Mercury issue in health-care waste management in Kiribati

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Presentation overview

- Kiribati geographical setting
- Health-care waste management
- Imports of mercury thermometers
- Mercury issues(thermometer) in health-care waste management
- Challenges faced with health-care waste management
- Mercury levels found in Kiribati
- Way forward

Kiribati geographical setting

- Made up of 33 atoll islands including one raised limestone straddling the equator
- Divided into 3 main island groups

 Gilbert (west), Phoenix (middle)
 and Line islands (east)
- Total land area 811km2 and EEZ – 3.5 million km2
- < 2-3m height and islets are narrow, rarely more than 100 to 400m wide
- ~100K population in 2005
- Drinking water from the ground





Health-care waste management

- No Health-Care Waste
 Management Plan/Strategy
- There is a health-care waste management committee made up of Ministry of Health and Ministry of Environment.
- The committee is not well supported and seldom meets
- In 2009, the WHO commissioned a study focused on the health-care waste management assessment and short term improvement plan for South Tarawa.





Imports of mercury thermometers in Kiribati

- No comprehensive inventory has been done on medical products containing mercury
- Approx 50Kg of mercury has been imported to Kiribati through (Hg thermometers) during the last 10 years (0.5 – 3gm)
- Blood pressure meters (Sygmanometers) import stopped more 10 years ago. Now replaced with equipments not containing mercury
- 8 electronic thermometers (imported during H1N1 outbreak in May 2009)

Mercury issues in health-care waste management

- There are no existing legislations targeted directly at addressing mercury
- In the hospital all broken mercury thermometers in the Wards are mixed up with clinical wastes in non labeled containers.
- There is no existing system for recording broken thermometers
- Clinical wastes are transported in bins by orderlies disposed off by incineration in the hospital compound
- High temperature incinerator at the main hospital is currently nonoperational. The interim small incinerators use kerosene as fuel
- There is a new high temperature not yet operational donated by JICA

Health-care waste container bins





Ordinary garbage bags used as lining for clinical waste unlabeled bins in hospital wards

Specialized bio-hazard plastic bags used in the Laboratory Unit







bushed to "incinerator" in unstable "supermarket" trolleys along