

Chemicals Road Map

Road map to enhance health sector engagement
in the Strategic Approach to International Chemicals
Management towards the 2020 goal and beyond

WORKBOOK

Chemicals Road Map Workbook

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in the Strategic Approach to International Chemicals
Management towards the 2020 goal and beyond

Chemicals road map: workbook
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INTRODUCTION

Background and context

The engagement of all relevant sectors and stakeholders in government, intergovernmental and nongovernmental organizations (NGOs) is vital to achieve the sound management of chemicals. The health sector is central to this given its key roles and responsibilities.

As demonstrated in the 2016 WHO publication *The public health impact of chemicals: knowns and unknowns* (<http://www.who.int/ipcs/publications/chemicals-public-health-impact/en/>), chemicals management is a health issue and sound management practices can bring substantial health benefits.

The important role of the health sector in the sound management of chemicals is further recognized by the inclusion of the sound management of chemicals in health-related goals and targets under the 2030 Agenda for Sustainable Development agreed to in 2015.

The Strategic Approach to International Chemicals Management (SAICM) is a voluntary international policy framework established to foster the sound management of chemicals worldwide. It is designed to support multisectoral, multistakeholder efforts towards the goal agreed to at the 2002 World Summit on Sustainable Development that, by the year 2020, chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health.

Implementation of SAICM is overseen and monitored by the International Conference on Chemicals Management (ICCM) – a multisectoral, multistakeholder forum.

In 2016, the World Health Assembly (WHA) adopted resolution 69.4 entitled: *The role of the health sector in the Strategic Approach to International Chemicals Management towards the 2020 goals and beyond*. The resolution calls directly on ministries of health to further engage in SAICM at the national, regional and global levels.

WHA resolution 69.4 also requested WHO to develop a road map outlining concrete actions to enhance health sector engagement towards meeting the 2020 goal and contributing to relevant targets of the 2030 Agenda for Sustainable Development.

In May 2017, the Seventieth World Health Assembly 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)*.

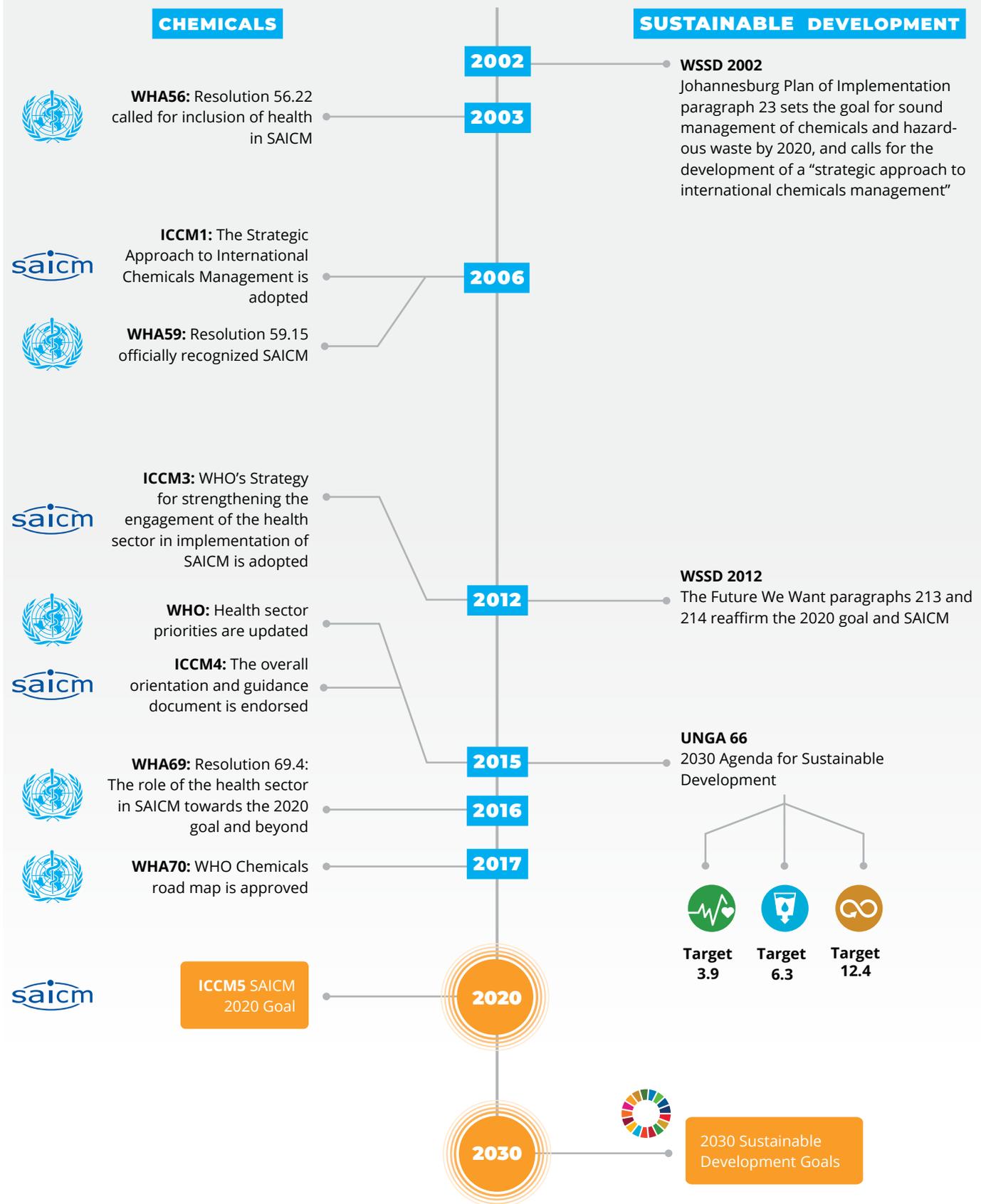
During discussion of the road map at the WHO Executive Board and the World Health Assembly, a number of countries requested assistance in implementing the road map. This workbook is intended, in part, to respond to these requests by offering a structured way to work through the road map, choose priorities and plan activities.

It is hoped that use of the workbook will facilitate the sharing of information and contribute to the identification of shared priorities and collaboration both within the health sector and with external partners.

Global policy context for the road map

CHEMICALS

SUSTAINABLE DEVELOPMENT



ICCM: International Conference on Chemicals Management
SAICM: Strategic Approach to International Chemicals Management
UNGA: United Nations General Assembly

WHA: World Health Assembly
WSSD: World Summit on Sustainable Development

About the road map

As requested in paragraph 2(1) of resolution WHA69.4 the road map was developed in consultation with Member States and others. The WHO Secretariat took into account the Strategic Approach's *Overall orientation and guidance document* and the *Intersessional process to prepare recommendations regarding the Strategic Approach and the sound management of chemicals and waste beyond 2020*. The road map also built on WHO's existing relevant work, as well as on the *Strategy for strengthening engagement of the health sector in implementation of the Strategic Approach*, with particular emphasis on the specific areas described in paragraphs 2(1)(a)–(h) of resolution WHA69.4.

The resulting 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 multisectoral cooperation.

The actions are organized 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 included in a number of different places within the road map. To avoid repetition, each action has been included only once.

The road map was designed to be applicable to and used by Member States at all stages of development, as well as a broad range of stakeholders.

Since 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.

Interlinkages between road map action areas

Risk reduction:

Reduced risk is an outcome of all the road map activities. Some activities directly reduce risk, and all activities contribute to reduced risk in the long term.



Knowledge and Evidence:

Knowledge and evidence, on chemicals, health vulnerabilities, which interventions work best, on current gaps and priorities etc, is needed to guide all the other interventions.



Institutional capacity:

Institutional capacity develops around a base of evidence and knowledge and strong leadership. It includes legislative frameworks and proper enforcement, strong policies, guidelines, laboratories, poison centres, emergency response systems and an educated workforce.



Leadership and Coordination:

Is required to ensure road map actions are part of the policy/ political agenda, are adequately funded, include the contribution of multiple sectors and deliver on national and international targets.



For each road map action, the main actor, or lead, within the health sector has been identified, as follows:

MS **Member States (MS):** These actions are mostly the responsibility of governments, with a focus on ministries with responsibilities for human health.

WHO Sec **The World Health Organization Secretariat (WHO Sec):** The World Health Organization Secretariat holds the lead responsibility for these actions.

All **All:** Member States, the WHO Secretariat and other relevant intergovernmental organizations and bodies, as well as nongovernmental organizations, industry and other stakeholders.

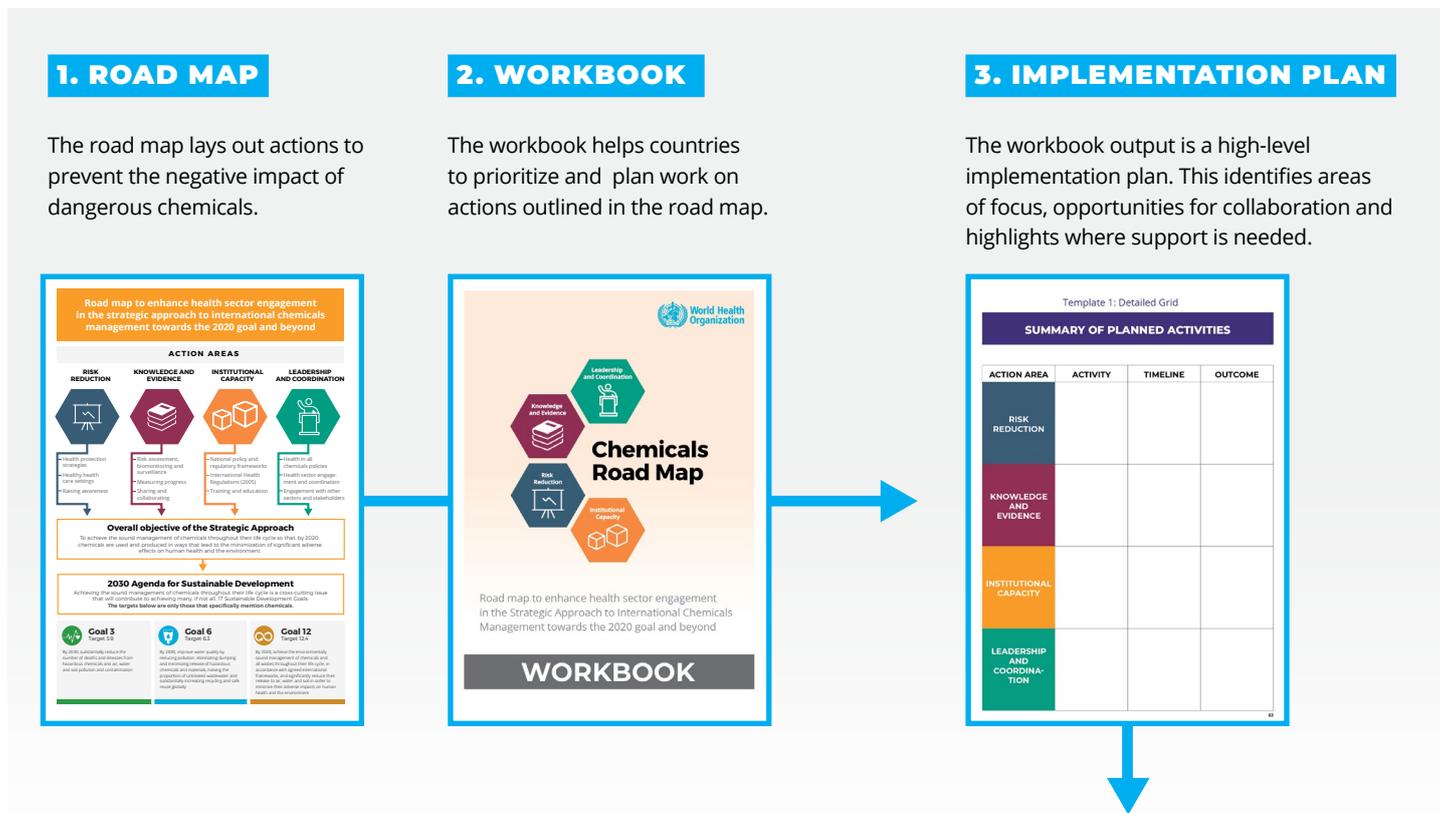
These different components of the health sector have varying mandates with respect to the actions identified in the road map. Nevertheless, even when an action is not completely within their mandate, they may still have an important role to play and there needs to be an awareness of the importance of the activity and active support for delivering the action. The identification of a 'lead' within the health sector, where possible, is intended to be helpful and facilitate progress by the health sector, not to create duplication with others.

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.

In addition, the road map could be useful for identifying actions for collaboration with other sectors and for advocating action from decision-makers. Capacity-building and the need for support to implement the road map, and the value of sharing experiences, for example through regional and subregional networking, are also important considerations.

The road map contains many important actions to consider. The workbook will help you choose which ones to prioritize.



USE OF THE WORKBOOK CAN SUPPORT A WIDE RANGE OF PROCESSES:

- ✓ Regional and international
- ✓ National policy, planning and budgeting
- ✓ Stakeholder or sector specific

Overview of the workbook

This workbook is designed to assist health sector planners, coordinators and policy analysts from government, civil society, industry or other organizations to use the road map to identify priorities and to plan activities around these priorities.

The final output of using the workbook is a high-level implementation plan that can be used to communicate priorities and planned activities to a variety of audiences, including decision-makers and colleagues both internally and externally.

The implementation plan can also be used to feed into broader, organization-wide, national, regional, international and/or intersectoral planning processes.

A great deal of guidance already exists on the various tasks involved in creating implementation plans as well as on various strategies and approaches for managing chemicals (see Annex 1: Useful resources). As well, stakeholders are at different stages and have varying processes and approaches to planning.

Furthermore, priority actions, objectives and the type of activities planned will differ depending on the individual stakeholder context – for example the type of stakeholder or organization, approaches to chemicals management, identified priority issues, chemicals or exposures, stage of development or level of resources.

Therefore this workbook is not intended to be an in-depth guide on how to develop an implementation plan or on specific strategies and approaches for the

many road map actions. Rather, it is intended to be a simple, practical and flexible tool to assist health sector stakeholders in using the WHO Chemicals road map.

The workbook offers a structured way to work through the road map, choose priorities and plan activities. Completing the workbook will require preliminary work and will likely be an iterative process that could take time.

As well, while the road map and this workbook are intended for the health sector, it is expected that others will need to be engaged and consulted; this could include specialists, other sectors and stakeholders, especially if their support is required to undertake an activity.

Although not covered by this workbook, consideration will need to be given on how to share experiences from using the workbook and undertaking the activities included in the resulting implementation plans, as well as measuring progress.

Use of the workbook will facilitate information sharing, identification of shared priorities and collaboration both within the health sector and with external partners.

Before you start

To complete this workbook you will need to have a good understanding of the following:

- The strategies and plans that already exist for chemicals management within your country or organization and the main objectives, challenges and priorities that have been identified for the health sector within these strategies or plans.
- The main health risks and vulnerabilities in relation to chemicals management in your country or within the scope of your organization.
- The general current level of information, evidence or engagement in each of the four road map action areas, and where are the main gaps.
- The capacities and resources that are available or accessible.
- Main partners for chemicals management – both within and outside the health sector – and their respective roles. This would include within your own ministry or organization, and in other ministries, organizations or sectors.

Introducing the 4 Steps

Four steps lead the user through a sequence for developing and sharing implementation plans

STEP 1 Determining potential activities

During this step you will select the road map actions that are the highest priority for your organization or country, and briefly describe potential activities you would like to undertake for each action selected. This step is key and will likely take the most time. In some cases it may be useful to consult with external partners.

STEP 2 Prioritization

If you have identified more activities than you can manage, this step can help you to further prioritize by considering additional criteria. It may be helpful to consult external partners to confirm their support where necessary.

STEP 3 Implementation planning

This step involves the creation of a high-level implementation plan for your prioritized activities. You will need to identify outcomes/deliverables, roles and responsibilities of partners, required resources and time frames.

STEP 4 Communication and sharing

Guidance is provided about how you can communicate your implementation plan with a variety of audiences and for a variety of purposes; for example, to colleagues, potential partners and decision-makers, both internal and external, to inform them and/or gain their support.

When working through the steps

For each step, a table or template is provided for completion. Guidance is provided on how to complete each step, including a list of questions or things to consider.

The tables and templates for each step are available for download in MS Word and Excel at: <http://www.who.int/ipcs/en/>

Hard copies of the workbook can be used as a discussion tool during meetings and for taking notes, while the electronic tables and templates can be customized and shared for gathering and consolidating input electronically.

For example, for Step 1 you could organize a meeting with colleagues to discuss priority road map actions and identify potential activities. Before the meeting, you could send each person a copy of the workbook along with the electronic Step 1 table. You could ask them to complete the Step 1 table for their top 10 priority actions for discussion by the group during the meeting. You could then gather and consolidate the input using the electronic tables and circulate for comment.

STEP 1

Determining
potential activities

Step 1 Overview

Step 1 is the key step in completing this workbook and is where most of your time will be spent. It involves going through the road map, reviewing the actions in each area of the road map and choosing the actions of highest priority based on your national or organizational context.

You can complete the Step 1 table for your highest priority actions by briefly summarizing the current situation, describing potential new activities and outlining any important considerations.

TIPS FOR COMPLETING STEP 1

- You may wish to start by doing an initial triage of all the road map actions using a simple high, medium or low rank to identify which are of most interest. Your ranking could be based on your known priorities or risks, level of resources, mandate, political realities and other factors.
- You may want to focus your initial attention on actions your organization would lead, but should not overlook any potentially important supporting roles for other actions.
- You would then fill in the Step 1 table based on the results of your triage. You do not need to complete the Step 1 table for all 64 road map actions.
- You can complete the Step 1 table in whatever order makes the most sense to you. For example, if you know your overall priority is institutional capacity you may wish to start reviewing the actions in this area first.

By the end of this step, you should have a good idea of your top road map actions and potential activities. If necessary, these potential activities can be further prioritized in Step 2.

Questions to ask

CURRENT SITUATION

- What is the current level of activity with respect to this action?
- Who is involved in undertaking these activities?
- How successful have the activities been?
Has there been a lot of support, in general?
- Are there any known major gaps or areas in need of improvement in relation to this activity?

POTENTIAL ACTIVITIES

- What new activities could be undertaken?
- How can potential activities address the gaps in the current situation?

CONSIDERATIONS

- What are the main milestones? What is the time frame for the activity?
- What capacity/resources are required for carrying out these activities? Are these resources available or accessible?
- What is the role of the health sector and/or your organization in relation to the action and potential activity?
- What are the major opportunities or obstacles for completing this activity?
- Who are your main partners and what is their role? Do they have the necessary resources/capacity for this action?
- Would completing this activity contribute to other road map actions? Are there other opportunities to leverage this activity in the short or long term?
- Has anyone already done something similar that you could learn from?

Guidance for completing Step 1:

CURRENT SITUATION:

In this column you would summarize or briefly describe the current situation with respect to each road map action.

POTENTIAL ACTIVITIES:

In this column, you would describe potential new activities to undertake for this road map action.

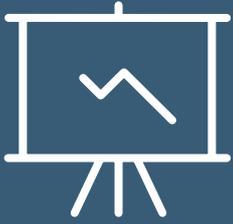
CONSIDERATIONS:

In this column, you would describe important considerations for moving forward with these activities.

ILLUSTRATIVE EXAMPLE

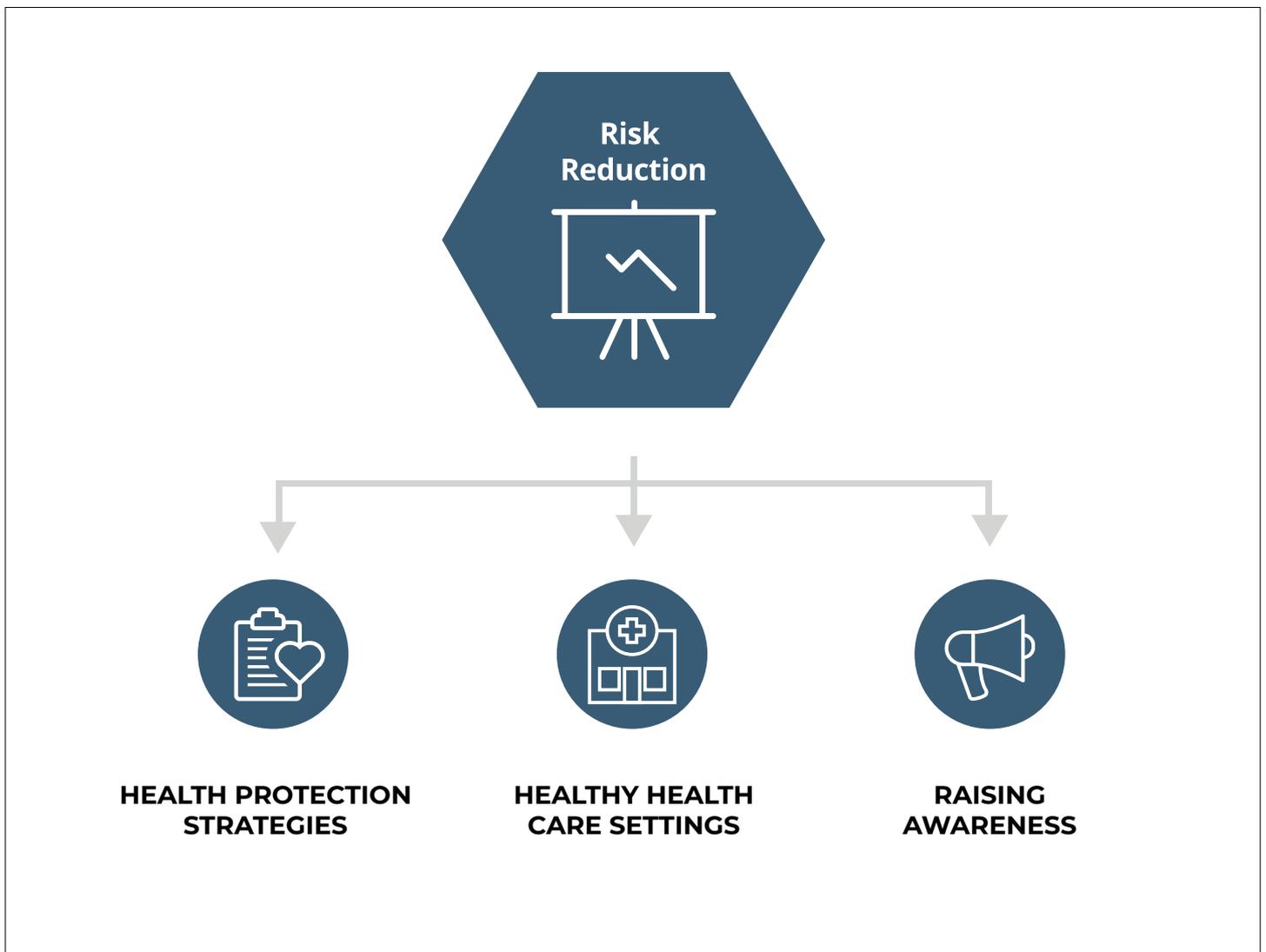
ROAD MAP ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>MS Develop and implement health promotion and protection strategies and programmes for the life cycle of high-priority chemicals, particularly for vulnerable populations.</p> <p>PRIORITY: LOW/MED/HIGH</p>	<ul style="list-style-type: none"> ● Lead poisoning in children is a known priority. ● Various NGOs are assisting but coverage is uneven and uncoordinated. ● Health worker knowledge and ability to diagnose and treat is uneven. ● Do not yet have legal limits on lead in paint. 	<ul style="list-style-type: none"> ● Develop and implement a strategy to prevent childhood lead exposure from known sources (paint, domestic battery recycling, contaminated soil and water). 	<ul style="list-style-type: none"> ● Multifaceted e.g. regulations; education and training, monitoring, awareness campaigns; can be modified to fit available resources. ● 2 years to develop and implement plan; but work will be ongoing. ● Consult WHO guidelines on prevention of lead poisoning (links to road map action on lead). ● Some domestic resources available; external sources possible since child health is a global priority; include in National Development Plan – contact Foreign Affairs Ministry. ● May need industry engagement (paint, batteries); engaged NGOs; many opportunities to learn from others; WHO has tools/guides/expertise.

Step 1 tables for each road map action area



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.



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.

HEALTH PROTECTION STRATEGIES

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>MS Develop and implement health promotion and protection strategies and programmes for the life cycle of high-priority chemicals, particularly for vulnerable populations.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>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).</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

HEALTH PROTECTION STRATEGIES

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p> Provide guidance on the prevention of negative health impacts from specific chemicals of concern.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p> Finalize guidelines on the prevention and management of lead poisoning;  Implement forthcoming guidelines, and phase out paints containing lead by 2020 as per the objectives of the Global Alliance to Eliminate Lead Paint.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

HEALTHY HEALTH CARE SETTINGS

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>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).</p> <p>PRIORITY: LOW / MED / HIGH</p>			

RAISING AWARENESS

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

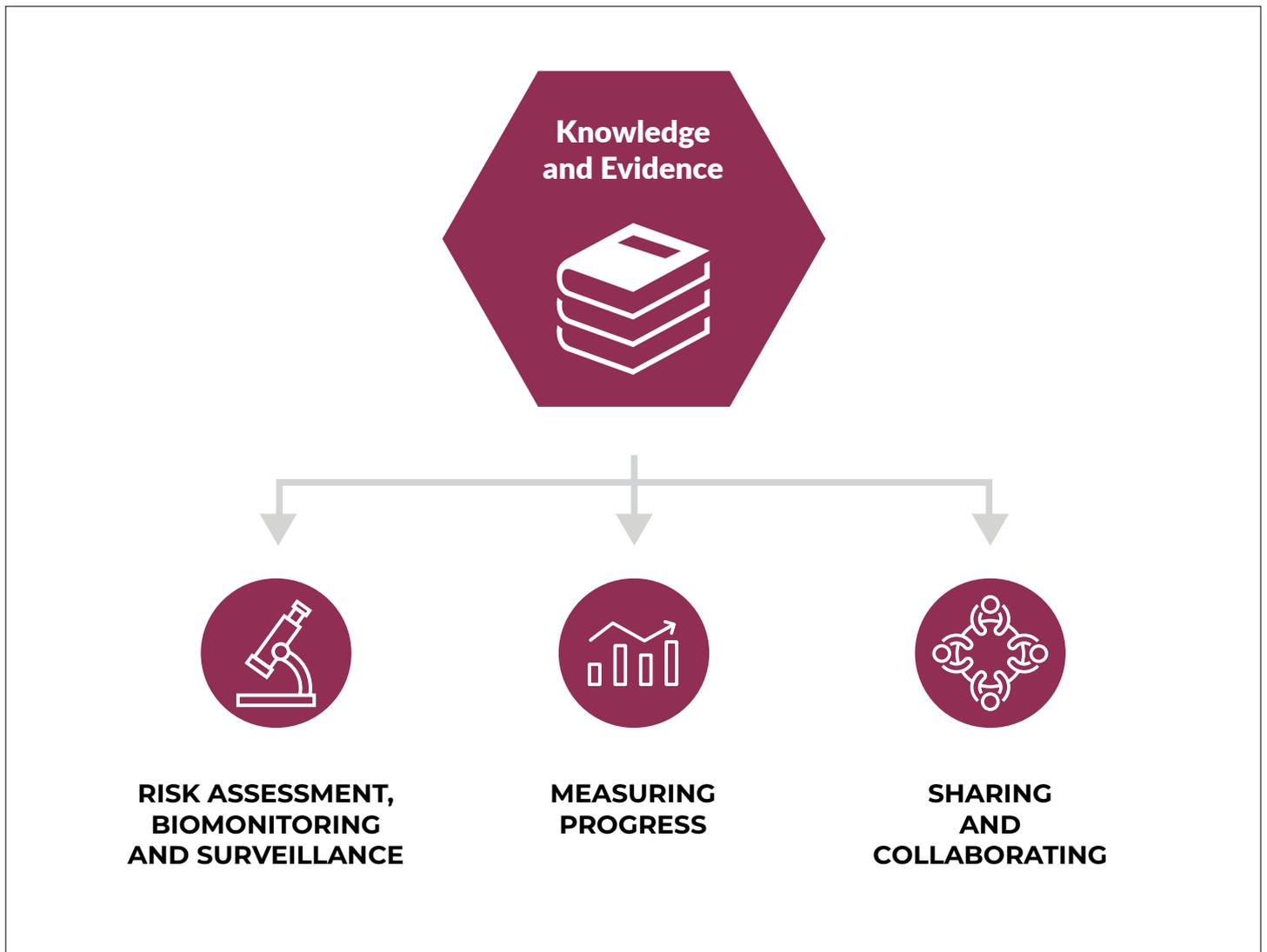
RAISING AWARENESS

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p> Support development of the health-related components of the Strategic Approach information clearing house.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p> Document experiences with and effectiveness of various awareness-raising, risk-reduction actions and prevention strategies and share this information with others.</p> <p>PRIORITY: LOW / MED / HIGH</p>			



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.



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.

RISK ASSESSMENT, BIOMONITORING AND SURVEILLANCE

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>AIU 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).</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>AIU 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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>MS Investigate the link between exposure and health impacts at the community level, including from pollution and contaminated sites.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

RISK ASSESSMENT, BIOMONITORING AND SURVEILLANCE

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>MS Identify priority chemicals for national assessment and management from a health perspective.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>All Work towards integrated health and environmental monitoring and surveillance systems for chemicals throughout their life cycle at the national, regional and international levels.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

RISK ASSESSMENT, BIOMONITORING AND SURVEILLANCE

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p> Facilitate coordination of health ministries, health care establishments, poison information centres, and others to enhance toxicovigilance/toxicosurveillance.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p> Further explore the relationships between climate change and chemicals, and the potential impacts on health.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

MEASURING PROGRESS

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>MS Improve systems for civil registration and vital statistics, and strengthen systems to document causes of hospital admissions and deaths due to chemical exposures.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>MS  Devise better and standardized methods to estimate the impacts of chemicals on health for improved burden-of-disease estimates and predictions.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>All Devise better and standardized methods to estimate the socioeconomic impact of disease from chemical exposures.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

MEASURING PROGRESS

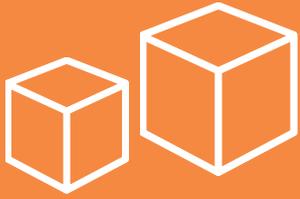
ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p> Collaborate with the international community to improve global indicators to better measure progress toward the 2020 goal and the 2030 Agenda for Sustainable Development with respect to health impacts of chemicals.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p> Identify and describe national indicators of progress in reducing the burden of disease from chemicals, aligned with global indicators where possible.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p> Develop mechanisms to collect and manage health data and information necessary for reporting progress on the Strategic Approach and other international instruments.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

SHARING AND COLLABORATING

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>ALL Participate in or, if necessary, foster the creation of interactive websites and/or discussion forums for specific issues related to chemicals and health.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

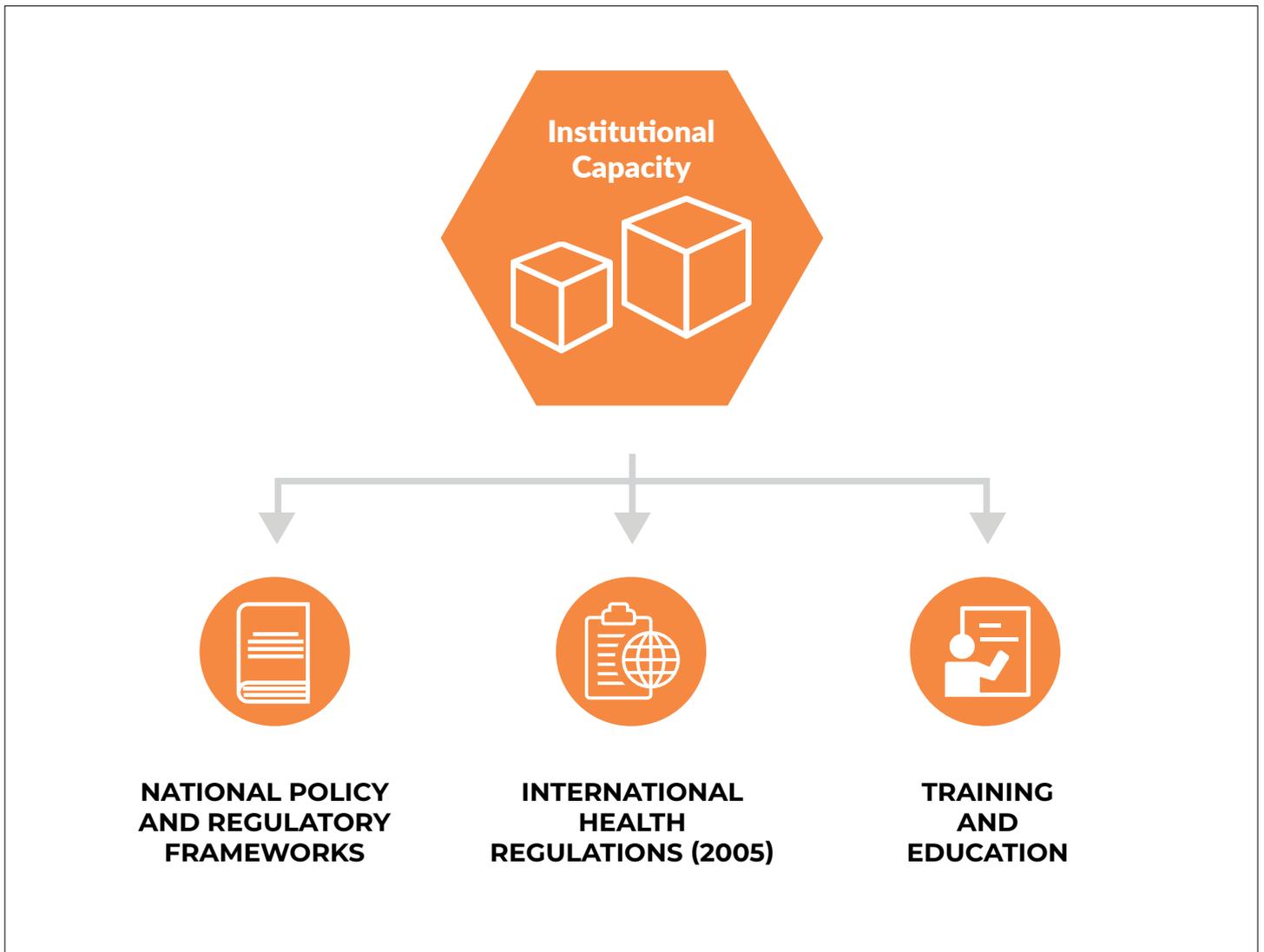
SHARING AND COLLABORATING

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>All Collaborate with other scientific forums studying chemicals related diseases, in particular, noncommunicable diseases.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>All Share experiences on establishing and using indicators for measuring progress.</p> <p>PRIORITY: LOW / MED / HIGH</p>			



INSTITUTIONAL CAPACITY

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



Outcome:

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

NATIONAL POLICY AND REGULATORY FRAMEWORKS

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>MS 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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>AIU Contribute to international efforts to develop tools and guidance for developing national frameworks, such as the IOMC Toolbox.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>MS 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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

NATIONAL POLICY AND REGULATORY FRAMEWORKS

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>MS Support implementation of the Globally Harmonized System of Classification and Labelling of Chemicals, coordinating internationally, where appropriate.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>MS 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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>MS 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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

INTERNATIONAL HEALTH REGULATIONS (2005)

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p> 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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p> 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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p> Establish an international health workforce to be mobilized to respond to chemical emergencies, e.g. contribute to a WHO roster of experts for chemical incidents and emergencies.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

INTERNATIONAL HEALTH REGULATIONS (2005)

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>MS 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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>MS Develop or enhance regional networks to coordinate, strengthen and share existing laboratory capacity.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>MS 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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

TRAINING AND EDUCATION

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>AIU 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).</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>AIU 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).</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>WHO Sec Provide a portal of WHO training materials on chemicals and health as a contribution to the Strategic Approach information clearing house.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

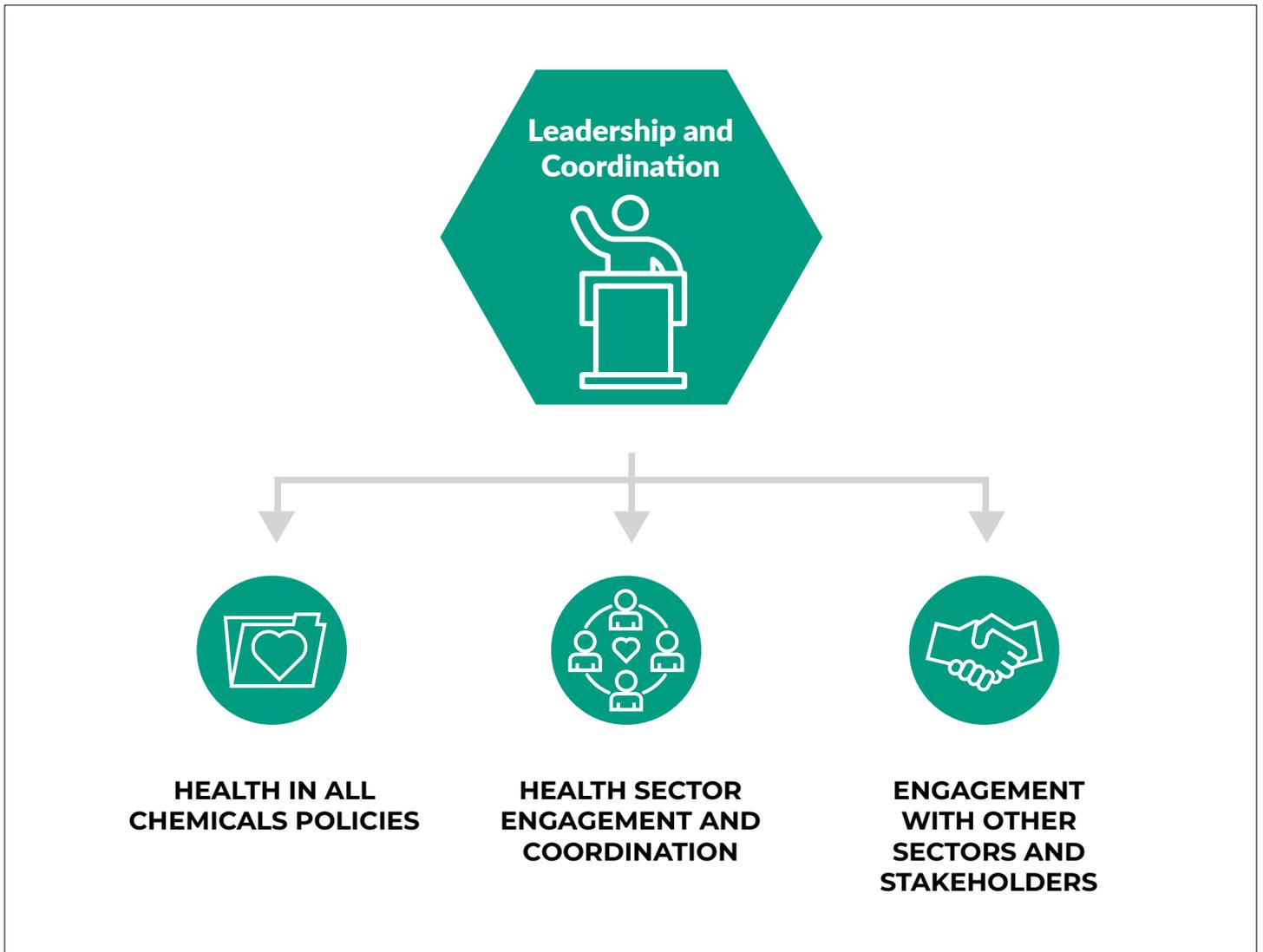
TRAINING AND EDUCATION

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			



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.



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.

HEALTH IN ALL CHEMICALS POLICIES

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>AIU Improve awareness of the health impacts of chemical exposures throughout their life cycle, and the resulting costs.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>AIU Pursue additional initiatives to mobilize financial resources for the health sector, including for WHO, for the sound management of chemicals and waste.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

HEALTH IN ALL CHEMICALS POLICIES

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>All Organize high-level briefing sessions on chemicals and health for politicians and senior officials at the national, regional and international levels.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>All Strengthen the chemicals component of national, regional and international health and environmental processes, including at the highest levels.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>All Include gender and equity as a component in all policies, strategies and plans for the sound management of chemicals and waste.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

HEALTH SECTOR ENGAGEMENT AND COORDINATION

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>WHO Sec 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).</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>MS Participate in and promote the inclusion of health sector priorities in the intersectoral process to prepare recommendations regarding the Strategic Approach and the sound management of chemicals and waste beyond 2020.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

HEALTH SECTOR ENGAGEMENT AND COORDINATION

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>MS Participate actively in decision making and support strengthening of national policy and regulatory frameworks relevant for chemicals and health.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>All Implement the strategy for strengthening the engagement of the health sector in the implementation of the Strategic Approach and promote it to others.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

ENGAGEMENT WITH OTHER SECTORS AND STAKEHOLDERS

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>AU 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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>AU Highlight the multisectoral impact that health investments can have on economies and communities.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

ENGAGEMENT WITH OTHER SECTORS AND STAKEHOLDERS

ACTION	CURRENT SITUATION	POTENTIAL ACTIVITIES	CONSIDERATIONS
<p>All Build capacity within the health sector for multi-sectoral engagement and look for opportunities to share information, harmonize and leverage efforts of networks in other sectors.</p> <p>PRIORITY: LOW / MED / HIGH</p>			
<p>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.</p> <p>PRIORITY: LOW / MED / HIGH</p>			

STEP 2

Prioritization

Step 2 Overview

This optional step involves a review of your 'potential activities' from Step 1 to determine which will move forward to Step 3 and become 'planned activities'.

If you feel you already have a manageable number of activities, you can skip Step 2 and go directly to Step 3.

For this exercise, you will choose criteria that are important in your decision-making process and assign a quantitative weight to them based on their relative importance. You will then score each activity for the criteria and add the scores. A higher score should point to a higher priority activity.

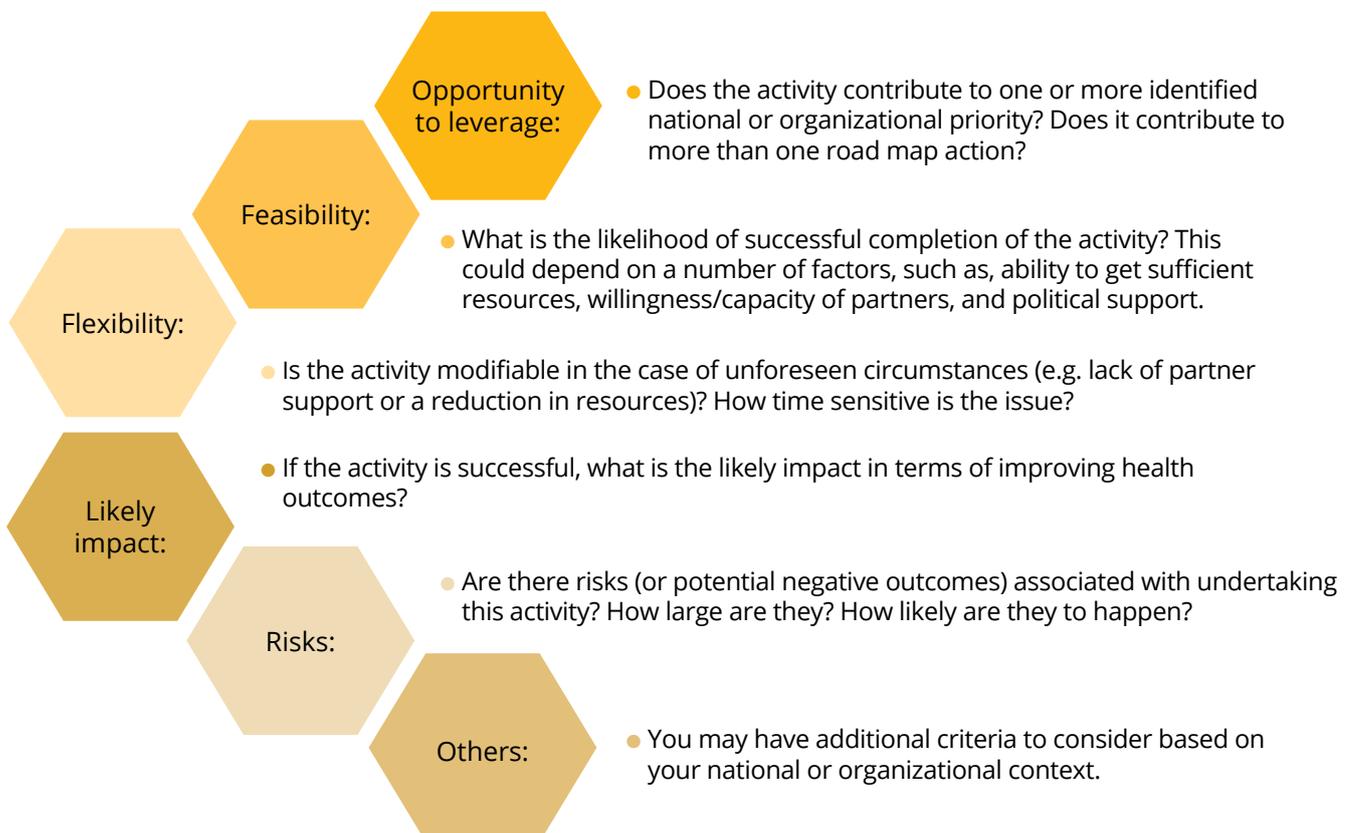
While the final scores may be helpful, the analytical process required to weight criteria and compare activities is the most important component of this exercise. In the end, you may still choose to work on an activity that scored lower than others, but your reasons for making this decision will be clearer.

For example, there may be situations where it is appropriate to choose to work on a lower priority activity because it is more likely to succeed and have a positive outcome than a risky higher priority item. Alternately, if the outcome of an activity is uncertain but it is determined to be more urgent with a greater potential for positive impact, it still may be chosen ahead of another more predictable activity.

It may be helpful to consult with partners, especially if you would require their support to carry out the activity.

This step provides a structure and a process that prompts you to think critically and more objectively about each potential activity.

Potential prioritization criteria



Guidance for completing Step 2:

The Step 2 tool is an optional step for further prioritizing your activities. If your top priority actions and activities are clear and the number of activities is manageable, you could move directly to the Step 3 implementation planning tables.

POTENTIAL ACTIVITIES:

Enter the potential activities that need to be further prioritized in the first column of the table.

CRITERIA:

Identify which criteria are the most important for you (i.e. your country, government department or organization). Enter these as the column headings under 'criteria' in the table.

WEIGHTING:

For each activity, assign a score for each of the criterion. Add the scores together and enter the total in the last column. Higher scores should point to higher priority items and this should help you choose a manageable number of priority activities to carry forward to implementation planning in step 3.

ILLUSTRATIVE EXAMPLE:

Risk Reduction	CRITERIA						PRIORITY SCORE
	WEIGHTING	Opportunity to leverage	Feasibility	Flexibility	Likely impact	Low risk	
POTENTIAL ACTIVITY		15	25	15	25	20	100
Develop and implement a strategy to prevent childhood lead exposure		12	18	15	22	10	77/100
Design a medical waste disposal protocol		7	20	5	12	17	61/100
Create a public awareness campaign addressing mercury usage		8	21	10	12	15	66/100

Step 2 prioritization tool

POTENTIAL ACTIVITY	CRITERIA*						PRIORITY SCORE
	WEIGHTING**						

* Criteria are to be user defined.

** Weighting to be decided by users.

POTENTIAL ACTIVITY	CRITERIA*					PRIORITY SCORE
	WEIGHTING**					

* Criteria are to be user defined.

** Weighting to be decided by users.

POTENTIAL ACTIVITY	CRITERIA*					PRIORITY SCORE
	WEIGHTING**					

* Criteria are to be user defined.

** Weighting to be decided by users.

POTENTIAL ACTIVITY	CRITERIA*					PRIORITY SCORE
	WEIGHTING**					

* Criteria are to be user defined.

** Weighting to be decided by users.

STEP 3

Implementation
planning

Step 3 Overview

This step provides a simple tool for starting to define implementation plans for the activities you have prioritized in Step 1 and/or Step 2.

During this step you will complete a high-level road map implementation plan by outlining outputs, roles, partners and responsibilities, resources and timelines for each activity.

Planning and measurement methods for each country are likely to differ, to link to a number of existing national processes, and to be overseen by mechanisms that are unique for each setting. The tools in this workbook are general, basic and adaptable.

A more detailed implementation plan may then be developed to break each activity into identifiable steps, and then, for each step, it would assign responsibilities, identify resources and suggest when each should be completed. Consideration would also be given to how progress and performance could be measured.

The implementation plan you create will summarize your priority activities, help to identify areas of focus, highlight opportunities for collaboration and indicate where further support is needed.

Things to consider

OUTPUTS

You will need a clear concept of the intended outputs for each activity. This will also be helpful for undertaking a more detailed planning process.

PARTNERS

Partners and stakeholders for each activity may come from various parts of government, civil society, the business sector and a range of other groups. It will be important to identify who your partners are and determine their needs, interests and potential roles.

RESOURCES

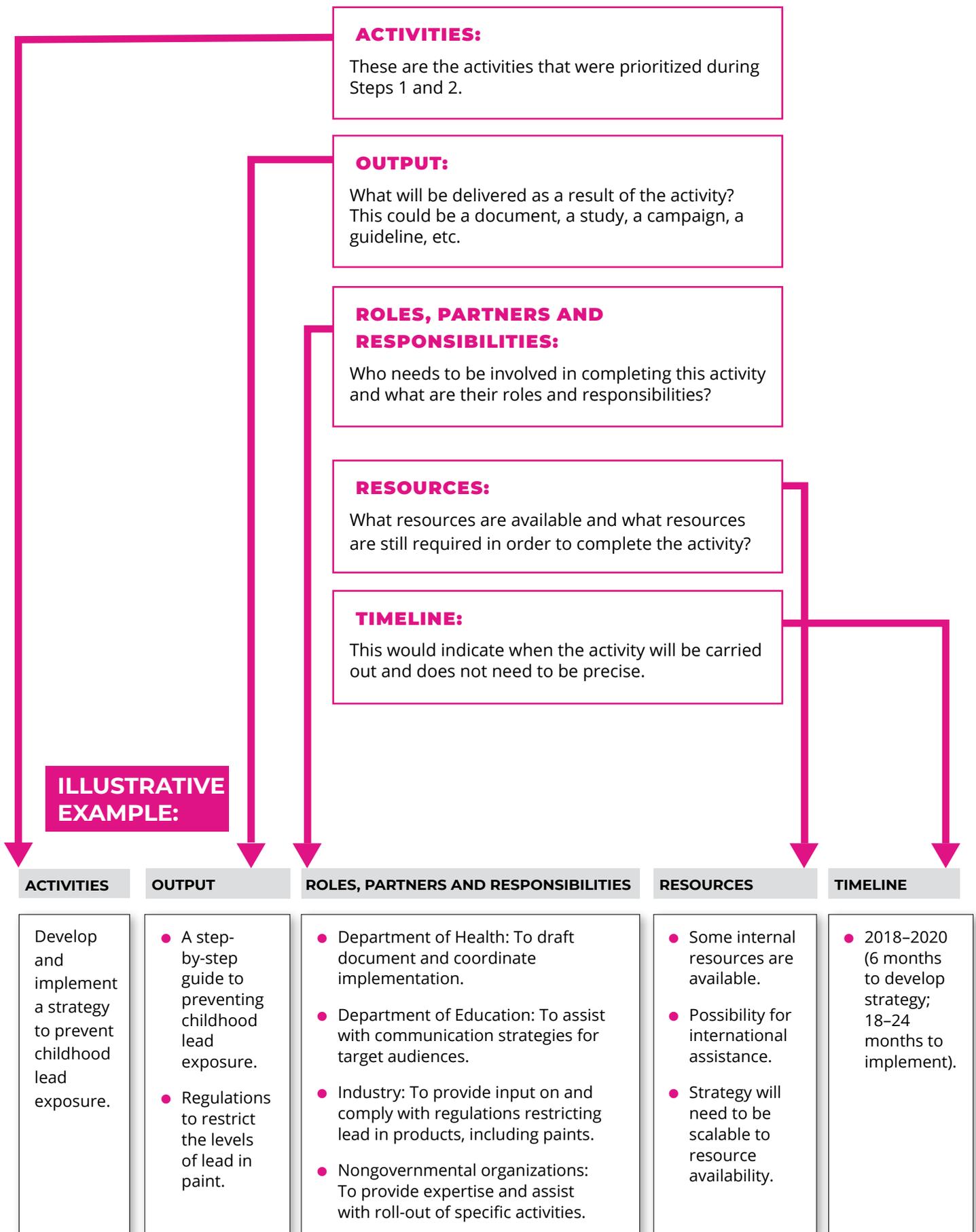
Resources (or 'inputs') may include financial, people and skills (human resources), and various kinds of institutional capacity. You will need to have an idea of resources available and/or required for each activity. It may also be helpful to identify potential opportunities for new or additional resources.

TIMELINE

Outlining the time frame for each activity is important to ensure that the overall workload associated with the implementation plan is manageable for all involved. A Gantt chart can be a useful way of representing this visually. It may also be helpful to map the timeline against resource availability.

Guidance for completing Step 3:

In this step, the prioritized activities from Steps 1 and/or 2 are transferred into the Step 3 table to form part of a high-level implementation plan. For each planned activity the user will define the output; roles, partners and responsibilities; resources required or available; and, the timeline for completion.



 IMPLEMENTATION PLANNING: RISK REDUCTION

ACTIVITIES	OUTPUT	ROLES, PARTNERS AND RESPONSIBILITIES	RESOURCES	TIMELINE



IMPLEMENTATION PLANNING: KNOWLEDGE AND EVIDENCE

ACTIVITIES	OUTPUT	ROLES, PARTNERS AND RESPONSIBILITIES	RESOURCES	TIMELINE



IMPLEMENTATION PLANNING: INSTITUTIONAL CAPACITY

ACTIVITIES	OUTPUT	ROLES, PARTNERS AND RESPONSIBILITIES	RESOURCES	TIMELINE



IMPLEMENTATION PLANNING: LEADERSHIP AND COORDINATION

ACTIVITIES	OUTPUT	ROLES, PARTNERS AND RESPONSIBILITIES	RESOURCES	TIMELINE

STEP 4

Communication
and sharing

Step 4 Overview

The implementation plan created in Step 3 can be used to communicate priorities and planned activities to a variety of audiences, including decision-makers and colleagues both internally and externally. It can also be used to feed into broader, organization-wide, national, regional, international and/or intersectoral planning processes.

This part of the workbook offers general guidance on communication along with some example templates that could be used to communicate your plan to different audiences.

Principles for effective communication of road map implementation plans

Given the diversity of potential audiences, detailed guidance on communication plans and strategies is not provided here. However, below are some basic principles for effective communication (adapted from WHO Principles for effective communications, 2017).

- The content needs to be tailored for the intended audience. For example, high-level decision-makers might want headline points and budget implications whereas programme managers might be more interested in the mechanics of implementation.
- The information needs to be written in a clear, concise and simple manner.
- It is important that the information is relevant, up-to-date and accessible for its intended audience in terms of language and format.

Sharing your plans widely will help in identifying shared priorities and opportunities for collaboration. You are encouraged to share your implementation plan with WHO and others.

Example templates to present your implementation plan

Template 1: Detailed Grid

- This template provides a structured way to share basic information about planned activities in each of the four road map areas. In the example provided you would insert timeline and outcome information but the headings could be changed to suit your needs. **(see next page)**

Template 2: Activities Grid

- In this template you would briefly summarize planned activities in each of the four road map areas. You could also include some key information that would be of interest to your audience for example costs and timeline. **(see next page)**

Template 3: Action Area Grids

- This template involves separate grids for each of the four road map areas. This template might be useful if your planned activities are concentrated in only one or two road map areas. **(see next page)**

The templates are available for download in MS Word and Excel at: <http://www.who.int/ipcs/en/>

Guidance for completing Step 4:

IDENTIFY TARGET AUDIENCE

Essential to effective communications is identifying for whom the message is intended and ensuring you understand what information will be of most interest to them.



TAILOR YOUR MESSAGE

Once a target audience has been identified, key messages from the implementation plan must be tailored to their interests and summarized clearly and concisely.



SELECT A TEMPLATE

You will also need to decide how to visually present the key messages to the target audience. Three examples are offered in the workbook but many other options are possible.



Template 1: Detailed Grid

SUMMARY OF PLANNED ACTIVITIES

ACTION AREA	ACTIVITY	TIMELINE	OUTCOME
RISK REDUCTION			
KNOWLEDGE AND EVIDENCE			
INSTITUTIONAL CAPACITY			
LEADERSHIP AND COORDINATION			

1

Template 2: Activities Grid

SUMMARY OF PLANNED ACTIVITIES

RISK REDUCTION . . .	INSTITUTIONAL CAPACITY . . .
KNOWLEDGE AND EVIDENCE . . .	LEADERSHIP AND COORDINATION . . .

2

Template 3: Action Area Grid

SUMMARY OF PLANNED ACTIVITIES

3

Step 4 templates

Template 1: Detailed Grid

SUMMARY OF PLANNED ACTIVITIES

ACTION AREA	ACTIVITY	TIMELINE	OUTCOME
RISK REDUCTION			
KNOWLEDGE AND EVIDENCE			
INSTITUTIONAL CAPACITY			
LEADERSHIP AND COORDINATION			

SUMMARY OF PLANNED ACTIVITIES

RISK REDUCTION

-
-
-

INSTITUTIONAL CAPACITY

-
-
-

KNOWLEDGE AND EVIDENCE

-
-
-

LEADERSHIP AND COORDINATION

-
-
-

SUMMARY OF PLANNED ACTIVITIES



HEALTH PROTECTION STRATEGIES



HEALTHY HEALTH CARE SETTINGS



RAISING AWARENESS

HEALTH PROTECTION STRATEGIES	HEALTHY HEALTH CARE SETTINGS	RAISING AWARENESS

SUMMARY OF PLANNED ACTIVITIES



**RISK ASSESSMENT,
BIOMONITORING
AND SURVEILLANCE**



**MEASURING
PROGRESS**



**SHARING
AND
COLLABORATING**

SUMMARY OF PLANNED ACTIVITIES



**NATIONAL POLICY
AND REGULATORY
FRAMEWORKS**



**INTERNATIONAL HEALTH
REGULATIONS (2005)**



**TRAINING
AND EDUCATION**

SUMMARY OF PLANNED ACTIVITIES



**HEALTH IN ALL
CHEMICALS POLICIES**



**HEALTH SECTOR
ENGAGEMENT
AND COORDINATION**



**ENGAGEMENT WITH
OTHER SECTORS
AND STAKEHOLDERS**

ANNEX 1

USEFUL RESOURCES

GAP ANALYSES, CAPACITY ASSESSMENTS, PRIORITIZATION

General resources that could be useful for detailed gap analyses, capacity assessments or implementation planning.

- **UNEP/UNITAR: Guidance for developing SAICM implementation plans (2009 edition)**

This document outlines a range of possible activities and provides practical suggestions, using country-based case studies or examples where possible, including for: establishment of a coordination mechanism and organizational considerations; assessment of infrastructure and capacity; development of action plans, and implementation issues.

<http://www.who.int/iomc/publications/publications/en/> (English, French, Spanish, Russian, Arabic, Chinese)

- **UNITAR: Preparing a national profile to assess infrastructure and capacity needs for chemicals management - guidance document (2nd edition 2012)**

This document provides an overview of the issues and information to consider in developing a national chemicals profile. To access this document and to find out if your country already has a national profile visit:

http://cwm.unitar.org/national-profiles/nphomepage/np3_region.aspx (English, French, Spanish)

GENERAL GUIDANCE

- **IOMC: IOMC Toolbox**

The IOMC Internet-based Toolbox for decision making in chemicals management identifies additional IOMC resources that will help countries address specific identified national problem(s) or objectives.

Issues covered include: pollutant release and transfer registers (PRTRs) scheme; national management scheme for pesticides; occupational safety and health management scheme for chemicals; chemical accident prevention, preparedness and response; industrial chemicals management scheme; public health management of chemicals; and classification and labelling system management scheme.

To reach the IOMC resources for each specific issue, from the link below click on the circle beside 'Gap Analysis' and then click on the circle beside 'Management objective selection.'

<http://iomctoolbox.oecd.org>
(English only)

- **IOMC: National implementation of SAICM: A guide to resource, guidance, and training materials of IOMC participating organisations (2012 edition)**

This document provides a useful overview of the various IOMC participating organizations and their roles in chemicals management. Additionally, it provides a listing of resources and tools that could be helpful in road map implementation.

<http://www.who.int/iomc/publications/publications/en/> (English and French)

IMPLEMENTATION PLANNING

- **UNITAR/UNDP: Guidance on action plan development for sound chemicals management, guidance document (2009 edition)**

This document provides a basic overview of the steps involved in developing an action plan, which could be helpful in developing specific project plans for each of your planned activities.

http://cwm.unitar.org/national-profiles/publications/cw/pops/AP_Guidance_01_Apr_09_en.pdf
(English, French, Spanish, Russian, Arabic, Chinese)

- **UNITAR: Resource mobilization for the sound management of chemicals and waste, guidance document (June 2011 edition)**

Chapters 4 and 5 of this document provide general but useful guidance on how to develop and implement a national resource mobilization strategy.

http://cwm.unitar.org/national-profiles/publications/cw/inp/RMS_Guidance_June2011.pdf
(English, French, Russian)

BACKGROUND DOCUMENTS

References for further reading:

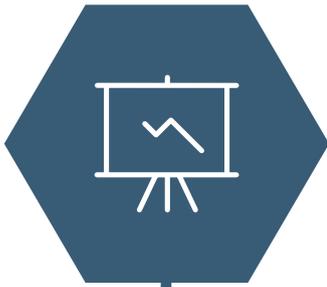
- Resolution WHA69.4: The role of the health sector in the Strategic Approach to International Chemicals Management towards the 2020 goal and beyond
http://www.who.int/ipcs/publications/wha/A69_R4-en.pdf?ua=1
- A69/19 Role of the health sector in the sound management of chemicals – Report by the WHO Secretariat, 4 March 2016.
http://apps.who.int/gb/e/e_wha69.html
- The public health impact of chemicals: knowns and unknowns (2016)
<http://www.who.int/ipcs/publications/chemicals-public-health-impact/en/#>
- Priorities of the health sector towards achievement of the 2020 goal of sound chemicals management (2015)
<http://www.who.int/ipcs/saicm/saicm/en/>
- Strategic Approach's Overall orientation and guidance for achieving the 2020 goal (2015)
www.saicm.org
- Strategy for strengthening the engagement of the health sector in the implementation of the Strategic Approach (2012)
<http://www.who.int/ipcs/saicm/saicm/en/>
- 2030 Agenda for Sustainable Development (2015)
<http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

ANNEX 2

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



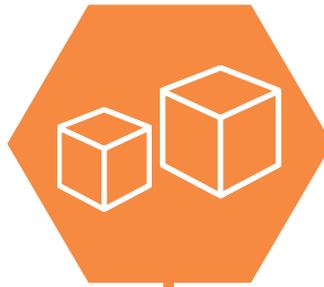
- Health protection strategies
- Healthy health care settings
- Raising awareness

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.

[†] 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.

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.

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 where possible.
- All** Develop mechanisms to collect and manage health data and information necessary for reporting progress on the Strategic Approach[†] and other international instruments.

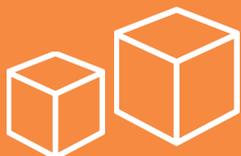
SHARING AND COLLABORATING

- 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.



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

MS 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.

MS 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.

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

MS 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.

MS 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)

MS 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 Sec 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.

MS WHO Sec Establish an international health workforce to be mobilized to respond to chemical emergencies, e.g. contribute to a WHO roster of experts for chemical incidents and emergencies.

MS 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.

MS Develop or enhance regional networks to coordinate, strengthen and share existing laboratory capacity.

MS 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 Sec 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 Sec 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 multi-sectoral 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.



**Chemicals
Road Map**

WORKBOOK

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