



Site Health Risks Summary and Recommendations

New data confirms Rhode Islanders should continue to limit the amount of fish eaten from and contact with parts of the Woonasquatucket River



Site:

Centredale Manor Restoration Project Superfund Site, North Providence, Rhode Island



Contaminant of concern:

Dioxins, furans, polychlorinated biphenyls (PCBs) in fish



Goal:

Review recent data to determine if chemicals in fish could still harm the health of people who eat the fish in the Woonasquatucket River near Centredale Manor.



Findings:

- Dioxins, furans, and PCBs have been found in fish near the Centredale Manor Superfund Site in North Providence, Rhode Island, due to past industrial pollution. These are harmful chemicals that come from industrial activities and can stay in the environment for a long time.
- Fish advisories have been in place on the Woonasquatucket River since EPA conducted studies in the 1990s.
- Eating fish from Allendale and Lyman Mill Ponds regularly for one year or more could lead to difficulty getting pregnant or complications during pregnancy.
- Eating fish caught downstream, or below, the dam at Cricket Field on the Woonasquatucket River could increase your risk of cancer. The data show fish from these areas have dioxin levels that increase risk for certain cancers, including soft tissue sarcoma or lymphoma.
- Fish caught upstream of the Johnston/Smithfield border on the Woonasquatucket River have much lower levels of dioxins. In this part of the river, the health benefits of eating fish likely outweigh the risks.



Recommendations to Protect Your Health:

- You should not eat fish caught downstream of the Johnston/Smithfield border on the Woonasquatucket River. The Johnston/Smithfield border is close to the dam at Cricket Field.
- You can eat fish caught upstream of the Johnston/Smithfield border on the Woonasquatucket River. People eating fish from this area should follow state mercury guidelines: sunfish and trout are generally safe to eat. For more information, visit health.ri.gov/fish
- Do not eat fish, turtles, eels, or plants from the river downstream, below the dam at Cricket Field.
- Do not swim or wade in the river downstream, below the dam at Cricket Field.



Recommendations for Government Partners:

- The EPA is working to remediate Centredale Manor, which will lower concentrations of dioxins in fish in the Woonasquatucket River.
- RIDOH recommends that the EPA provide follow up data on dioxins and dioxin-like PCBs in fish tissues to measure the success of the remediation methods after remediation is complete.



RIDOH Will:

- Provide a copy of the Health Consultation to community partners.
- Continue to keep community members informed of any new findings.
- Continue to work closely with the Woonasquatucket River Watershed Council (WRWC) to promote messaging related to the Woonasquatucket River.
- Evaluate new data as it becomes available.
- Participate in community meetings with WRWC and EPA to discuss potential risks.

The WRWC is a nonprofit dedicated to restoring and preserving the Woonasquatucket River. Since 1996, WRWC has played a leadership role within the watershed. They serve as the local technical advisory group for the site and advise the EPA on the cleanup strategy and community uses for the land post-remediation. WRWC also educates community members about the benefits of a healthy river and how to safely interact with the river.

About Dioxins, Furans, and PCBs

Dioxins, furans, and PCBs are toxic chemicals that come from industrial processes, burning fuel, and past manufacturing. These chemicals stay in the environment for many years. They can build up in animal fat, soil, and sediment. People are most often exposed through contaminated soil, air, and food, including fish. Exposure to dioxins, furans, and PCBs for many years has been linked to health problems. Learn more about these chemicals on the EPA's website:

<https://www.epa.gov/dioxin/learn-about-dioxin>

<https://www.epa.gov/pcbs>

Potential Health Effects of Dioxins, Furans, and PCBs

Dioxins, furans, and PCBs have been linked to a variety of health effects. Dioxins build up in the body. They stay in the liver and in fat for many years before the body can eliminate them. Exposure to dioxins has been linked to liver, reproductive, and developmental problems. There have been reports of damage to the thyroid, endocrine, and immune systems. Liver and biliary tract cancer have also been associated with PCB exposures in humans.

Fish are Good, Dioxins are Bad

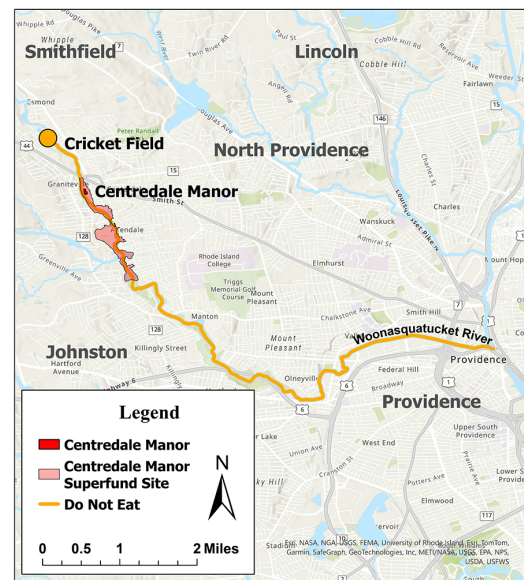
Fish is a source of essential nutrients. Eating fish can improve heart and brain health for people of all ages. Pregnant and breastfeeding women who eat fish pass these nutrients to their baby, supporting healthy brain and eye development. Fish can also be contaminated with harmful chemicals, like dioxins and mercury. People should weigh the benefits of eating fish against the potential health risks from contamination.

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Evaluation Area:

Centredale Manor Restoration Project Superfund Site is located on the east side of the Woonasquatucket River in North Providence, Rhode Island. This site is a former chemical manufacturer and drum reconditioner. Chemicals were released directly into the soil and the river during manufacturing. Equipment and chemicals left behind at the site continued to spread chemicals over time. High levels of dioxins, furans, and dioxin-like PCBs have been found in soil, river sediments, groundwater, and fish tissue by the EPA.

Below is a map that shows the impacted waterbodies around Centredale Manor along the Woonasquatucket River. Fish from the areas downstream, below the dam at Cricket Field should not be eaten.



About the Evaluation:

In September and October of 2019, contractors sampled 3 different species of fish from 5 locations along the Woonasquatucket River. This testing took place to determine the level of contamination in fish before clean up around the Centredale Manor Superfund site. Fish will be tested again after cleanup is complete to confirm that the chemicals were cleaned up. The fish were tested for dioxins, furans, and PCBs. RIDOH used the test results to understand if the chemicals found in these fish were at levels that could negatively impact health when consumed. The results were published in a health consultation, which is a technical document that explains the analysis.

To read the full Health Consultation, visit health.ri.gov/EHRAP. If you have questions or concerns, call 401-222-7746.