# NET CARE

#### **NETCARE TECHNICAL SERVICES**

TECHNICAL POLICY AND PROCEDURE

# **MERCURY DISPOSAL**

**1. DOCUMENT DETAIL** 

Applicable Date: 1 July 2011 Document Version: 1.1

Revision Date: 30 June 2014 Document Number: TP201102

Document Location: http://138.182.1.31/intranetcare/Technical Services/General Documents/Policy Mercury

Disposal v1.1

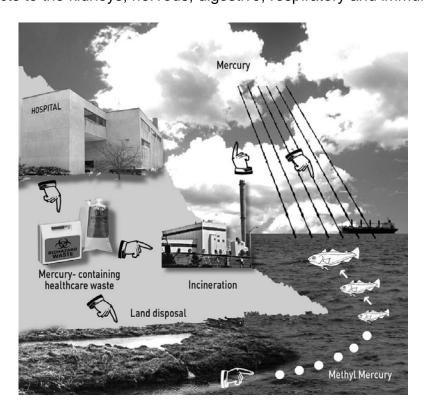
#### 2. OBJECTIVE

To ensure safe disposal of all Mercury-containing Medical Equipment as well as fluorescent lighting.

#### 3. IMPLICATIONS

Mercury is a naturally occurring heavy metal that when released into air, it might stay in the atmosphere for up to a year where after it is transported and deposited globally.

Mercury causes a variety of significant adverse impacts on human health and the global environment. Mercury vapour may be fatal if inhaled and harmful if absorbed through the skin due to direct exposure. At high doses it can cause potential life threatening lung damage and at lower doses harmful effects to the kidneys, nervous, digestive, respiratory and immune systems.



Mercury from Health Care and other industries accumulate in lake, river, stream and ocean sediment, where it is transferred into methyl mercury, which then moves up the aquatic food chain.

Should Mercury-containing devices not be disposed of in the correct manner, it poses toxic risks to patients, users as well as the environment.

#### 4. REFERENCE

- i. OHS Act No 85 of 1993
- ii. Department of Environmental Affairs May 2007
- iii. The Isipingo Declaration on Eliminating the Harmful Impacts of Health Care Waste and Incinerators in Southern African Communities, 8 April 2002
- iv. Health Care Without Harm <a href="http://www.noharm.org/all\_regions/issues/toxins/mercury">http://www.noharm.org/all\_regions/issues/toxins/mercury</a>
- v. The Global Movement for Mercury-Free Health Care <a href="http://www.noharm.org/lib/downloads/mercury/Global\_Mvmt\_Mercury-Free.pdf">http://www.noharm.org/lib/downloads/mercury/Global\_Mvmt\_Mercury-Free.pdf</a>
- vi. Mercury-free Health Care http://www.mercuryfreehealthcare.org/
- vii. World Health Organization (WHO) recommendations

# 5. POLICY

# a. Medical Equipment

# i. New Mercury-containing devices

No new devices to be procured.

#### ii. Existing Mercury-containing devices

All Mercury-containing medical devices are no longer to be used in any Netcare facility on or near a patient. These devices include but are not limited to thermometers, blood pressure monitors and dilators. It is only allowable in a Netcare training facility whereby student nurses are trained on basics. If any facility is still in possession of such a device, it must be removed immediately and sent to Technical Services for safe disposal.

### b. **Lighting**

Any mercury-containing lighting shall be disposed of in the correct manner as set out in this Netcare Procedure.

#### 6. PROCEDURE

# a. Medical Equipment

- i. Remove all mercury-containing devices from the hospital
- ii. Place in sealed primary and secondary containers
- iii. Store in a secure, properly marked, ventilated storage area
- iv. Contact the disposal company for collection of mercury-containing devices

#### b. Lighting

- i. Place Lamp/Tube safely inside a crusher drum (if one is available) and follow instructions as per drum manufacturer on method of crushing, to prevent exposure and environmental pollution.
- ii. If no drum is available, lamps/tubes must be stored safely in one piece until an approved vendor can collect it and dispose of it in the correct manner.

#### 7. HOW TO HANDLE MERCURY SPILLS

- i. Remove anyone from the area where the spill has occurred
- ii. Take off any jewellery and put on PPE (mask, apron, gloves)
- iii. Carefully pick up any sharp or broken object
- iv. Look for any mercury beads and collect into a waste bag
- v. Collect used gloves and put into the same waste bag
- vi. Seal the bag and label it as mercury-containing waste
- vii. Place waste bag in contained storage area
- viii. Keep the storage area ventilated to the outside

# **8. RESTRICTION**

Collection of mercury-containing devices may only be done by a Netcare approved vendor that complies with strict disposal policies according to the World Health Organization (WHO).

# 9. RESPONSIBILITY

The Technical Services Manager/Supervisor is responsible to put a system in place to dispose all mercury-containing devices in the correct manner.

# 10. RECORDS

All Disposal records should be filed and kept at Technical Services.