



Frequently Asked Questions

Process to Evaluate Community Environmental Exposures

This document describes the process of evaluating the potential for health effects in New Jersey communities based on the evaluation of environmental data.

How does the Department evaluate potential public health implications from environmental exposures?

The Department can conduct a public health assessment which evaluates the potential for public health implications from exposures to hazardous substances through our cooperative agreement with the Agency for Toxic Substances and Disease Registry (ATSDR). In order for the Department to conduct this type of evaluation there needs to be environmental sampling data available.

What is the public health assessment process?

- Determine whether there are sufficient environmental sampling data available
- Evaluate available environmental data and define potential human exposure pathways (for example, ingesting contaminated drinking water or soil, breathing in contaminated air)
- Determine whether there is an existing completed environmental exposure pathway and make immediate recommendations to interrupt the pathway if one exists
- Characterize the extent of environmental contamination, the geographic area impacted, and the time frame of when exposures may have occurred
- Characterize the population that may be or may have been exposed to environmental contamination through a completed environmental exposure pathway
- Conduct modeling/risk assessment to determine whether there is an increased risk of adverse health effects (including cancer and other health outcomes). This modeling incorporates toxicological data and uses specific exposure assumptions (for example how much water and/or soil children and adults ingest per day, residential and occupational exposures)
- Provide recommendations to regulatory agencies and communities to prevent and minimize harmful exposures (for example, if there is contaminated soil, provide education on reducing exposures until remediation occurs)

Does the Department collect environmental data to assess community exposures?

No, the Department evaluates environmental data collected by outside entities, such as the state and the federal environmental agencies and any of their certified contractors.

Why is conducting a risk assessment evaluating environmental data a necessary tool in the public health assessment process?

The first step in evaluating community exposures is to determine whether there is a current completed environmental exposure pathway (for example, residents drinking contaminated water) so actions can be taken immediately to interrupt the exposure pathway and protect public health.

Health-protective recommendations are made based on the *potential* for environmental contamination to increase the risk of cancer or cause other adverse health effects. It is important to note, these recommendations are made independent of determining whether there is an *actual observed* increase in adverse health outcomes in the exposed population.

When would the Department evaluate health outcome data?

If a completed environmental exposure pathway is present and the findings of the public health assessment indicate that there is an increased risk of adverse health effects, the Department may be able to evaluate the occurrence of health outcomes that are associated with the contaminants of concern. For this evaluation to be carried out, the following components are necessary: 1) a defined geographical area where contamination is present, 2) a defined time-period when exposures occurred, and 3) available health outcome data that are known to be associated with the exposure.

Where can the Department's public health assessment reports be found?

These reports can be found by county at the following website:

<https://www.nj.gov/health/ceohs/environmental-occupational/hazardous-waste-sites/>