

PROMOTING HEALTHY ENVIRONMENTS FOR CHILDREN

Taking an Environmental History



KEY POINTS

An environmental history is a basic component of a complete pediatric history.

- Areas of inquiry include age and condition of the home and childcare environment; secondhand smoke exposure; exposure to gas stoves; dietary exposure to mercury in fish, and to arsenic in rice products and juice; exposure to ultraviolet radiation; exposure to noise; and parental/teen occupations and hobbies.
- Questions can be incorporated into health supervision visits, as well as visits for illnesses with known or potential environmental causes.
- Questions about the environment are also appropriate when symptoms are unusual, persistent, or when multiple people in the home (or childcare setting, school, etc.) have similar symptoms.
- Questions should take into account the child's age and developmental stage.
- Information from an environmental history may help prevent or mitigate hazardous exposures.

CLINICAL GUIDANCE

Learning more about a child's environment allows pediatricians to identify possible exposures and prevent severe illness or injury. Environmental histories include questions about:

- **The home:** Ask whether there is enough heat in the winter and access to cooling in the summer; if gas stoves are used for supplemental heat; if there are working smoke detectors and carbon monoxide detectors; if renovations are planned or ongoing; if the home has lead paint or mold; where chemicals such as pesticides are stored; and if the family has HVAC with MERV 13 or higher or portable air cleaners for poor air quality days or secondhand smoke.
- **Tobacco smoke exposure, use, and/or use of alternative nicotine products by household members:** Tobacco use inside the home results in second- and third-hand smoke exposure to children and other family members. Provide guidance to help smokers quit; if quitting is not possible at this time, smokers can be counseled to reduce exposure to other family members.
- **Water sources:** Ask about water source (including municipal supply, well water, bottled water) and possible contaminants with guidance about resources and mitigation.
- **Exposures from food:** Encourage breastfeeding for infants and young children. Promote a diet rich in fruits, vegetables, protein, and calcium. Discuss food choices and preferences to determine potential exposures such as mercury in certain fish species and arsenic in rice products and juice.
- **Sun exposure:** Promote playing outside but doing so safely to reduce skin cancer risk.

- **Noise exposure:** Ask about noisy sleep machines and toys; discuss limiting exposure from earphones, headphones, or personal listening devices to decrease risks to hearing. Promote quieter environments to enhance learning, and to decrease physiologic stress and psychological harm.
- **Pesticides:** Ask about pest management practices, safe storage of pesticides, spraying or other application of lawn/landscaping chemicals and pesticides, and use of insect repellants.
- **Exposures resulting from household member occupations and hobbies:** Ask about potential hazards from occupations and hobbies while offering guidance to reduce or eliminate childhood exposure. Ask about the presence of firearms in the home, and counsel parents who do keep guns to store them unloaded in a locked case, with the ammunition locked separately.

BACKGROUND INFORMATION

Pediatricians can use environmental histories to learn about children's environments. When available, this can be supplemented with a home visit through the health department or community health workers. Information can help pediatricians understand a child's physical surroundings and offer guidance to reduce or eliminate exposure to hazards. Regional Pediatric Environmental Health Specialty Units (PEHSUs) can assist in obtaining an environmental history and addressing exposure concerns.

FOR MORE INFORMATION

The following resources offer additional information regarding taking an environmental history:

- [Pediatric Environmental Health, 4th Edition](#) – AAP Policy Manual
- [Bright Futures Guidelines and Pocket Guide](#)
- [Pediatric Environmental Health Specialty Units](#) – PEHSU
- [Pediatric Environmental Health Toolkit Training Module](#) – ATSDR
- [National Environmental Education Foundation](#) – NEEF
- [PEHSU Fact Sheet: Arsenic in Food](#) – PEHSU Resource