M10-EN.11 HOUSEKEEPING

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M10-EN.11.1 Contaminated work environment

Housekeeping personnel can be exposed to blood or Other Potentially Infectious Materials (OPIM) through contaminated work environments. **(M10.11.1.jpg, M10.11.2.jpg)**

Safety Precautions

Work environment must be kept clean and sanitary preventing contact with blood or other potentially infectious materials.

Employers must implement a proper written procedure for cleaning and methods of decontamination, based on the:

- Location within the workplace
- Tasks or procedures to be performed in the workplace
- Type of surfaces to be cleaned

M10-EN.11.1.1 Hazardous Chemicals

Employees can be exposed to the following potential hazards:

- Cleaning chemicals found and used in the housekeeping processes
- Soaps and detergents causing allergic reactions and dermatitis
- Broken skin from soap or detergent irritation can help an infection or injury to occur, if exposed to chemical or biological hazards

Safety Precautions

- Never mix cleaning solutions containing ammonia and chlorine because this will form a deadly gas
- Be aware of the hazardous chemicals you are exposed to. These chemicals are usually found in soaps, disinfectants, pesticides, and must be clearly labelled as hazardous
- Use appropriate PPE (e.g. gloves, goggles, splash aprons) when handling hazardous dishwashing detergents and chemicals

In cases where the eyes or body of any person at the work are may be exposed to injurious corrosive materials, suitable facilities must exist, in order to drench or flush of the eyes and body immediately

M10-EN.11.1.2 Appropriate disinfectants

Housekeeping personnel can also be exposed to blood or OPIM if they do not use an appropriate or approved disinfectant.

Safety Precautions

Use appropriate disinfectants (Link: M10-EN.4.2)

Use disinfectants according to the manufacturer's instructions

Employers are required to place labels giving instructions about:

- Using personal protection devices when performing a task
- Cleaning blood thoroughly before applying the disinfectant
- Discarding infectious wastes according with the existing regulations
- Keeping surface wet with the disinfectant for an appropriate time when dealing with HIV-1 and HBV

M10-EN.11.1.3 Contaminated Equipment

Potential hazards can occur from the exposure of employees to blood or OPIM through their contact with contaminated:

- Equipment and working surfaces **(M10.11.3.jpg)**
- Protective coverings
- Reusable containers
- Glassware

Safety Precautions

- Clean and decontaminate all the equipment, environmental and working surfaces after contact with blood or OPIM
- Clean with soap and water solution before its decontamination, equipment that is contaminated at a great extend, because some anti-microbial products will not work in the presence of blood, interfering with the sterilizing process
- Remove protective coverings (i.e. plastic wrap or aluminium foil) and replace as soon as possible, when they become visibly contaminated, or at the end of a work shift if they may have become contaminated during the shift
- Inspect and decontaminate any bin, bucket can, and/or similar receptacles intended for reuse, and that are possible to be contaminated with blood or OPIM frequently. Also, clean and decontaminate them immediately or as soon as possible upon visible contamination
- Never pick up glassware that is broken and possible to be contaminated, with hands. Use instead mechanical means, such as brush and dustpan, tongs or forceps, etc

Employers should place proper labels or tags on contaminated equipment (such as IV poles), for the identification of the portions of the equipment that are contaminated

M10-EN.11.2 Sharps and Containers

Housekeeping personnel can be exposed to contaminated sharps and containers from:

- Their lack of training in proper procedures and poor handling practices
- Sharps that are not discarded properly, left in bedding and sent to laundry accidentally
- Inappropriate handling or disposal of sharps containers, such as allowing the overfilling of containers, or transport them incorrectly

Safety Precautions

Employers should implement work practice and engineering controls for the prevention of their personnel exposure to sharps. These can be:

- **Handling sharps –** correct disposal of sharps immediately or as soon as possible into proper containers
- **Handling sharps' containers –** the containers used for the disposal of the contaminated sharps must be closable, puncture resistant, and leak-proof. They must have the label of biohazard symbol or be colour coded accordingly. Replacement of containers must be regular, to avoid overfilling
- **Disposal of Sharps Containers -** employees must be trained in proper handling/disposal of sharps and containers, such as:
  - Close contaminated sharps' containers prior their removal or replacement to prevent spillage of their contents during handling/storage/transport or shipping
  - If leakage is possible, place them in a secondary container
- **Reusable sharps containers –** this type of containers must never be opened, emptied or cleaned manually or in any other manner that would expose employees to the risk of transdermal injury.

M10-EN.11.3 Medical Waste

Clinical/medical waste is defined (Controlled Waste Regulations, 1992) as any waste which consists wholly or partly of: human or animal tissue; blood or bodily fluids, excretions; drugs or other pharmaceutical products; swabs or dressings; or syringes, needles or other sharp instruments: which unless rendered safe may prove hazardous to any person coming into contact with it. It also includes any other waste arising from medical, nursing, dental, veterinary, pharmaceutical or similar practice, investigation, treatment, care, teaching or research, or the collection of blood for transfusion, that the waste may cause infection to any person coming into contact with it.

Medical waste can be separated in five groups (Health Services Advisory Committee in Safe disposal of clinical waste (1999), as following:

Group A	– Identifiable human tissue, blood, animal carcasses and tissue from veterinary centres, hospitals or laboratories. – Soiled surgical dressings, swabs and other soiled waste. – Other waste materials, for example from infectious diseases cases, excluding any in Groups B-E.
Group B	Discarded syringe needles, cartridges, broken glass and other contaminated disposable sharp instruments or items.
Group C	Microbiological cultures and potentially infected waste from pathology departments (laboratory and post mortem rooms) and other clinical or research laboratories.
Group D	Drugs or other pharmaceutical products.
Group E	Items used to dispose of urine, faeces and other bodily secretions or excretions which do not fall within Group A. This includes disposable bedpan liners, incontinence pads, stoma bags and urine containers.

The healthcare personnel, (doctors, nurses, waste disposal workers) may be at risk from contact with clinical waste. When broken skin, or eyes, nose and mouth come into contact with this waste, lot of infections can occur. Therefore, the personnel must always consider all clinical wastes as infectious. Diseases that may be transmitted by medical waste are some forms of Hepatitis, E. coli infection, Tuberculosis, etc, in addition to digestive problems such as diarrhoea.

Safety Precautions

- Provision of information and training on the hazards to health and associated risks posed by medical waste to employees and others who may come into contact with it
- Provision of appropriate training to the healthcare personnel on the use of personal protective equipment (PPE), why to use it, in addition to the safe handling and disposal of medical waste. The PPE can be:
    - Gloves (latex, or nitrile), where staff are likely to come into contact with medical waste. Hands must be washed thoroughly with warm water and soap after the gloves are removed
    - Gowns, lab coats or aprons must be provided and worn when there is a likelihood of clothing becoming soiled.
    - Protective barriers (e.g. waterproof dressings) in order to reduce the risk of exposure to potentially infectious material through contact with broken skin or mucous membranes.
    - Protective mask
- All those been at risk must be instructed on who to report to if they are exposed and where to obtain immediate treatment

- The personnel must wash their hand frequently in order to prevent the spread of infectious diseases in the facility
- Waste must be disposed in puncture resistant containers lined with leak-proof plastic bags marked as biological waste
- The personnel that handles medical waste must wear puncture resistant gloves and handle all contaminated wastes carefully avoiding direct contact
- Only the outsides of the container must be held when handling and never reach in
- Containers must never be loaded beyond their capacity, and contents must never be compacted. Medical waste must never be mixed with other domestic or workplace garbage
- Sharps must be handled with care and treated like they are infectious materials

Good Practice

- All waste should be separated by the healthcare personnel into three categories **(M10.11.4.jpg)**:
  - general health care waste (e.g. paper and packaging, drinks containers, glass, food residues, dead flowers, intravenous (IV) bottles, hand towels and tissues not contaminated with body fluids)
  - potentially infectious (or hazardous) health care waste (all waste items contaminated, or suspected of being contaminated, with body fluids such as bandages and gauze, swabs)
  - used sharps (including broken glass), put into rigid containers (if possible yellow too)
- Use of different colours for general and potentially infectious wastes, such as black for general waste and yellow for potentially infectious wastes. Ultimately all bags, containers, bag holders and trolleys can be either black or yellow reinforcing the separation of these two types of waste. Once separated, the two waste streams should be handled and disposed of separately and not mixed.
- The healthcare personnel must never place loose sharp items (e.g. needles and blades) in plastic bags or similar containers that can be easily punctured
- Healthcare personnel must cover all waste bins and avoid using open containers and wastebaskets
- Yellow and black waste bags must be placed in separate places, away from patient areas and usually at the nurses' station or room and (if one exists) possibly in a treatment room. Sharps containers should also be in these locations and not in the patients' areas where they could be interfered with.
- Medical waste must be regularly removed, usually once a day, and preferably at least once per working shift. Also, separate schedules and separate collection times must exist for black bags and yellow bags/sharps containers.
- The bags or sharps container must never be more than three quarters full when they are replaced, in order to reduce the risk of plastic bags splitting open and of an injury from a protruding sharp item in sharps containers
- All bags with medical waste must be sealed and labelled (M10.11.5.jpg)

- A waste management system must exist, as well and an infection control or hygiene committee and specialist infection control personnel. In addition, a person must be responsible in every department, in order to ensure good waste management procedures at every stage from generation to final disposal.
- Healthcare personnel must use a waste segregation system and dispose of waste properly, since it is part of the continuing need to maintain good hygiene within hospitals to control infection
- Training must exist for every new member of the personnel, concerning his/her responsibilities regarding the achievement of good waste management in their department.
- Good waste segregation and hygienic practices need constant reinforcement. The personnel can be reminded in many ways, such as short refresher training courses in the department, posters and signs, hygiene inspections, etc

Storage

Because of the increased production of medical waste in healthcare facilities, bags can be filled reasonably quickly. Therefore the use of rigid containers (such as a two-wheeled 240-litre container with a lid), is widely recommended for temporary storage within or near to the facility, away from patient areas. Sealed and labelled yellow bags containing waste are placed in this container and then removed by cleaning or housekeeping personnel. By using this rigid container as a temporary storage point, filled waste bags do not being piled on the floor where they could be knocked and split open. One yellow temporary storage container should be available to every medical department for potentially infectious waste. Also, a separate rigid container, preferably black, can be used as a temporary storage point for general waste **(M10.11.6.jpg)**.

Some hospitals do not use temporary storage. Instead, the personnel transport sealed bags of waste directly from a medical area to a central storage point outside the facility **(M10.11.7.jpg)**. In this case, trolleys can be used for general waste and potentially infectious waste. Yellow and black bags must never be put in the same trolley. Furthermore, the central storage containers for black bags should be black or at least clearly marked “for general waste only”, and those for yellow bags should be yellow or at least clearly marked “for infectious waste only”.

The waste packaged in yellow bags that has been disinfected, is no longer regarded as highly infectious and can therefore leave the facility with other yellow-bagged waste, stored and transported. Yellow bags containing non-disinfected highly infectious waste must be collected quickly from a temporary storage area connected to the infected patient area and carried in a trolley to a secure central storage area.

M10-EN.11.4 Latex Allergy

Employees can be exposed to latex allergy from wearing latex gloves, during housekeeping processes. Alternatives must be provided as well, to those allergic to latex (Link: M10-EN.3.5).

M10-EN.11.5 Slips/Trips/Falls

Potential hazards during the housekeeping process can be the exposure of the personnel, to wet floors, with probable slips, trips, and falls

Safety Precautions

- Keep floors in a clean and dry condition, with provision of mats where practicable
- Follow housekeeping procedures such as cleaning one side of a passageway at a time, providing good lighting for all halls and stairwells can help reduce accidents

Employers should:

- Implement a program in order to provide safe, immediate, clean-up of floor spills
- Eliminate uneven floor surfaces
- Provide warning signs for wet floor areas