Module 5

Cultural Uses of Mercury
Learning Objectives

• Understand mercury’s impact on human health and the environment

• Recognize typical uses of mercury

• Be familiar with available response measures to protect against mercury
Why is Mercury an Issue?

• Mercury and its compounds are recognized as highly toxic substances

• Mercury’s toxic effects include:
  – Harm to the central nervous system
  – Neurological and behavioral disorders
  – Kidney and thyroid problems

• Mercury is more likely to adversely affect children than adults
Why is Mercury an Issue?

• Mercury is toxic to ourselves and to our environment

• Yet, mercury is used in many cultures for religious and cultural reasons

• When the mercury is emitted into our air and water
How Am I Exposed to Mercury?

- Mercury can enter the body if it is ingested, injected, touched, or inhaled

- Sometimes, mercury is left out in the open air to “purify” a car or a home
  - Mercury easily vaporizes, even if you cannot see it happen
What is the History of Mercury Use for Cultural Purposes?

- Mercury has been used for hundreds of years
- Some believe that mercury brings good fortune, wealth and love
- Others believe that it confers immortality
Mercury in Beauty Products
Mercury in Beauty Products

- Acne
Mercury in Beauty Products

- Hyperpigmentation
- Kidney and/or nervous system problems
## Mercury in Beauty Products

<table>
<thead>
<tr>
<th>Location and Activity</th>
<th>Mercury Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women using mercury soap</td>
<td>122 mg/kg</td>
</tr>
<tr>
<td>Fish consumers near gold mining in Amazon</td>
<td>75 mg/kg</td>
</tr>
<tr>
<td>Fish consumers in Bolivia</td>
<td>16 mg/kg</td>
</tr>
<tr>
<td>Non-miners at Lake Victoria</td>
<td>1.1 mg/kg</td>
</tr>
<tr>
<td>Danes (average)</td>
<td>0.6 mg/kg</td>
</tr>
</tbody>
</table>

*Source: Mercury in Soap in Tanzania, NERI Technical Report # 306. 1999. Greer, Linda E. email: lgreer@nrdc.org*
Is Mercury Mistakenly Used to Improve Health?

• Mercury Capsules
  – Known as Azogue, they are sold in Mexico
  – Used to dislodge gastrointestinal blockages

• Mercury in the home
  – Mercury is exposed to the air so that it is purified
  – Common in Latin American and Caribbean communities living in New York City
Does Mercury Have Other Uses?

• Mercury is:
  – Sometimes sprinkled on the floor to protect occupants
  – Used with water to spiritually clean a floor
  – Added to oil lamps or candles to ward off evil spirits or to bring good luck
  – Sometimes an ingredient in love spells
What Are the Risks?

- Risks are involved in the storage, transport and handling of mercury

- Poorly ventilated areas, such as cars, result in high mercury concentrations
  - 80% of the inhaled mercury enters the bloodstream

- New residents may be poisoned by exposure to mercury left by previous residents
  - Mercury can linger in cracks, carpeting, dirt and concrete for many years
What Can Governments Do?

• Governments can:
  – Educate community groups and their leaders about the risks of mercury
  – Design and distribute information on mercury exposure, risks and symptoms
  – Meet with key members of cultural groups and distributors using or selling mercury
What Can Governments Do?

• Governments can:

  – Measure contamination levels at locations where mercury is sold

  – Develop printed information on mercury
    • Place leaflets in schools, hospitals and other visible public places

  – Promote voluntary initiatives to reduce mercury
What Can Governments Do?

• Governments can:

  – Regulate the import and export of mercury

  – Require that mercury is labeled as hazardous on the products that contain it

  – Properly enforce a prohibition on mercury containing substances

  – Properly secure waste management facilities
What Are the Main Messages?

• Mercury is very toxic

• Mercury is used in many different cultural and religious practices

• Reducing mercury demand can only be achieved by working closely with community leaders

• If adequately enforced, government regulations on mercury can be effective
Additional Resources

• The Ritual Use of Mercury
  www.homepage.mac.com/cynthiagraber

• Mercury Poisoning Project
  www.mercurypoisoningproject.org

• The Use of Mercury for Cultural and Religious Purposes
  www.archive.naccho.org/documents/MercuryFactsheet.pdf

• or contact mercury@unep.org