Road map to enhance health sector engagement in the Strategic Approach to International Chemicals Management towards the 2020 goal and beyond
In May 2017, the Seventieth World Health Assembly (WHA) approved the Road map to enhance health sector engagement in the Strategic Approach to International Chemicals Management towards the 2020 goal and beyond (the road map). The WHO Secretariat was requested to prepare the road map by WHA resolution 69.4 (2016) The role of the health sector in the Strategic Approach to International Chemicals Management towards the 2020 goal and beyond.

The road map identifies concrete actions where the health sector has either a lead or important supporting role to play in the sound management of chemicals, recognizing the need for multi-sectoral cooperation. The actions are organised into four areas: risk reduction; knowledge and evidence; institutional capacity; and, leadership and coordination. Because these areas are interlinked, there are many actions that could have been placed in a number of different places within the road map. To avoid repetition, each action has been included only once.

For each action, the main actor, or lead, within the health sector has been identified. While it is recognized that, in many cases, success depends on cooperation between a variety of stakeholders and sectors, the identification of a lead within the health sector, where possible, is intended to be helpful and to facilitate progress. Member States have been identified as the lead in cases where governments, and in particular ministries with responsibilities for human health, would bear most of the responsibility for the action. Similarly, the WHO Secretariat has been identified as the lead in cases where the Secretariat would bear most of the responsibility for the action. In other cases, it is recognized that the entire health sector – including Member States, the Secretariat and others, including other bodies of the United Nations system and non-State actors – needs to play a leadership role.

As individual Member States and other stakeholders have different priorities, based on their specific contexts, the actions are not presented in priority order. Furthermore, some of the actions are very broad, while others are quite specific. This variation is intentional and recognizes that Member States and other stakeholders have chosen different approaches to chemicals management and are at different stages of implementation. The inclusion of broader actions makes it possible for countries to tailor the implementation of the road map to their own context.

It is hoped that the road map will be a useful tool to assist Member States and other health sector stakeholders in identifying areas of primary focus for engagement and additional actions relevant for chemicals management at the national, regional and international levels. It is envisaged that the various components of the health sector will define their own implementation plans for this road map, which will take into account the need to engage and cooperate with others as appropriate.

The timeline of the road map is towards the 2020 goal and beyond. Progress reports on the implementation of the road map will be made to the 72nd and 74th World Health Assemblies (2019 and 2021 respectively). As well, the road map will be updated according to the outcome of the intersessional process to prepare recommendations regarding the Strategic Approach and the sound management of chemicals and waste beyond 2020.
Road map to enhance health sector engagement in the strategic approach to international chemicals management towards the 2020 goal and beyond

**ACTION AREAS**

**RISK REDUCTION**

- Health protection strategies
- Healthy health care settings
- Raising awareness

**KNOWLEDGE AND EVIDENCE**

- Risk assessment, biomonitoring and surveillance
- Measuring progress
- Sharing and collaborating

**INSTITUTIONAL CAPACITY**

- National policy and regulatory frameworks
- International Health Regulations (2005)
- Training and education

**LEADERSHIP AND COORDINATION**

- Health in all chemicals policies
- Health sector engagement and coordination
- Engagement with other sectors and stakeholders

**Overall objective of the Strategic Approach**

To achieve the sound management of chemicals throughout their life cycle so that, by 2020, chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment.

**2030 Agenda for Sustainable Development**

Achieving the sound management of chemicals throughout their life cycle is a cross-cutting issue that will contribute to achieving many, if not all, 17 Sustainable Development Goals. The targets below are only those that specifically mention chemicals.

**Goal 3**

Target 3.9

By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

**Goal 6**

Target 6.3

By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

**Goal 12**

Target 12.4

By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment
RISK REDUCTION
Actions focused on risk management by and within the health sector, including health protection strategies, regulating chemicals, public education, and sharing information and best practices.

HEALTH PROTECTION STRATEGIES
- **MS** Develop and implement health promotion and protection strategies and programmes for the life cycle of high-priority chemicals, particularly for vulnerable populations.
- **MS** Actively engage in and support the implementation of the chemicals- and waste-related multilateral environmental agreements, particularly health protective aspects. Support ratification and implementation of the Minamata Convention on Mercury and build capacity to assess and address health impacts of mercury exposure in line with resolution WHA67.11 (2014).
- **All** Collaborate to identify and promote reduced-risk alternatives, taking into account the life cycle of substances and products, including waste, and promoting the use of these alternatives.
- **WHO Sec** Provide guidance on the prevention of negative health impacts from specific chemicals of concern.
- **WHO Sec** Finalize guidelines on the prevention and management of lead poisoning; **MS** Implement forthcoming guidelines, and phase out paints containing lead by 2020 as per the objectives of the Global Alliance to Eliminate Lead Paint.

HEALTHY HEALTH CARE SETTINGS
- **MS** Provide guidance for health care settings to promote and facilitate the use of safer alternatives and sound management of health care waste, drawing on relevant guidance from WHO and others, such as that adopted under multilateral environmental agreements.
- **MS** Develop and implement awareness campaigns for health care workers about chemicals of concern and established best practices for safe chemicals management within the health sector, including occupational, patient/community and environmental impacts in health care settings.
- **MS** Use WHO guidance to reduce the use of mercury in health care and manage mercury-contaminated wastes (in line with Articles 4, 10 and 11 of the Minamata Convention and resolution WHA67.11).

RAISING AWARENESS
- **All** Develop and launch public awareness campaigns for priority health issues related to chemicals throughout their life cycle (e.g. e-waste, highly hazardous pesticides, lead, mercury and other chemicals of major public health concern), occupational hazards, chemicals subject to international actions, and maternal and child health.
- **All** Promote communication of relevant information, including training, on chemicals used in products and processes, to enable informed decision-making by all actors throughout the product life cycle, and to promote safer alternatives.
- **All** Publish and use articles on chemicals-related health sector issues in peer-reviewed health care, medical, toxicology and other related journals, including those of professional bodies.
- **MS WHO Sec** Support development of the health-related components of the Strategic Approach information clearing house.
- **All** Document experiences with and effectiveness of various awareness-raising, risk-reduction actions and prevention strategies and share this information with others.

Outcome:
Improved health, in both the short and the long term and for future generations through the reduction of risk to health from exposure to chemicals throughout their life cycle, including as waste, resulting from increased health protection activities by the health sector at the national, regional and international level, as well as from greater interest and awareness within the health sector and in the general community.

All: all stakeholders; MS: Member States; WHO Sec: WHO Secretariat.

1 Actions that are within the mandate of the WHO Secretariat and also contribute to increasing the capacity of the secretariat of the Strategic Approach to support activities related to the health sector in line with resolution WHA69.4. For actions with more than one lead actor, this note applies only to the WHO Secretariat’s role.
**KNOWLEDGE AND EVIDENCE**

Actions focused on filling gaps in knowledge and methodologies for risk assessment based on objective evidence, increasing biomonitoring and surveillance, estimating the burden of disease from chemicals, and measuring progress.

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**RISK ASSESSMENT, BIOMONITORING AND SURVEILLANCE**

- **All** Engage in efforts to fill gaps in scientific knowledge, including work taking place under the Strategic Approach, (e.g. on endocrine-active chemicals, nanomaterials, environmentally persistent pharmaceuticals, combined exposures to multiple chemicals, gender, links to non-communicable diseases).
- **All** Contribute to the development of globally harmonized methods, and new tools and approaches, for risk assessment (e.g. integrated approaches, combined exposures to multiple chemicals) that take into account use patterns, climatic conditions, gender and country capacities, where appropriate.
- **MS** Investigate the link between exposure and health impacts at the community level, including from pollution and contaminated sites.
- **MS** Identify priority chemicals for national assessment and management from a health perspective.
- **All** Work towards integrated health and environmental monitoring and surveillance systems for chemicals throughout their life cycle at the national, regional and international levels.
- **MS** Facilitate coordination of health ministries, health care establishments, poison information centres, and others to enhance toxicovigilance/toxicosurveillance.
- **All** Further explore the relationships between climate change and chemicals, and the potential impacts on health.

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**MEASURING PROGRESS**

- **MS** Improve systems for civil registration and vital statistics, and strengthen systems to document causes of hospital admissions and deaths due to chemical exposures.
- **MS** Devise better and standardized methods to estimate the impacts of chemicals on health for improved burden-of-disease estimates and predictions.
- **All** Devise better and standardized methods to estimate the socioeconomic impact of disease from chemical exposures.
- **MS** Collaborate with the international community to improve global indicators to better measure progress toward the 2020 goal and the 2030 Agenda for Sustainable Development with respect to health impacts of chemicals.
- **MS** Identify and describe national indicators of progress in reducing the burden of disease from chemicals, aligned with global indicators wherever possible.
- **All** Develop mechanisms to collect and manage health data and information necessary for reporting progress on the Strategic Approach and other international instruments.

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**SHARING AND COLLABORATING**

- **MS** Participate and actively engage in and contribute to networks including the WHO Chemical Risk Assessment Network and the WHO INTOX network of poison centres.
- **All** Participate in or, if necessary, foster the creation of interactive websites and/or discussion forums for specific issues related to chemicals and health.
- **MS** Make health-related chemicals data available (e.g. risk assessment, human and environmental monitoring, disease surveillance), where possible and appropriate, and easily accessible to the local and international communities, including relevant international scientific and technical committees.
- **All** Collaborate with other scientific forums studying chemicals related diseases, in particular, non-communicable diseases.
- **All** Share experiences on establishing and using indicators for measuring progress.

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**Outcome:**

Enhanced engagement of the health sector in cooperative efforts to fill current gaps in knowledge and methodologies for risk assessment, biomonitoring, surveillance, estimating the burden of disease, and measuring progress. This includes greater participation in networks and development of new cooperative mechanisms, as necessary, to facilitate knowledge sharing and collaboration within the health sector on specific technical issues.
**INSTITUTIONAL CAPACITY**

Actions to strengthen national institutional capacities to address health threats from chemicals, including in response to chemical incidents and emergencies.

### NATIONAL POLICY AND REGULATORY FRAMEWORKS

- **WHO**
  - Identify gaps and support stronger national policy and regulatory frameworks to address the health impacts of chemicals throughout the life cycle of chemicals with a focus on the 11 basic elements set out in paragraph 19 of the Strategic Approach’s orientation and guidance document.

- **All**
  - Contribute to international efforts to develop tools and guidance for developing national frameworks, such as the IOMC Toolbox.

- **WHO**
  - Establish health-based guidelines for water, air, soil, food, products, and occupational exposure drawing on WHO norms, standards and guidelines, as appropriate, and participating in their development.

- **WHO**
  - Support implementation of the Globally Harmonized System of Classification and Labelling of Chemicals, coordinating internationally, where appropriate.

- **WHO**
  - Support regulations to prevent discharge of toxic chemicals and advocate appropriate recovery and recycling technology, as well as safe storage and disposal, in line with resolutions WHA63.25 and WHA63.26 (2010), and relevant multilateral environmental agreements.

- **WHO**
  - Support stronger monitoring of production, transport, use and releases of hazardous chemicals and waste, and promote regional and international cooperation with a view to enhancing compliance with existing regulations and preventing illegal traffic.

### INTERNATIONAL HEALTH REGULATIONS (2005)

- **WHO**
  - Establish/strengthen core capacities for chemical incident and emergency preparedness, detection and response, including: chemical event surveillance, verification, notification, risk assessment and communication, and inspection capacities at ports of entry.

- **WHO**
  - Continue to develop and enhance tools, guidance and other support to countries, in order to strengthen core capacities for chemical incidents and emergencies, and promote awareness among all stakeholders.

- **WHO**
  - Establish an international health workforce to be mobilised to respond to chemical emergencies, e.g. contribute to a WHO roster of experts for chemical incidents and emergencies.

- **WHO**
  - Strengthen existing, and establish new poison centres and networks, coordinating as necessary to achieve the objective of all countries having access to a poison information service.

- **WHO**
  - Develop or enhance regional networks to coordinate, strengthen and share existing laboratory capacity.

- **WHO**
  - Improve communication and collaboration between national focal points for the International Health Regulations (2005), the Strategic Approach, and chemicals-and waste-related multilateral environmental agreements to leverage synergies, e.g. need for risk assessment, surveillance, laboratory capacity and reporting.

### TRAINING AND EDUCATION

- **All**
  - Disseminate training materials for targeted audiences (e.g. nongovernmental organisations, government officials, teachers, medical professionals, and health care workers) on specific topics (e.g. assessing and monitoring health risks, gathering evidence, diagnosing and treating health disorders, chemical safety awareness, and labelling).

- **All**
  - Enhance curricula in medical schools and other academic institutions to address the health impacts of chemicals, with an emphasis on toxicology and occupational and public health, and encourage residencies, fellowships, or specializations; encourage inclusion of curricula in other academic programmes that would promote safe and sustainable chemistry (e.g. Safer by Design).

- **WHO**
  - Provide a portal of WHO training materials on chemicals and health as a contribution to the Strategic Approach information clearing house.

- **All**
  - Link health professional associations with academic environmental health or risk analysis groups and institutions to strengthen engagement on and knowledge of chemicals management issues.

**Outcome:**

Increased capacity and resilience of health systems in order to address all aspects of chemical safety.
**LEADERSHIP AND COORDINATION**

Actions to promote the inclusion of health considerations in all chemicals policies, engagement of the health sector in chemicals management activities at the national, regional and international levels, and engagement of the health sector with other sectors.

**HEALTH IN ALL CHEMICALS POLICIES**

- **All** Improve awareness of the health impacts of chemical exposures throughout their life cycle, and the resulting costs.
- **MS** Promote inclusion of health priorities in chemicals policies, gap analyses, profiles, implementation plans and strategies, at all levels, including for the 2030 Agenda for Sustainable Development.
- **All** Pursue additional initiatives to mobilize financial resources for the health sector, including for WHO, for the sound management of chemicals and waste.
- **All** Organize high-level briefing sessions on chemicals and health for politicians and senior officials at the national, regional and international levels.
- **All** Strengthen the chemicals component of national, regional and international health and environmental processes, including at the highest levels.
- **All** Include gender and equity as a component in all policies, strategies and plans for the sound management of chemicals and waste.

**HEALTH SECTOR ENGAGEMENT AND COORDINATION**

- **MS** Nominate a health ministry contact point for issues related to chemicals and health including implementation of this road map, and establish a national chemicals and health network.
- **WHO** Establish a global chemicals and health network, with links to existing subregional, regional and international networks, to facilitate health sector implementation of this road map (including participation in the Strategic Approach†).
- **MS** Participate in and promote the inclusion of health sector priorities in the intersessional process to prepare recommendations regarding the Strategic Approach and the sound management of chemicals and waste beyond 2020.
- **MS** Participate actively in decision making and support strengthening of national policy and regulatory frameworks relevant for chemicals and health.
- **MS** Engage in national, regional, and international chemicals forums, including for Strategic Approach emerging policy issues and other issues of concern as well as for noncommunicable diseases.
- **All** Implement the strategy for strengthening the engagement of the health sector in the implementation of the Strategic Approach and promote it to others.

**ENGAGEMENT WITH OTHER SECTORS AND STAKEHOLDERS**

- **MS** Participate in and encourage the development of sustainable, effective and operational multisectoral coordination networks to maximize collective efforts, as envisaged by the Strategic Approach.
- **All** Facilitate inclusion and active participation of all relevant sectors and stakeholders in chemicals management throughout the life cycle, at all levels, while recognizing the shared leadership of the health and environment sectors.
- **All** Highlight the multisectoral impact that health investments can have on economies and communities.
- **All** Build capacity within the health sector for multisectoral engagement and look for opportunities to share information, harmonize and leverage efforts of networks in other sectors.
- **All** Actively engage in relevant regional and international negotiations, including those related to multilateral environmental agreements, development financing and technical cooperation, and, where possible and appropriate, establish a standing item to discuss issues relating to the health sector.

**Outcome:**

Increased awareness and integration of health considerations and engagement of the health sector in chemicals management activities at the national, regional and international levels, including engagement with other sectors, leading to an increased profile and priority for the global sound management of chemicals throughout their life cycle.