

Eat Fish, Choose Wisely



- Fish is a healthy food that is high in protein and low in saturated fat. However, there is a concern about eating some kinds of fish because they contain mercury. Mercury is a metal found in the environment that can cause damage to the developing nervous system of a fetus or young child. This lesson will help you:

- Learn about mercury
- Understand the benefits of eating fish
- Learn how to choose fish wisely



Mercury

Mercury

- Mercury (Hg) is a naturally occurring metal found throughout the environment.
- It is a silvery, metallic liquid at room temperature, combines easily with other metals and expands and contracts evenly with temperature changes.
- It is commonly found in household items like compact fluorescent light bulbs and thermometers.



How mercury gets in the environment



- Environmental release
 - volcanic activity
 - marine environments
 - forest fires
- Man made
 - coal-fired power plants
 - other industrial settings such as factories

How mercury gets in the environment

- Once mercury enters the environment, it travels around the atmosphere until it ends up in the bottoms of lakes, oceans, rivers and other water bodies.
- Mercury does not break down in the environment.
- Mercury also builds up in the food chain over time especially in older fish and fish that eat other fish.



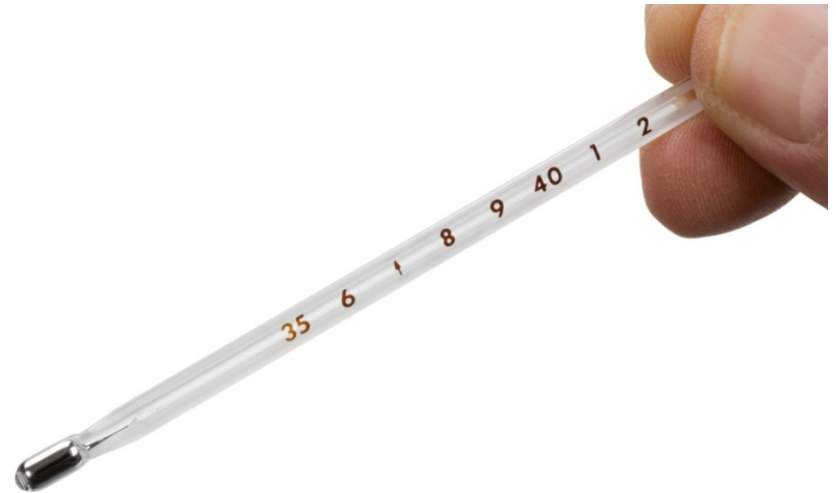
How people are exposed to mercury



- People ingest mercury when they eat contaminated fish.
- If people eat a lot of contaminated fish they will have higher mercury levels than normal.
- Mercury levels in humans will go down slowly over time if consumption of contaminated fish goes down.

How people are exposed to mercury

- Exposure from
 - vapors from broken fluorescent lamps
 - gas regulators
 - home fever thermometers
- There are no health risks linked to swimming, boating, and waterskiing in contaminated waters.

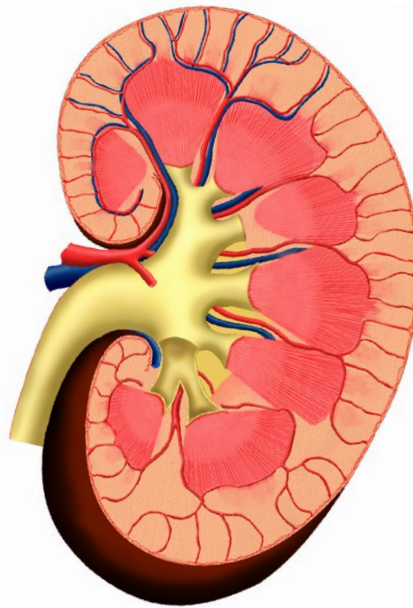


Health effects of mercury

- Mercury interferes with the way nerve cells function.
- Mercury poisoning causes difficulties with the way people see, hear, talk and walk.
- It can create problems with brain function causing personality changes, depression, irritability, nervousness and problems with concentration.



Health effects of mercury



- Mercury damages

- brain
- lungs
- kidneys
- developing fetus

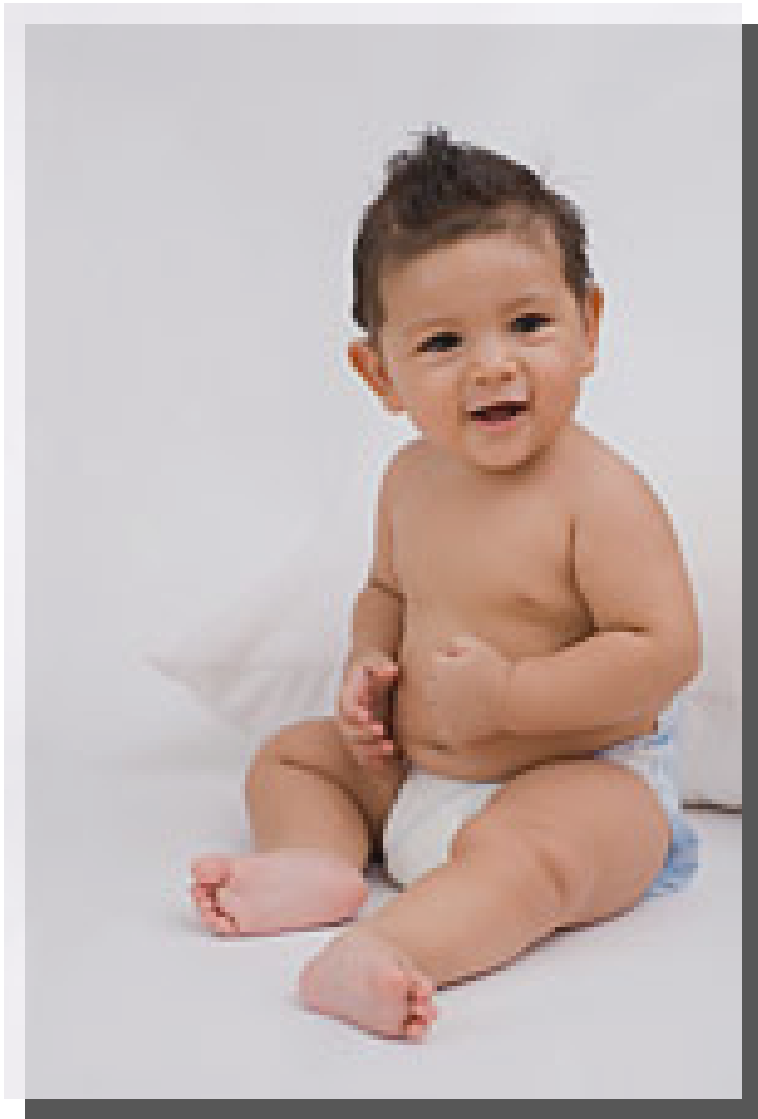
- Side effects

- nausea
- vomiting
- diarrhea
- high blood pressure
- skin rash
- eye irritation

Groups of special concern

- A concern for:
 - women who may become pregnant
 - pregnant women
 - nursing mothers
 - young children





- Fetuses and young children suffer the greatest risk because their nervous systems are still developing.
- They are four to five times more sensitive to mercury than adults.
- Infants may ingest mercury in breast milk.
- The benefits of breastfeeding may be greater than the possible adverse effects of mercury in breast milk.

Eat Fish, Choose Wisely

Mercury and Fish

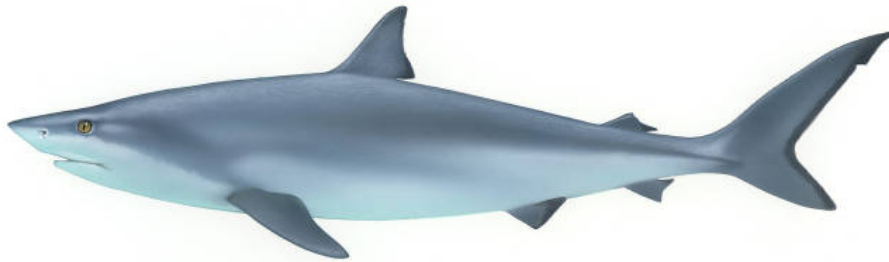
Health benefits of eating fish

- Fish is high in protein and low in saturated fat.
- It is also a good source of vitamins, minerals and Omega-3 fatty acids.

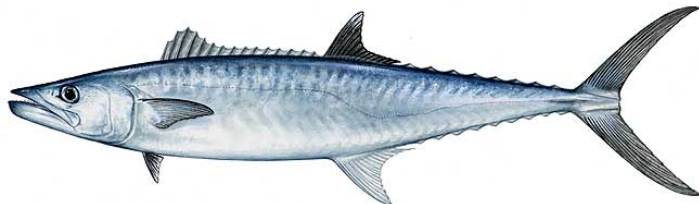


Recommendations for eating fish

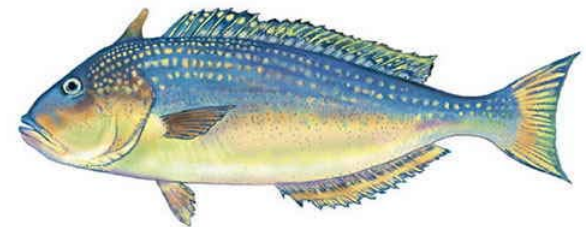
- There is no way of cooking or cleaning fish that will reduce the amount of mercury it contains.
- These fish contain high levels of mercury and should not be eaten:



shark



king mackerel



tilefish

Recommendations for eating fish

- Eat up to 12 oz. (2 average meals) a week of a variety of fish and shellfish that are lower in mercury.
- Some examples of fish that are lower in mercury include:



Salmon



Shrimp



catfish



Canned light tuna



Pollock

Fish Advisories

Fish Advisories

- Some water bodies in Utah are home to fish that are contaminated with mercury and/or PCBs. These chemicals are not safe for humans in high amounts. They are not safe for children and pregnant women in any amount.
- In order to protect public health, the Utah Department of Health issues fish advisories which recommend limits for consumption of fish caught in Utah waters.
- There are specific advisories for pregnant women, young children and for the rest of the population.
- The advisories vary according to fish species and body of water.

Fish Advisories

- Fish advisories give you information to help you decide **where** to fish, **which** fish to keep, and **how much** fish to eat.
- An advisory will list the location of a lake, stream or river and will list the types of fish that are unsafe in that body of water.
- Not all types of fish are unsafe when there is an advisory. Only limit the fish listed on the advisory.



Fish Advisories

- Map of fish advisories
- www.fishadvisories.utah.gov

ATTENTION ANGLERS

FISH CONSUMPTION ADVISORY

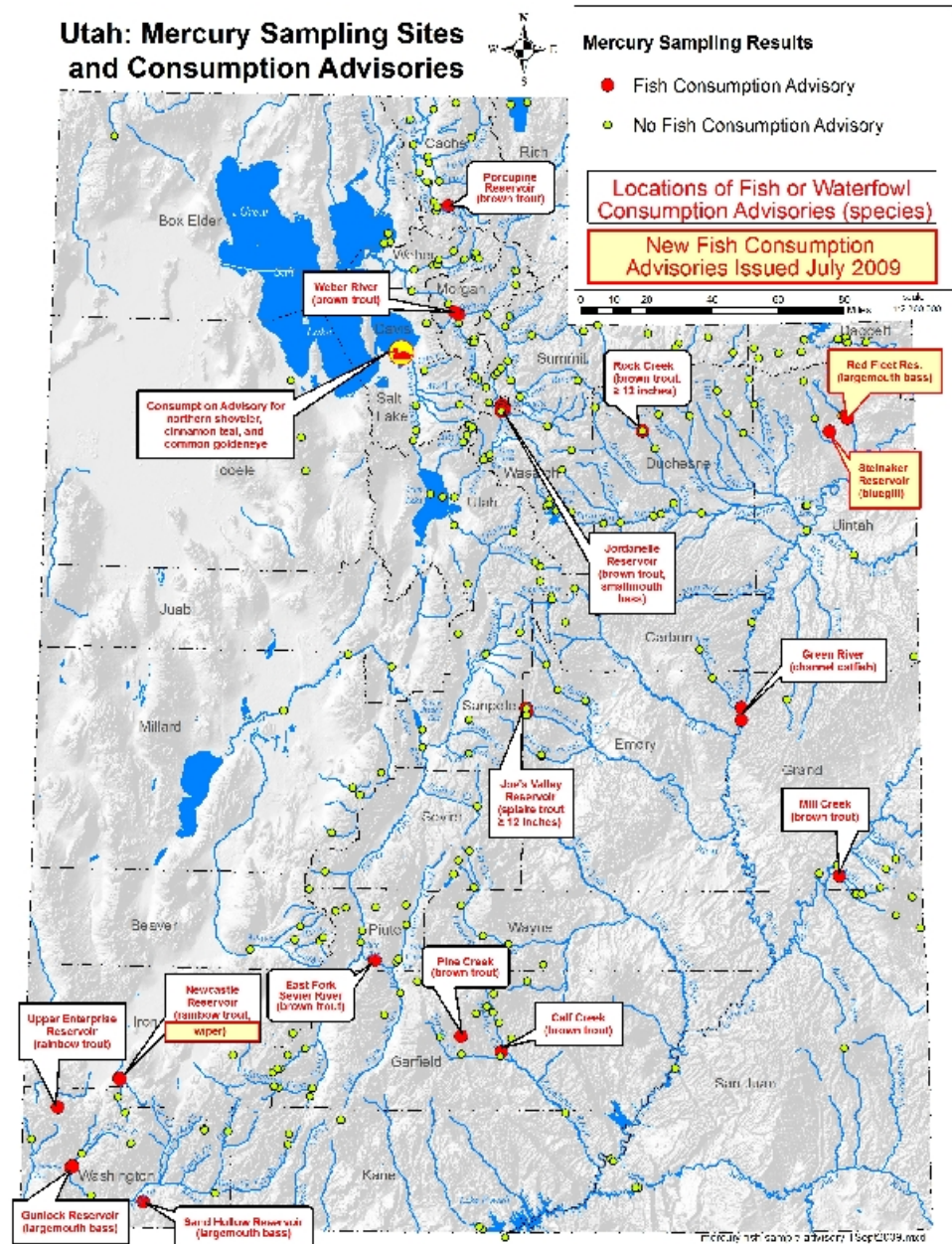
High levels of mercury have been found in **Brown Trout** from Pine Creek. Utah public health officials recommend that adults eat no more than two 8-ounce servings of these fish per month. Pregnant women, nursing mothers, and children under 12 should NOT eat these fish.

An 8-ounce serving of fish is approximately the size of two decks of cards.

For more information contact:

Utah Department of
Environmental Quality
801-538-6146

Utah Dept
Environment
801



Fish Advisories

- Fishing can be a fun recreational activity for the whole family, simply be cautious about where you fish
- Fish is still a great food, just remember to:

Eat fish and choose wisely!



Mercury in other sources

Mercury in fluorescent light bulbs

- Mercury can pollute the environment when products containing it are broken and not disposed of properly. Pouring mercury down the drain and throwing broken bulbs or thermometers in the trash pollutes local landfills, soil, and water systems.
- Compact fluorescent light bulbs (CFLs) are efficient and can save you money because they use 75% less energy and on average last 7 to 10 times longer than standard incandescent bulbs.
- CFLs, contain small amounts of mercury; bulbs will have a special label that reads “contains mercury” or “Hg” within a circle on the lamp to signify that they must be handled



Mercury in thermometers

- Types of thermometers that may contain mercury:
 - fever/basal
 - oven/meat
 - indoor/outdoor
 - temperature measuring devices in industrial applications
- All mercury containing thermometers and manometers should not be disposed of in the regular trash.



Proper disposal

- Mercury containing bulbs should not be crushed or be discarded in the trash.
- For proper disposal look online or call your local health department to see if there is a permanent recycling location or annual recycling event.
- If there are no other options except your household garbage, place the CFL in a plastic bag and seal it before putting it in the trash.



Proper disposal

- In an effort to “Get the Mercury Out!” of homes in Utah, the Utah Department of Environmental Quality has teamed up with local health departments to collect thermometers that contain mercury and exchanges them for mercury-free thermometers for free.
- You can find more information by calling 1-800-458-0145

Or visit

- http://www.mercury.utah.gov/get_the_mercury_out.htm

