Safety Corner

What is precautionary principle?

The precautionary principle suggests that where there are potential threats (regardless of the likelihood) of serious or irreversible damage to the public or the environment, the lack of full scientific certainty and consensus should not be used as a reason for postponing drastic measures to remove the potential threats. The precautionary principle represents a paradigm shift in decision-making as it assumes guilt and requires prove of innocence – if an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is actually harmful, the burden of proof that it is not harmful falls on those taking the action.

Advocates of the principle maintain that the principle enables rapid response in the face of a possible danger to safety, or to protect the environment. The principle implies that policymakers have a social responsibility to protect the public from exposure to great harm and make discretionary decisions in situations where extensive scientific knowledge on the matter is lacking or scientific data do not yet permit a complete evaluation of the risk. Actions would be taken based on the assumption that there would be severe consequence regardless of the likelihood. An example in applying this principle is the killing of all chickens in Hong Kong when there are a few cases of avian flu found amongst poultry in the region.

Critics of the principle argue that, contrary to what its advocates claim, this principle does not provide a particularly useful, prudent guide to developing or implementing environmental and public health measures in terms of introducing new technology. It is impractical in some applications to be so overly conservative, since every implementation of a technology carries some risk of negative consequences.

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