International Labour Organization

সেন্টার ফর পলিসি ডায়লগ (সিপিডি)
Centre for Policy Dialogue (CPD)

First Industrial Safety Forum ISF

12 May 2022

Inaugural session

Keynote presentation

Bertrand Dagallier, Principal Administrator, Biosafety, Novel Food/Feed Safety, Chemical Accidents, OECD ENV/EHS

INDUSTRIAL ACCIDENTS PREVENTION, PREPAREDNESS AND RESPONSE: *Elements for Building the National Safety Framework*

Industrial Safety Forum in Bangladesh – 12 May 2022

Keynote presentation by M. Bertrand Dagallier, OECD

BETTER POLICIES FOR BETTER LIVES

What is the OECD?

Organisation for Economic Co-operation and Development

Inter-Governmental Organisation, *"Better Policies for Better Lives"*

- **38 Member Countries** from Americas, Europe, Asia and Pacific +
  Candidate and key partner countries

Advice to governments, information exchange, analyse/compare data, harmonised practices and standards, recommends policies

At Environment, Health and Safety Div., **Chemical Accidents programme:**

collaboration with other IGOs, Industry, Trade Union, Environmental NGOs, other interested countries

https://www.oecd.org/env/ehs/chemical-accidents/

Major accidents are still happening

- Industrial accidents continue to happen worldwide.

- Over the past decades, successive major accidents, have caused deaths, injuries, significant environmental pollution and massive economic losses, e.g.;
  - Leverkusen, Germany (2021) Beirut, Lebanon (2020),
  - Bentos Rodrigues, Brazil (2015), Tianjin, China (2015),
  - West, Texas, United States (2013) Gumi, Korea (2013)
  - **Bangladesh (1999)**: August: Chalantika Mirpur gas pipeline fire
    Febr.: Dhaka chemical factory+warehouses (plastics/cosmetics) fire

- Recovering from industrial accidents sets back development gains, takes time and is expensive and many places still suffer from events that happened years before

Links to some of the key databases of industrial accidents

- **eMars database**: (E.C. Joint Research Center (JRC) in collaboration with OECD and UNECE) https://emars.jrc.ec.europa.eu/en/emars/content

  Bangladesh information: 2021 – 8 accident cases

  Jan-April 2022 – 5 accident cases

- **eNatech** (https://enatech.jrc.ec.europa.eu/)
- **ARIA** (https://www.aria.developpement-durable.gouv.fr/)
- **ZEMA** (http://www.infosis.uba.de/index.php/en/ site/13947/zema/index.html)
- **Failure Knowledge Database** (http://www.shippai.org/fkd/en/index.html)
- **US Chemical Safety Board** (http://www.csb.gov)
- **IOGP database on oil and gas events**, https://data.iogp.org/ProcessSafety/Introduction/

Building national safety framework – Challenges ahead

- Develop and maintain a high level of safety
- Raise awareness of the risks and costs of accidents at higher policy levels, industry, operators, civil servants, society
- Make industrial accident **prevention** a priority
- Integrate prevention, preparedness and response to industrial accidents with natural disaster risk reduction and management (*Natech accidents*)

Building national safety framework – collective effort

- ✓ Many stakeholders, public, private, civil society
- ✓ Coordination of legislations from different areas – enforcement, control
- ✓ Guidance and practical tools needed
- ✓ Growing + strengthening from lessons learnt from past accidents

- Build a '**safety culture**', wide constant resource effort – it is worth! *Proven benefits, accidents reduction*

1. PRIORITISE INDUSTRIAL ACCIDENT PREVENTION

2. IDENTIFY THE HAZARDS & UNDERSTAND THE RISK

3. COMMMUNICATE WIDELY

4. CO-OPERATE AMONG STAKEHOLDERS


Organisational structure
Identification & evaluation of hazard
Facilities & operational control
Management of change
Planning for emergencies
Monitoring performance
Audit & review
Accident & incident investigation & learning from experience
Elements of a safety management system

Role of industry (1)

Promote a mature safety culture throughout the enterprise

Establish safety management systems and regularly review their implementation

Utilise inherently safer technology principles in designing and operating hazardous installations

Role of industry (2)

Identify and manage the risks arising from change

Prepare and plan for any industrial accidents that may occur

Educate and train for employees to work safely

Role of industry (3)

Track and learn from past accidents

Seek continuous improvement through applying good engineering and management practices

Exercise corporate governance in all operations and all locations of an enterprise

Role of Public Authorities (1)

- Develop, enforce and continuously improve policies, regulations and practices
- Motivate all stakeholders to fulfil their roles and responsibilities
- Monitor industry to ensure that risks are properly understood and addressed

Role of Public Authorities (2)

- Help ensure that there is effective communication and co-operation among stakeholders
- Plan and prepare for the effects of industrial accidents through appropriate response measures
- Establish appropriate and coherent land-use planning policies and processes

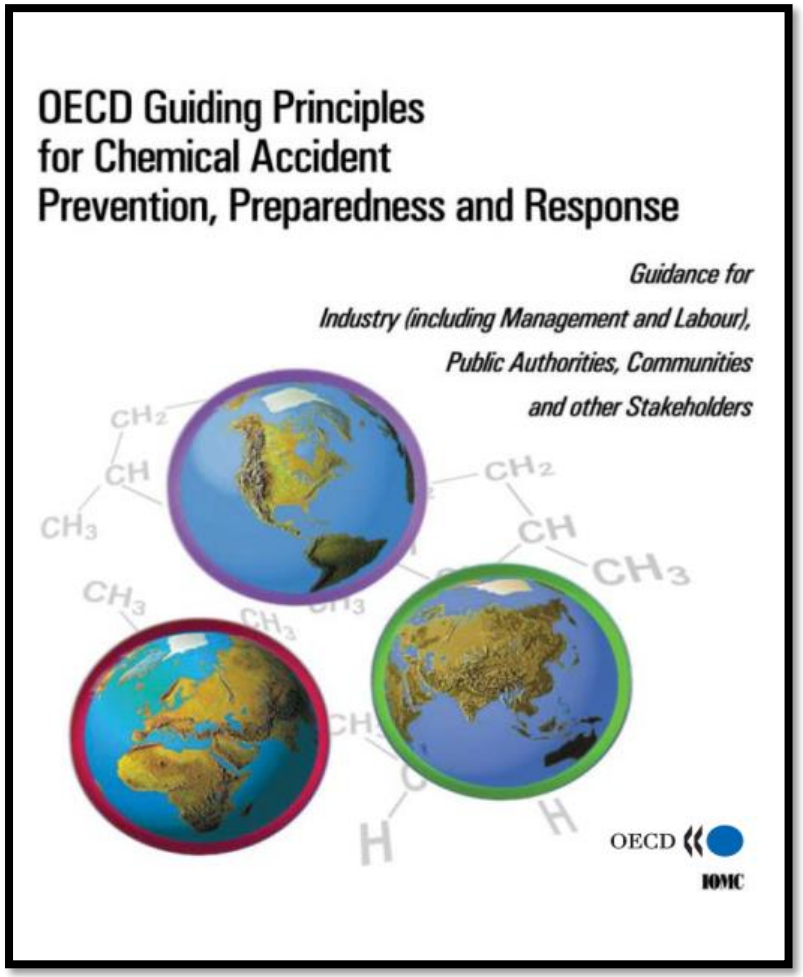
Objectives of the OECD Programme on Chemical Accidents

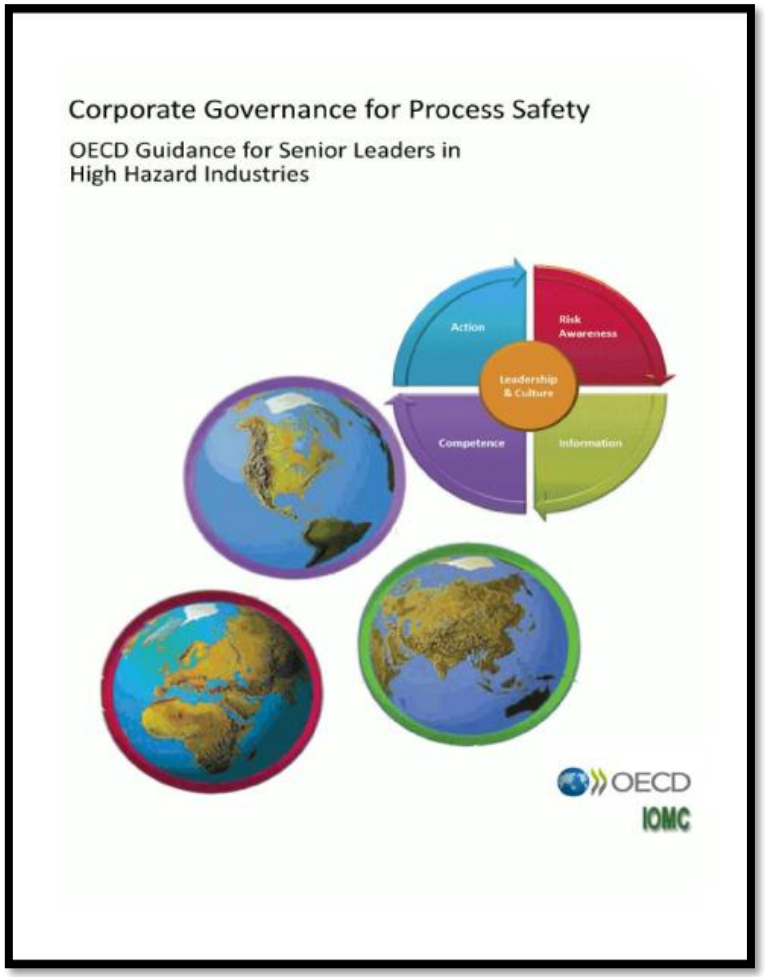
Share experience and recommend appropriate policy options for enhancing the prevention of, preparedness for, and response to, chemical accidents

Programme of work designed to:

- support cooperation and knowledge exchange on chemical accidents
- discuss and provide recommendations on continuing and emerging issues
- have a particular emphasis on **PREVENTION**

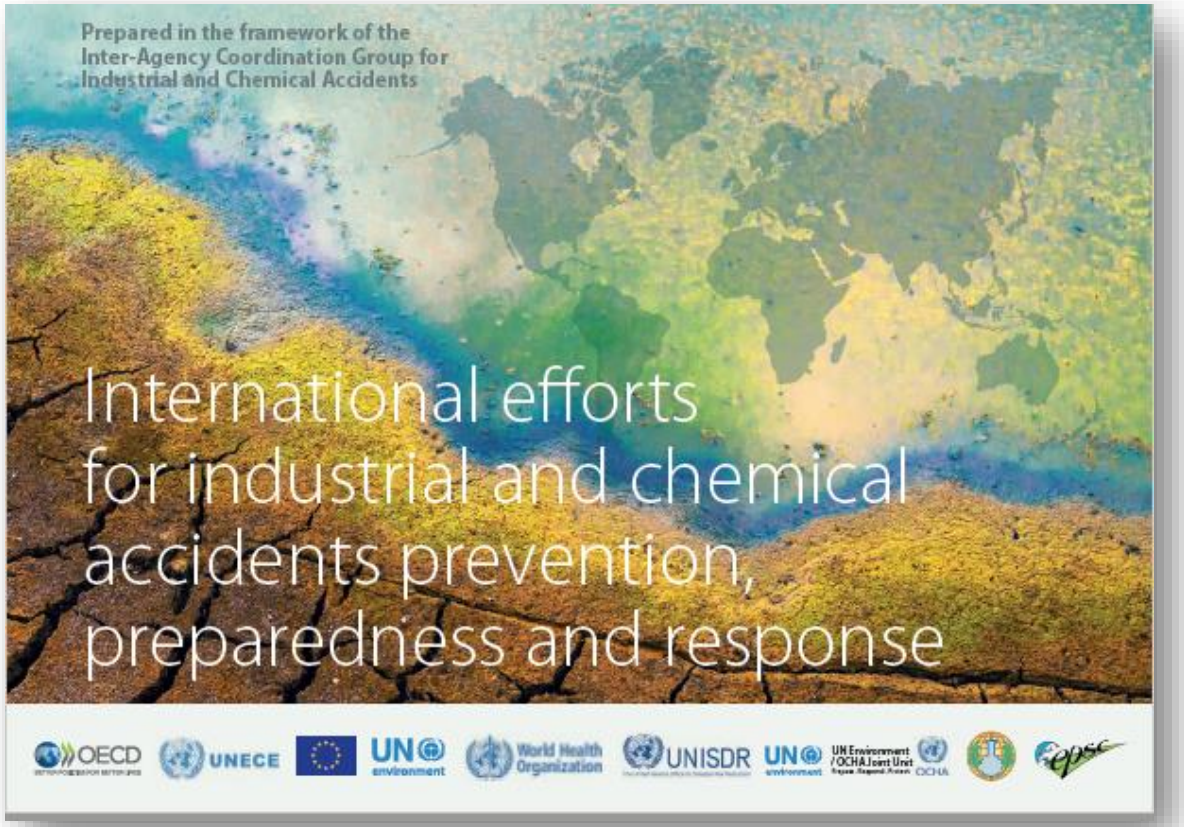
Flagship Publications





Now being revised!

Inter Agency Coordination Group on Chemical/Industrial Accidents



- informal forum that brings together international organisations and institutions working on prevention, preparedness & response to industrial and chemical accidents

- EC, Joint UNEP/OCHA Environment Unit, ILO, OECD, OPCW, UNECE, UNDRR, UNEP, UNIDO, WHO

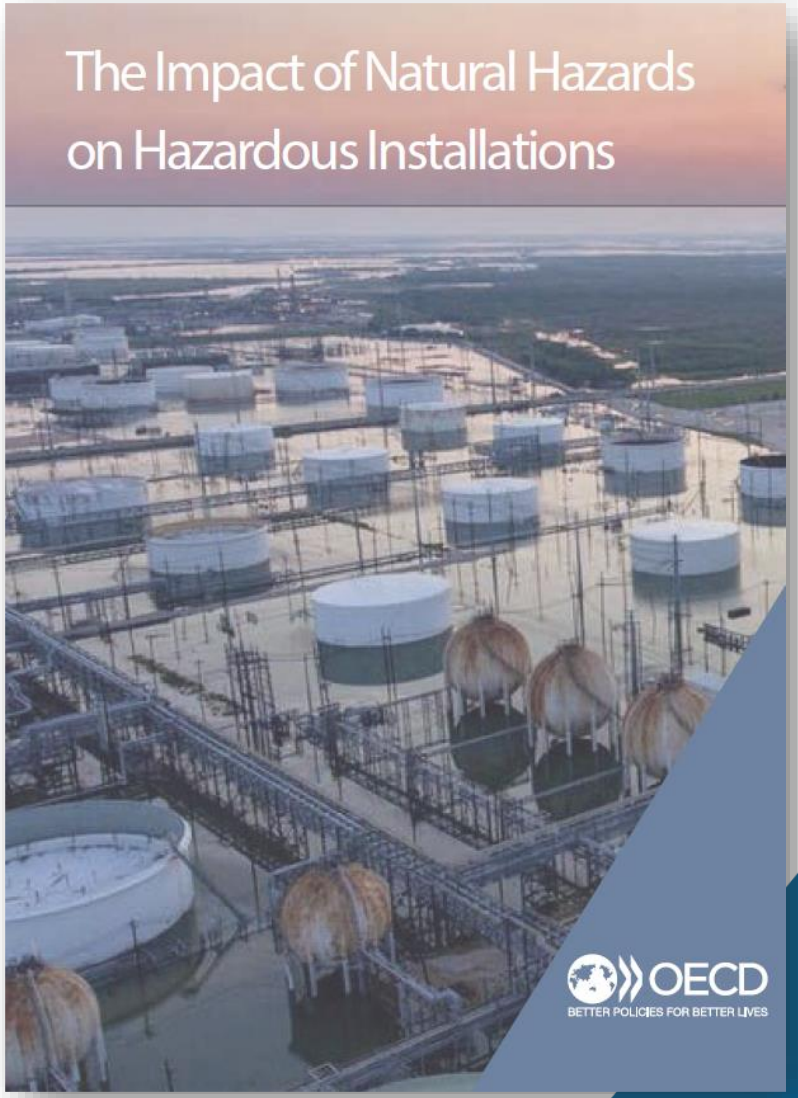
LINK:
https://www.oecd.org/chemicalsafety/chemical-accidents/Brochure-International-efforts-for-industrial-and-chemical-accidents.pdf

‘Natech’ Accidents *(Natural Hazard triggered Technological Accidents)*

Natural hazards, such as earthquakes, floods or storms, can initiate events which may challenge the safety and operation of industrial installations and trigger an accident. With climate change, more frequent and stronger/ more impacting/ natural disasters expected.

Bangladesh: **cyclones** and **floods** causing massive damages.
Also river bank erosion, earthquake, drought, salinity intrusion, fire, tsunami

Just published! OECD Brochure to Raise Awareness on Natech accidents risk.
LINK: https://www.oecd.org/chemicalsafety/chemical-accidents/impact-of-natural-hazards-on-hazardous-installations.pdf



Thank You!

www.oecd.org/chemicalsafety/chemical-accidents/

bertrand.dagallier@oecd.org
marie-ange.baucher@oecd.org

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