

1 General principles for prevention

This chapter sets out general principles relating to the prevention of chemical accidents. It provides key elements to ensuring effective prevention and on the main roles of industry and public authorities.

The primary objective of safety-related programmes at hazardous installations is the prevention of chemical accidents (recognising that chemical accidents may, nonetheless, occur).

The prevention of chemical accidents is the concern of all stakeholders. This includes industry (e.g. owners and managers of hazardous installations, other employees and (sub)contractors working at or on behalf of such installations, and employee representatives);¹ public authorities at the national, regional and local levels, the public and other stakeholders (e.g. business, labour, communities, international organisations and academic institutions).

For chemical accident prevention activities to be effective, co-operative efforts should be undertaken by all stakeholders. Within communities where there are hazardous installations, it is important for industry, local authorities and the public to work together to reduce the risks of accidents. This co-operation should be based on a policy of openness, to build trust and manage the risk of chemical accidents in the most effective way.

All hazardous installations should comply with the same overall safety objectives and the same expectation of safety, irrespective of size, location or other factors. Industry's obligation to operate safely applies to enterprises of all sizes that produce, use, handle, transport, store or dispose of hazardous substances, including those enterprises that are not chemical producers or otherwise not considered part of the chemical industry.

It is undisputed that learning from past chemical accidents is an essential and important part of major accident control. In order to learn from past accidents and improve safety over time, it is important to gather reports of chemical accidents and disseminate the learnings. Provided that lessons learnt are disseminated properly, all concerned should be able to avoid similar accidents.

Management at all levels of organisations operating hazardous installations has the responsibility for operating installations safely and for developing the means and the resources to do so. Industry should periodically monitor and review safety performance in hazardous installations in order to assess achievements with respect to the general goals set and demonstrate management's commitment to safety and provide motivation for improvement.

Producers of hazardous substances should promote the safe management of substances they produce throughout the total life cycle of the substances, consistent with the principle of product stewardship. Producers should make special efforts to help prevent accidents during the handling and use of a hazardous substance by downstream users. The importance of a standardised system of classification and labelling of hazardous substances should be raised and the role of the United Nations (UN) Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

All *employees* should share responsibility for and have a role to play in the prevention of accidents by carrying out their jobs with an active regard for safety, supporting the ability of others to do so, and by contributing to the development and implementation of safety policies and practices.

Public authorities should set general safety objectives, establish a clear and coherent control framework and ensure, through appropriate inspection and enforcement measures, that all relevant requirements are being met. They should be proactive in stimulating the development of new approaches for accident prevention, in addition to their more traditional reactive role in responding to specific public concerns. They should take a leadership role in motivating all sectors of society to recognise the need for accident prevention, in identifying the tools needed and in developing a national culture that promotes chemical accident prevention.

Public authorities, industry associations and others should improve the sharing of information and guidance materials promoting the prevention of chemical accidents and improving the health, safety and environmental performance of hazardous installations.

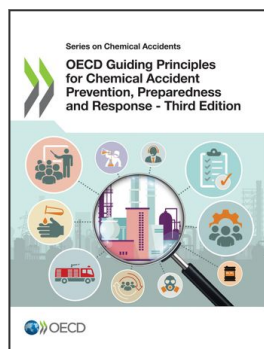
All stakeholders should be involved in addressing the fundamental issues related to risk acceptability/tolerability in a community with regard to chemical accidents. In this regard, each country/organisation should decide on its own criteria for acceptability/tolerability. Reaching a consensus on what is acceptable/tolerable can be helped by having an agreed framework for judging the criteria. While risk assessment informs the decision-making process, it should not be the sole decisive influence. Such questions are a matter of socio-political judgement.

Members of all stakeholder groups should be able to communicate effectively to their colleagues and superiors about safety and risk issues. Risk communication should take into account the fact that groups of people in an organisation may have different objectives (which may be conflicting) and that different disciplines may use different terminology when addressing safety and risk issues.

Means should be made available to assist *enterprises with limited resources* that need support or assistance to improve their safety programmes. A multi-faceted approach, with a variety of entities and programmes, may be necessary in order to address possible concerns and limitations of enterprises that might need support or assistance.

Note

¹ Different countries and enterprises may have different types of representatives of employees, including union representatives or safety representatives.



From:

OECD Guiding Principles for Chemical Accident Prevention, Preparedness and Response - Third Edition

Access the complete publication at:

<https://doi.org/10.1787/162756bf-en>

Please cite this chapter as:

OECD (2023), "General principles for prevention", in *OECD Guiding Principles for Chemical Accident Prevention, Preparedness and Response - Third Edition*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/8ed23b4b-en>

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <http://www.oecd.org/termsandconditions>.