Legal requirements

There are specific legal requirements concerning control of parasites in fish to be consumed raw.

They are of particular relevance to suppliers and caterers producing produces such as gravlax, cold smoked fish, sushi or sashimi.

The following fish products must be frozen at a temperature of no more than –20°C in all parts of the product for not less than 24 hours—this treatment must be applied to the raw product or the finished product to kill any roundworm or tapeworm larvae present:

- Fishery products to be consumed raw or almost raw—with the exception of farmed salmon
- Fish products from the following species—if they are to undergo a cold smoking process in which the internal temperature of the fishery product is not more than 60°C: herring, mackerel, sprat, wild Atlantic and Pacific salmon. However the guidance regarding freezing does not apply to farmed salmon.
- Marinated and/or salted fishery products, if the processing is insufficient to destroy nematode larvae.

The following legal requirement also applies in respect of this freezing process:

A document from the manufacturer, stating the type of process the product has undergone, must accompany the above fish products at every stage of sale, except when supplied to the final consumer.

Caterers need to look out for this documentation, and if there is no paperwork with the fish to show that the manufacturer has carried this out—or carried out an equivalent procedure to kill parasites—you must do so and record that you frozen the fish.

This leaflet is produced by Environmental Health, Craven District Council. August 2016

CDC/F/015
The production of raw fish products and the preparation of raw fish products require higher standards of hygiene production including:

| Marinated and/or salted fishery products | Usually salmon and trout made into products such as gravlax |
| Cold Smoked Fish | Usually herring, mackerel, sprat, wil Atlantic and Pacific salmon, and halibut cold smoking in which the internal temperature of the fish product is not more than 60°C |
| Sushi | Food consisting of cooked and pressed rice flavoured with vinegar and garnished with other food ingredients including raw or cooked seafood in vinegar, marine fish or shellfish roe, vegetable, cooked meat or egg, which may or may not be wrapped in seaweed |
| Sashimi | Food consisting of fillets of marine fish, molluscs, crustaceans, fish roe or other seafood to be eaten in its raw state |

Fresh and frozen raw seafood and fish can contain food poisoning bacteria—listeria and salmonella—and viruses like norovirus.

Because it is consumed raw, or almost raw, there is no cooking process to kill any food poisoning bacteria or parasites which may be present.

Poor temperature control on some certain species of oily fish can result in scombrotoxic (histamine) fish poisoning. This is caused by the bacterial breakdown of fish when time or temperature abuse occurs. The chemical reaction results in high histamine levels developing in fish which causes a violent reaction in humans. The fish usually associated with a high level of histamine are tune, mackerel, sardines, herring, marlin, bonito and jacks. The recommended temperature control for these types of fish are to store at the point of melting ice—below 2°C—and have a quick turnover - within a couple of days.

It is not possible to detect the presence or absence of the toxin by smell, taste or appearance of the food.

Reports of poisoning have also been associated with mackerel or tinned tuna used for sandwich fillings which are often linked with poor hygiene practices once tins have been opened. Tins of tuna usually have the instructions ‘once opened use within 48 hours’ which should be followed.

Fish can also contain parasites such as tapeworm, roundworm, flatworm and non-visible parasites and undetectable larvae of nematodes. These can be passed on to humans.

### Ensuring food safety

- Buy good quality ingredients from reputable suppliers
- Check suppliers delivery conditions—products should be delivered at less than 8 oC or colder then –15°C. Check frozen products for solid blocks of ice which can indicate that the product has been defrosted and refrozen.
- Store raw ingredients and prepared or cooked food separately, to avoid cross-contamination
- Store fish above raw meat to prevent blood contamination
- After freezing, thaw fresh fish and seafood in a refrigerator and store it at or below 4°C
- Only defrost fish in small amounts—do not keep child ingredients for too long, and operate stock control system based on the ‘first in, first out’ principle
- Always defrost in the fridge
- Wash hands thoroughly in soap and warm water immediately before preparation of fish and seafood—and observe a high standard of personal hygiene
- Keep the food preparation area and food contact equipment clean and disinfected—use a food safe sanitizer, or dishwasher at about 82°C
- Minimise preparation time and store or display any preparation time and store or display any prepared ready to eat fish and seafood at or below 40°C, until it is served
- Dispose of remaining prepared ready to eat raw fish and seafood at the end of each day.