
Health-related targets and indicators within Global Framework for Chemicals

Joint Task Force on Environmental Statistics and Indicators

16-17 Oct 2023



ICCM-5: Global Framework on Chemicals – For a planet free of harm from chemicals and wastes

Measurability structure

The structure facilitates the reporting and monitoring of progress and impact in the implementation of the framework and contributes to assessing progress towards the vision.

Vision	Our vision is a planet free of harm from chemicals and waste for a safe, <u>healthy</u> and sustainable future.				
High level indicators	<ul style="list-style-type: none"> • <u>[Global burden of disease attributable to chemicals and waste]</u> • <u>Global environmental burden attributed to chemicals and waste]</u> 				
Strategic objectives	<p>A</p> <p>Legal frameworks, institutional mechanisms and capacities are in place to support and achieve the safe and sustainable management of chemicals throughout their life cycle.</p>	<p>B</p> <p>Comprehensive and sufficient knowledge, data and information are generated, available and accessible to all to enable informed decisions and actions.</p>	<p>C</p> <p>Issues of concern are identified, <u>prioritized</u> and addressed.</p>	<p>D</p> <p>Safer alternatives and innovative and sustainable solutions in product value chains are in place so that benefits to human health and the environment are maximized and risks are prevented or, where prevention is not feasible, minimized.</p>	<p>E</p> <p>Enhanced implementation occurs through increased and effective resource mobilization, partnerships, cooperation, capacity-building, and integration into all relevant decision-making processes.</p>
Headline indicators	TBD	TBD	TBD	TBD	TBD
Targets	A <u>targets (7)</u>	B targets (7)	C target (1)	D targets (7)	E targets (6)
Indicators for tracking targets progress⁶	TBD				

Targets

Target A6 – By 2030, all countries have access to poison centers equipped with essential capabilities to prevent and respond to poisonings as well as access to training in chemical risk prevention and clinical toxicology.

Target B7 – By 2030, stakeholders generate to the extent possible, and make available comprehensive and accessible monitoring and surveillance data and information on concentrations and potential exposure sources of chemicals in humans (disaggregated by sex, age, region, other demographic factors, and other relevant health determinants as feasible), other biota and environmental media.

Resolution: Health surveillance systems for the sound management of chemicals and waste beyond 2020 to prevent and protect human health from chemical exposure

Resolution

Encourages stakeholders to establish and strengthen surveillance systems as part of integrated national chemicals and waste management systems to assist in implementation of the Global Framework on Chemicals

Encourages the development of a proposal for the creation of a global network for the collection of health surveillance data and for the analysis of trends regarding selected chemicals of concern

Indicators selection criteria

- Relevance and/or meaningfulness to the GFC;
- Availability of data to create a baseline and to assess progress (already in use);
- Have a designated custodian;
- Allow for regular updating to help ensure sustainability of the measurement;
- Allow for easy access to data and enable stakeholder participation in data collection;
- Data comparability through standardized methodologies;

279 indicators

SDG 3.9 Mortality rate attributed to unintentional poisoning

148 indicators

Stockholm Art1. Outcome Ind. 2 Changes in levels of the listed persistent organic pollutants in humans

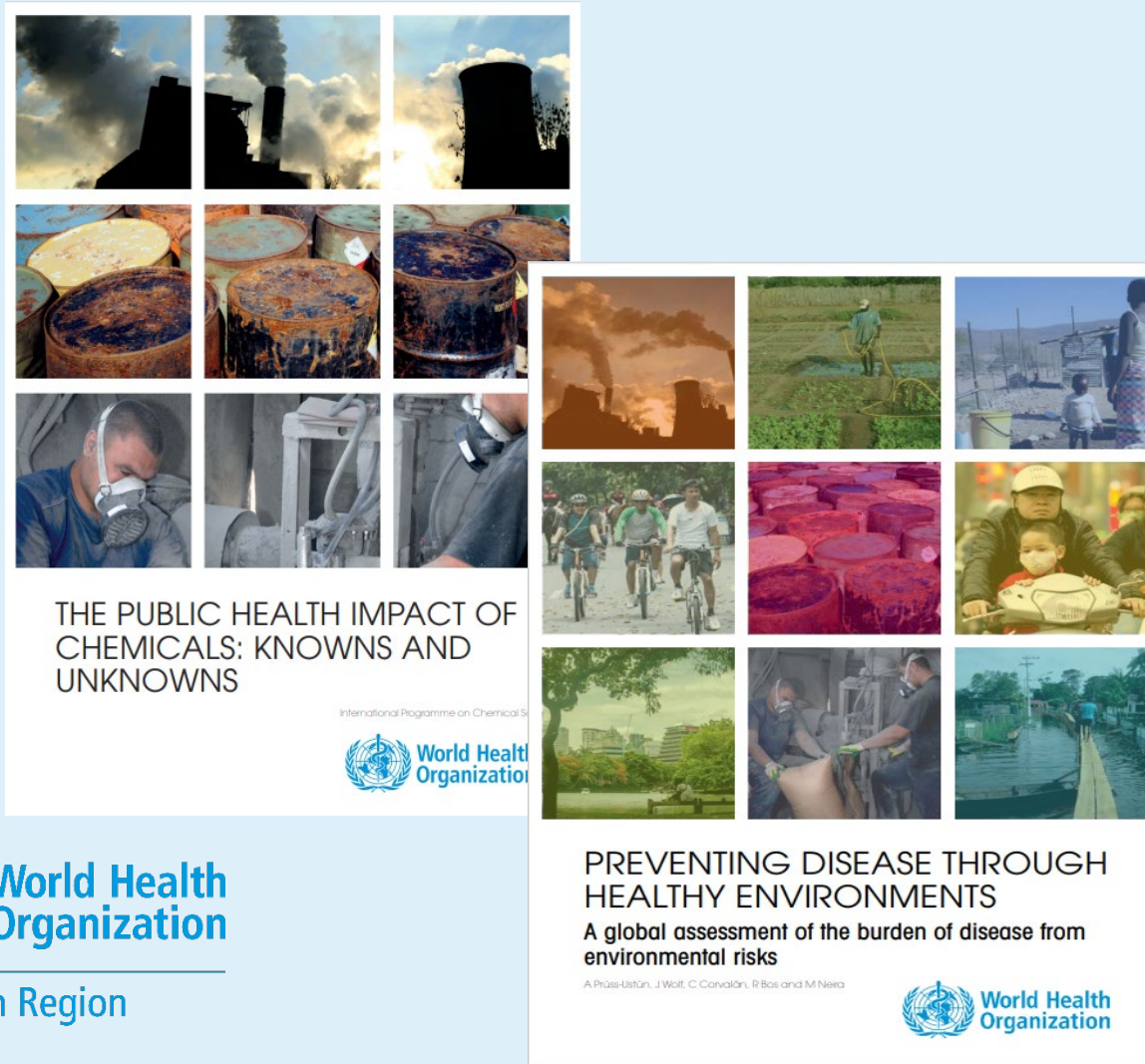
75 indicators

Minamata Convention The COP4 decided to advance the work on the proposed indicators for effectiveness evaluation

#	Process indicators, titles	Custodians
1	Number of countries with National Profiles	UNITAR
2	Number of countries with a PRTR	UNITAR, UNECE, OECD
3	Number of countries with poisons centres	WHO

Global burden of diseases attributable to chemicals

Based on systematic reviews



European Region

Poison centres - numbers



Mortality rate from unintentional poisonings



Mortality rate attributed to unintentional poisoning (per 100 000 population)

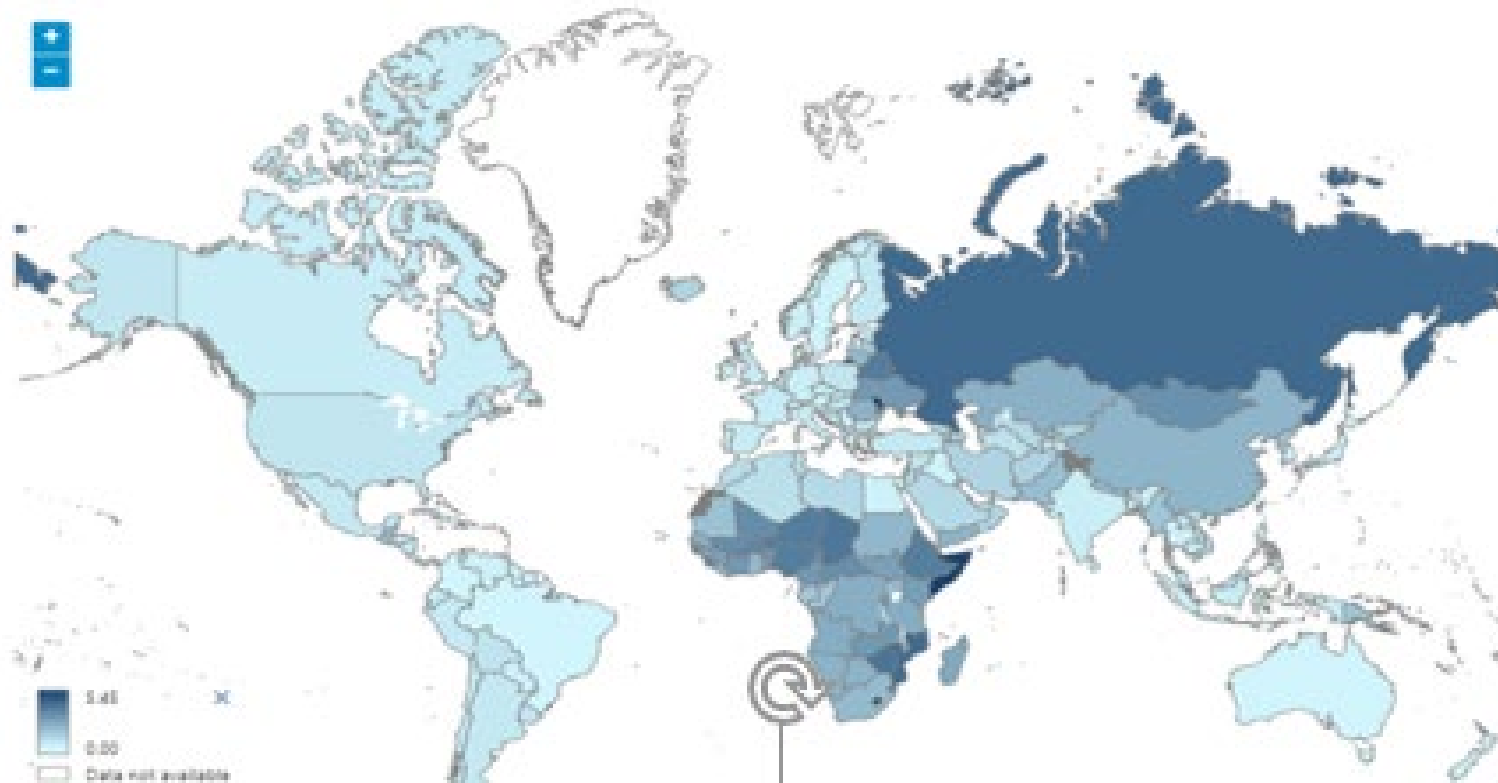
FILTERS

Year

Latest

Sex

Both sexes



Human biomonitoring – concentration of chemicals in humans

<https://www.youtube.com/watch?v=LAcVdM1a8eQ>



Stockholm Convention on POPs

Monitoring of POPs in blood and breast milk

Since 1987-2019

Minamata Convention on Mercury

Effectiveness evaluation – COP4 (2023)



Global monitoring plan/evaluation

Advantages

Allows direct measurement of internal dose given all environmental, lifestyle and personal influencing factors from different sources and exposure routes - Can support assessment of both aggregate and combined exposure

- Can detect low levels of exposure
- Reflects cumulative exposure over time for chemicals with long half-life
- Helps to test and validate exposure models
- Can also capture interactions between different substances
- Makes exposure to chemicals persona

Challenges

HBM alone does not provide information about the source and pathways of exposure or how long a chemical has been in the body:

- For emerging substances, it is difficult to identify the human biomarker that specifically reflects the exposure
- Analytical reference standards for each biomarker are often not readily commercially available HBM data need to be combined with other data and tools for interpretation in RA
- Costly

Health surveillance

Click to edit Master title style

ICCM-5 Resolution “Health surveillance systems for the sound management of chemicals and waste beyond 2020 to prevent and protect human health from chemical exposure

Encourages stakeholders to establish and strengthen surveillance systems as part of integrated national chemicals and waste management systems to assist in implementation of the [name of new framework]

Thank you

For more information, please contact:

Irina Zastenskaya

Technical Officer, Chemical Safety

zastenskayai@who.int



European Region

