WHO Chemical Safety - Activity Report 2017

This document presents a summary of WHO Headquarters Chemical Safety activities undertaken in 2017.

It covers the following areas:

1. Chemical Risk Assessment Network.
2. Tools for Assessing Chemical Risks (chemical risk assessment methodologies).
3. Health Impacts of Chemicals (chemical risk assessments).
4. Poisons Prevention, Information and Management.
5. Chemical Incidents and Emergencies.
6. Promoting Health in International Conventions and Agreements.

A list of WHO/IPCS publications is given in Annex 1 and a list of WHO/IPCS Events in 2017 is given in Annex 2.

1. CHEMICAL RISK ASSESSMENT NETWORK

1.1 Network Management and Meetings

During 2017 the membership of the Network increased to 87 participants (on an institutional basis) from 48 countries. Several activities were taken forward under the umbrella of the Network in the area of methodology for chemical risk assessment, including Mode of Action, Combined Exposures, chemical-specific adjustment factors, immunotoxicity of nanomaterials and systematic review in chemical risk assessment. Details of these activities are given in the relevant sections below.

Network Participants were kept informed by bimonthly broadcast emails and a Newsletter. The Network Coordinating Group, consisting of the leads for each of the Network activities, met by teleconference five times in the first five months of the year to plan for the Network Meeting in June. Presentations about the Network and its activities on chemical risk assessment methodology were delivered at two scientific conferences and at three WHO expert meetings during 2017.

A face to face meeting of the Network took place 20–22 June 2017, hosted by the European Food Safety Authority (EFSA) in Parma, Italy. This meeting (the second full meeting of the Network to be held) was attended by 74 participants representing 63 Network institutions in 39 countries. The goal of the meeting was to review progress made since the first Network meeting in 2014 and to identify new activities and opportunities for collaboration.

The meeting supported continuing work on several activities and also developed a number of new project ideas. The meeting also featured the development of a capacity building strategy

for the Network (see below), and the launch of a new WHO publication titled "*Chemical Mixtures in Source-water and Drinking-water*".
This publication and the meeting report can be obtained from the following links:-

- 🕮 WHO Chemical Risk Assessment Network Meeting Report, June 2017
  http://www.who.int/ipcs/network/meeting2017/
- 🕮 Chemical Mixtures in Source-water and Drinking-water
  http://apps.who.int/iris/bitstream/10665/255543/1/9789241512374-eng.pdf

Back to back with the Network Meeting, two training events were organized, covering "*Systematic review in chemical risk assessment*" and "*Setting health-based guidance values*". A meeting to identify opportunities, obstacles and challenges to involvement of institutions from developing countries in the Network was also convened.

Details of Network membership and the ongoing activities are presented on the dedicated Network web pages.

- 🕮 WHO Chemical Risk Assessment Network web pages
  http://www.who.int/ipcs/network/en/
- 🕮 WHO Chemical Risk Assessment Network activities web page
  http://www.who.int/ipcs/network/activities/en/
- 🕮 WHO Chemical Risk Assessment Network meetings web page
  http://www.who.int/ipcs/network/about/en/index2.html

1.2 Capacity Building in Chemical Risk Assessment

In 2017, the Strategic Plan for enhancing chemical risk assessment capacity in the WHO Chemical Risk Assessment Network was developed. The Plan is aimed at increasing chemical risk assessment capacity in WHO Network Participants and thereby strengthening environmental health decision-making. The Plan operationalizes capacity building related actions of the Road map to enhance health sector engagement in the Strategic Approach to International Chemicals Management towards the 2020 goal and beyond (see Section 6.1). In particular, the Plan includes actions to be implemented from 2018 to 2020 to strengthen national institutional capacities to address health threats from chemicals and on filling gaps in knowledge and methodologies for risk assessment.

In addition, WHO signed an agreement with the European Commission to launch Phase III of the IOMC Toolbox project on decision making in chemicals management: From design to action. The project includes a number of capacity building workshops in developing countries to be implemented from 2018 to 2020 (see Section 6.4).

Face to face training: A number of activities have been supported to strengthen risk assessment capacities in countries and to introduce and promote the use of the WHO Human Health Risk Assessment Toolkit, including:

- International Training Course on Environmental and Health Risk Assessment and Management of Toxic Chemicals, 5–19 December 2017, Bangkok, Thailand.

- 🕮 WHO Chemical Risk Assessment Network web pages
  http://www.who.int/ipcs/network/en/

2. TOOLS FOR ASSESSING CHEMICAL RISKS

2.1 The WHO/IPCS Harmonization Project

The WHO/IPCS "*Project on the Harmonization of Approaches to the Assessment of Risk from Exposure to Chemicals*" (commonly referred to as the "Harmonization Project") aims to harmonize global approaches to risk assessment through both increased understanding and agreement on basic principles, and to develop international guidance documents on specific issues.

Two collaborative forums have been established under the umbrella of the WHO Chemical Risk Assessment Network, one on the topic of Mode of Action and the other on Combined Exposures. These groups provide a forum for Network Participants to share information about their activities on the topic, and to coordinate activities as necessary. The groups consist of experts from institutions which are leading the development of new methods in these topic areas. Both groups meet several times per year via teleconference.

The outcome of the Network activity to review the use of WHO guidance on Chemical-Specific Adjustment Factors (CSAF), which reviewed more than 100 examples of use (or attempted use) of CSAF identified from literature searches and a call for data was published in an Open Access journal article during 2017.

Evolution of Chemical-Specific Adjustment Factors (CSAF) based on recent international experience; Increasing utility and facilitating regulatory acceptance. V.S. Bhat *et al*, Critical Reviews in Toxicology Vol. 47, pages 733–753 (2017) http://dx.doi.org/10.1080/10408444.2017.1303818

A working group consisting of Network Participants continued to work on a framework on systematic review in chemical risk assessment. The aim of the framework is to be a concise, high-level document which will introduce the topic of systematic review, provide a practical perspective on when and when not to conduct a systematic review, and give an overview of the tools and resources available. The working group organized a training event on systematic review methods held back to back with the Network Meeting in June 2017, and aims to publish the framework document and hold training webinars for Network Participants during 2018.

Under the umbrella of the Network, a Working Group was established to identify, review, describe, develop and promote tools to prioritize chemicals and settings involving chemicals for risk assessment, with a focus on developing countries. An organizing committee was also convened to plan a new Network activity on new and emerging risks from chemicals, starting with a mapping of existing systems during 2018.

2.2. Environmental Health Criteria (EHC) and other Methodology Documents

Under the umbrella of the Chemical Risk Assessment Network, and with the WHO Collaborating Centre at RIVM, work continued on an Environmental Health Criteria Document on *Principles and Methods for assessing the risk of immunotoxicity associated with exposure to nanomaterials*. A draft document was released for public and peer review and an expert meeting was convened at RIVM, RIVM, Bilthoven, from 2–4 November 2017, to consider the comments received. The text of the document was finalized in December, ready for editing and publication in 2018. Highlights of the document were also presented at a EUROTOX Continuing Education Course in Bratislava, Slovakia, on 10 September 2017.

3. HEALTH IMPACTS OF CHEMICALS

3.1 Chemical Risk Assessment Documents

Chrysotile Asbestos: The WHO publication on Chrysotile Asbestos, including a short information document for decision-makers and a section addressing questions commonly raised in policy discussions, was translated into Portuguese during 2017. This publication is now available in nine languages.


Chrysotile Asbestos
http://www.who.int/ipcs/assessment/public_health/asbestos/en/

3.2 International Chemical Safety Cards (ICSCs)

WHO work on the International Chemical Safety Cards (ICSCs) continues to be a major point of collaboration with the International Labour Organization (ILO). ICSCs are available for approximately 1700 chemicals.

The ICSC collection is disseminated via a web-based interface (http://www.ilo.org/dyn/icsc/) which is linked directly to the underlying database. This means that the up-to-date version of each ICSC is immediately available via a single source, and this mechanism has replaced the diverse sources of ICSCs used in the past. There are currently nine language versions available, with a further three languages almost fully translated and two new language versions in early development.

GHS classifications continue to be made for new and updated International Chemical Safety Cards (ICSCs). The corresponding hazard statements, signal words and symbols are included on the ICSCs. To date, GHS classifications have been included on 585 ICSCs.

A peer review meeting for the ICSCs was held 24–28 April 2017, at which 64 ICSCs were revised.


International Chemical Safety Cards.
http://www.ilo.org/dyn/icsc/)

3.3 IPCS INCHEM website (http://www.inchem.org)

This website, hosted on behalf of WHO/IPCS by the Canadian Centre for Occupational Health and Safety (CCOHS), enables WHO/IPCS to disseminate its collections of risk assessment documents and the ICSCs to a wider audience. The INCHEM collection is long established and ranks highly in internet search engine results, as well as allowing powerful search options within the collections.

During 2017 there were 1.41 million page-views on the INCHEM web site from 675 000 users in 913 000 sessions, with 27% of users being repeat visitors. Approximately 38% of sessions (347 000) accessed the INCHEM collection either directly or via links from other web sites, with the remaining 62% reaching the site via a search engine. These statistics demonstrate that the INCHEM collection is a very well established internet data source, with many direct users or referrals from other web sites.

The INCHEM collection is also included within the databases which can be searched via the OECD eChemPortal [www.oecd.org/ehs/eChemPortal].

3.4 Advocacy on Chemicals of Public Health Concern

The WHO project on Chemicals of Public Health Concern aims to raise awareness, advocate for action, and facilitate access to tools for action on selected chemicals or groups of chemicals of major public health concern has been updated regularly. These are: (a) arsenic; (b) asbestos; (c) benzene; (d) cadmium; (e) highly hazardous pesticides; (f) inadequate or excess fluoride intake; (g) lead; (h) mercury; (h) major air pollutants; and (i) polychlorinated dibenzodioxins and dioxin-like compounds. The primary target group is decision-makers from WHO Member States.

A web entry point provides easy access to the range of WHO resources on each of the 10 chemicals. The resources include: short documents for decision makers; tools for action; norms and guidance values; educational material; and further information (such as WHO assessments, burden of disease information, fact sheets and other information).
In 2017, web information on the 10 chemicals was updated regularly to include newly developed materials.

10 Chemicals of Major Public Health Concern web site.
http://www.who.int/ipcs/assessment/public_health/chemicals_phc/en/index.html

3.5 Classification of Pesticides by Hazard

The WHO Recommended Classification of Pesticides by Hazard was first published in 1975, and has been revised and reissued with new and updated information every few years. This WHO publication has gained wide international acceptance, in particular among developing countries. The *International Code of Conduct on the Distribution and Use of Pesticides* has been adopted by WHO since 2014. The WHO Classification document plays a significant role in the identification of Highly Hazardous Pesticides (HHPs), which are a key aspect of many of the principles in the Code. The WHO Classification also plays a significant role in two Guideline documents which support the Code – one on the management of Highly Hazardous Pesticides (the FAO/WHO Joint Meeting on Pesticides Management (JMPM) Guideline on Highly Hazardous Pesticides) and the other on Good Labelling Practice for pesticides.

WHO continues to contribute to the FAO/WHO/UN Environment Strategy on Highly Hazardous Pesticides in the context of SAICM, which was referred to in the ICCM4 resolution on HHPs.

In 2017, the process to update the WHO Recommended Classification of Pesticides by Hazard was started, with data from acute toxicity data from evaluations of 61 new pesticides being collated. The updated document will be published during 2018.

4. POISONS PREVENTION, INFORMATION AND MANAGEMENT

4.1 Poisons Information and Management

A publication on the health hazards associated with recycling used lead acid batteries was published in English, French and Spanish. The document provides information about the mechanisms of lead release during recycling, the main routes of exposure, the health impacts, the associated burden of disease, methods for assessing lead exposure, and the types of control measures needed to prevent lead emissions and exposures. A short version of the publication is also available, in the six UN official languages.

📖 Recycling used lead-acid batteries: health considerations
📖 Recycling used lead-acid batteries: brief information for the health sector
http://www.who.int/ipcs/publications/ulab/en/

4.2 Network of poisons centres

The poisons centre directory on the WHO Global Health Observatory was updated with the addition of two new poisons centres (Saudi Arabia and Mongolia).

📖 Global Health Observatory: poisons centres
http://www.who.int/gho/phe/chemical_safety/poisons_centres/en/

Technical support has been provided to colleagues in the WHO regions for Africa, South East Asia and Western Pacific who are working on developing regional poisons centre networks.

A two-week training visit to the National Poisons Information Service (Edinburgh Centre) was arranged for a member of staff from the poisons centre at the Government Chemical Laboratory Agency (GCLA) in Dar Es Salaam, United Republic of Tanzania. This took place in November 2017.

4.3 WHO Guidelines for the Prevention and Management of Lead Poisoning

The final draft of the guidelines for the management of lead poisoning was prepared and the treatment recommendations were presented at a national meeting on lead exposure hosted by the National Institute of Occupational Health, Ahmedabad, India on 14–15 June 2017. Feedback obtained at the meeting resulted in some further revision to the recommendations. The guideline will be submitted for external peer review in early 2018.

Work also continued on the guidelines for the prevention of lead poisoning, including the commissioning of a systematic evidence review on educational interventions for people working with lead. Further work will be carried out in 2018.

4.4 Global Alliance to Eliminate Lead Paint

Work has continued on the implementation of resolution II/4B of the International Conference on Chemicals Management on eliminating lead from paint through the initiative established by WHO jointly with UN Environment, known as the Global Alliance to Eliminate Lead Paint (short name: the Lead Paint Alliance).

The overall goal of the Lead Paint Alliance is to prevent children's exposure to lead through paints containing lead and to minimize occupational exposures to lead in paint. The broad objective is to phase out the manufacture and sale of paints containing lead and eventually to eliminate the risks that such paints pose.

The Action Plan for the work of the Alliance in 2017–2018 was completed and published. The plan was jointly developed by WHO, UN Environment and the Chair of the Alliance's Advisory Group (the US EPA), in consultation with the Advisory Group for the Alliance. It has been published on the official website of the Lead Paint Alliance, hosted by UN Environment.

📖 Global Alliance to Eliminate Lead Paint: Action Plan for 2017-2018
https://wedocs.unep.org/bitstream/handle/20.500.11822/20954/Draft_LPA_Action_Plan_2017-18_Final.pdf?sequence=1&isAllowed=y

WHO, in partnership with UN Environment, is monitoring progress in eliminating lead paint through periodic surveys of Member States. A database and map have been created in the WHO Global Health Observatory that shows the status of legally-binding controls on lead paint. This is updated as new information becomes available. As of October 2017 only 68 countries had confirmed that they had legally-binding controls on lead paint.

📖 Global Health Observatory: Regulations and controls on lead paint
http://www.who.int/gho/phe/chemical_safety/lead_paint_regulations/en/

WHO has worked with UN Environment and members of the Lead Paint Alliance Advisory Group in the development of a guidance document on preparing a law to regulate lead paint. The guidance document is aimed at countries wishing to prepare new laws or to modify existing laws that establish binding limits on the lead content in paints.

📖 Model Law and Guidance for Regulating Lead Paint
http://web.unep.org/chemicalsandwaste/model-law-and-guidance-regulating-lead-paint

WHO revised six modules in the Lead Paint Alliance Advisory Group toolkit to assist countries in establishing and implementing legally binding controls on lead paint. These modules related to the health hazards of lead, analytical methods for measuring lead in blood and paint, conducting investigations into lead exposure and conducting awareness-raising activities on lead.

📖 Toolkit for Establishing Laws to Control the Use of Lead in Paint
http://web.unep.org/chemicalsandwastes/noleadinpaint/toolkit

WHO coordinated the fifth international lead poisoning prevention week, which took place this year from 22 to 28 October. The aim of the campaign was to raise awareness worldwide about lead poisoning and to encourage action to eliminate the use of lead in paint. WHO, in collaboration with UN Environment, US EPA and IPEN, developed a revised campaign pack and a range of campaign materials, including posters, infographics, web banners, flyers and FAQs, in all six UN languages (Arabic, Chinese, English, French, Russian and Spanish). Social media, particularly Twitter and Facebook, were used to provide key messages about lead hazards. Campaign organizers were able to register their events in a special data collection tool on the WHO website.

There were at least 67 events in 44 countries, based on registrations on the WHO website. Activities included educational sessions in schools, the provision of lead-safe paints to schools, dissemination of information to the public through the mass media and through leaflets, launching reports of national surveys of lead in paint, competitions, and public demonstrations. These events were organized by non-governmental organizations, paint manufacturers, academic institutions and government ministries. Events took place in schools, universities, shopping centres, metro stations, medical centres, community centres and on the street. A short report of the 2016 lead-week was published in January 2017. A report about the 2017 lead-week activities is in preparation and will be published on the IPCS website in early 2018.

📖 Lead campaign website and materials
http://www.who.int/entity/ipcs/lead_campaign/en/index.html
http://www.who.int/ipcs/lead_campaign/objectives/en/

📖 Fact Sheet on Lead Poisoning and Health (updated) – available in 6 languages
http://www.who.int/entity/mediacentre/factsheets/fs379/en/index.html

📖 Questions and answers about the International Lead Poisoning Prevention Awareness Campaign (updated) – available in 6 languages
http://www.who.int/ipcs/lead_campaign/QandA_lead_2017_en.pdf?ua=1

📖 International Lead Poisoning Prevention Week 2016: report
http://www.who.int/ipcs/lead_campaign/ILPPW_2016_Report.pdf?ua=1

WHO carried out an analysis of performance during 2013–2017 against the Lead Paint Alliance business plan indicator on countries with national awareness campaigns about the risks of lead paint. This showed that the 2020 target of 40 countries having awareness campaigns was already met, but noted the need to keep up the momentum of country engagement with International Lead Poisoning Prevention Week until 2020.

📖 The International Lead Poisoning Prevention Week: a progress report on achievement of the Business Plan indicator, 2013–2017
http://www.who.int/ipcs/assessment/public_health/gaelp/en/

The Global Environment Facility (GEF) has agreed to fund a project on lead paint with the aim of increasing the number of countries with lead paint laws by at least 40. WHO has been working with UN Environment on the development of the project preparation grant for this project. The project will start in 2018.

5. CHEMICAL INCIDENTS AND EMERGENCIES

5.1 International Health Regulations (2005) (IHR)

The IHR (2005) cover all events of potential international public health concern, including disease outbreaks of known, or suspected, chemical etiology. Countries are required to build national core capacities for surveillance of and response to such outbreaks, and can call upon the support of the WHO and the international community to manage the outbreaks.

WHO contributed to the revision of two IHR capacity assessment tools: the Annual Reporting Tool and the Joint External Evaluation tool, in both cases by developing performance indicators for chemical capacities.

In collaboration with the WHO IHR Team, the review process of the Guidance for the Assessment and Notification of Chemical Events under the IHR commenced. The document was prepared by the Chemical Events Working Group of the Global Health Security Initiative and is being reviewed with the aim to be published as a WHO document (http://www.ghsi.ca/english/index.asp).

5.2 Responding to Chemical Incidents and Emergencies

In 2017, 21 events were evaluated for their public health significance and the need for technical support by WHO. This evaluation was carried out in conjunction with technical counterparts in the regional offices. Technical support was provided in 11 events, as described below.

- Five outbreaks of unknown cause, where WHO provided an assessment of the likelihood of a toxicological cause and suggested possible lines of investigation.

- Deliberate chemical releases in three countries. WHO updated technical information on the chemicals concerned and liaised with other agencies involved in response.

- Contingency planning internally and with regional counterparts for the possible deliberate use of chemicals, as well as other agents, in the Asia-Pacific region.

- One food contamination threats – contributed to internal risk assessment.

- Mass methanol poisoning – provided guidance on sample analysis

A document for the health sector on chemical release triggered by natural hazard events (Natech events) was finalised. Three off-shoot products, standalone leaflets on chemical release resulting from earthquakes, floods and cyclones, were also prepared. These documents are currently being designed and will be published in early 2018.

The manual for investigating disease outbreaks of possible chemical etiology was substantially revised with the assistance of the WHO Collaborating Centre for the Public Health Management of Chemical Incidents in Cardiff, UK. This document will be finalised in 2018.

WHO participated in a workshop on the long-term health effects of chemical weapons exposure organized by the Global Health Security Action Group. This took place on 6 April 2017 in London, UK. The aim of the workshop was to understand the current state of knowledge on the subject and to identify ways for improving this knowledge to enable the development of guidance on the management of long-term health effects. The need for such guidance has been identified in countries where chemical weapons have been used.

6. PROMOTING HEALTH IN INTERNATIONAL CONVENTIONS AND AGREEMENTS

6.1 Strategic Approach to International Chemicals Management (SAICM)

World Health Assembly Resolution 69.4, adopted in May 2016, called on WHO to develop, in consultation with Member States and others, a road map for the health sector at the national, regional and international levels towards achieving the 2020 goal and contributing to relevant targets of the 2030 Agenda for Sustainable Development. The resolution requested WHO to present the road map to the Seventieth World Health Assembly.

Accordingly, a draft road map was prepared by the Secretariat and discussed at the 140th Executive Board Meeting in January 2017. Following discussion at the 140th Executive Board

Meeting, the Secretariat prepared a revised draft road map for consideration by the 70th World Health Assembly in May 2017. The draft road map was submitted along with supporting information in the report noted below.

📖 The role of the health sector in the Strategic Approach to International Chemicals Management towards the 2020 goal and beyond. Report by the Secretariat.
http://apps.who.int/gb/ebwha/pdf_files/WHA70/A70_36-en.pdf

The 70th 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* in Decision WHA70(23). Following which the Secretariat published a standalone brochure of the road map.

📖 Road map to enhance health sector engagement in the Strategic Approach to International Chemicals Management towards the 2020 goal and beyond – available in 6 languages.
http://www.who.int/ipcs/saicm/roadmap/en/

The road map identifies concrete actions where the health sector has a lead or an important supporting role to play in the sound management of chemicals. One of the actions in the road map mandates the WHO Secretariat to establish a global chemicals and health network to facilitate health sector implementation of the road map (including participation in the Strategic Approach). To this end, the Secretariat issued a formal request to countries to nominate a contact point for this network and, as of January 2018, 44 nominations have been received.

In addition, 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. In response to this, the WHO has developed a workbook which offers a structured way to work through the road map, choose priorities and plan activities. The workbook will be published in early 2018.

WHO continued to work on other aspects of strengthening the engagement of the health sector in implementation of SAICM related to the road map, including:

- Supporting eight representatives of health ministries to participate in the First meeting of the Intersessional Process for considering SAICM and the sound management of chemicals and waste beyond 2020, held in Brasilia, Brazil, 7–9 February 2017. WHO also hosted a side meeting for health sector participants who were in attendance.

- Hosting a workshop 25–26 October 2017 in Geneva which brought together ministry of health representatives from 15 countries to discuss road map implementation, provide input on a draft workbook, and to help prepare for SAICM Regional meetings scheduled for January and February 2018, as well as the Second meeting of the Intersessional Process for considering SAICM and the sound management of chemicals and waste beyond 2020 taking place 13–15 March 2018 in Stockholm, Sweden.

Finally, WHO continued to be engaged in SAICM emerging policy issues, including lead in paint, endocrine disrupting chemicals, nanotechnology and manufactured nanomaterials, environmentally persistent pharmaceuticals and e-waste, as required.

6.2 Minamata Convention on Mercury

Work continued on implementation of World Health Assembly 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.* A report on this work was discussed at the 70th World Health Assembly in May.

WHO participated in the 1st Conference of the Parties to the Minamata Convention, held 24–29 September, 2017, Geneva, Switzerland. In conjunction WHO convened a series of events dedicated to health on 22 September, *For health make mercury history*. The event was attended by Permanent Missions to the United Nations in Geneva, Ministry of Health and other health sector representatives participating in the Conference of the Parties, and UN partner organizations, and included as keynote speaker H.E. Ambassador Fernando Lugris, President of the Mercury Intergovernmental Negotiating Committee.
http://www.who.int/ipcs/assessment/public_health/make-mercury-history/en/

WHO convened the following regional workshops for ministries of health, and reported on their outcomes to an Asia Pacific regional preparatory meeting for COP1:

- Western pacific regional workshop on health sector involvement in implementation of the Minamata Convention on Mercury, 29–30 June 2017, Minamata, Japan.

- South East Asia regional workshop on health sector involvement in the implementation of the Minamata Convention on Mercury, 3–4 July 2017, Bangkok, Thailand.

Key publications:

📖 Report to the 70th World Health Assembly on 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 (resolution WHA67.11 (2014)
http://apps.who.int/gb/ebwha/pdf_files/WHA70/A70_38-en.pdf

📖 Infographics *For health, make mercury history*, available in 6 UN languages.
http://www.who.int/ipcs/assessment/public_health/mercury-infographics/en/

📖 The documents *ASGM and health* and Step-by-step guidance on phasing out mercury thermometers and sphygmomanometers were translated into French and Spanish, and published on the WHO mercury web page
http://www.who.int/ipcs/assessment/public_health/mercury/en/

📖 Work of the World Health Organization relevant to the Minamata Convention was presented to Minamata COP1 in UNEP/MC/COP.1/INF/5 Report on activities undertaken by partner organizations
http://unepmercurycop1.mediafrontier.ch/wp-content/uploads/2017/08/1_INF5.pdf

WHO is a member of the IOMC Mercury Group, which coordinates the work of the IOMC organizations relevant to implementation of the Minamata Convention. This includes activities on Minamata Initial Assessments and National Action Plans for Artisanal and Small-Scale Gold Mining.

WHO coordinated the preparation of a report on human exposure to mercury based on a systematic review of published biomonitoring data. The full report is being finalised and a summarised version will become a chapter in the 2018 Global Mercury Assessment being prepared by UN Environment.

6.3 Rotterdam and Stockholm Convention

WHO participated in the Conferences of the Parties to the Basel, Rotterdam and Stockholm Conventions, 24 April to 5 May 2017, including speaking in plenary and at a number of side events.

6.4 Inter-organization Programme for the Sound Management of Chemicals (IOMC).

The IOMC coordinates the chemicals policies and programmes of its nine Participating Organizations (FAO, ILO, UNDP, UN Environment, UNIDO, UNITAR, WB, WHO and OECD). WHO is the administering agency for the IOMC and provides its Secretariat, as well as participating as a member of the IOMC. In 2017, two regular meetings of the IOMC were held 30–31 March, hosted by WHO in Geneva and 9–10 November, hosted by FAO in Rome. Refer to: http://www.iomc.info for information about IOMC activities.

In 2017, work continued to finalize the implementation of the EC funded IOMC project entitled IOMC Toolbox for decision making in chemicals management – Phase II: Modification, Expansion and Promotion. The IOMC Toolbox is available on the IOMC web page at. The overall objective of the project which commenced on 1 November 2013 was to support implementation of SAICM by promoting the identification and implementation of guidance materials for chemicals management by IOMC Participating Organizations, especially in developing countries and countries with economies in transition.

In 2017, WHO in collaboration with IOMC Participating Organizations finalized the development of the comprehensive proposal for Phase III of the IOMC Toolbox project. The proposal was accepted by the EC and a Delegation Agreement was prepared. Phase III of the project commenced on the 1 January 2018.

The IOMC Toolbox project is managed by WHO. Face-to-face meetings of the Toolbox Project Management Group took place in March and September. In addition, a range of technical activities were implemented by WHO.

LIST OF PUBLICATIONS DURING 2017

International Chemical Safety Cards (ICSCs): 64 updated cards have been published in 2017. These are listed in the table below.

Recycling used lead-acid batteries: health considerations
Recycling used lead-acid batteries: brief information for the health sector
http://www.who.int/ipcs/publications/ulab/en/

International Lead Poisoning Prevention Week 2016: report
http://www.who.int/ipcs/lead_campaign/ILPPW_2016_Report.pdf?ua=1

WHO Fact Sheet on Lead Poisoning and Health (updated)
http://www.who.int/entity/mediacentre/factsheets/fs379/en/index.html

Questions and answers about the International Lead Poisoning Prevention Awareness Campaign (updated) – available in 6 languages
http://www.who.int/ipcs/lead_campaign/QandA_lead_2017_en.pdf?ua=1

Lead campaign website and materials
http://www.who.int/entity/ipcs/lead_campaign/en/index.html
http://www.who.int/ipcs/lead_campaign/objectives/en/

The International Lead Poisoning Prevention Week: a progress report on achievement of the Business Plan indicator, 2013–2017
http://www.who.int/ipcs/assessment/public_health/gaelp/en/

Toolkit for Establishing Laws to Control the Use of Lead in Paint: modules on:

- Lead paint and the problem
- Health hazards of lead
- Analytical methods for measuring lead in blood
- Analytical methods for measuring lead in paint
- Conducting blood lead prevalence studies
- Environmental sampling
- Conducting lead awareness-raising campaigns

http://web.unep.org/chemicalsandwaste/noleadinpaint/toolkit

Global Health Observatory: Regulations and controls on lead paint
http://www.who.int/gho/phe/chemical_safety/lead_paint_regulations/en/

Global Health Observatory: poisons centres
http://www.who.int/gho/phe/chemical_safety/poisons_centres/en/

Report to the 70th World Health Assembly on 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 (resolution WHA67.11 (2014)
http://apps.who.int/gb/ebwha/pdf_files/WHA70/A70_38-en.pdf

Infographics *For health, make mercury history,* available in 6 UN languages.
http://www.who.int/ipcs/assessment/public_health/mercury-infographics/en/

ASGM and health and *Step-by-step guidance on phasing out mercury thermometers and sphygmomanometers* were translated into French and Spanish.
http://www.who.int/ipcs/assessment/public_health/mercury/en/

Work of the World Health Organization relevant to the Minamata Convention was presented to Minamata COP1 in UNEP/MC/COP.1/INF/5 Report on activities undertaken by partner organizations http://unepmercurycop1.mediafrontier.ch/wp-content/uploads/2017/08/1_INF5.pdf

A70/36 The role of the health sector in the Strategic Approach to International Chemicals Management towards the 2020 goal and beyond. Report by the Secretariat
http://apps.who.int/gb/ebwha/pdf_files/WHA70/A70_36-en.pdf

Road map to enhance health sector engagement in the Strategic Approach to International Chemicals Management towards the 2020 goal and beyond – available in 6 languages
http://www.who.int/ipcs/saicm/roadmap/en/

List of International Chemical Safety Cards published in 2017

ICSC No.	Chemical	CAS
2	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8
17	1,3-BUTADIENE	106-99-0
58	DICHLOROMETHANE	75-09-2
62	NICKEL	7440-02-0
63	NICKEL (II) SULPHATE	7786-81-4
64	NICKEL CARBONYL	13463-39-3
70	PHENOL	108-95-2
82	VINYL CHLORIDE	75-01-4
158	GLUTARALDEHYDE	111-30-8
162	HEXAMETHYLPHOSPHORIC TRIAMIDE	680-31-9
165	HYDROGEN SULFIDE	7783-06-4
176	METHAMIDOPHOS	10265-92-6
179	METHYL ETHYL KETONE	78-93-3
191	PROPOXUR	114-26-1
202	TRIETAZINE	1912-26-1
205	TRIFLURALIN	1582-09-8
208	ZINC OXIDE	1314-13-2
231	BORON TRIFLUORIDE	7637-07-2
249	1,1-DICHLOROETHANE	75-34-3
256	DI-n-DIBUTYLTIN OXIDE	818-08-6
274	FLUOROACETIC ACID	144-49-0
278	HEXAMETHYLENE DIISOCYANATE	822-06-0
283	HYDROGEN FLUORIDE	7664-39-3
284	HYDROGEN SELENIDE	7783-07-5
330	TEREPHTHALIC ACID	100-21-0
332	1,1,2,2-TETRACHLOROETHANE	79-34-5
350	ZINEB	12122-67-7
406	CALCIUM CARBIDE	75-20-7
471	CARBON BLACK	1333-86-4
482	SODIUM HYPOCHLORITE (SOLUTION, ACTIVE CHLORINE <10%)	7681-52-9
500	ISOPHTHALIC ACID	121-91-5
505	2-MERCAPTOBENZOTHIAZOLE DISULFIDE	120-78-5
555	beta-PROPIOLACTONE	57-57-8
597	VINYL BROMIDE	593-60-2
598	VINYL FLUORIDE	75-02-5
636	BUTYLENE OXIDE (STABILIZED)	106-88-7
689	CYCLOPHOSPHAMIDE	50-18-0
702	CARBON	7440-44-0
814	MESITYL OXIDE	141-79-7
893	GRAPHITE (NATURAL)	7782-42-5
907	ISOPROPYL ACETATE	108-21-4

ICSC No.	Chemical	CAS
909	N-ISOPROPYLANILINE	768-52-5
910	LEAD ACETATE	301-04-2
926	NICKEL(II)OXIDE	1313-99-1
927	NICKEL CARBONATE	3333-67-3
928	NICKEL SULFIDE	12035-72-2
1007	PHENYL CHLOROFORMATE	1885-14-9
1064	ZINC CHLORIDE	7646-85-7
1119	SODIUM HYPOCHLORITE (SOLUTION, ACTIVE CHLORINE >10%)	7681-52-9
1150	n-BUTYL ETHER	142-96-1
1152	METHYLAL	109-87-5
1156	ACETOPHENONE	98-86-2
1158	T.E.P.P.	107-49-3
1174	GALLIC ACID	149-91-7
1176	1-TRIDECANOL	112-70-9
1179	n-HEPTANOIC ACID	111-14-8
1183	2-MERCAPTOBENZOTHIAZOLE	149-30-4
1205	ZINC POWDER	7440-66-6
1206	ZINC NITRATE	7779-88-6
1241	IRON (III)-o-ARSENITE, PENTAHYDRATE	63989-69-5
1613	PERFLUOROOCTANOIC ACID	335-67-1
1625	ARSENIC ACID (80% IN WATER)	7778-39-4
1709	NITROCELLULOSE (DRY, MORE THAN 12.6% NITROGEN)	
1777	HYDROFLUORIC ACID (70% AQUEOUS SOLUTION)	7664-39-3

MEETINGS HELD IN 2017

9 February 2017
Meeting of health sector participants at the 1st meeting of the intersessional process for considering SAICM and the sound management of chemicals and waste beyond 2020
Brasilia, Brazil

24–28 April 2017
Peer review meeting for International Chemical Safety Cards
Lyon, France

20–22 June 2017
Second meeting of the WHO Chemical Risk Assessment Network
Parma, Italy

29–30 June 2017
Western Pacific regional workshop on health sector involvement in implementation of the Minamata Convention on Mercury
Minamata, Japan

3–4 July 2017
South East Asia regional workshop on health sector involvement in the implementation of the Minamata Convention on Mercury
Bangkok, Thailand

10 September 2017
Immunotoxicity Risk Assessment, Continuing Education Course, EUROTOX, co-organized by WHO and OECD.
Bratislava, Slovakia

2–4 October 2017
Expert Review Group Meeting for WHO/IPCS Environmental Health Criteria Document on Principles and Methods for assessing the risk of immunotoxicity associated with exposure to nanomaterials
Bilthoven, Netherlands

25–26 October 2017
Workshop on the WHO Chemicals Road Map
Geneva, Switzerland

16 November 2017
Organizing Committee meeting to plan for the 2018 WHO Chemical Risk Assessment Network workshop on new and emerging risks from chemicals
Geneva, Switzerland