Toxics Link

Towards a safer workplace

Bindas, a spokesperson for waste management, presents a nurse's guide to safe work practices and laws pertaining to bio-medical waste management.

The danger is real!

Injuries from needles and sharp devices in healthcare and laboratory settings are associated with the transmission of more than 20 pathogens including HBV, HCV, HIV.[1]

Recapping can account for 25 to 30 percent of all needlestick injuries.[2]

Acute exposure to glutaraldehyde can cause asthma.

Nurses of child-bearing age, pregnant nurses and nursing mothers are risking their infants/ foetuses if they get exposed to hazardous chemicals such as mercury.

1. Centers for Disease Control and Prevention (CDC)
2. http://www.ccohs.ca/oshanswers/diseases/needlestick_injuries.html

The solutions are simple!

Segregate waste correctly

Disinfect and mutilate bio-medical waste

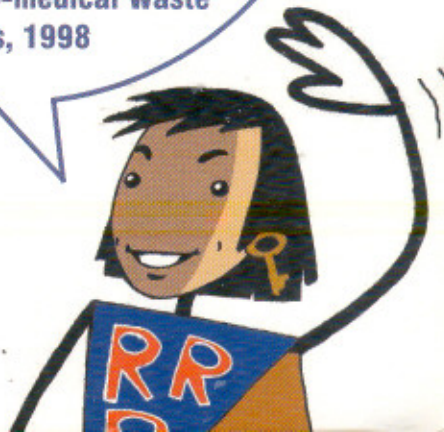
Handle and dispose sharps carefully

Handle dangerous chemicals such as mercury and glutaraldehyde carefully

Clean body fluids and soiled laundry properly

Report all accidents

Follow the Bio-medical Waste Rules, 1998



Put the right waste in the right bin

Bio-medical Waste (Management and Handling) Rules, 1998 prescribe segregation of waste at source. Colour-coded bins are recommended for different kinds of waste. The bags and bins should have the bio-hazard symbol in accordance with the BMW Rules.

Disinfection and mutilation

For disinfection ensure that you have:

- 1% sodium hypochlorite or an equivalent solution.
- Minimum residency time of 30 minutes.
- Freshly prepared solution.
- 10% solution in case of heavily soaked material/spill.
- Mutilate all infected plastic like gloves, urine bags, and tubings, to avoid illegal reuse.

Infectious waste

Microbiological and biotechnological waste
Blood-soaked bandages
Soiled dressings
Cotton swabs

Disinfected and mutilated plastic

Blood bags
IV sets
Tubings
Urine bags
Syringes
Catheters
Gloves

Sharps

Needles
Broken glass
Suture needles
Lancets
Blades
Scalpels

Body parts and anatomical tissues

To be used in OT and Labour Room only

Human tissues
Organs
Body parts
Animal waste
Placenta

General

Non-infected plastic
Cardboard
Packaging material
Paper

Body fluid spills

- Cover the spill with absorbent cotton or a cloth.
- Discard this cloth in the red bin.
- Disinfect the surface with 10% bleach for 10-15 minutes or use phenolic disinfectants.
- Now use cloth or cotton to absorb the spill and discard it in the red bag.
- Finally, use the normal mop.
- And remember to wear gloves at all times.

Disinfect and destroy sharps

Injuries from needles and other sharp devices used in healthcare settings are associated with the occupational transmission of more than 20 pathogens including HBV, HCV, and HIV. Recapping can account for 25-30% of all needlestick injuries.

- Destroy needles immediately after use.
- Cut the syringes and then disinfect both of these in separate containers.
- Avoid recapping of needles.
- All other sharps like lancets, blades, scalpels, etc, can be directly put in the disinfecting solution.
- Always wear personal protective gear.
- Make sure you report all sharps-related accidents.

Chemicals require extra care

Mercury

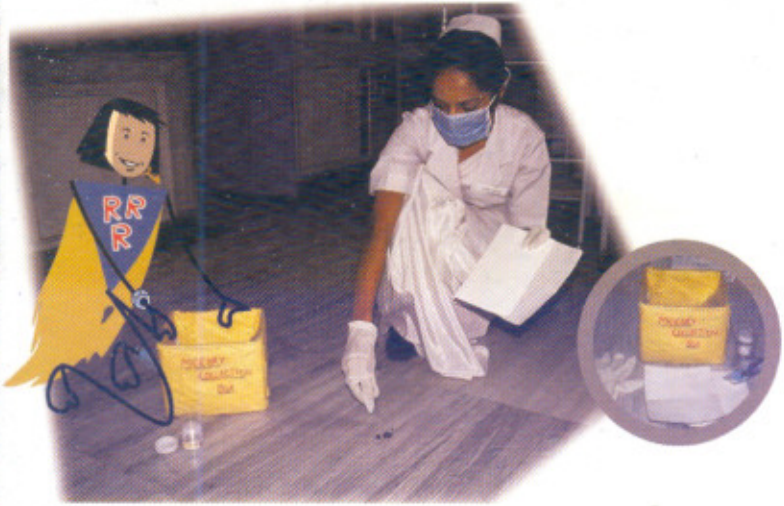
Mercury is a neuro and nephro toxin and can also cause harmful effects on the digestive and respiratory systems. Nurses in child-bearing age, pregnant nurses and nursing mothers are risking their foetuses/infants if they get exposed to mercury. Mercury is used in thermometers, sphygmomanometers and dental amalgams.

In case of a spill:

- Open all windows and turn off heaters and air conditioners to minimise vaporisation.
- Remove all jewellery and watches as mercury bonds with metal.
- Wear gloves, collect mercury using cardboard sheets and suck it with an eyedropper or a syringe. Empty it in a container which has water.
- Pick up the remaining beads of mercury with a sticky tape and place the tape in a plastic bag along with the eyedropper, cardboard and gloves.
- Place this bag and the sealed container in the second bag. Label it as mercury waste.

DON'Ts

- Never touch mercury with your hands.
- Never use a vacuum cleaner, or other household cleaning products such as a broom to clean mercury.
- Never pour mercury into a drain or put it the trash.



Glutaraldehyde

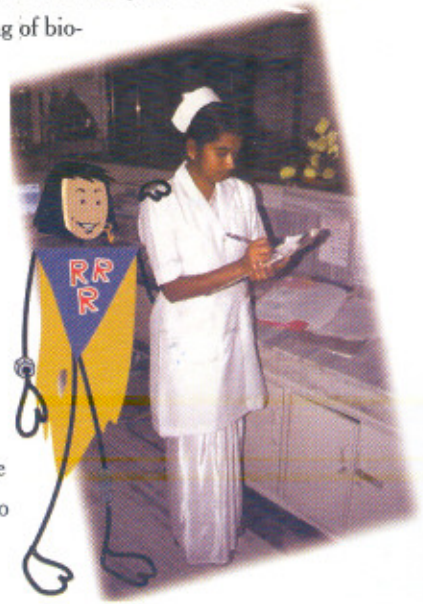
Glutaraldehyde can be damaging to the environment because it is a potent disinfectant.

- Minimise usage locations for glutaraldehyde.
- Limit access to glutaraldehyde usage locations.
- Monitor exposure levels using monitoring badges or hand-held direct reading meters.
- Use personal protective equipment such as splash goggles, face shields, chemical protective gloves and protective clothing.
- Place the glutaraldehyde-soaking bin in a fume hood to eliminate virtually all glutaraldehyde exposure problems.
- Neutralise chemical solutions with neutralisers before disposing of them.

Follow the law diligently

Salient features of Bio-medical Waste (Management and Handling) Rules

- Bio-medical waste should not be mixed with any other waste.
- Waste should be segregated at the point of generation as per the colour codes given in Schedule II of the Rules. Containers should be labelled according to Schedule III.
- No untreated waste should be stored beyond 48 hours.
- Records related to handling of bio-medical waste should be maintained.
- Accidents during handling or transportation of bio-medical waste should be reported.
- Failure to comply with any provision of this Act is punishable with imprisonment for up to five years or with a fine of up to Rs 1,00,000, or both.



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less waste is best

Meet Bindas, the genius genie of the dustbin. On her chest is the 3R symbol of her credo – Reduce, Reuse and Recycle with Responsibility.

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