

**Health Care Without Harm
PHASE-OUT OF MERCURY FEVER THERMOMETERS AND BLOOD PRESSURE DEVICES IN HEALTH CARE IN
BRAZIL AND SOUTH AFRICA**

Final Report

HCWH with the support of UNEP and in collaboration with two partner NGOs in South Africa and Brazil implemented a series of activities designed to encourage the emergence of national policies for implementing the phase-out of mercury fever thermometers and blood pressure devices under the Minamata Convention and to provide technical assistance to hospitals to phase-out the use of mercury-containing measuring devices.

This work was undertaken as part of the WHO-HCWH Mercury-Free 2020 initiative, a component of the UNEP Mercury Products Partnership. It utilized the WHO guidance for ministries of health on the implementation of the Minamata Convention as it relates to thermometers and sphygmomanometers and other materials developed both by WHO and HCWH.

Key Outcomes

South Africa

National Policy

Meetings were held with the Environmental Health Directorate, National Department of Health (NDoH) in February and March 2015 who suggested the way forward was to create a national steering committee to be developed to implement Minamata. This national steering committee required signature at the Director level and has not yet occurred. In the absence of official NDoH endorsement from the Director General, informal advice suggested and the plan focused instead on a work plan that approaching the Provincial DoH individually or collectively and develop work plans with them instead of with the National Department of Health.

Efforts to advocate with the National Committee on Chemicals Management resulted in the Department of Environmental Affairs agreement and submission of a Minamata Initial Assessment and application to the GEF which was approved. As part of the MIA, the establishment of a National Coordination Mechanism towards organizing the national work on mercury to include HCWH and strengthen collaboration with other key stakeholders such as the National Department of Health more formally into this framework.

The first National meeting will take place on 13 June 2016 and one part of this agenda will be to discuss and agree the national phase out of mercury in health care as per project agreement, in keeping with the output:

“Motivates the development of a National Action Plan with a guiding steps document that is to be followed by the national department of health, provincial departments of health, municipal departments of health in eliminating and substituting mercury in the health sector (NAP developed and executed in the second phase, 2015 – 2017)”. Part of the MIA project will be an assessment of the national infrastructure and capacity for the management of mercury, including national legislation.

Implementation in health facilities and regional policy

Significant progress has been achieved in the 3 largest Provinces: Gauteng, Western Cape and Kwa Zulu Natal (KZN). Summary of the number of hospitals in these three provinces below. In addition, a campaign to extending to the private sector resulted in large private health care providers becoming entirely mercury-free of medical devices including Netcare, Medi-Clinic and Life Healthcare (three major medical providers in South Africa's private health care system). A summary of activities in the private sector follows the Provincial results.

Summary of the KZN Provincial Health Department:

- KZN Department of health is almost 100% mercury free
- Small pockets of thermometer use in rural district hospitals
- Work is ongoing with the KZN DoH mainly through the GGHH outreach project

| Public Health Facilities in KZN | Number of facilities |
|-----------------------------------|----------------------|
| Mobile Clinics | 173 |
| PHC Clinics [1] | 569 |
| Community Health Centres | 19 |
| District Hospitals [2] | 38 |
| Regional Hospitals [3] | 13 |
| Specialised TB Hospitals | 10 |
| Specialised Psychiatric Hospitals | 6 |
| Chronic Hospitals | 2 |
| Tertiary Hospitals [4] | 2 |
| Central Hospitals [5] | 2 |
| Total beds | 23886 |

Summary of the Western Cape Department of Health

- 50 hospitals with a total of 9481 beds of which > 90% mercury free
 - Small pockets of thermometer and sphygmomanometer use in rural district hospitals
 - We are actively working with the Western Cape DoH to identify these "pockets" who were invite to a provincial mercury in health care workshop in the first quarter of 2016.
 - A draft Mercury Elimination Plan was completed in January 2016 undertaken within the framework of the Provincial climate change working group hosted by the GGHH contact in the Western Cape DoH.

Gauteng Department of Health

- 28 provincial hospitals run a total of 16 020 approved beds, of which 2 587 are in specialised hospitals for psychiatric care, rehabilitation or infectious diseases.
- Two mercury in health care workshops were held in Gauteng in 2015 and the first quarter of 2016.
- A mercury free pilot project is ongoing in the hospital designated by the Provincial DOH (Helen Joseph Hospital) and are working with the Gauteng Dept. of Infrastructure

Development and also the Environmental Health Services Directorate to roll out mercury free health care in Gauteng Province.

The private health sector

Large private health care providers are now entirely mercury-free of medical devices. These include Netcare, Medi-Clinic, and Life Healthcare (the three major medical providers in South Africa's private health care system). This follows substantial efforts to educate and raise awareness that have prepared the private sector for this transition to mercury free health care. A breakdown of the private health care providers follows with a total of 171 hospitals with a total of 24,317 beds.

Netcare (South Africa) has the following footprint and provides the following services:

- Private hospital and trauma services comprise 55 owned hospitals (in all Provinces) including private facilities forming part of Public Private Partnerships. Netcare has 9,052 registered beds, 338 operating theatres and manage operating theatres and 87 retail and hospital pharmacies. Netcare's wholly-owned subsidiary, Netcare 911, operates the largest private emergency medical service in the country with over 6.9 million insured lives and a fleet of over 180 response vehicles and ambulances, and 3 helicopter and 2 fixed-wing air ambulances. The company has almost 10,000 beds in total by 2016.
- The Primary Care Division operates medical and dental provider services through Medicross, as well as a managed care organisation that focuses on the low income market, extending healthcare to previously uninsured lives through Prime Cure. This includes a national footprint of 88 Medicross and Prime Cure Medicentres, with 41 retail pharmacies and 12 day-theatres.
- A group of 568 independent doctors and dentists provide comprehensive primary health services to about 3, 5 million patients, funded through private medical aid insurance, managed care capitation premiums or self-pay arrangements.

Life Healthcare

- Life Healthcare comprises a private hospital network which includes 64 hospitals (in all Provinces) providing a range of healthcare services throughout South Africa. Life hospitals total beds: 7665.
- 6 Mental Health units in 3 provinces and 2 units which offer involuntary and assisted mental health admissions. Life Rehabilitation is the leading provider of acute rehabilitation services in the country, operating 265 beds.
- The company also delivers hospital based services in the fields of chronic mental healthcare, frail care, chronic rehabilitation and acute care in five provinces. It offers 4 171 beds through its network of 12 facilities, some of which provide dual services.

Mediclinic Southern Africa

- Mediclinic Southern Africa represents the Southern African operations (in all Provinces) of Mediclinic International, the sixth largest private hospital group in the world.

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- Mediclinic Southern Africa has more than 7 600 beds in 52 multidisciplinary hospitals in South Africa and Namibia.

Brazil

A series of outreach and training activities were conducted including the development of an on-line survey tool, conferences sessions devoted to mercury phase out and participation by Projecto Hospitais Saudaveis (PHS) in events to present on Minamata and its implementation in the health sector.

All 124 institutional members of the Global Green and Healthy Hospitals network are now mercury free having received technical support for the implementation. The list of these hospitals and health systems who are members can be found at <http://greenhospitals.net/en/members/>. In addition, 10 health systems members, that represents more 250 hospitals and 900 health care facilities, are mercury free. This represents about 5% of the 7000 hospitals (total of hospitals in Brazil) and 15% of the total number of beds. Brazil has a lot of small hospitals (less than 50 beds). PHS/GGHH members are usually medium and big hospitals. Small hospitals and clinics are difficult to reach. For this reason, we designed the survey project, aiming collect information from distant and isolated regions.

São Paulo State's approximately 1000 hospitals are all mercury free. Since December 2010, mercury devices are forbidden in all public state healthcare and since January 2014, mercury medical devices become totally forbidden in SP state. In the south and south-east regions of Brazil, healthcare is almost totally mercury free (except 2 states, MG and ES). Efforts are now concentrated on the rest of the country. Today, still more than 50% of Brazilian healthcare use mercury devices. These facilities are in the most distant and poor regions, that is why we need to trace a profile of Brazilian market of healthcare devices, because it is important to improve access and reduce costs, and also, to plan safe options to mercury devices disposal during the phase out.

In September 2015, the national survey on mercury-based medical device substitution was launched for members of the GGHH network. The purpose of the survey was to identify the market availability and implementation of mercury-free devices and challenges/barriers to implementation throughout the country. As of December, 70 hospitals have completed the survey and all are mercury-free. In June 2016, the survey has been re-launched as a national survey.

Panels on Mercury-free health care were held in September 2014 and 2015 with 500 participants in each conference representing 200 hospitals each year. The following speakers presented at the September 2015 conference.

Speakers:

Panel 08: Treaty of Minamata - the hazard of mercury and the challenge of its banishment in Brazilian health sector by 2020

Gilson Alves Quinaglia – PhD in analytical chemistry and master in environmental health, manager of the Toxicological Analysis Department at CETESB and author of the book “Basal Levels Characterization of Metal Concentration (São Paulo – SP)



Anne Hélène Fostier – PhD in Oceanography, Master in Ecology and Degree in Oceanographic Biology, Professor at the Unicamp Chemistry Institute in which conducts research on emission sources and mercury biogeochemical cycle (Campinas - SP)



Heloisa Pacheco-Ferreira – PhD in Social and Environmental Development by Federal University of Pará Master in Public Health by Oswaldo Cruz Foundation, Professor at the Medical School and Coordinator of the Environmental and Occupational Toxicology Outpatient Clinic at the HUCFF / UFRJ. (Rio de Janeiro – RJ)



Additional awareness-raising and educational events in which HSP organized or participated in 2015 are listed in the table below.

| Date | Event | Promoting entity |
|------------------|---|--|
| 9-Dec-15 | Agenda for “Brazil- Japan Technical Cooperation Workshop for Effective Mercury Management in relation to the Minamata Convention” | Ministry of Environment |
| 23-Oct-15 | International Seminar on Health Systems Contemporary Management | Federal University at Bahia |
| 30-Sep-15 | Embedding sustainability on purchasing systems: Challenges for the formation of a more mature hospital market | ANAHP: National Association of Private Hospitals |
| 28-Jul-15 | Initial Evaluation of Development of Minamata Convention on Mercury in Brazil - MIA Project | Ministry of Environment |
| 19-Jun-15 | Meeting to discuss the use of mercury in dentistry | Regional Council of Dentistry of São Paulo |
| 7-Apr-15 | Videoconference: Waste Management and mercury devices banishment in the health care of the penitentiary system | Department of Prisons Administration |
| 31-Mar-15 | National Conference: replace, reduce, treat and dispose safely waste and hazardous substances for health services | National Confederation of Health Care Cooperatives (UNIMED Brazil) |

Tools and Resources

The following websites, tools and resources have been disseminated as part of the project.

Health Care Without Harm Go Mercury Free pages: <https://noharm-uscanada.org/issues/us-canada/go-mercury-free>

HCWH Mercury Elimination Guides for Hospitals (English, Spanish and Portuguese) <https://noharm-global.org/issues/global/mercury-tools-and-resources#guides>

WHO Developing national strategies for Phasing Out Mercury-Containing thermometers and sphygmomanometers in health care, including in the context of the Minamata Convention on Mercury: Key considerations and step-by-step guidance.

http://www.who.int/ipcs/assessment/public_health/WHOGuidanceReportonMercury2015.pdf

WHO Replacement of mercury thermometers and sphygmomanometers in health care. Technical guidance. WHO 2011 (English, Russian, Spanish)

http://www.who.int/water_sanitation_health/publications/2011/mercury_thermometers/en/

Global Green and Healthy Hospitals www.greenhospitals.net

Case studies in mercury phase-out in the chemicals section: <http://greenhospitals.net/en/case-studies/>

Projeto Hospitais Saudáveis Mercury elimination site and hospital survey (in Portuguese)

http://www.hospitaissaudaveis.org/campanha_saude_livre_de_mercurio.asp