

**Precautionary Principle Fact Sheet**  
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The Precautionary Principle is defined as “When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically.” (Wingspread Statement, at <http://www.sehn.org/state.html#w>)

In plain English, this means: in the face of harm and scientific uncertainty, we should take action to protect our health and environment. The precautionary principle directs us to act ethically and protect future generations, even if that means not waiting until all the scientific evidence is complete. The ethical question becomes: “do we know enough to act?”

There are five steps that can be taken to implement the precautionary principle.

- 1) **Heed Early Warnings.** Are there trends in data that show increasing levels of disease or pollution or climate change? Those trends can sound an alarm of increasing levels of harm even if we don’t fully understand all the causes. These early warnings can initiate more research. But they can also lead to preventive measures when we have enough evidence to act.
- 2) **Set Goals.** When the trend lines show decreases in honey bees or increases in asthma and breast cancer or dying rivers, we can set goals that shape action to reverse those trends.
- 3) **Hold Polluters Accountable.** Lawyers have a fancy term for holding polluters accountable: reversing the burden of proof. Currently, most laws favor economic activity and dismiss predictions of environmental or public health harm. This results in polluters, like mining and fracking companies, gambling with our health, water and air. When they lose their bet, the public has to pay for the pollution and the disease. The Precautionary Principle, instead, directs that polluters be held accountable by posting bonds *before* proceeding with a potentially damaging activity. If they damage the commonwealth and common health, they must pay. This is reversing the burden of proof – they have to prove that their activity is safe, instead of the public having to show that it’s dangerous.
- 4) **Identify the best alternatives to harmful activities and choose them.** Most environmental decisions consider the risk of single activities, sites or substances. They decide if those risks are acceptable. Instead of simply accepting risk, the precautionary principle directs us to determine if an activity poses a threat of harm and if it does, to look for a safer alternative. Is solar or wind power safer than nuclear power? Are there alternatives to toxic pesticides for managing lawns? Do we even need to use arsenic in playgrounds at all?
- 5) **Democratic participation leading to free, prior and informed consent.** Because the precautionary principle is a way to make ethical decisions, it doesn’t leave all decisions to scientists. Communities and people affected by a decision should be at the table to document the early warnings, set goals and look for the best alternatives. Communities have the right to give or withhold their free, prior and informed consent to activities that affect their future.