Hospital Pattern
Mercury Spillage Kit
Instructions for Use
Description of Mercury Spillage Kit

The kit contains everything you need, in the event of a mercury spillage:

1) **Personal Protection Equipment**
   Dust mask, to protect the user from chemical dust
   Two pairs vinyl gloves (allergy-free)

2) **Waste Mercury Bottle**
   Leakproof, shatterproof container

3) **Manipulation items**
   Scoop, brush and syringe for handling mercury

4) **Absorption systems**
   Sulphur/Calcium hydroxide powder for use on vinyl or other non-absorbent floors
   Alloy Wool adsorbent for use on all surfaces, particularly carpets, bedding

5) **Instruction sheet**

**Spillage on Hard Floor: Example - Broken Thermometer in Ward**

Mercury is a heavy, liquid metal and a breakage usually results in the mercury spreading over a wide area, in many small globules. It is important to prevent people walking through the spillage area, spreading the mercury further.

Never use a vacuum cleaner or other suction device on a mercury spillage, since this will contaminate the cleaner or aspirator.

It is mercury vapour which is the hazard; the metal slowly evaporates at room temperature, releasing the highly toxic vapour. This is why it is so important to effectively clean up spillages.

**Procedure**

1) Put on the mask and gloves. Remove the broken thermometer, wrap as for broken glass and dispose via the clinical waste stream (incineration).

2) Using the scoop, collect the mercury globules together so that they merge into larger globules.
3) Using the syringe, pick up as much of the mercury as you can, and place it in the waste bottle.

4) Open the containers of calcium hydroxide and sulphur.

5) Tip out about a capful of each powder onto the floor, close to the centre of the spillage.

6) Using the scoop, mix the powders with the spilt mercury.

7) The mercury will be incorporated into the powder as a greyish 'pseudo-amalgam'. This will take two minutes or so. You will see the globules of mercury gradually disappear.
8) Brush the contaminated powder into the scoop and place it in the waste container. Cap the waste container tightly and replace the items in the spillage kit case, until it is needed again. Unless the same person will be using the spillage kit each time, do not replace the mask and gloves, for hygiene reasons.

The waste material can be kept safely in the spillage kit until the end of its shelf life. Disposal of the waste and other kit components is by incineration. Finally, wipe the spillage area with a damp paper towel to remove any remaining powder. Dispose of the paper towel in the incineration waste stream.

Replacement items for the kit are available from the manufacturers and should be ordered through your purchasing or estates department, or pharmacy.

**Spillage on a Fabric or Carpet Surface eg a Sphygmo in the Clinic**

1) Put on the gloves; remove any glass debris and dispose of, wrapped, as broken glass.

2) Using the scoop, push the globules of mercury together so that they form large globules which can be collected using the syringe.
3) Transfer the waste mercury to the waste container.

4) When only the small globules of mercury remain, take the Alloy Wool and pull off a piece about 2.5cm (1 inch) in diameter.

5) Using the Alloy Wool like a cotton wool bud, dab it onto the remaining mercury. Allow the wool to remain in contact with the mercury. Do not press hard or you may force the mercury into the pile of the fabric.

6) You will see the mercury filling the gaps between the metal strands as it forms an amalgam. The Alloy Wool 'bud' will hold the mercury.

7) When it does not pick up any more and the mercury drops out again, use another piece of Alloy Wool.
8) Place the contaminated Wool in the waste container. Cap the waste container tightly and return it to the spillage kit.

**Decontamination Procedure for Hard Floors Only**

To a third of a bucket of warm water add a drop of washing up liquid and two heaped capsful each of sulphur and calcium hydroxide, stirring to make a suspension. Use a mop to apply this to the floor. After most of the suspension has been mopped off, clean the floor with a proprietary cleaner.

COSHH guidelines for hospitals suggest that this decontamination procedure is done where spillages of mercury have occurred previously without full chemical clean-up.

For further information, such as mercury safety policy in the hospital, access the Mercury Safety Products web site at [www.mercurysafety.co.uk](http://www.mercurysafety.co.uk)