

MERCURY FREE POLICY FOR HEALTH CARE

MALDIVES

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**HEALTH PROTECTION AGENCY
REPUBLIC OF MALDIVES**



**MINISTRY OF HEALTH
REPUBLIC OF MALDIVES**

Mercury Free Policy for Health Care Maldives

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FOREWORD

Mercury is a naturally occurring heavy metal which vaporizes and deposits in the environment and when inhaled can have significant adverse neurological and other health effects including harmful effects to the unborn children and infants based on the exposure levels.

Health care facilities are marked as one of the main areas mercury can be released to environment, through spills or broken mercury-containing equipment. Exposure to elemental mercury in health care settings is a significant health hazard for employees, patients, visitors, waste handlers and those tasked with repairing and cleaning up such broken equipment.

Recognizing the serious health impacts of mercury, Ministry of Health of Maldives realizes the importance of phasing out mercury containing products with safer alternatives in health care facilities. In this regard deliberations have been made with relevant stakeholders to develop the National Mercury Free Policy for Health Care (2018). This policy focuses on substituting and eliminating mercury containing equipments and devices in all health care facilities, safe collection and disposal of mercury waste, capacity development among policy makers and health care professionals as essential element of implementing mercury free policy.

Effective implementation of the policy requires multi sectorial cooperation and engagement at all levels. Therefore, it is crucial that every health facility in the country gives their full commitment in phasing out mercury containing devices and equipments.

This policy provides an opportunity for health care providers and all relevant stakeholders to work together to protect the health of our population by creating a safer environment in the health care facilities and protecting the environment from mercury waste.



Mr. Abdulla Nazim Ibrahim

Minister of Health

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The Ministry greatly appreciates the active participation of and valuable contributions of working group members which made the development of the policy possible.

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TABLE OF CONTENTS

Forward	i
Acknowledgment	ii
List of Contributors	iii, iv
Table of Contents	v
Acronyms	vi
1. Introduction.....	1
2. Background.....	1
2.1. Mercury in Health Care Facilities:.....	1
2.2. Health Impact of mercury exposure:.....	2
2.3. Policy directions for public health actions:.....	2
2.4. National Legal Frame work	3
2.5. International Guidance and Conventions.....	3
3. Policy Title	4
4. Policy Statement.....	4
5. Scope.....	4
6. Objectives.....	4
7. Principles	5
8. Policy Interventions	5
9. Policy Review.....	6
10. References:.....	7

ACRONYMS

HCF: Health Care Facilities

IFCS: Intergovernmental Forum on Chemical Safety

PPE: Personal Protective Equipment

RCRA: Resource Conservation and Recovery Act

UNEP: United Nations Environment Program

HCWH: Health Care Without Harm

1. Introduction

Mercury is a naturally occurring heavy metal, a silvery-white liquid that rapidly vaporizes and may stay in the atmosphere up to a year. Mercury is transported and deposited globally when it is released to the air. The sediment of this compound is transformed into more toxic organic form known as the methyl mercury which could be fatal if inhaled and harmful if absorbed through skin¹. Methyl mercury accumulates in the aquatic food chain at various degrees and humans are primarily exposed through consumption of fish contaminated by mercury². Another potential sources of exposure to elemental mercury includes dental amalgam which contain up to 50% of elemental mercury. Further, significant releases of mercury to the environment result from the use of mercury containing thermometers and sphygmomanometer and from incineration of medical waste³.

The United Nations Environment Program (UNEP) in the year 2001 carried out a global assessment, to understand the impact of mercury on human health and environment. This assessment revealed plausible evidence to inform that further interventions are necessary to reduce mercury emissions and pollution to protect human health and environment. Recognizing this, the Minamata Convention paper was developed by a specially formulated team by the UNEP council in 2010. The paper was finalized in 2013 with the aim to protect human health and the environment from anthropogenic emissions and releases of mercury or mercury compounds⁴.

2. Background

2.1. Mercury in Health Care Facilities:

Health Care Facilities are marked as one of the areas that mercury is released to the environment significantly through medical waste, treatment technologies, wastewater and solid waste. In the year 2009, Health Care without Harm published a list of instruments,

products, and laboratory chemicals that may contain mercury. It includes thermometers, sphygmomanometers, gastrointestinal tubes, dental amalgam, pharmaceutical supplies, batteries, laboratory chemicals etc. Mercury used in hospitals are potential sources of exposure for patients, hospital staffs and general population. Under certain circumstances, all these equipment releases significant amount of mercury to the environment, specifically from thermometers and sphygmomanometers⁵. Incinerations of medical waste, release of untreated waste water and dental amalgam are major sources of contribution to mercury emissions³.

All hospital staff, patients and visitors are potentially exposed to mercury during incidents of mercury spills in health care facilities. At room temperature substantial amount of liquid elemental mercury transforms to gas, exposing hospital staff and patients to potentially high toxic levels².

2.2. Health Impact of mercury exposure:

Health impact from mercury emission and pollution was notified by the global assessment carried out by the UNEP in 2001. The assessment confirmed that mercury causes significant adverse neurological and other health problems, particularly on the foetus, infants and children^{3 & 4}. Exposure to either organic or inorganic metals can permanently damage the brain, kidneys, and developing foetus. Harmful effect also occurs to digestive, respiratory, immune system, lungs, kidneys and can be fatal. Adverse health effects that may occur include tremors, impaired vision and hearing, paralysis, insomnia, emotional instability, fetal developmental issues, attention deficit and childhood developmental delays³.

2.3. Policy directions for public health actions:

A clear time frame is given in the Minamata Convention on Mercury (2013), for phasing out the manufacturer, export or import of a number of mercury containing products identified in the convention. It is specified under Article 4 of the convention for thermometers and sphygmomanometers to be phased out by 2020 with possible extension until 2030. This convention also calls upon member countries (Signatories) to phase out manufacturer, import and export of certain products containing mercury or product components that contain

mercury or a mercury compound that was intentionally added. Similarly, dental amalgam is one of the mercury added product subject to phase down in use⁶.

Recognizing the impacts of mercury on human health and the contribution of the health care to this problem, the World Health Organization published a step by step guidance in 2015 which provided a model process for countries to develop strategies for phasing-out mercury containing equipment's in health care in the context of Minamata Convention on Mercury. It was emphasized to engage all stakeholders, conduct situation assessments, maintain inventory, develop and implement strategies and establish mechanisms to monitor the process⁶.

The present policy for Maldives is formulated as per the directions of these evidence-based documents.

2.4. National Legal Frame work

- Public Health Protection Act, 7/2012
- Waste Management Regulation (2013/R58), MoEE
- National Health Care Waste Management Policy, (2016)
- Minimum Standards for Health Care Waste Management (2008)

2.5. International Guidance and Conventions

- Basel Convention on Control of Trans boundary Movements of Hazardous Waste and Their Disposal (1992)
- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in the International Trade (2007)
- Stockholm Convention on Persistent Organic Pollutants (POP) Stockholm (2007).
- Strategic Approach to International Chemicals Management (SAICM) (2006)

3. Policy Title

Mercury Free Policy for Health care

4. Policy Statement

This policy is to support health care facilities to create a mercury- free environment and to mitigate the effects of mercury exposure on human health and environment with contribution to achieve the global objectives of the Minamata Convention to protect the human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds.

5. Scope

This policy applies to all health care facilities; public and private including companies importing and selling health care products and agencies responsible for environmental protection and waste management in the Maldives.

6. Objectives

- To evaluate and monitor the situation of mercury use in health care facilities.
- To phase out and ban mercury thermometers and sphygmomanometers and other mercury containing health care products used in health care facilities.
- To link management of mercury waste at health care facilities with health care waste management policy and environmentally sound
- To strengthen capacity of health service providers to prevent, detect, treat and care for populations affected by mercury exposure.
- To conduct policy advocacy and public education regarding the health and environmental effects of mercury and mercury compounds.

7. Principles

- Available and understandable to all stakeholders and relevant staff
- Aligned with global and regional strategies
- Consistent with national policies and guidelines
- Formulated with evidence-based information
- Communicated with stakeholders at all stages of development and implementation

8. Policy Interventions

1. A stakeholder engagement strategy shall be developed to achieve goals and objectives cited under this policy to phase out mercury in health care facilities
2. Baseline survey shall be carried out in collaboration with relevant organizations to identify mercury containing products, knowledge practices and belief of health care providers towards mercury product use and its impact.
3. An assessment shall be carried out to identify availability of reliable and economically feasible alternatives for mercury containing equipment and devices in the health sector.
4. A plan shall be developed to substitute and eliminate use of mercury containing equipment and devices in the health care facilities. The plan shall prioritize list of targets with measurable goals for all levels of health care facilities
5. Mercury phase out guideline shall be developed which provides direction for procurement, use, safe handling, storage, collection and environmentally sound disposal of mercury-containing products.
6. An inventory shall be developed for items that contain mercury in the health care facilities detailing use, storage and other relevant information.
7. Inventory for mercury containing equipment in health care facilities shall be maintained at central level linked with National Waste Management System.
8. Sensitization and capacity development programs shall be carried out for policy makers, managers and health care professionals to enhance substitution of mercury containing

products, management of mercury and mercury-containing wastes in health care facilities, practical procedures for handling of broken devices and use of new mercury-free equipments.

9. Strengthen health sector and institutional capacity to prevent, diagnose, treat, monitor and manage health risks that occur due to exposure to mercury and mercury compounds.
10. Inform public through health promotion and public education programs; strategize these interventions through existing public health plans and awareness programs of relevant sectors.
11. Develop and implement strategies and programs with stakeholders to identify and protect populations at risk including health care providers. Annual budgeting of all public and private health care facilities shall facilitate procurement of safer alternatives to mercury and health promotion programs
12. Mechanism for safe collection, disposal of mercury wastes shall be established in line with the National Waste Management Regulation (2013/R58).
13. Mercury containing thermometers and Sphygmomanometers shall be phased out by 2020 to achieve the target as per the Minamata Convention on Mercury (Article 4; mercury manometers shall be replaced with Aneroid – Mercury free.)
14. Dental service providers shall develop a plan and implement to phase down the use of dental amalgam by 2020.
15. Evaluation and monitoring mechanism shall be established to monitor and assess the progress of the implementation of relevant policy and guidelines.
16. Conduct mercury safety audits.

9. Policy Review

This policy should be reviewed by MoH in consultation with stakeholders in 3-5 years.

10. References:

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