet pipes.



## MANAGING THE RISKS OF ILLNESS

#### **BIOTOXINS:**

MPI tests shellfish for biotoxins around New Zealand at popular recreational gathering sites. If shellfish become contaminated with high levels of biotoxins, warning signs are put up at affected beaches and media releases are issued.

Always check the **www.mpi.govt.nz/shellfish** website before gathering shellfish in your area to see if there are any biotoxin warnings in place. This webpage also explains the different types of biotoxins in more detail.

# PATHOGENS AND CHEMICAL POLLUTION:

Here are some steps to lower the risk of illness from contamination with sewage or chemical pollutants:

- Avoid collecting shellfish from heavily populated areas and areas where sewage or storm water is discharged. Avoid collecting near pipes on beaches.
- Do not collect shellfish near rivers or estuaries after heavy rain. Wait until the water has run clear for several days.
- Do not collect shellfish where there are farm animals grazing nearby.
- Avoid collecting shellfish near wharves or marinas where sewage or chemicals such as anti-fouling paint or fuel may have been discharged.
- Read and obey any warning signs they are up to date and there for a reason!

## **STORING YOUR SHELLFISH**

Storing shellfish carefully can help reduce your risk of illness from bacteria. By looking after your shellfish they'll stay fresher for longer.

#### **CLEAN AND CHILL**

- Only take shellfish from areas with clean water.
- Refrigerate shellfish as soon as possible after collection (within four hours) and if transporting shellfish in a chilly bin, store them on ice. Wrap the ice in a towel as freezing will kill shellfish.
- Do not eat broken shellfish or those that have died during storage.
- Prepare your shellfish carefully, wash your hands and avoid cross contamination with other foods or utensils.

#### COVER

- Keep shellfish in the shade during harvest to keep them moist and cool.
- Cover live shellfish with a clean wet towel and store in the fridge. Don't use airtight containers or bags to hold shellfish.

#### COOK

- Shellfish are often eaten raw or lightly steamed which does not get rid of bacteria and viruses, chemicals or biotoxins.
- It is best to cook shellfish thoroughly for 3-5 minutes after the shells open, however this won't remove biotoxins.
- Refrigerate leftovers and keep them covered.
- Thoroughly reheat leftover seafood to a minimum core temperature of 80°C for at least 3 minutes.

If you become ill after eating shellfish, call Healthline **0800 611 116** for advice, otherwise seek medical attention immediately. Keep any leftover shellfish in case it can be tested.

Commercially grown or caught shellfish sold in shops are subject to very strict monitoring and testing programmes by MPI, meaning the shellfish you buy is safe to eat.

#### REMEMBER

Check the biotoxin webpage for warnings in your area before collecting shellfish and make use of the free services below:

**www.mpi.govt.nz/shellfish**. You can sign up to receive alerts on this page too.

Cooking will **NOT** remove biotoxins from shellfish.

**DO NOT** collect shellfish following heavy rain or from polluted areas.

#### CLEAN, COOK, COVER AND CHILL

#### Use one of our FREE services:

- Download our free fish rules smartphone app by texting the word 'app' to 9889 OR by scanning the QR code. The app works even when you have no coverage.
- Free text the name of the species you are fishing for (e.g. blue cod or paua) to 9889 and receive legal size and bag limit via return text.
- Visit www.mpi.govt.nz

#### IT IS ILLEGAL TO TRADE OR SELL YOUR CATCH.







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