Seafood Consumption Recommendations after an Oil Spill

Polycyclic aromatic hydrocarbons (PAHs) are one of the most toxic constituents of oil. PAHs have low acute (short-term) toxicity, but chronic (long-term) exposure can lead to serious adverse health effects. For example, PAHs cause damage to DNA, which may lead to cancer over time. Chronic exposure to PAHs can also impair the function of your immune system, cause cardiovascular effects, decrease fertility, and lead to developmental problems.

PAHs can accumulate to high levels in marine organisms and sediment after an oil spill. Several factors affect the level of contamination in marine fish and shellfish following an oil spill. These include the animal’s habitat, metabolism, and feeding strategies. Following the guidelines below can reduce your PAH exposure following an oil spill, and help prevent adverse health effects.

What kinds of seafood should I avoid eating following an oil spill?

- Avoid eating fish that are obviously oiled, caught in heavily oiled areas, or smell tainted.
- Avoid eating fish that are behaving oddly or have unusual sores.
- Avoid eating fish that live or spawn in shallow waters and estuaries immediately after the spill because they are generally exposed to more oil. In Alaska, these include salmon, sturgeon, and herring (only during spawning season). Sensitive populations like pregnant women and children may want to avoid eating these types of fish for a longer period of time after the spill.
- Avoid eating fish eggs from oiled areas, even if there’s only a light sheen of oil in the water. Eggs can accumulate high levels of PAHs directly from the water, and adult females can also transfer PAHs into developing eggs.
- Avoid eating oysters, mussels, clams, scallops, abalone, limpet, or whelk from oiled areas. Shellfish can accumulate high levels of the toxic constituents of oil, they don’t detoxify quickly, and they can be continually re-exposed to oil that is trapped in the sediment.
- Avoid eating smoked fish until the oil has been cleaned up, as the smoking process adds additional PAHs to the meat.

What kinds of fish are safest to eat following an oil spill?

If you don’t have an alternative source of nutritious food following a spill, it is best to eat fish that live in deeper water like cod, rockfish, sablefish, walleye pollock, and halibut.

Are there other animals I should be concerned about consuming after an oil spill?

Birds and mammals also rapidly metabolize oil and are usually able to avoid oil spills, so if they do not appear to be oiled and seem to be healthy, consuming them poses little risk to your health. However, you should avoid eating the liver of an animal caught near an oiled area in the time immediately after the spill. This is because PAHs (like many other contaminants) may reach high concentrations in the liver.