


Evaluation of Wetland and Soil Contamination, New Bedford, MA

Summary of ATSDR's Health Consultation

The Agency for Toxic Substances and Disease Registry (ATSDR) prepared this factsheet to share our findings of the health consultation report to address concerns from a citizen who petitioned ATSDR. Some of the petitioner's concerns have already been addressed by ATSDR and other agencies. This report focuses on the petitioner and community's concerns about exposures to soil/sediment contaminated with polychlorinated biphenyls (PCBs) and lead at Keith Middle School (KMS), the adjacent wetlands, and New Bedford High School (NBHS).




The Bottom Line

 **ATSDR expects no harm to health from possible past exposures to:**

Trespassers who accidentally swallowed PCBs and lead in wetland soil/sediment and surface water next to KMS

Students and faculty who accidentally swallowed PCBs and lead in soil on the NBHS campus

 **ATSDR expects no harm to health from current exposures because there are no current exposures.**

Exposures to PCBs and lead in KMS and NBHS soil and groundwater, and to volatile organic compounds (VOCs) in indoor air have been eliminated.



What did ATSDR do?

Environmental investigations identified areas with contaminants including PCBs and lead. ATSDR evaluated the available environmental data received from the U.S. Environmental Protection Agency (USEPA), the Massachusetts Department of Environmental Protection (MADEP), and the City of New Bedford to determine if exposures to PCBs and lead in NBHS, KMS, and the wetlands near KMS harmed or are harming people's health.

What did ATSDR find?

For Trespassers

- Past exposures to PCBs and lead in the wetland soil/sediment and surface water next to Keith Middle School are not expected to harm people's health.
- All estimated exposure doses to PCBs for trespassers were below levels known to result in non-cancer harmful health effects.
- The estimated lifetime risk of trespassers developing cancer is low.
- Past lead exposures were unlikely to cause an increase in blood lead levels.



For New Bedford High School students and faculty

- Past exposures to PCBs and lead in the NBHS soil are not expected to harm people's health.
- All estimated exposure doses for PCBs were below levels known to result in harmful non-cancer health effects.
- Estimates show that students and faculty exposed to PCBs continuously for an entire lifetime have a low increased lifetime risk of developing cancer. This risk level is not a concern.
- Results of the study conducted by Massachusetts Department of Public Health (MDPH) revealed that former teachers and students from KMS and the NBHS (2009-2010) had serum-PCB levels that were within the typical variation seen in the U.S. populations.



Exposures to soil, groundwater, and indoor air at Keith Middle School are not expected to harm people's health

- Exposure pathways have been eliminated:
 - » Continued monitoring and maintenance of engineering controls were put in place to prevent potential exposures to contaminated soil.
 - » Passive ventilation was installed to allow any sub-slab soil gases to move from beneath the vapor barrier to the vent stacks that exit through the school's roof.
 - » Indoor air samples collected from 2006-2010 show that volatile organic compounds (VOCs) were detected at very low concentrations, below levels of health concern.
- The drinking water sources are not contaminated.
 - » Groundwater is not used for drinking water or other purposes.
 - » Drinking water sources for Keith Middle School and the city are from five ponds located outside of New Bedford, MA.

For More Information

How can I learn more about the KMS and NBHS sites?

For more details about ATSDR's findings, see report:

- <https://www.atsdr.cdc.gov/HAC/pha/KeithMiddleBedfordHighSchool/KeithMiddleSchoolHC-508.pdf>



For more information about:

- Lead: <https://www.atsdr.cdc.gov/toxfaqs/tfacts13.pdf>
- PCBs: <https://www.atsdr.cdc.gov/toxfaqs/tfacts17.pdf>



If you have questions or comments, call ATSDR's regional office director, Tarah Somers, at 617-198-1493 or our toll-free number at 1-800-CDC-INFO.



What are ATSDR's recommendations for the community?

To protect public health, ATSDR recommends that

- The City of New Bedford continue the anticipated activities at the Parker Street Waste Site (PSWS) by following the Long-Term Monitoring and Maintenance Implementation Plan (LTMMIP) and the Activity and Use Limitation (AUL) to ensure that contamination levels are below health concern.
- All residents reduce lead exposure from all sources wherever possible since there is no proven safe blood lead level.

About ATSDR

The Agency for Toxic Substances and Disease Registry (ATSDR) is a federal public health agency of the U.S. Department of Health and Human Services (HHS). ATSDR works with other agencies and tribal, state, and local governments to study possible health risks in communities where people could come in contact with dangerous chemicals. For more information about ATSDR, visit our website at <https://www.atsdr.cdc.gov/>