

Preventive Medicine: Taking an Environmental History

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Disclosure: Joel Kreisberg, DC, is an employee of Practice Greenhealth, a membership and networking organization for institutions in the health-care community that seek to maintain sustainable, ecofriendly practices.

How often do you take an environmental history? If your answer is rarely or never, please read on.

An integrative practice requires the practitioner to consider the whole person—including chief complaints, a full health history, and the patient's social and psychological makeup—along with still having the time to determine a prescription and give proper guidance. In particular, environmental health is an important topic that should be included in a full health history.

It is probably not practical in a busy clinic to take a comprehensive environmental history. However, a brief environmental screening takes only a few minutes and is an excellent preventive medicine tool. Or, if you have a patient with chronic conditions, an environmental history may reveal 1 of the sources of the disorder. In addition, the screening gives patients a chance to inquire about environmental health and offers an excellent opportunity for you, as their practitioner, to advocate for a healthy environment.

The following Environmental Screening Questionnaire has been adapted from the *Pediatric Environmental History* created by the National Environmental Education Foundation (www.neefusa.org).¹

1. Where do you spend most of your time?
2. What is the age, condition, and location of your home?
3. Do you live with anyone who smokes?
4. Do you have a carbon monoxide detector?*
5. Do you have any furry pets that live indoors?
6. What type of heating/cooling system does your home have? How old?
7. What is the source of your drinking water?
8. Are you aware of any exposures to toxic chemicals?
9. What is your occupation and the occupation of others who live with you?
10. Do you have concerns about your local environment and its impact on your health?

Given 5 minutes during an intake interview, these 10 questions offer simple, effective screening for environmental illness. In general, if all the answers come back as insignificant,

*Radon levels, another environmental concern, should be professionally calibrated when someone buys a house; if a patient has an older home, he can hire a professional to perform the test.

Resources

- ▶ Agency for Toxic Substances and Disease Registry Case Studies in Environmental Medicine
www.atsdr.cdc.gov/csem/csem.html
- ▶ American Academy of Environmental Medicine
www.aeonline.org/
- ▶ Environmental Health Center-Dallas
www.ehcd.com/
- ▶ Environmental Health Committee, Ontario College of Family Medicine
www.cfpc.ca/English/OCFP/Members/Committees/EHC/default.asp?s=1
- ▶ National Environmental Education Foundation
www.neefusa.org/
- ▶ Physicians for Social Responsibility Pediatric Environmental Toolkit
www.psr.org/site/PageServer?pagename=pediatric_toolkit
- ▶ Scorecard: The Pollution Information Site
www.scorecard.org/
- ▶ Taking An Exposure History
www.cfpc.ca/local/files/EHC/Exposure%20Hx%20Forms%2010Feb2004.pdf
- ▶ Toxic Release Inventory Program
www.epa.gov/tri/

then the majority of a person's time is spent in safe/nontoxic environments and a person's home is safe. That is to say, the house is not too old (so no asbestos or underlying layers of lead paint), does not have smokers or furry pets, has a water source without too many added chemicals, and is without occupants who work closely with chemicals—hence, the risk for environmental exposure is low. However, if any 1 of these answers is a cause for concern, a more detailed exposure history is warranted. As well, the final question offers the patient an opportunity to direct the physician to any particular area of concern about health and the environment.

An explanatory note on question number 5, pets: The reason this is an environmental health concern is that pets not only leave hair throughout a home, but additional organisms, including bacteria, mold, and dander, also play a role in changing the indoor environment.

Going Deeper

With 1 positive answer, the next step would be to complete a more thorough environmental case history. Several useful tools are available.

Lynn Marshall, MD, a physician working at the Environmental Health Clinic, Sunnybrook & Women's College Health Sciences Centre (www.womenscolleghospital.ca) in Toronto, Ontario, has designed the mnemonic CH2OPD2, which stands for community, home, hobbies, occupation, personal habits, diet, and drugs.² Download Dr Marshall's *Taking An Exposure History*³ and keep copies available for the next patient. As one of the most useful documents in my practice, Dr Marshall's forms cover the CH2OPD2 in detail—though often I only focus on a particular area of risk rather than completing the entire form.

The Ontario College of Family Physicians (www.ijc.org) is also an impressive website full of useful resources, particularly their Environmental Health Committee (see sidebar for site location). A training manual entitled *Environmental Health in Family Medicine*⁴ is available for free and includes 6 modules: lead, outdoor air quality, indoor air quality, pesticides, water quality, and persistent organic compounds. The presentations, all posted online, include vital topics such as environmentally linked chronic conditions, food intolerance, breast cancer prevention, body burden, climate change and infectious disease, and asthma and the environment. This material, including case studies, is easily accessible and should be required reading for anyone in a primary care position.

The Agency for Toxic Substances and Disease Registry (www.atsdr.cdc.gov), part of the US Centers for Disease Control and Prevention, has a section on their website called Case Studies in Environmental Medicine, which explains how to take an exposure history as well as offers case studies for continuing education credit, including 9 specific substances.⁵

I often use Scorecard: The Pollution Information Site (www.scorecard.org). Recommended to me by William Rae, MD, founder of the American Academy of Environmental Medicine (www.aeonline.org) and the Environmental Health Center in Dallas (www.ehcd.com), you can print a score card for each patient's zip code and place it directly into a chart. You not only will have a record of each patient's environmental risk, it allows you to answer questions that might come up during the screening, and it will increase your knowledge of local environmental threats.

Essential to green healthcare is understanding the context of a patient's illness. Much comes from the environment, either social or physical. Integrative medicine offers many approaches for issues of the social environment using mind-body techniques and stress reduction; however, the physical environment is often overlooked. The 21st-century primary care physician will be well served by familiarizing him or herself with the common hazard(s) for each patient. An understanding of local conditions provides an excellent opportunity for promoting a healthy environment while providing useful clues in a complex search for hidden causes of unexplained illness. Learning about the place in which we live can improve our clinical outcomes while serving to promote a healthy community for all of us to use and thrive.

Joel Kreisberg, DC, a chiropractor and clinical homeopath, is founder and senior director of the Teleosis Institute, formed to educate health professionals about the principles of ecologically sustainable medicine. As mentioned in the disclosure, Teleosis is a program of Practice Greenhealth.

References

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2. Marshall L, Weir E, Abelson A, Sanborn MD. Identifying and managing adverse environmental health effects: 1. Taking an exposure history. *CMAJ*. 2002;166(8):1049-1055.
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4. Environmental Health Committee. *Environmental Health in Family Medicine*. Accessible at: <http://www.ijc.org/rel/boards/hptf/modules/content.html>. Accessed August 19, 2009.
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