HEALTH SECTOR INVOLVEMENT IN THE MINAMATA CONVENTION ON MERCURY:

Outcomes of World Health Organization regional workshops for ministries of health
HEALTH SECTOR INVOLVEMENT IN THE MINAMATA CONVENTION ON MERCURY:
HEALTH SECTOR INVOLVEMENT IN THE MINAMATA CONVENTION ON MERCURY:

Outcomes of World Health Organization regional workshops for ministries of health
# CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iv</td>
</tr>
<tr>
<td>ACRONYMS AND ABBREVIATIONS</td>
<td>v</td>
</tr>
<tr>
<td>1</td>
<td>INTRODUCTION</td>
</tr>
<tr>
<td>2</td>
<td>African Region</td>
</tr>
<tr>
<td>3</td>
<td>Region of the Americas</td>
</tr>
<tr>
<td></td>
<td>Kingston, Jamaica Workshop</td>
</tr>
<tr>
<td></td>
<td>Montevideo, Uruguay Workshop</td>
</tr>
<tr>
<td>4</td>
<td>Eastern Mediterranean Region</td>
</tr>
<tr>
<td>5</td>
<td>European Region</td>
</tr>
<tr>
<td>6</td>
<td>South-East Asia Region</td>
</tr>
<tr>
<td>7</td>
<td>Western Pacific Region</td>
</tr>
<tr>
<td>8</td>
<td>CONCLUSIONS</td>
</tr>
<tr>
<td>9</td>
<td>BIBLIOGRAPHY</td>
</tr>
<tr>
<td>10</td>
<td>FOR FURTHER INFORMATION</td>
</tr>
</tbody>
</table>
ACKNOWLEDGEMENTS

The World Health Organization (WHO) wishes to express its appreciation to all whose efforts made the workshops and the production of this publication possible.

The workshops and publication are the result of the collective collaboration among many WHO staff from the six regional offices and headquarters Department of Public Health, Environmental and Social Determinants of Health and the Oral Health Programme.

This publication is based on output from workshops convened by the WHO regional offices, including the Regional Office for Africa, Regional Office for the Americas/Pan American Health Organization, Regional Office for the Eastern Mediterranean, European Regional Office, Regional Office for South-East Asia, and Regional Office for the Western Pacific.

Financial support for regional workshops provided by the Governments of Japan, Germany and Switzerland is gratefully acknowledged.

This publication was prepared and edited at the request of WHO by Terrence Thompson and Charlotte Kuo-Benitez [Water & Environment International, LLC, United States of America].
## ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
</tr>
<tr>
<td>ASGM</td>
<td>artisanal and small-scale gold mining</td>
</tr>
<tr>
<td>CARICOM</td>
<td>Caribbean Community</td>
</tr>
<tr>
<td>CC</td>
<td>Collaborating Centre</td>
</tr>
<tr>
<td>CEHA</td>
<td>WHO Regional Centre for Environmental Health Action</td>
</tr>
<tr>
<td>GEF</td>
<td>Global Environment Facility</td>
</tr>
<tr>
<td>HBM</td>
<td>human biomonitoring</td>
</tr>
<tr>
<td>MIA</td>
<td>Minamata Initial Assessment</td>
</tr>
<tr>
<td>NAP</td>
<td>National Action Plan</td>
</tr>
<tr>
<td>PAHO</td>
<td>Pan American Health Organization</td>
</tr>
<tr>
<td>SIDS</td>
<td>Small Island Developing States</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
The World Health Organization (WHO) convened a series of regional workshops on health sector involvement in the implementation of the Minamata Convention in order to support awareness raising and networking among ministries of health to facilitate implementation of the Minamata Convention and the associated World Health Assembly Resolution WHA67.11 (2014). This brochure is intended to inform readers about the outcomes of the workshops, including the challenges and opportunities confronting health authorities in each region in relation to the Convention’s health-related Articles, as well as needs for technical assistance.

Mercury is a naturally occurring element (chemical symbol is Hg) in the earth’s crust. It is released into the environment mainly as a result of human activity. Mercury’s behaviour in the environment and degree of toxicity depends heavily on its state and form. It exists in several forms: as elemental mercury, inorganic and organic mercury compounds. It is also considered to be a persistent pollutant and cannot be broken down or degraded into harmless substances. This means that once mercury has been brought into circulation in the biosphere by human activity, it does not “disappear” again in the time spans comparable to human lifetime and will need to be managed (stored or disposed) for the longer term. Once in the environment, mercury can be transformed by bacteria into methylmercury, where it enters the food chain, in particular, in seafood.¹ ²

Artisanal and small-scale gold mining (ASGM) and coal burning are the major sources of anthropogenic mercury emissions to air. In the case of coal burning, mercury is emitted because it is present in coal as an impurity. In ASGM, mercury is intentionally used to extract gold, resulting in emissions to air and also releases of mercury to water and soil. Mercury is also used in a range of products and processes – for example, manometers and thermometers, electrical switches, fluorescent lamps, dental amalgam, batteries and vinyl-chloride–monomer production, and skin-lightening cosmetics.³

WHO considers mercury to be one of the top ten chemicals or group of chemicals of major public health concern. People may be exposed to mercury in any of its forms under different circumstances. However, exposure mainly occurs through consumption of fish and shellfish contaminated with methylmercury, through worker inhalation of elemental mercury vapours during industrial processes, and through use of skin-lightening cosmetics. Depending on the form of mercury, it may have toxic effects on the nervous, digestive and immune systems, and on lungs, kidneys, skin and eyes. In particular, methylmercury exposure in the womb can result from a mother’s consumption of seafood, adversely affecting a baby’s growing brain and nervous system. Children are also particularly vulnerable to neurodevelopmental effects of mercury exposure.⁴

With the recognition that mercury is a threat to public health and environment, the United Nations Environment Programme (UNEP) Governing Council agreed in 2009 to the elaboration of a legally binding instrument on mercury. The resulting Convention is a global treaty to protect human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds. Its name recalls the city of Minamata in Japan, whose residents have greatly suffered from the effects of mercury poisoning since the early 1950s. The Convention entered into force on 16 August 2017. Updated information on countries that have become Parties to the Convention can be found at the website: http://www.mercuryconvention.org/Countries/Parties/tabid/3428/language/en-US/Default.aspx.

¹ UNEP (2013). Mercury Inventory Toolkit.
The Convention controls most aspects of the mercury "life cycle", including manufactured supplies and uses of mercury and mercury compounds, emissions to air and releases to land and water, as well as the environmentally sound management of mercury-contaminated sites. Major highlights of the Convention include a ban on new mercury mines, the phase-out of existing ones, the phase-out and phase-down of mercury use in a number of products and practices, control measures on emissions and on releases to land and water, and the regulation of the informal sector of ASGM. The Convention also addresses interim storage of mercury and its disposal once it becomes waste, sites contaminated with mercury, as well as health issues.

The protection of human health is at the core of the Minamata Convention, whose objective (Article 1) "is to protect human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds". Implementation of the Convention requires multisectoral action, including the health sector. A leading role for health ministries is envisaged in:

- the phase-out of manufacture, import and export of thermometers, blood pressure monitors, antiseptics and skin-lightening cosmetics, and the phase-down of use of dental amalgam (Article 4 and Annex A);
- developing public health strategies to address the health impacts of mercury use in ASGM (Article 7 and Annex C);
- undertaking human health risk assessments in relation to contaminated sites (Article 12);
- developing and implementing strategies and programmes to identify and protect populations at risk (Article 16: Health aspects); and
- information exchange (Article 17), public information, awareness and education (Article 18) and undertaking health assessments and monitoring levels of mercury and mercury compounds in vulnerable populations (Article 19).

In May 2014, the Sixty-seventh World Health Assembly adopted Resolution WHA67.11: "Public health impacts of exposure to mercury and mercury compounds: the role of WHO and ministries of public health in the implementation of the Minamata Convention". The Resolution acknowledges WHO's input into the development of the Convention and clearly defines the roles and responsibilities of WHO and ministries of health in its implementation.

World Health Assembly Resolution WHA67.11 encourages Member States to:

- promptly sign, ratify and implement the Minamata Convention;
- address health aspects of exposure to mercury;
- recognize inter-relationship between health and environment and ensure close cooperation between the respective authorities;
- promote appropriate health-care services for prevention, treatment and care; and
- facilitate exchange of epidemiological information among Parties to the Convention and with the international community.

The health-related Articles of the Convention as well as World Health Assembly Resolution WHA67.11 raise many challenges and opportunities for WHO Member States. Workshops recently convened in the various WHO regions effectively identified the issues of importance to the health sector in each region, as well as their respective dominant technical assistance needs.
WHO organized a workshop for countries of the African Region on 9–10 April 2018 in Johannesburg, South Africa to reinforce the role of the health sector in implementation of the Minamata Convention on mercury use in Africa. The workshop brought together focal persons on the Convention from the ministries of health of 40 countries in the WHO African Region. Many international experts and representatives of key industry associations, research institutes and WHO collaborating centres (WHO CCs) also attended the workshop. The overall objectives of the workshop were to raise awareness and promote peer learning and networking opportunities among ministries of health for the effective ratification and implementation of the Convention by Member States in the Region.

At the time of the workshop, 23 countries in the African Region had ratified the provisions of the treaty as part of their national legislation. Many other countries have undertaken the Minamata Initial Assessment (MIA) to support ratification and better implementation of the Convention.

Participants agreed that the role of the health sector includes monitoring exposure as well as implementing strategies to protect health, particularly of vulnerable populations.

During the workshop, the participants focused on a number of shared issues and concerns, and exchanged experiences and best practices across countries. Also emphasized were the roles and responsibilities of the health sector to phase out mercury-containing measuring devices, as well as promote oral health, in the context of phasing down the use of dental amalgam. A complete ban of dental amalgam (not required under the Convention) was considered unrealistic since safe and affordable alternatives will not be available for most of the low-income countries in the Region for the next seven to 10 years. Participants identified the need to strengthen the evidence base for advocacy by assessing the global burden of disease attributable to mercury use, and agreed that the role of the health sector includes monitoring exposure as well as implementing strategies to protect health, particularly of vulnerable populations.

Participants emphasized the need for resource mobilization and capacity-building to strengthen the health sector’s participation in chemicals work in general and mercury more specifically. Management of health-care wastes (including mercury wastes), enforcement of laws, sound environmental management of contaminated sites and inventory of equipment are priorities for capacity-building. Health-care workers should be trained on mercury-free alternatives to dental amalgam; public and private insurance companies should be encouraged to examine policy and programme options that favour a shift to quality mercury-free materials for dental restoration; and demand-side measures such as raising public awareness of these alternatives are critical to any lasting solution.

Mercury exposure from ASGM was identified as a key priority for action as ASGM accounts for a disproportionate share of mercury exposure in the Region. A shared need was expressed for capacity-building to develop National Action Plans (NAPs), including the necessary public health strategies, taking a step-by-step approach, and ensuring effective and inclusive multi-stakeholder coordination and consultation with relevant ministries. Delegates expressed caution against reinventing new institutions for multisectoral collaboration. There was consensus to build on existing coordinating frameworks on environment and health, including incorporating mercury work in the African ChemObs project (Global Environment Facility [GEF]/UNEP/WHO), which aims to build national integrated observatories on chemical use.

Overall, there is still a critical need to work towards greater political commitments by countries through ratification of the Convention.

Notes:
1 Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cabo Verde, Central African Republic, Chad, Comoros, Cote d’Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Niger, Nigeria, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, South Sudan, Swaziland, Togo, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.
3. REGION OF THE AMERICAS
Kingston, Jamaica Workshop

A workshop aimed to promote the understanding of the roles of the health sector in the Minamata Convention to ministries of health of English-speaking countries in the WHO Region of the Americas was held on 18–19 October 2016 in Kingston, Jamaica. The event was organized by the WHO Regional Office for the Americas/Pan American Health Organization (PAHO) and the University of the West Indies, Mona. The workshop was attended by 20 participants, including representatives from eight countries: Bahamas, Guyana, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago. Delegates were from the ministries of health, environment, economic growth and job creation; national agencies; academic institutions; and nongovernmental organizations.

Besides promoting understanding of the roles of the health sector in the Convention, other objectives of the workshop were to facilitate implementation of World Health Assembly Resolution WHA67.11; and to exchange information on health, public awareness, monitoring and surveillance in health in different sectors. The meeting also emphasized the need to mobilize the health sector to promote activities related to mercury.

A KEY NEED IDENTIFIED WAS INFRASTRUCTURE TO IMPROVE WASTE MANAGEMENT PRACTICES AND STORAGE FACILITIES TO MANAGE EXISTING MERCURY STOCKPILES.

Caribbean countries share common environmental issues and challenges in implementing the Minamata Convention. Therefore, the Region would benefit from collaboration mechanisms to tackle these issues while at the same time maximizing resources. Experts from the workshop were encouraged to initiate the creation of a Caribbean fish advisory database and biomonitoring with support from regional experts, agencies and institutions. Evidence on the harmful effects of mercury exposure through fish consumption should be shared with the ministries of health and policy-makers. Participants highlighted the need for capacity-building of health professionals and artisanal miners, and awareness raising of populations at risk on the harm of exposure to mercury. Another key need identified was infrastructure to improve waste management practices and storage facilities to manage the existing mercury stockpile in the Region. The use of mercury-containing skin-lightening products in the Region was also brought up as a troubling issue for which update notes would be prepared for consultation and dissemination.

During the workshop, suggestions were made that the phasing-down/out of mercury-containing products could follow that of the efforts undertaken by PAHO and UNEP with the Caribbean Community (CARICOM) in addressing lead in paint. Strategies could be put in place to identify drivers among the CARICOM countries to work jointly towards the reduction of mercury-added products and dental amalgam use.

PAHO will expand upon its existing resources and materials on the topics related to the Minamata Convention, both on the PAHO/Toxicology website and the mercury virtual course, which will be made available on the PAHO Virtual Campus. This virtual course will be presented as a self-learning tool and/or through WebEx sessions with tutors, with a regional or country format, depending on available funds and interest from countries in implementing the course.
Montevideo, Uruguay Workshop

A workshop was convened on 7–8 October 2015 in Montevideo, Uruguay for health authorities of Central and South American Member States in the WHO Region of the Americas. The objective of the workshop was to promote understanding of the role of the health sector in the Minamata Convention in order to facilitate implementation of World Health Assembly Resolution WHA67.11. The event was organized by the WHO Regional Office for the Americas/PAHO and the Ministry of Public Health of the Eastern Republic of Uruguay. It was attended by 47 participants, including representatives from 17 Member States. Participants came from ministries of health, academic institutions, nongovernmental organizations and international organizations.

Workshop participants developed and signed the “Declaration of Montevideo” in order to promote participation of the health sector in the ratification and implementation of the Minamata Convention. The Declaration, inter alia, calls upon WHO/PAHO to support Member States in the development and implementation of strategies and programmes to detect and protect populations at risk, especially vulnerable populations such as ASGM workers and communities. It also seeks support for the development of health guidelines, support for establishing of goals for reducing exposure to mercury, and support for public education.

As one point of follow-up, it was agreed in the workshop that PAHO, with the support of several participants, would launch a training course for health personnel through its Virtual Campus.

The workshop focused on health effects of exposure to mercury, mercury-added products such as mercury-containing medical devices and dental amalgam, ASGM, and experiences of ministries of health in their preparations for implementation of the Minamata Convention, including both mandatory and voluntary measures. Work group sessions provided an important output of the workshop, summarizing the preparations made by health ministries in attendance in the areas of human resource development, laboratory and technical capacity, synergies with allied health programmes, and implications for health systems arising from the Convention. Most of the participating countries reported that, notwithstanding challenges, some progress had been made towards assessing and initiating controls on mercury-containing medical devices and amalgam, advancements in education and research, and progress towards identification of populations at risk.

It was apparent through the workshop that sources of mercury and routes of human exposure are highly variable among the participating countries. Nonetheless, commonalities were found in terms of needs for technical assistance. Chief among these were the need to establish baseline data on mercury contamination, the need for sustainable social responses to transform the models of production in some sectors such as ASGM, and the need to identify safe and cost-effective alternatives to dental amalgam.

* Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela.
4. EASTERN MEDITERRANEAN REGION
The WHO Regional Office for the Eastern Mediterranean Region and the WHO Regional Centre for Environmental Health Action (CEHA) organized a regional workshop on health sector involvement in implementation of the Minamata Convention held on 30 November to 1 December 2016 in Amman, Jordan. The workshop was attended by delegates from 10 Member States\(^7\) and Palestine, as well as representatives from regional and international organizations. The main purpose of the workshop was to highlight the importance of the Minamata Convention and inform participants about the risks of mercury to human health. Discussions focused on identifying prerequisites for the implementation of the Convention and promoting networking among stakeholders. During the workshop, delegates identified the following as requirements for implementation of the Convention: needs assessment of technical, financial and human resources at the national level; development of updated public health legislation; and development of national strategies and plans to phase out the use of mercury.

A NUMBER OF CHALLENGES WERE IDENTIFIED, INCLUDING: LACK OF UPDATED NATIONAL-LEVEL PUBLIC HEALTH LEGISLATION WITH REFERENCE TO THE CONVENTION.

The participants advocated for the discontinuation of mercury-containing equipment and products in health care and occupational health services where possible, with the effort supported through training and capacity-building. The use of mercury in dentistry should also be reduced and eventually phased out. Safe practices for the collection and disposal of mercury-containing hospital waste need to be established and mercury replacement strategies developed. Populations most at risk for direct exposure to mercury include nursing mothers and their infants, women of childbearing age, young children, health professionals, ASGM miners, dentists and waste collectors. Delegates emphasized the need to develop advocacy and educational materials for these vulnerable groups, health professionals, communities, patients and families.

A number of challenges were identified, including: lack of updated national-level public health legislation with reference to the Convention; financial constraints on ministries of health and the private sector when introducing new technology to replace mercury; lack of safe practices for collection and disposal of mercury-containing waste; lack of community awareness regarding the health risks from mercury; and lack of country-specific information and data. The validation and calibration of replacement devices was also brought up as a need that could alleviate clinicians’ concerns about accuracy of measurements. Moving forward, Member States were encouraged to sign and ratify the Convention as soon as possible and to strengthen intersectoral collaboration required for its implementation, as well as to develop strategies for the systematic phasing out of mercury-containing products in all relevant sectors. Evidence-based research should be undertaken to better understand the exposure routes for mercury in national populations. Consumer education should be strengthened, especially among the identified vulnerable groups, to reduce excessive exposure to mercury through the consumption of fish and seafood. Efforts should also be made to involve academia, civil society and nongovernmental organizations in raising awareness regarding the risks of mercury use, including in the use of certain types of traditional medicine. As mentioned, countries should conduct needs assessments of technical, financial and human resources at the national level, and establish and maintain effective systems for collection and disposal of mercury-containing products and equipment.

---

\(^7\) Bahrain, Egypt, Jordan, Lebanon, Morocco, Oman, Pakistan, Qatar, Saudi Arabia and the United Arab Emirates.
5. EUROPEAN REGION
The meeting on Health Sector Involvement in the Implementation of the Minamata Convention: Assessment and Prevention of Mercury Exposure was held on 24–25 June 2015 in Bonn, Germany under the umbrella of the European Environment and Health Process. It was attended by 21 Member States from the WHO European Region, as well as representatives from international organizations and nongovernmental organizations. The aim of the meeting was to update participants on the effects on health of mercury and the implications of exposures to hazardous chemicals in early life for child development, and to share knowledge and information relevant to the implementation of the Minamata Convention.

Findings were presented from studies conducted by the Research Centre for Toxic Compounds in the Environment, especially from the European Longitudinal Study of Pregnancy and Childhood. The overall objective of the study is to link environmental factors and exposures to health, with the view of informing policies and practice to improve the health of future generations. Birth cohort surveys can be useful to assess the impacts of mercury and its compounds on health throughout the life-course. Capacity-building and the need to bridge the science and policy interface in the WHO approach to the birth cohort survey were stressed.

As Parties to the Convention on the Rights of the Child, all countries should focus on protecting children from early exposure to toxic chemicals to prevent harm in present and future generations. Businesses, alongside their economic interests, also have a responsibility to avoid toxic chemical pollution, to exercise due diligence regarding the impacts of their activities, to respect human rights and to provide access to effective remedies.

Recent studies indicate that in some parts of Europe, a high percentage of the population has higher mercury concentrations in hair than the cutoff values established by different organizations and studies. The reduction of human exposure to mercury in food should therefore be considered a public health priority objective. It was suggested that further studies should be undertaken, including human biomonitoring (HBM), in a wider population, with a specific focus on areas where environmental pollution and higher exposure have been identified.

Participants were introduced to the UNEP/WHO project on the Development of a Plan for Global Monitoring of Human Exposure to and Environmental Concentrations of Mercury (funded by GEF), which aims to harmonize approaches for monitoring mercury in humans and the environment, and to strengthen the capacity for mercury analysis to accurately determine their global concentrations.

In line with the respective articles of the Convention, the health sector is focusing on the replacement of mercury-added products in health care, which includes phasing out manufacture, export or import of specified mercury-added products. Engaging stakeholders, targeting primary care centres and adopting a systems-wide approach were considered essential elements for success.

Participants discussed whether all relevant sources of exposure to mercury are addressed and assessed reliably, such as in ASGM, silver mining and cremation. One identified challenge was the need to protect workers who are occupationally exposed to mercury. HBM is an important way to evaluate exposure to mercury and could be implemented during pre-employment and periodic medical checks on workers; however, there is a need for clear guidance.

Participants welcomed the annotated bibliography of the key information sources from WHO relevant to the Minamata Convention as user-friendly and containing valuable information. They strongly encouraged the further development and finalization of the bibliography and the development of a toolkit to support the implementation of Article 16. The toolkit should be a practical guidance for identifying populations at risk and translating scientific findings into action for management to improve the control of mercury-containing products.

One identified challenge was the need to protect workers who are occupationally exposed to mercury.

---

6 Armenia, Belarus, Belgium, Bosnia and Herzegovina, Croatia, Georgia, Germany, Hungary, Israel, Italy, Kazakhstan, Kyrgyzstan, Lithuania, Poland, Republic of Moldova, Romania, Serbia, Slovenia, Switzerland, Turkmenistan and Ukraine.
6. SOUTH-EAST ASIA REGION
The workshop on health sector involvement in the Minamata Convention for the WHO South-East Asia Region was held on 3–4 July 2017 in Bangkok, Thailand. It was attended by delegates from all 11 Member States of the Region, relevant WHO CCs in oral health and occupational and environmental health, as well as resource persons and consultants. Among the Member States, two had ratified the Convention at the time of the workshop and four had signed and were awaiting ratification; however, many countries were still at very early stages with regard to ratification of the Convention. The objectives of the workshop were to promote networking among ministries of health and health sector experts in support of Resolution WHA67.11; taking stock of progress among South-East Asian Member States towards implementation of the Convention, including MIAs and other activities undertaken with external assistance; and developing plans for future health-sector implementation activities in support of the Convention. Challenges in the Region have arisen due to the wide range of health-care settings and differences between rural and urban areas in South-East Asia. Other needs identified by the participants included: guidance on how to perform public health assessments; support for Member States at the early stages of implementation; raising public awareness; sustainable phasing out of mercury-containing products; lack of capacity for HBM, quality assurance of HMB and utilization of results; and acceleration of phasing out of dental amalgam.

Although a number of ministries of health have been involved in discussions with nodal ministries for the Convention through multisector stakeholder committees, in some countries health sector needs and implementation have not been addressed sufficiently. It was pointed out that health issues have received limited attention in MIAs, and that even within the health sector there remains a tendency to think of mercury as an issue that is only relevant to the health-care sector, rather than addressing it in all policies and sectors. As such, much stronger intersectoral coordination is needed to tackle the issue of mercury. One of the priorities for next steps is to develop a health situation and assessment action plan that builds on the MIAs.

Challenges in the Region have arisen due to the wide range of health-care settings and differences between rural and urban areas in South-East Asia. There is also a large informal sector that makes addressing mercury emissions difficult, particularly in relation to waste management and ASGM. Despite some success stories in the Region, especially in phasing out thermometers and other mercury-containing health-care products, there is still real and unmet need in terms of guidance and facilities for appropriate storage and disposal of mercury-containing waste. Lack of awareness of replacement technologies and lack of quality standards about these – such as the accuracy of digital instruments – are also issues that have to be addressed. Another concern is the use of mercury in certain traditional regional practices; while these are not covered by the Convention, it was noted that implementation of the Convention would help in raising awareness and addressing these in the future.

1 Bangladesh, Bhutan, Democratic People’s Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand and Timor Leste.
7. WESTERN PACIFIC REGION
WHO co-organized a workshop with the Ministry of the Environment and Ministry of Health, Labour and Welfare of Japan, and the Minamata City Government on 29–30 June 2017 in Minamata, Japan on health sector involvement in implementation of the Minamata Convention. Representatives from the ministries of health of 18 Member States of the WHO Western Pacific Region attended the workshop, along with participants from the Ministry of the Environment of Japan, as well as health institutions and experts. The objectives of the meeting were to raise awareness among ministries of health in the context of the Convention, to provide opportunities for strengthening existing networks; and to disseminate relevant tools and guidance provided by WHO.

The countries in the Western Pacific are at different stages with regard to the Minamata Convention, with some having ratified the Convention and others not. Despite these differences, a number of shared issues and concerns were brought up, providing an opportunity for participants to exchange knowledge and experiences. There was agreement on the importance of securing political commitment – for example, through the Pacific Health Ministers Meeting and the WHO Western Pacific Regional Committee Meeting – and on the value of improving health information and raising awareness among vulnerable populations about the dangers of mercury exposure. The delegates discussed how to approach phasing out of mercury thermometers and sphygmomanometers in health care, and the urgent need to find a solution to the issue of mercury health-care waste. Plans were made to share health sector capacity assessment methodologies and analyses with those Member States that have yet to undertake this step. The small island countries expressed an interest in working together to develop their health action plans and to collaborate on implementation because their human and other resources are too limited to effectively address all the issues alone.

Participants saw an opportunity to follow up on the UNEP/WHO Global Mercury Monitoring Project, which will produce standard operating procedures for biomonitoring studies (for example, for hair mercury content) and would like to collaborate on developing studies in the Region. They also prioritized training of health-care workers, addressing the issue of dental amalgam and, for some countries, managing the health risks associated with ASGM and contaminated sites. For some countries, high consumption of predatory fish is a concern, as is the effect mercury pollution has on people’s livelihoods due to dependence on fish exports.

Through the workshop, the participants were able to identify practical steps to be taken in the short and longer terms, and to establish a network of contacts in health ministries for follow-up. They also learnt about tools and resources available from the WHO CC for Studies on the Health Effects of Mercury Compounds at the National Institute for Minamata Disease and the WHO CC for Translation of Oral Health Science at Niigata University, as well as from WHO and other United Nations partners.

High consumption of predatory fish is a concern, as is the effect mercury pollution has on livelihoods.

10 Cambodia, China, Cook Islands, Japan, Kiribati, Lao People’s Democratic Republic, Malaysia, Marshall Islands, Mongolia, Niue, Papua New Guinea, Philippines, Samoa, Singapore, Solomon Islands, Tuvalu, Vanuatu and Viet Nam.
8. CONCLUSIONS

Through WHO’s regional workshops on health sector involvement in implementation of the Minamata Convention, many ministries of health reported encouraging progress towards planning and making preparations for the health sector to address the health-related Articles of the Convention and to fulfill their obligations under World Health Assembly Resolution WHA67.11. The workshops were also effective in promoting dialogue among participants and establishing relationships to enable future networking. Notwithstanding the progress that has been made and despite a very broad range of cultural, economic, environmental, political and social conditions among the many countries that participated in the workshops, the workshops revealed many commonalities among the regions in terms of issues and challenges.

- The health sector’s role in implementation of the Minamata Convention is often narrowly seen as focused on relatively few issues, such as mercury-containing medical devices, dental amalgam, mercury-contaminated health-care waste, and ASGM in some countries. All regions identified the need for capacity-building among health workers to address those issues.

- At the same time, there is a parallel need to raise awareness among policy-makers and health workers alike on a broader range of mercury issues within health-care settings, as well as to raise awareness on mercury-related health issues outside the health sector. Stronger participation by health authorities in the MIAs could be an effective starting point. WHO Regional Committees and various regional organizations, such as the Association of Southeast Asian Nations (ASEAN), CARICOM and the Pacific Community, could help to raise awareness and commitment at policy level.

- A common need identified among the regions was the need for awareness-raising and education about the health effects of mercury exposure, routes of exposure, protective measures and treatment. Support is needed for development of risk communication strategies and tools targeted at the general public, at consumers, and at specific vulnerable groups.

- With regard to the phase-out of manufacture, import and export of mercury-containing medical measuring devices, workshop participants often stressed the need to effectively disseminate information on available alternatives, to address clinicians’ concerns on safety and cost-effectiveness of alternatives, and to develop and enforce adequate standards for the procurement and use of alternative devices.

- The concerns of workshop participants regarding the phase-out of mercury-containing medical measuring devices were echoed in their discussions on phasing down the use of dental amalgam.

- With regard to the issue of mercury-contaminated health-care waste, the need for infrastructure to safely transport, store and dispose such wastes was identified by many workshop participants, in addition to the need for relevant training of health workers.

- Several challenges emerged from the workshops related to monitoring and surveillance. The need to establish health and environmental baseline data on mercury contamination was widely recognized. Many countries face challenges in terms of technical capacity and laboratory capacity firstly to establish baseline conditions and subsequently to conduct monitoring. HBM was seen as an effective approach to identify and monitor vulnerable populations, but there is a need for assistance to implement HBM in many countries.

The workshops were also effective in promoting dialogue among participants and establishing relationships to enable future networking.
Several key issues, although not universal, were highlighted by more than one region:

- Exposure to mercury among ASGM workers and their families is a concern in all regions but not in all countries. Many participants from countries where ASGM is more than insignificant seek assistance to develop and implement NAP public health strategies in the context of the Minamata Convention.

- Concern was raised by many workshop participants, particularly those from Small Island Developing States (SIDS) in the Caribbean and Pacific islands, about mercury in fish. Concern focuses not only on the consumption of fish but also on the livelihoods of populations dependent on the fishing industry. A need was seen for increased research and surveillance on mercury contamination of fish products and for effective consumer risk education programmes.

- Traditional practices, such as the use of mercury in Ayurvedic and traditional Chinese medicine, although excluded from the Convention, were highlighted as a concern by many countries, especially in Asia and in the WHO Eastern Mediterranean Region.

- Another issue of global concern, particularly in Asia, Africa and the Caribbean, is the use of mercury in skin-lightening cosmetics, which is covered in the Convention.

In conclusion, with the support of country participants and other partners, WHO’s regional workshops have effectively highlighted the issues and challenges of paramount importance currently faced by ministries of health across the globe as they plan for their countries’ involvement in implementation of the health-related Articles of the Minamata Convention. WHO stands ready to work in partnership with health ministries, external support agencies and other partners to support all countries in fulfilling their obligations under World Health Assembly Resolution WHA67.11. By working together to address the critical needs and challenges identified in the regional workshops, we can ensure a safer world for present and future generations.


The information contained in this publication was obtained from unpublished meeting notes taken at each of the regional workshops.

Photo credits

African Region: Joseph Sohm / Shutterstock.com

South-East Asia Region: Lokman Hamid / Shutterstock.com

FOR FURTHER INFORMATION

Visit the WHO web page on mercury
