

CAUT Health and Safety Fact Sheet



Precautionary Principle

ISSUE 21

The precautionary principle has become vital to ensuring safety in the workplace and in our homes and communities. With the development of industrialization, workers and communities have been faced with the proliferation of physical, chemical and biological hazards. Newer “safer” technologies have often proven to be as dangerous as the hazards they replaced.

The rush to introduce new materials or processes into the workplace without careful consideration of potential harm, coupled with an indifferent attitude to workplace risks and injuries, has dramatically increased injury and disease.

Hippocrates, who has been identified as the father of the precautionary principle¹, said “As to diseases make a habit of two things – to help, or at least, to do no harm.” This principle has been carried forward in various ways, including by Dr. John Snow who stopped an 1880’s cholera epidemic in London, England, by removing the handle of a public pump when he suspected the water might be transmitting the disease. The basic tenant of the principle is that absence of scientific certainty should not prevent prudent actions that may reduce risk.

The consequences of not following the precautionary principle can be very serious as we have seen in relation to asbestos, lead and thalidomide. Safer alternatives is a necessary adjunct component.

Occupational health and safety acts direct employers to “take every precaution reasonable (or practicable) for the safety of a worker”. This means the precautionary principle should be the priority in keeping our members safe. The joint health and safety committee (JHSC) should ensure that this principle is incorporated into its terms of reference and that it is an intrinsic part of all programs, analysis, training and introduction of new elements or practices into the workplace.

The precautionary principle states that action to reduce risk need not await scientific certainty.

Waiting for proof can cost lives.

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Global Approach

Since the mid-1970's, there has been a growing recognition that traditional scientific investigative methodology cannot predict with accuracy the safety of any given product or practice. Worker experience and intimate knowledge of their workplace and how their body reacts to workplace exposures has been increasingly recognized as vital in identifying workplace hazards instead of waiting for "proof" to act. This does not mean that scientific research is not relevant or valuable – it recognizes that where there are gaps, we must look to workers' experiences and knowledge to assist with hazard prevention.

It was the environmental movement in Germany in the 1970's who first coined the term "Vorsorgeprinzip" – translated as "Foresight Principle".² In 1992, the United Nations Rio Conference on the Environment and Development adopted the following:

"In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

Even companies producing hazardous products are noting the importance of the role the principle plays.³ The World Health Organization (WHO)⁴ and the International Labour Organization (ILO)⁵ both

promote the use of the precautionary principle for public health and workplace safety.

The European Union's European Commission adopted a Communication on Precautionary Principle in 2000.⁶ It notes that:

"The Communication underlines that the precautionary principle forms part of a structured approach to the analysis of risk, as well as being relevant to risk management. It covers cases where scientific evidence is insufficient, inconclusive



or uncertain and preliminary scientific evaluation indicates that there are reasonable grounds for concern that the potentially dangerous effects on the environment, human, animal or plant health may be inconsistent with the high level of protection chosen by the EU."

It further says that "Recourse to the precautionary principle presupposes that potentially dangerous effects deriving from a phenomenon, product or process have been identified, and that scientific evaluation does not allow the risk to be determined

with sufficient certainty." It is important to note that risk analysis is not supported by health and safety activists. Hazard identification is a more appropriate mechanism that dovetails with the precautionary principle.

Courts

In the 1970's, the US Supreme Court ruled in favour of Occupational Safety and Health Administration's attempts to

Hazard identification is a more appropriate mechanism that dovetails with the precautionary principle.

regulate benzene in the workplace because of suspected links to a rare type of leukemia, ruling that

"...OSHA is not required to support its findings that a significant risk exists with anything approaching scientific certainty...so long as they are supported by a body of reputable scientific thought, the Agency is free to use conservative assumptions ...risking error on the side of overprotection rather than under protection."⁷

In 1976, the Environmental Protection Agency (EPA) won a ruling to ban the use of lead in gasoline, with the court ruling "...the statutes and common sense demand regulatory action to prevent harm, even if the regulator is less than certain that harm is otherwise inevitable..."⁸

Finally, in a June 28, 2001 Supreme Court of Canada⁹ cites many sources for the precautionary principle and notes “Scholars have documented the precautionary principle’s inclusion in virtually every recently adopted treaty and policy document related to the protection and preservation of the environment.”



Lessons from SARS

In the spring of 2003, Canadian health care workers in Toronto were infected and died from exposure to Severe Acute Respiratory Syndrome (SARS). Through a complex dysfunction of government, municipal and workplace management, coupled with inadequate legislative worker protection and the ignoring of frontline worker concerns, workers and their families, patients and their families, and the community at large were exposed to a lethal virus.

Mr. Justice Archie Campbell headed the SARS Commission, whose mandate was to search for what happened and make recommendations to prevent something similar from happening again. Throughout his Report¹⁰,

the Commission notes frequently that the failure to use the precautionary principle resulted in insufficient action to use proactive, preventative methods to attempt to control the disease when so little was known regarding it. He made clear the error, namely that “...action to reduce risk should not await scientific certainty...” and that joint health and safety committees must be an integral part of the process.

In its Report (pg 1158) the Commission recommended:

- That the precautionary principle, which states that action to reduce risk need not await scientific certainty, be expressly adopted as a guiding principle through Ontario’s health, public health and worker safety systems...and by way of inclusion, through preamble, statement of principle...in the *Occupational Health and Safety Act*, the *Health Protection and Promotion Act*, and all relevant health statutes and regulations.
- That in any future infectious disease crisis, the precautionary principle guide the development, implementation and monitoring of procedures, guidelines, processes and systems...
- That...the precautionary principle guide the development, implementation and monitoring of worker safety procedures, guidelines, processes and systems.

The lesson is that waiting for proof can cost lives, and that common sense coupled with the best known information and practices available make for a more effective safety process.

Worker Initiatives

Unions like the Ontario Nurses Association (ONA), the Ontario Public Service Employees Union (OPSEU), and the United Steelworkers (USW) have promoted the inclusion of the precautionary principle in workplace health and safety mandates. The Ontario Federation of Labour has been leading a campaign to make changes to the Ontario Occupational Health and Safety Act which would include the use of the precautionary principle as one of its core requirements.

Faculty associations should consider, in collaboration with the workplace JHSC, to ensure that it become part of both the JHSC terms of reference and faculty and other campus union collective agreements.

Tools

Joel Tickner, Associate Professor and Director of the Department of Community Health and Sustainability and Project Director at the Lowell Center for Sustainable Production at the University of Massachusetts,



Lowell, co-authored “The Precautionary Principle in Action – A Handbook” which lays out when and why to implement the principle, how to do it, and dispels the myths of science vs alternative approaches.”¹¹

The precautionary principle: protecting public health, the environment and the future of our children”¹², co-edited by Tickner, notes:

- limits in scientific knowledge
- problems of statistical power
- low-adverse effects
- difficulties in addressing cumulative effects
- financial and resource limitations

These documents are excellent guides in understanding the relevance of using the precautionary principle.

The Precautionary Principle Project for sustainable development, biodiversity, conservation and natural resource management can be found at www.pprinciple.net.

The Ontario Federation of Labour’s (OFL) “Occupational Health and Safety and the Precautionary Principle Collective Bargaining Language”, July 2007, provides a guide for collective agreement language.

The Ontario Nurse’s Association (ONA) also has collective agreement language that includes: “When faced with occupational health and safety decisions, the Hospital will not await scientific or absolute certainty before taking reasonable action(s) that reduce risk and protects nurses.”



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Workers Health and Safety Centre

Notes

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