CHEMICAL SAFETY

Chemicals are part of our daily lives. Some chemicals are manufactured for specific uses, while others are unwanted products of various processes, and some are of natural origin. Harmful exposure may occur through breathing, drinking, eating or contact. Several sectors and programmes have a role to play in preventing human exposure to chemicals and promoting their sound management throughout their life cycle. The health sector in particular needs to strategically engage in various areas in order to minimize the adverse effects of chemicals.

KEY RISKS TO HEALTH

Hazardous chemicals can be found in the air, in consumer products, at the workplace, in water, or in the soil, and can cause a large variety of diseases. Many more diseases, such as mental, behavioural and neurological disorders, adverse pregnancy outcomes, cataracts, or asthma, could be prevented by reducing or removing chemical exposure.

1.6 M More than 1.6 million deaths were due to chemicals in 2016.

PROPORTIONS OF THOSE KILLED BY SELECTED CHEMICALS IN 2016:

- 9% Poisonings (106,683 deaths)
- 14% Self-harm (166,594 deaths)
- 26% Cancers (296,243 deaths)
- 0.5% Chronic kidney disease (6,691 deaths)
- 3% Acute lower respiratory infections (31,033 deaths)
- 3% Diabetes (29,636 deaths)
- 0.3% Asbestosis (3,495 deaths)
- 44% Cardiovascular diseases (510,507 deaths)

More than 1.6 million deaths were due to chemicals in 2016. Source: WHO and Global Health Data Exchange.
WHAT ARE KEY ACTIONS FOR IMPROVEMENT?
Implement the WHO Chemicals Road Map approved by the World Health Assembly in 2017, which comprises four action areas:

1. Risk reduction
   Perform risk reduction, including through regulating chemicals (for example by implementing the Minamata Convention on Mercury and regulating lead paint), carrying out public education, and sharing best practices.

2. Knowledge and evidence
   Fill the gaps in knowledge and evidence on chemical risks, including through biomonitoring and surveillance, and estimating the disease burden from chemicals.

3. Institutional capacities
   Strengthen national institutional capacities to address chemical threats, including in response to chemical incidents and emergencies.

4. Leadership and coordination
   Ensure leadership and coordination to promote the inclusion of health considerations in all chemical policies, and engagement of the health sector in chemicals management activities at the national, regional and international levels.

SECTORAL POLICIES INTERACTING WITH CHEMICAL EXPOSURE
Cooperation with the following sectors may be required to sustainably reduce risks to health:

- Water and sanitation
- Industry
- Housing
- Agriculture
- Labour
- Health

Further information: http://www.who.int/ipcs/en/