# Appendix [insert letter]: Brief Summary of ATSDR’s Public Health Assessment (PHA) Process

ATSDR follows the PHA process to find out:

* Whether people living near a hazardous waste site are being exposed to toxic substances.
* Whether that exposure is harmful.
* What must be done to stop or reduce exposure.

The PHA process is a step-by-step consistent approach during which ATSDR:

* Establishes communication mechanisms, including [engaging communities](https://www.atsdr.cdc.gov/pha-guidance/engaging_the_community/index.html) at the beginning of site activities and involves them throughout the process to respond to their health concerns.
* Collects many different kinds of [site information](https://www.atsdr.cdc.gov/pha-guidance/getting_familiar_with_the_site/index.html).
* Obtains, compiles, and evaluates the usability and quality of environmental and biological [sampling data](https://www.atsdr.cdc.gov/pha-guidance/selecting_sampling_data/index.html) (and sometimes modeling data) to examine environmental contamination at a site.
* Conducts four main, sequential scientific evaluations.
  + [Exposure pathways evaluation](https://www.atsdr.cdc.gov/pha-guidance/conducting_scientific_evaluations/exposure_pathways/exposure_pathways.html) to identify past, present, and future site-specific exposure situations, and categorize them as completed, potential, or eliminated.
  + [Screening analysis](https://www.atsdr.cdc.gov/pha-guidance/conducting_scientific_evaluations/screening_analysis/index.html) to compare the available sampling data to media-specific environmental screening levels (ATSDR comparison values [CVs] and non-ATSDR screening levels). This identifies potential contaminants of concern that require further evaluation for completed and potential exposure pathways.
  + [Exposure Point Concentrations (EPCs) and exposure calculations](https://www.atsdr.cdc.gov/pha-guidance/conducting_scientific_evaluations/epcs_and_exposure_calculations/index.html) for contaminants flagged as requiring further evaluation in completed and potential exposure pathways. It involves calculating EPCs, using the estimated EPCs to perform exposure calculations, and determining which site-specific scenarios requires an in-depth toxicological effects analysis.
  + [In-depth toxicological effects evaluation](https://www.atsdr.cdc.gov/pha-guidance/conducting_scientific_evaluations/indepth_toxicological_analysis/index.html), if necessary, based on the three previous scientific evaluations. This step looks more closely at contaminant-specific information in the context of site exposures. This evaluation can also help determine if there is a potential for non-cancer or cancer health effects.
* Summarizes findings and next steps, while acknowledging uncertainties and limitations.
* Provides recommendations to site-related entities, partner agencies, and communities to prevent and minimize harmful exposures.

The sequence of steps can differ based on site-specific factors. For instance, health assessors might define an exposure unit before or after the screening analysis.

For more detail on the PHA process, please visit [Explanation of ATSDR’s PHA Process Evaluation](https://www.atsdr.cdc.gov/pha-guidance/resources/Full-PHA-Process-Explanation-508.pdf). Readers can also refer to [ATSDR’s Public Health Assessment Guidance Manual](https://www.atsdr.cdc.gov/pha-guidance/index.html) for all information related to the step-wise PHA process.