

**Environmental Health Fact Sheet**

## An Ounce of Prevention...

## The Precautionary Principle

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

Stakeholder Advisory Board members include:

- Community Health and Social Services Center, Inc.
- Detroit Hispanic Development Corporation
- Detroiters Working for Environmental Justice
- Institute for Population Health
- Green Door Initiative
- Henry Ford Health System
- Eastside Community Network
- Michigan Department of Community Health
- University of Michigan School of Public Health

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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”? 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. 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.

**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.

There is much uncertainty about the chemicals that we are exposed to daily. They may be harmful to our health, though we do not have enough scientific evidence to know for certain. Therefore, we use the precautionary principle to reduce our exposure to potentially harmful chemicals. These include:

- BPA- (bisphenol A) commonly found in plastics and metal-lined cans
- 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 removers
- PVC- (polyvinyl chloride) commonly found in plastics, particularly in toys
- Pesticides– used in gardening and foods to prevent pests

## Decisions that Protect the Public from Harm



The precautionary principle encourages and allows decisions 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**. 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.
- ✓ **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.



## 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.



*The University of Michigan Environmental Health Science Center of Excellence promotes collaboration among UM environmental health researchers and communities. Researchers work together to advance knowledge of environmental health issues that affect community members in Detroit and Southeast Michigan.*

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