Elemental (metallic) mercury is not hazardous when confined within a closed system such as a manometer. However, should such an instrument shatter or develop a leak, the resulting spill could expose nearby personnel to high levels of mercury vapour depending upon the amount spilled and the effectiveness of the area ventilation system. Repetitive inhalation in such a situation can result in mercury poisoning in the exposed individual.

Many campus labs and research areas have been replacing mercury - type instrumentation with equivalent or better non - mercury systems i.e. mercury replaced by coloured water in manometers. This form of control is encouraged by Occupational Health and Safety (OH&S).

**ACCIDENTAL MERCURY SPILLS:**

All spills of mercury (Hg) must be cleaned up immediately to minimize the introduction of the potentially harmful vapours into the workplace. Cleanup of such spills must be performed by the Western University HazMat Team or a qualified contractor. The recommended clean-up procedures will depend on the size and the extent of the spill. See instructions below.

1. **Small Spill Clean-Up** (i.e, thermometers, etc.)
   1.1 Collect up all spilled mercury by using handy commercial kits, lab suction apparatus (aspirator), etc., and seal in a leak proof container.
   1.2 Gather other materials used in clean-up or having been in contact with mercury and seal in a 6 mil plastic bag.

2. **Large Spill Clean-Up** (i.e, greater than 2 ml.)
   2.1 Ventilate area by using portable air exhaust units.
   2.2 Contact Western Special Constable Service(WSCS) immediately if assistance is required. WSCS will activate the Western University HazMat Team A specialized mercury vacuum, respirators and a mercury vapour detector are available when required. In addition, the HazMat Team can advise on the degree of hazard and other preventive measures to be taken.
   2.3 Supervisors must complete an Accident Investigation Report.

3. **Disposal**
   3.1 Contact Occupational Health & Safety for disposal of mercury or mercury related waste.
   3.2 Ensure that all materials are tightly sealed in plastic and labeled according to instructions in the Hazardous Materials Management Handbook.
**POLICY:**

<table>
<thead>
<tr>
<th>MERCURY CONTROL PROGRAM</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>NUMBER:</th>
<th>S-10</th>
</tr>
</thead>
</table>

| LABORATORY PLUMBING MAINTENANCE: | (Facilities Management Personnel) |

If sinks or drain pipes are being removed or repaired in laboratories, precautionary steps must be taken before starting this job. Over exposures caused by using a torch to free the pipe joints can be prevented by the following steps below.

1. Always empty a sink trap by placing a suitable container under it.
2. Any mercury collected in this manner must be sealed tightly in a leak proof container preferably plastic.

   Contact Occupational Health & Safety for proper disposal, see Large Spill Clean-up section above.