

The Precautionary Approach

Definition: "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 have not been fully established scientifically."

Three elements of precaution:

1. When we have reasonable suspicion that **harm** is occurring or may occur
2. and we have scientific **uncertainty**
3. then we all have a **duty to act** to prevent harm.

Eight kinds of precautionary action we can take

1. **Set goals** (dream, then plan).
2. **Monitor** (pay attention -- no sleep-walking).
3. **Heed early warnings** (be prepared to act on results of monitoring).
4. **Consider all the evidence** (no cherry-picking data, no ignoring inconvenient facts).
5. **Consider the boundaries of consequence in time and space:** who and what might be affected? How far away, and how long from now, could effects be felt?
6. **Engage the affected people in decisions:** we all have a fundamental right to participate in the decisions that affect our lives because "governments derive their just powers from the consent of the governed," as the Declaration of Independence says.
7. **Choose the best alternative for achieving the goal** (evaluate the alternatives).
8. **Give the benefit of the doubt to nature and to public health.**

Three questions we can always ask:

1. **Is this harm preventable?**
2. **Do we know enough to act?** (Asked when someone wants to delay until certainty has been achieved.)
3. **Are there better alternatives and has anyone looked?**

Three other ideas that are often linked to the Precautionary Principle

1. We all must **protect the commons** (all the things we own together and none of us owns individually, including air, water, the gene pool, public health, accumulated human knowledge, and more) because the commons provide the basis of all life, health and commerce.
2. The **public trust doctrine**, which dates from ancient Rome and remains embedded in the laws of most states: The commons are owned by the public (all of us) but government holds the commons in trust for the trust beneficiaries (present and future generations). Without precaution, the trust property (the commons) will be harmed and the trustee will have failed to fulfill its duty as trustee. The trustee must protect the commons against all harmful actions, including actions by trust beneficiaries. Government cannot abdicate, alienate, deny, transfer or ignore its public trust duty.
3. **Guardians for future generations.** We can designate guardians for future generations and we can serve as guardians for future generations. To do so, we will need to use the precautionary principle.

A Precautionary Checklist

1. What do we care about?

2. What are we trying to accomplish?

- a. Who shares this goal?
- b. Do the goals reflect what we care about?

3. What choices do we have?

- a. What is feasible and likely to move us toward the goal?
- b. How do choices compare and rank?
- c. How do we find even better solutions?
- d. How do we adopt better solutions?

4. What is the bigger picture?

- a. What are the "upstream" problems? What are the downstream repercussions? What is the broader context?

- b. What are the earlier solutions? The most elegant? Is there a systemic solution that could create multiple benefits? Where can we intervene in the system to set in motion the best solutions?

5. Do we know enough to act? Do we know so little we must act with caution?

a. How would we know if harm was occurring or about to occur?

- b. What do we know about harmful effects?
- c. Where does our knowledge come from?
- d. How can we predict from what we know already?
- e. Do we know enough to act?
- f. Do we know so little that we must act with caution?
- g. Are we getting all the information we need from those who have it?
Is testing thorough? Is monitoring adequate? How will we learn?

6. Who is responsible?

- a. Are those responsible accountable?
- b. Is government acting responsibly as public trustee?
- c. Who has the burden of proof -- those who harm or those who are harmed?
- d. How can we distribute power, costs, benefits, and responsibilities more justly?

From: Nancy J. Myers and Carolyn Raffensperger, editors, *Precautionary Tools for Reshaping Environmental Policy* (Cambridge, Mass.: MIT Press, 2006), pg. 94.