



The Precautionary Principle

The Community Engagement Core (CEC) increases awareness and understanding of environmental health research.

Stakeholder Advocacy Board members include:

- Community Health and Social Services
- Detroit Health Department
- Detroit Hispanic Development Corporation
- Detroiters Working for Environmental Justice
- Eastside Community Network
- Ecology Center
- Henry Ford Health System
- Michigan Environmental Justice Coalition
- We the People of Detroit

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What is the Precautionary Principle?

Have you ever heard the phrase “An ounce of prevention is worth a pound of cure”?¹ This is the idea behind the precautionary principle, which helps us weigh whether an action or decision should be taken when we do not know for certain whether it may have harmful effects on the environment, or on the health of people.² The precautionary principle suggests that, when we do not know for certain that there will not be damaging effects of substances, especially those that are persistent and toxic in the environment, it is best to err on the side of precaution— that is to prevent exposure, rather than try to clean up or cure the negative health effects of an environmental exposure after it has occurred.²

Why do we need a "Precautionary" Principle?

Very little in life is certain. When we cross the street, we look both ways before stepping into the road – this is an action of precaution, helping to prevent us from walking into the path of a moving vehicle. When we turn off our electronic devices on planes during takeoff and landing we are taking precaution by preventing radio signal interference that can disrupt the plane.

For many chemicals that are in daily or frequent use, there is not enough scientific evidence to know for certain what their adverse health effects may be. Until we know for certain that these chemicals are safe, the precautionary principle can be used to avoid exposure to these chemicals with unknown health impacts. Examples of chemicals in common use for which adverse health effects are suspected but not yet certain include:

- BPA- (bisphenol A) commonly found in plastics and metal-lined cans³
- PBDEs- (polybrominated diphenyl ethers) commonly found in flame retardant clothing and foams
- Phthalates- commonly found in cosmetics, shower curtains, and wallpaper
- TCE- (trichloroethylene) commonly found in degreasers and paint removers⁴
- PVC- (polyvinyl chloride) commonly found in plastics, particularly in toys⁴
- Pesticides– used in gardening and foods to prevent pests





Decisions that Protect the Public from Harm

The precautionary principle encourages and allows decision makers to make decisions that protect the public and the environment from harm. The precautionary principle also states that the burden of proof that a product or action is safe for people and for the environment should fall to those who are promoting its use.⁵ It should not be up to the people who are exposed to the product or action to prove that it is unsafe or harmful to health.



The Precautionary Principle in Real Life

Many chemicals last a long time in the environment once they are released, and may be difficult and expensive to clean up. Therefore, the Precautionary Principle has been applied in a number of important decisions, to protect the environment and health. For example:

- **Water:** Risk management decisions in water regulation reflect precautionary principles. When the estimate of risk for contaminants in water are unknown, regulatory limits tend toward greater-protection – that is, they allow lower levels of the contaminant.
- **Toys:** In 2008, Wal-Mart, Target and Toys “R” Us applied the precautionary principle in a decision to voluntarily reduce PVCs in their toys.^{6 7}
- **Pesticide Use:** The Los Angeles Unified School District (LAUSD) adopted an integrated pest management practice in the schools, drastically reducing the use of pesticides in the schools.⁸

What Does this Mean for Me and My Community?

Your health, and the health of your community, is affected by many things, including the foods available to you, how much exercise you get, and the things you are exposed to in the air, water, and in your home. The Precautionary Principle asks business, policy and other decision makers to take precautions that protect the environment and the health of people by making decisions that reduce the likelihood of exposure to harmful chemicals. To promote precaution, you can encourage business, policy, and other decision makers to:

- Clearly label products that may have adverse effects on the health of people, animals and the environment;
- Limit actions that may pose a risk of threat to human health or the environment, even if that threat has not yet been fully established scientifically.
- Prove that an action or chemical is safe to the environment and will not harm human health (rather than requiring the public to prove that it is not safe), before approval.

Please see http://mleead.umich.edu/Coec_Fact_Sheets.php for the citations included in this factsheet.

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