PRE-ACCREDITATION ENTRY LEVEL STANDARDS FOR HCO & SHCO

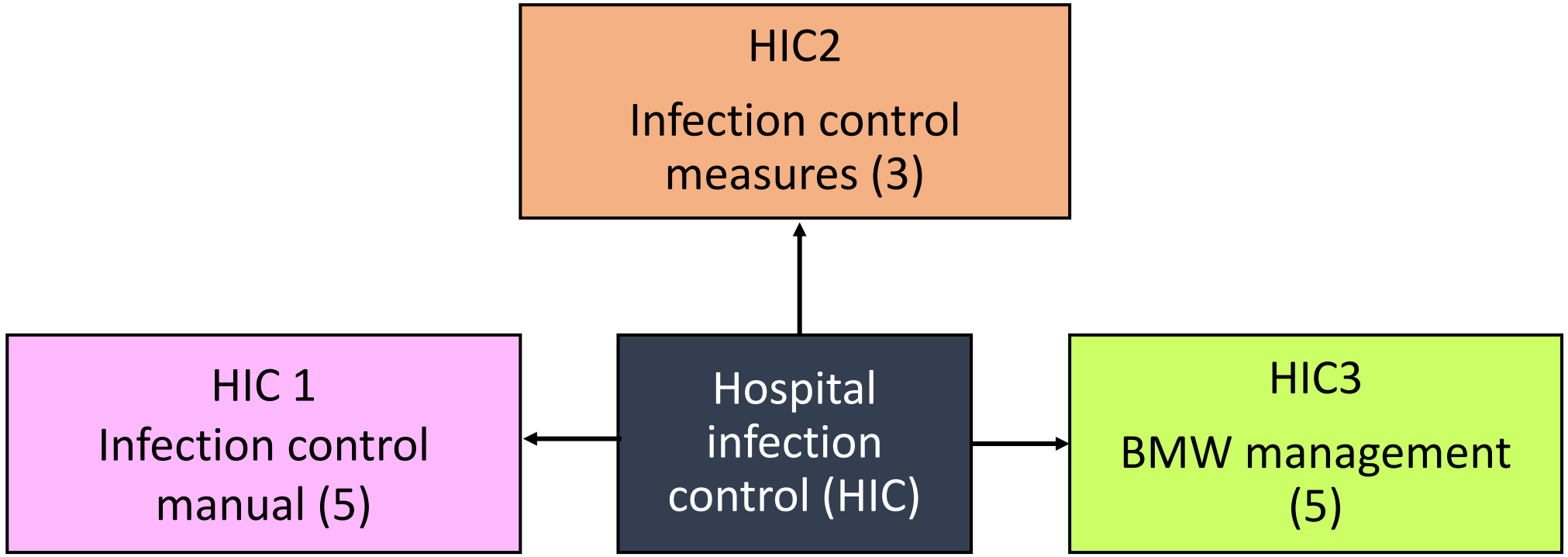
2.1

CAHO

Committed to Safer Patient Care

HOSPITAL INFECTION CONTROL (HIC)

Summary of Standards



Intent of HIC

The NABH **Hospital Infection Control (HIC)** chapter aims at:

- Effective infection control programme.
- Reducing/eliminating infection risks to patients, visitors and providers of care.
- Measures and action taken to prevent or reduce the risk of Hospital Acquired Infection.
- Action plan to control outbreaks.

HIC 1: The hospital has an infection control manual, which is periodically updated and conducts surveillance activities.

HIC 1a: It focuses on adherence to standard precautions at all times.

HIC 1b: Cleanliness and general hygiene of facilities will be maintained and monitored.

HIC 1c: Cleaning and disinfection practices are defined and monitored as appropriate.

HIC 1d: Equipment cleaning, disinfection and sterilisation practices are included.

HIC 1e: Laundry and linen management processes are included.

Standard Precautions

The infection prevention practices that apply **to all patients**, regardless of suspected or confirmed infection status, in any setting in which health care is delivered are called standard precautions.

Infection Prevention Practices

- Hand hygiene.
- PPE.
- Prevention of needlestick injury and injury from other sharp items.
- Pre- and post-exposure prophylaxis.
- Environmental cleaning.
- Patient care equipment cleaning.
- Linen and laundry management.
- Safe disposal of biomedical waste (BMW).

HIC 2: The hospital takes actions to prevent or reduce the risks of hospital associated infections (HAI) in patients and employees.

HIC 2a: Hand hygiene facilities in all patient care areas are accessible to health care providers.

HIC 2b: Adequate gloves, masks ,soaps and disinfectants are available and used correctly.

HIC 2c: Appropriate pre and post exposure prophylaxis is provided to all concerned staff members.

Hand Hygiene

Cleaning one’s hands to prevent the spread of infections is called hand hygiene.

Techniques of Hand Hygiene

Hand washing – It is done using soap and water when hands are visibly soiled or when there is an exposure to spore forming pathogens such as *Clostridium difficile.*

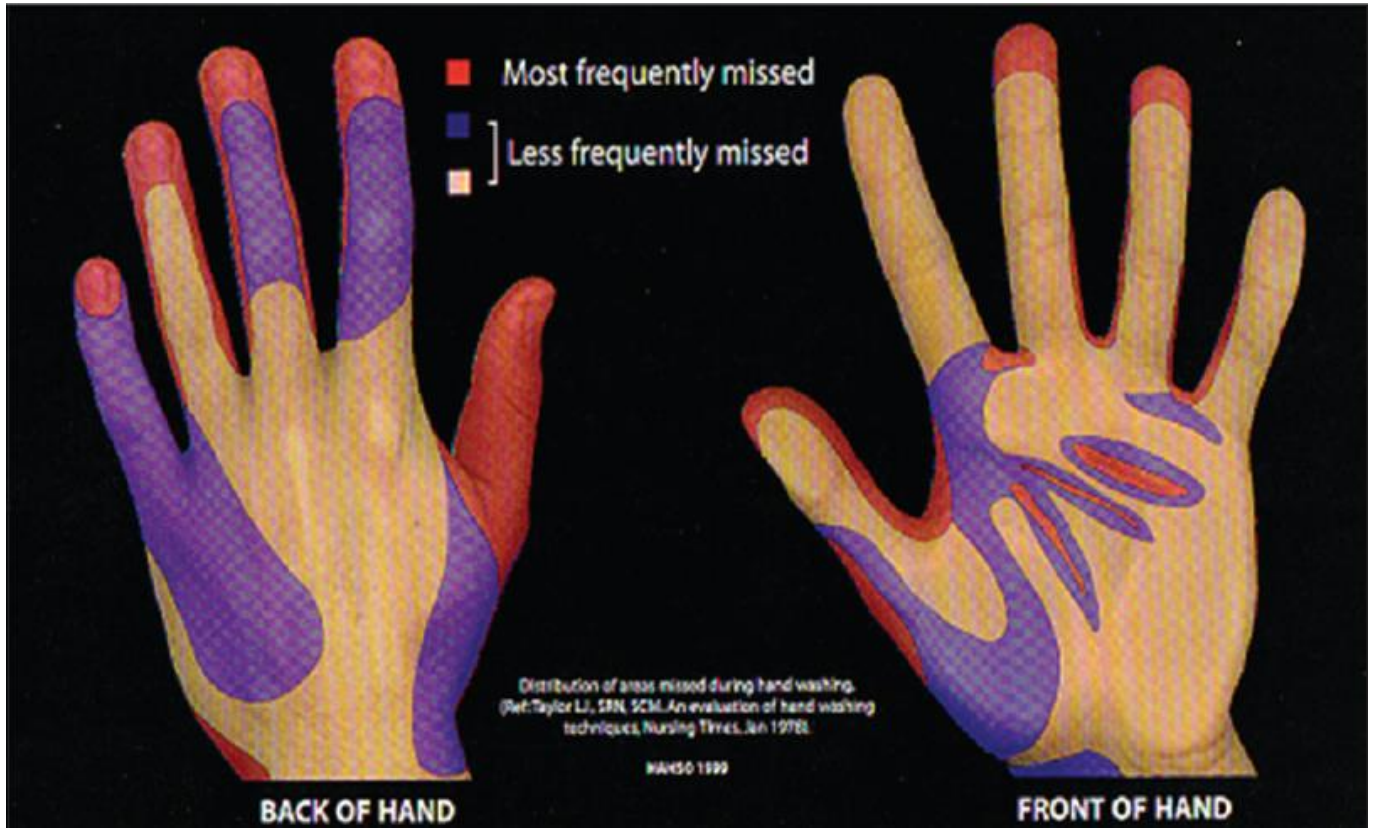
Hand rubbing – It is done using an alcohol-based hand rub. And, is the preferred method of hand hygiene, if hands are not visibly soiled.

Hand Washing Facilities

- Wash basins.
- Hands-free/elbow tap.
- Adequate water and soap.
- Facilities for drying hands without contaminating them.
- Hand rub should be available in the ward or adjacent to each patient's bed.

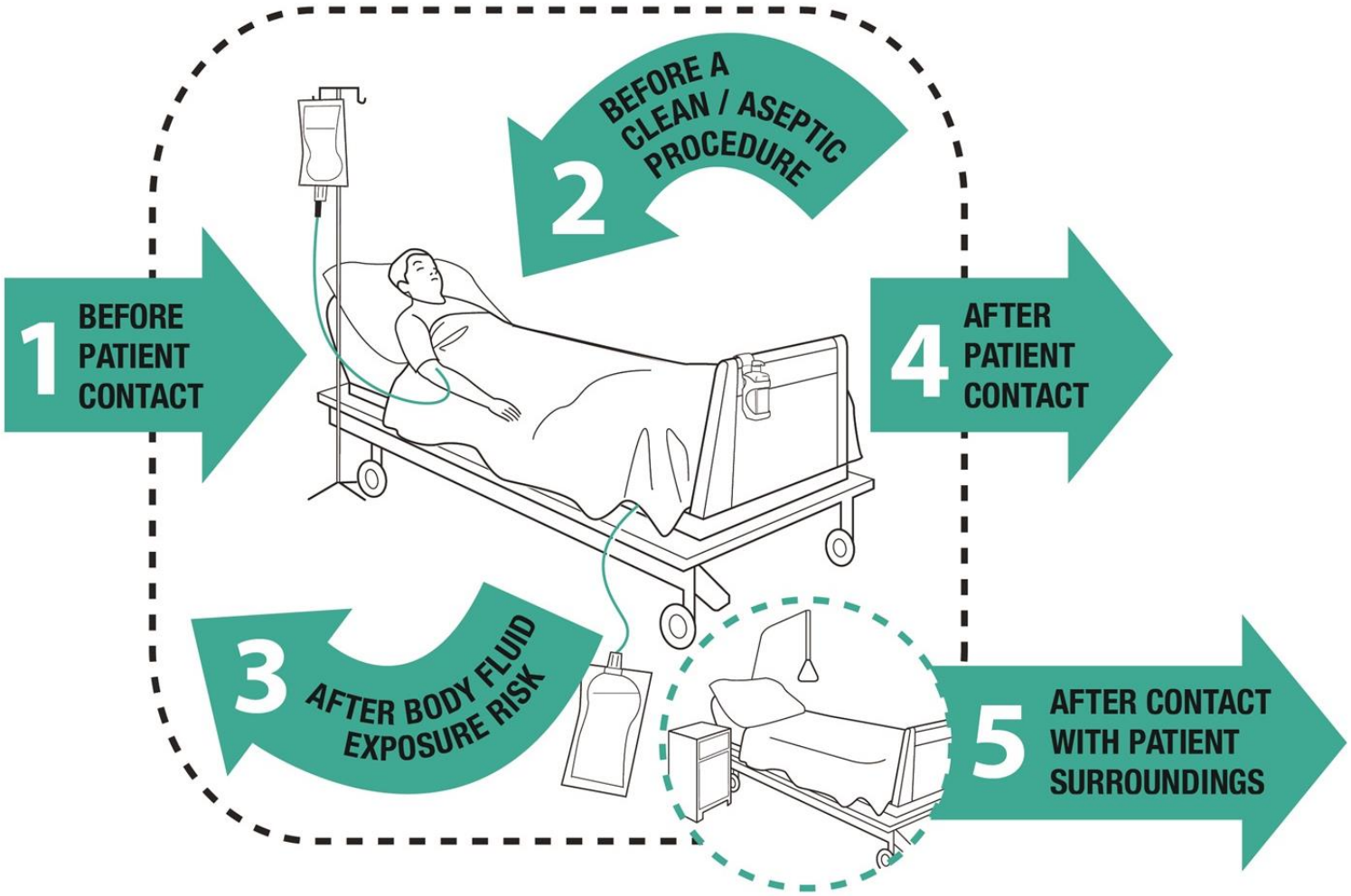
How to perform hand hygiene?

Hand hygiene should be performed using appropriate technique, active ingredient and for appropriate duration.



https://www.cdc.gov/oralhealth/infectioncontrol/faq/hand.htm

When should hand hygiene be done?



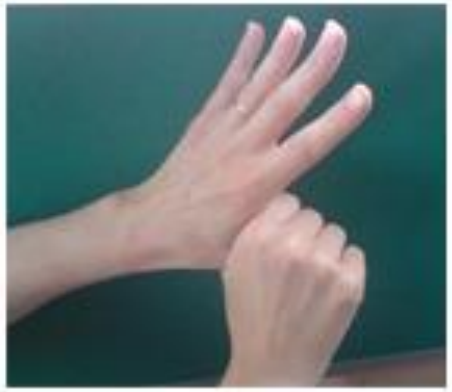
Six Steps of Hand Hygiene

Rub palm to palm

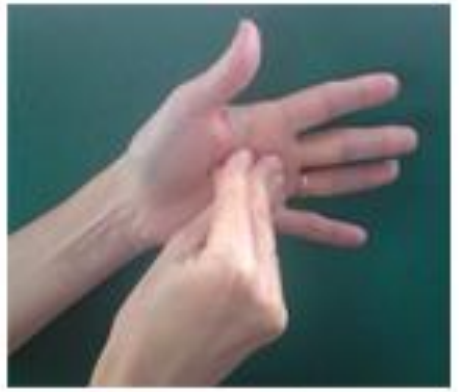
Rub the back of both hands

Rub palm to palm interlacing the fingers

Rub the backs of fingers by interlocking the hands



Rub the thumbs

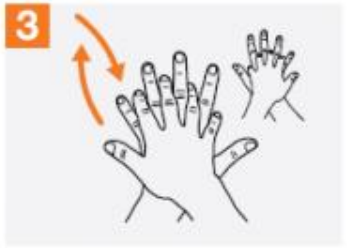


Rub palms with fingertips

Hand Rubbing (20-30 seconds)

Apply a palmful of the product in a cupped hand, covering all surfaces;

Rub hands palm to palm;



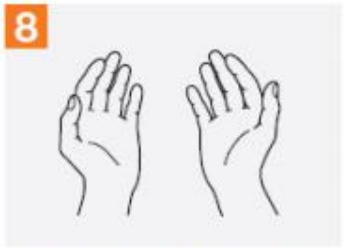
Right palm over left dorsum with interlaced fingers and vice versa;

Palm to palm with fingers interlaced;

Backs of fingers to opposing palms with fingers interlocked;

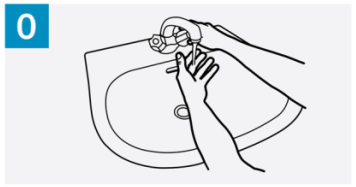
Rotational rubbing of left thumb clasped in right palm and vice versa;

Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;

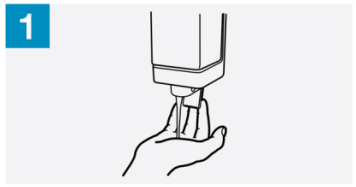


Once dry, your hands are safe.

Hand Washing (40-60 secs)

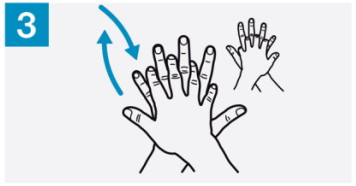


Wet hands with water;

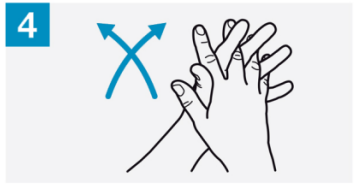


Apply enough soap to cover all hand surfaces;

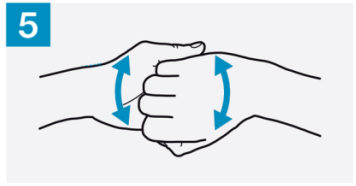
Rub hands palm to palm;



Right palm over left dorsum with interlaced fingers and vice versa;

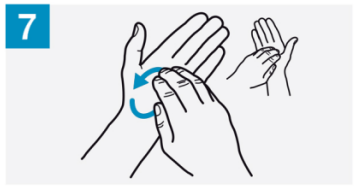


Palm to palm with fingers interlaced;

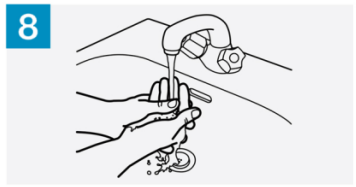


Backs of fingers to opposing palms with fingers interlocked;

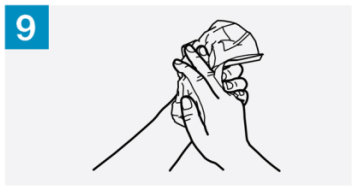
Rotational rubbing of left thumb clasped in right palm and vice versa;



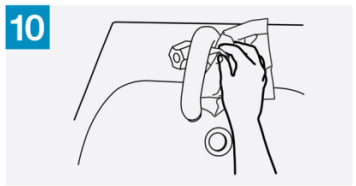
Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



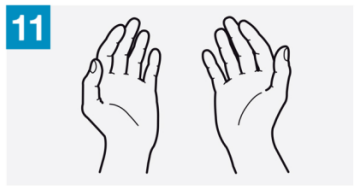
Rinse hands with water;



Dry hands thoroughly with a single use towel;



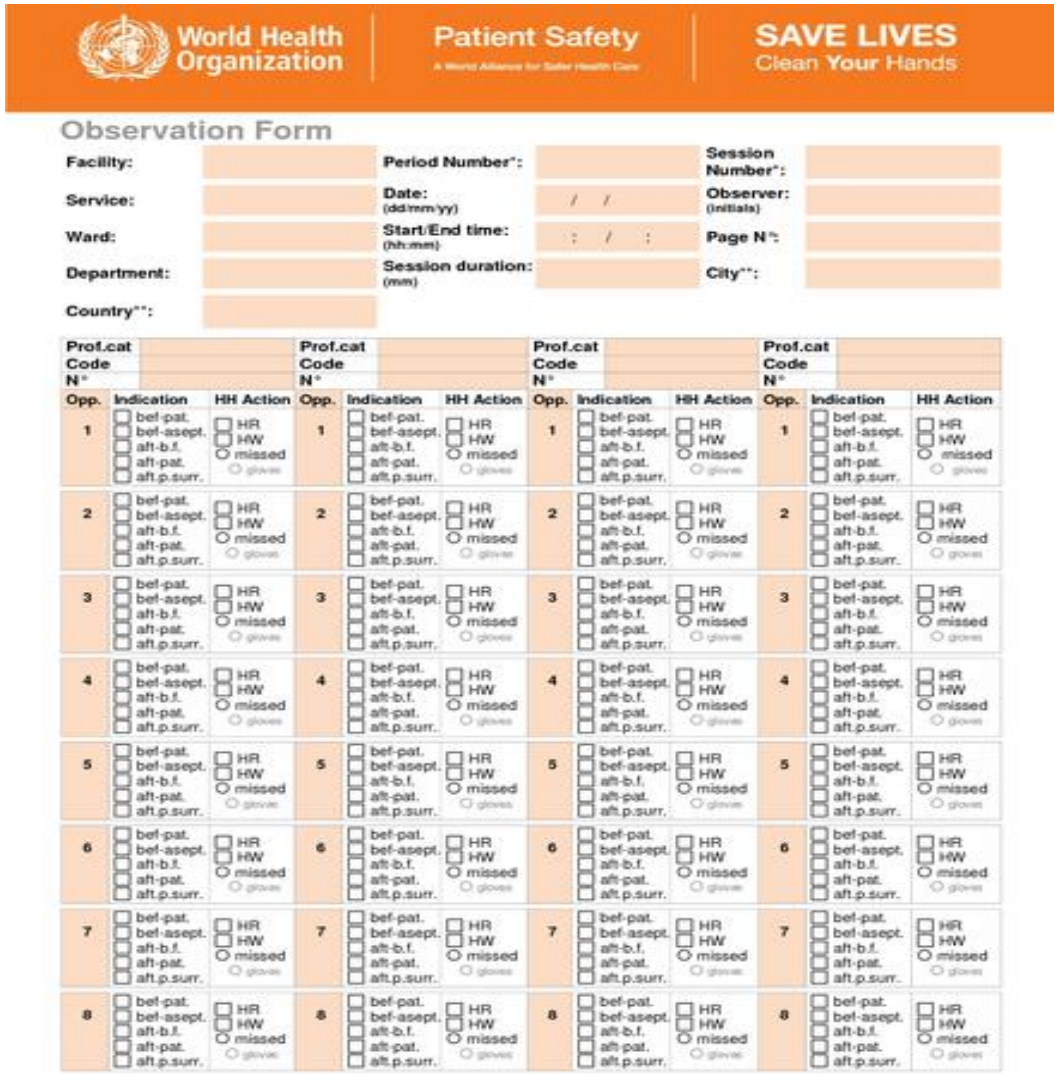
Use towel to turn off faucet;



Your hands are now safe.

Surgical hand antisepsis (2 - 5 mins)

Hand Hygiene Audit



World Health Organization | Patient Safety | SAVE LIVES Clean Your Hands

Observation Form

Facility:		Period Number*:		Session Number*:	
Service:		Date: (dd/mm/yy)	/ /	Observer: (initials)	
Ward:		Start/End time: (hh:mm)	: / :	Page N°:	
Department:		Session duration: (mm)		City**:	
Country**:					

Prof.cat Code N°			Prof.cat Code N°			Prof.cat Code N°			Prof.cat Code N°		
Opp.	Indication	HH Action	Opp.	Indication	HH Action	Opp.	Indication	HH Action	Opp.	Indication	HH Action
1	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	1	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	1	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	1	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves
2	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	2	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	2	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	2	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves
3	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	3	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	3	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	3	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves
4	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	4	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	4	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	4	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves
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7	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	7	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	7	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	7	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves
8	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	8	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	8	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves	8	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ○ missed ○ gloves

Hand Washing Competence Checklist

NAME:

All stages must be carried out to be assessed as competent

		Tick
No wristwatches or, jewellery are worn. A plain band ring is acceptable but no stoned rings. Nails should be short, no polish or fake nails to be worn.		
Wet hand under running water before applying soap.		
Apply enough soap to cover all hand surfaces		
1 Palm to palm		
2 Right palm over left dorsum and left pam over right.		
3 Palm to palm finers interlaced		
4 Backs of fingers to opposing palms with fingers interlocked		
5 Rotational rubbing of thumbs		
6 Rotational rubbing backwards and forwards with clasped fingers		
7 Rub each wrist with opposite hand		
Rinse hands thoroughly under running water		
Turn taps off with elbows		
Dry thoroughly using paper towels		
Using foot pedal to open bin, dispose of paper towels		

Competent: YES/NO

Comments:

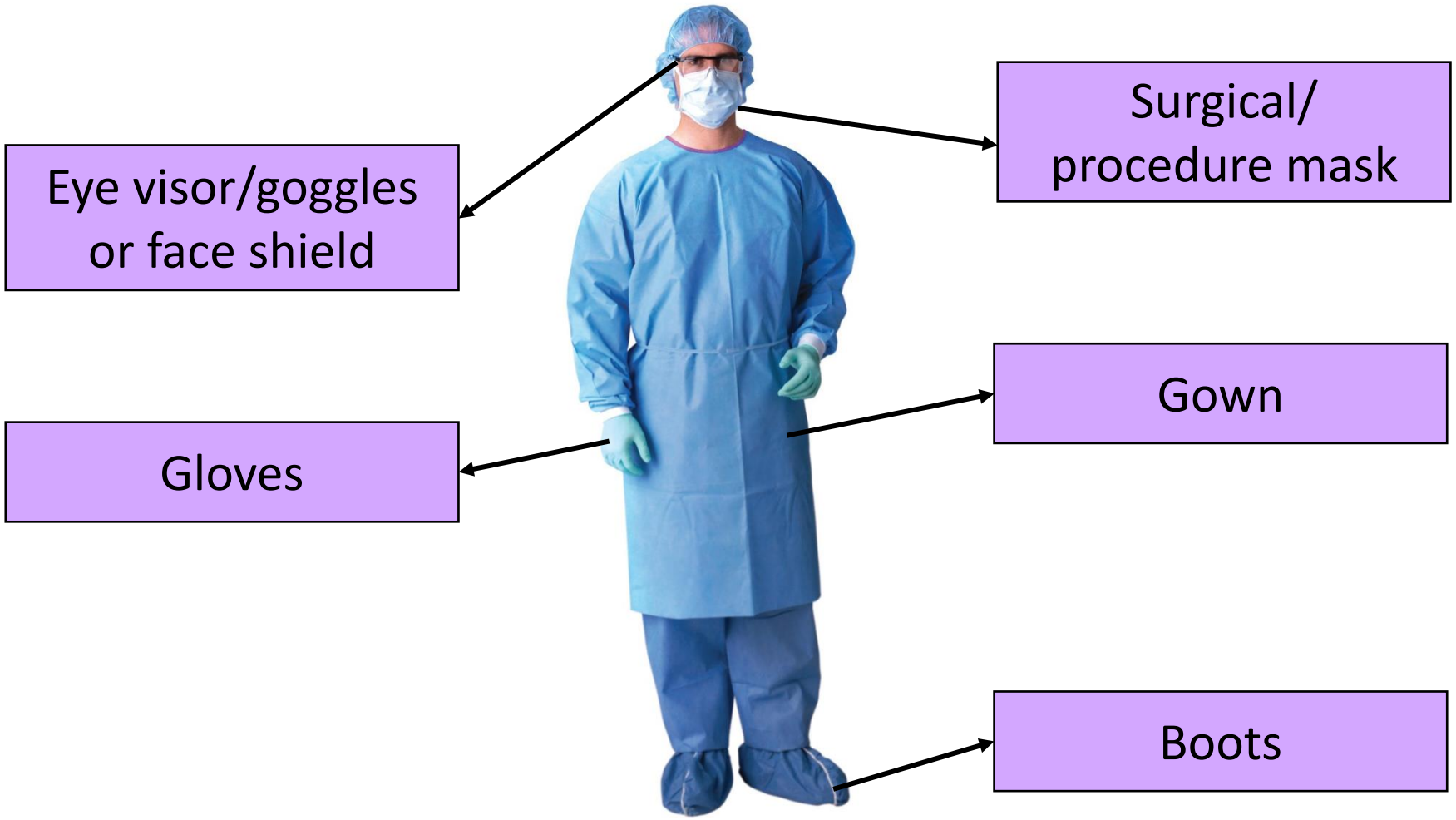
Signed: **Date:**

Print name:

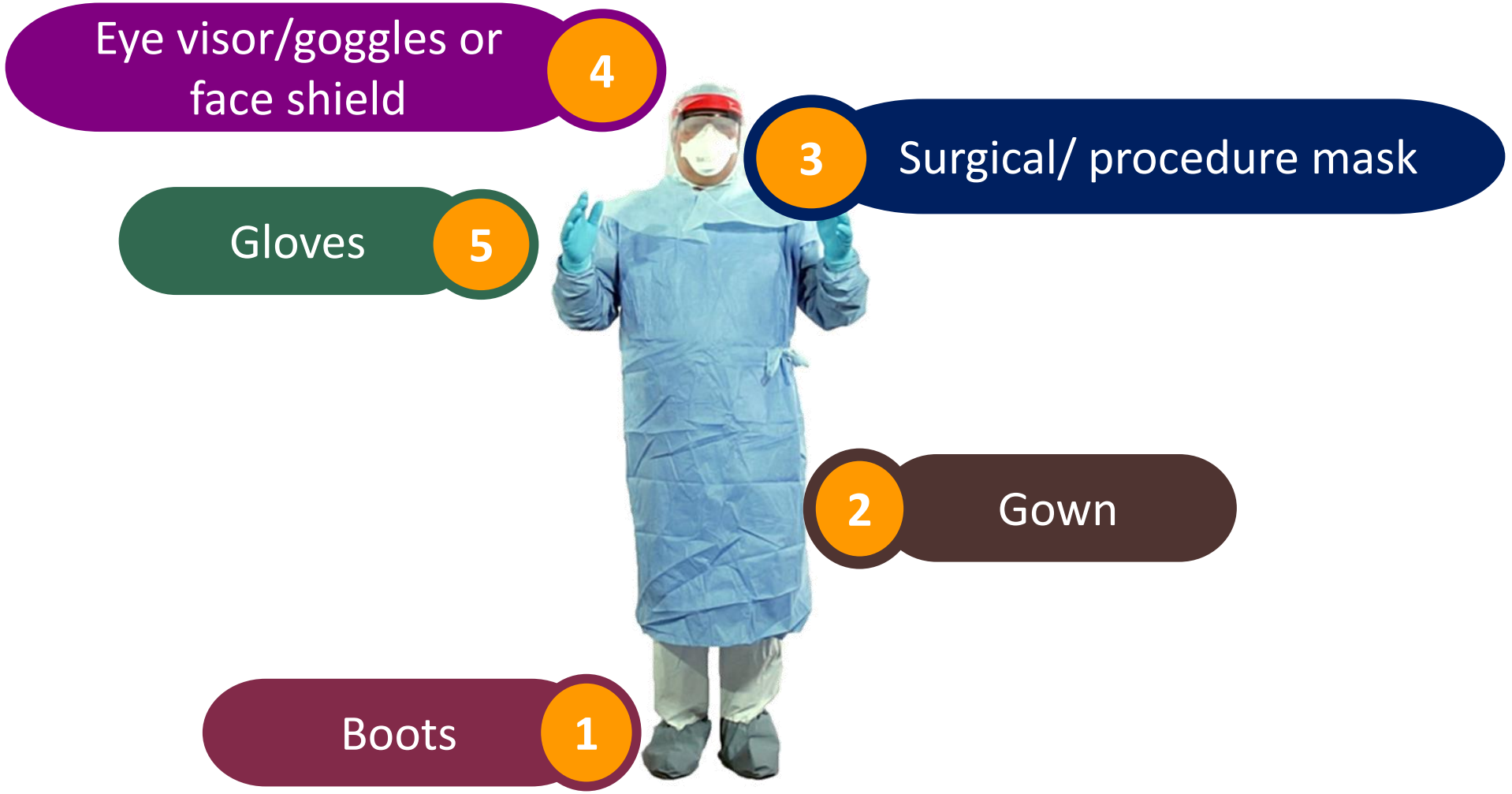
Personal Protective Equipment (PPE)

All health care professionals should wear specialised clothing or personal protective equipment (PPE) to protect themselves from exposure to blood or body fluid spills.

Types of PPE


Eye visor/goggles or face shield
Surgical/ procedure mask
Gloves
Gown
Boots

Sequence of Wearing PPE



Sequence of Removing PPE

2 Eye visor/goggles or face shield

4 Surgical/ procedure mask

1 Gloves

3 Gown

5 Boots

Prevention of Needlestick Injury

Health care professionals should be careful and prevent needle stick injury while:

- Handling needles, scalpels and other sharp instruments or devices.
- Cleaning sharp instruments.
- Disposing used needles and other sharp instruments.

Note: Avoid recapping needles. If recapping is done, one-handed technique should be used.

Pre-exposure Prophylaxis

Staff: Provide vaccination for Hepatitis B.

For new staff who are already vaccinated: Records should be available, if not titers should be checked.

Post-exposure Prophylaxis(PEP)

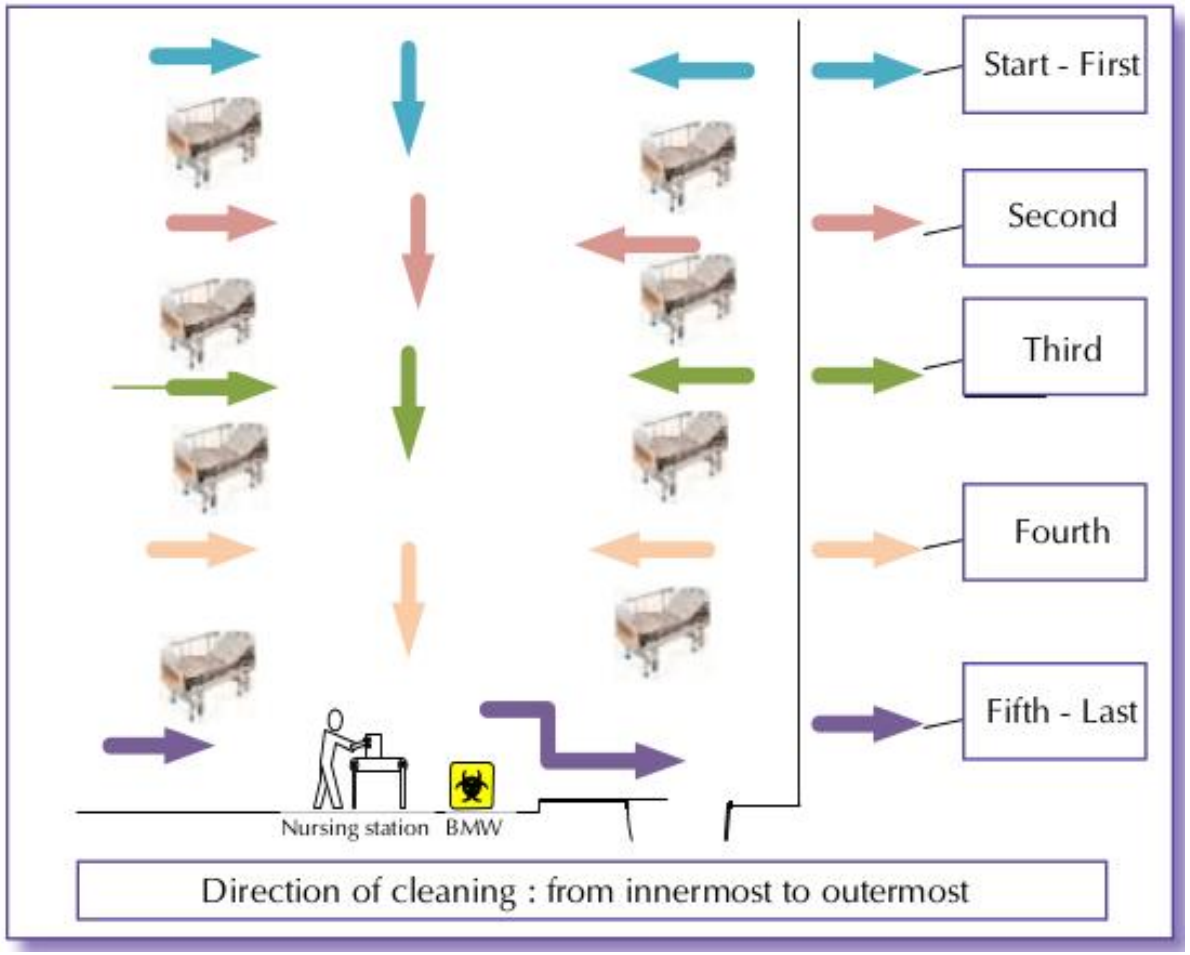
- A designated person: Administer PEP.
- Document exposure.
- Perform root cause analysis.
- Provide training on wearing PPE and safe injection practices.

Environmental Cleaning

All health care professionals should adopt adequate procedures for routine cleaning of the different areas of the hospital and frequently touched surfaces.

Method of Cleaning

Direction of Cleaning



Cleaning of OT

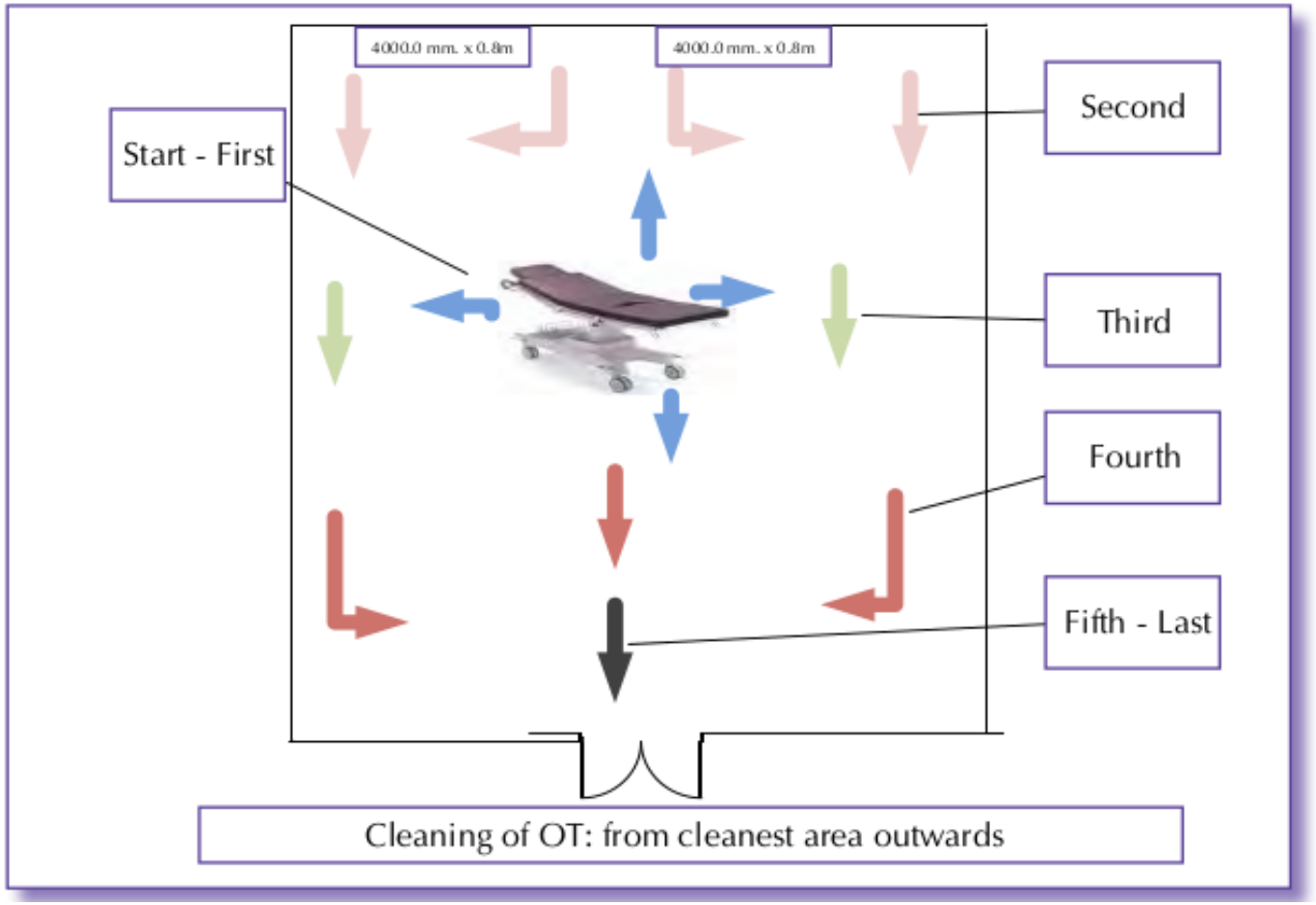
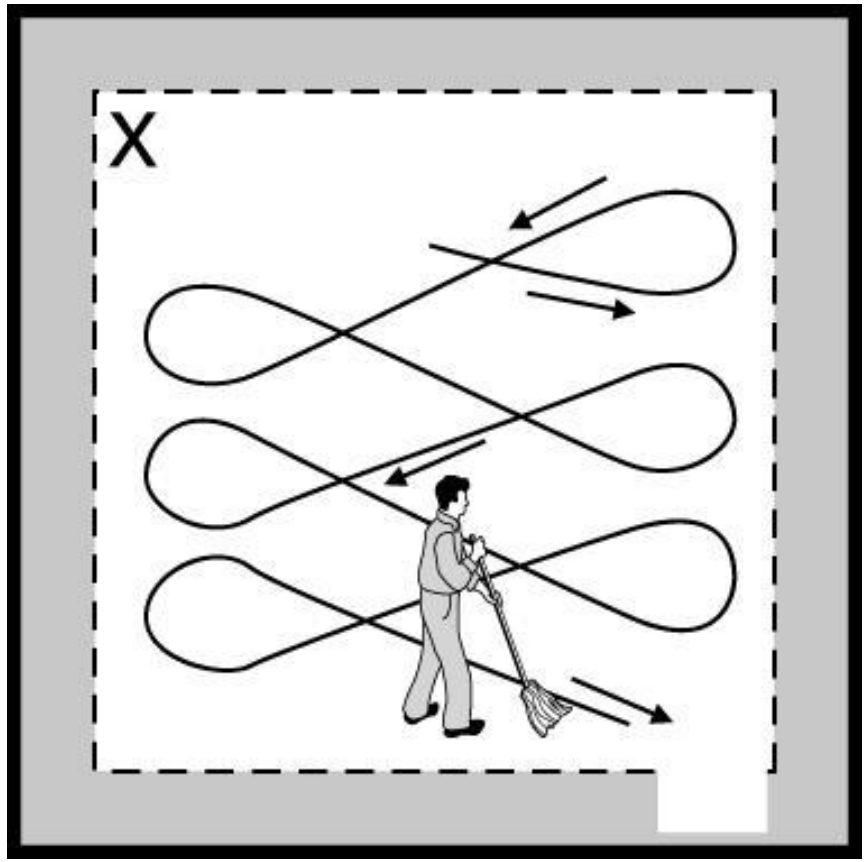


Figure of 8 Stroke Technique for Mopping



Cleaning Checklist

Work	Schedule		
	7.30 am	1.00 pm	7.30 pm
Brush the floor			
Mop the floor			
Dusting			
Toilet wash			
Wash basin cleaned			
Liquid soap refill			
Wall tiles cleaned			
Lights and fans cleaned			
Doors cleaned			
Windows cleaned			
Waste collected			
Waste bins cleaned			
Name of cleaning / Housekeeping staff			
Signature of ward nurse			
Sign of administrator			

Cleaning Patient Care Equipment

All patient care equipment should be cleaned and then based on the degree of risk involved, each equipment should be either disinfected/ sterilised before reuse.

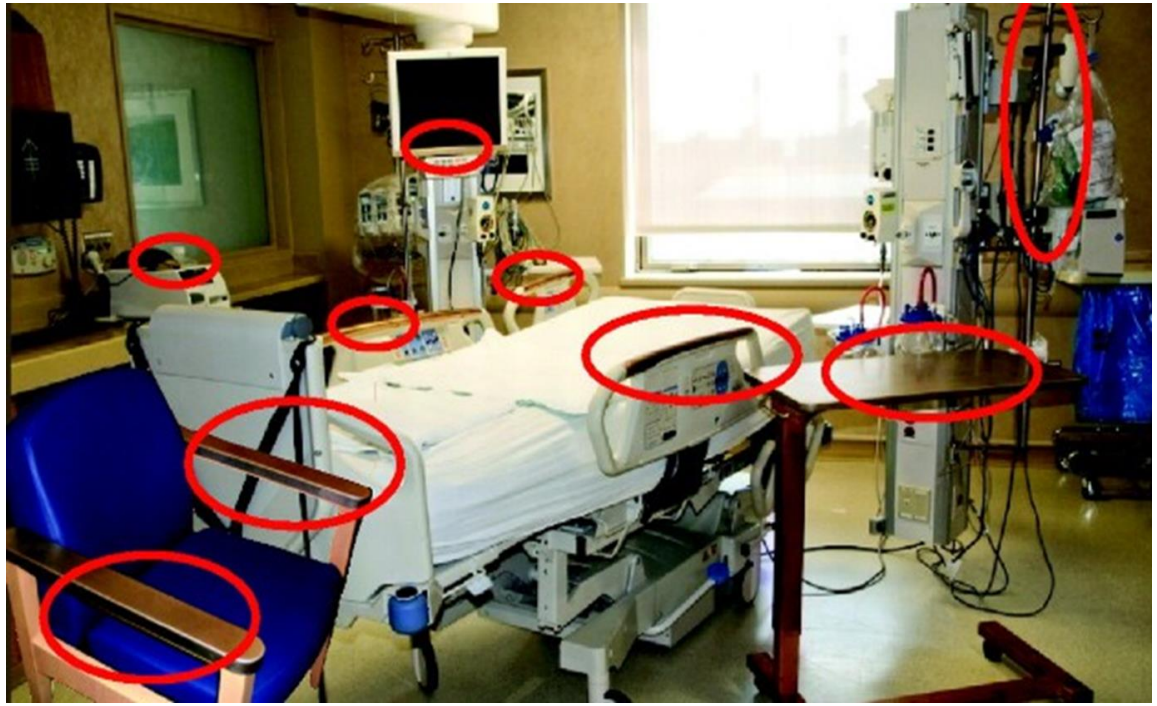
Frequency of Cleaning

Routine cleaning is done based on the following criterion:

- Type of surface:
  - High touch surface.
  - Low touch surface.
- Risk of infection associated with the area.
- Patient's vulnerability.

Cleaning High Touch Surface

High touch surfaces in a hospital are surfaces that are in frequent contact with the hands.
These surfaces should be cleaned and disinfected daily.
For example: Doorknobs, bedrails and elevator buttons.



Cleaning Low Touch Surface

Low touch surfaces in a hospital are surfaces that are in minimal hand contact.

These surfaces should be cleaned regularly(but not necessarily daily)and when a patient gets discharged.

For example: Floors and walls.

Spill Management Kit

The spill management kit should contain the following items:

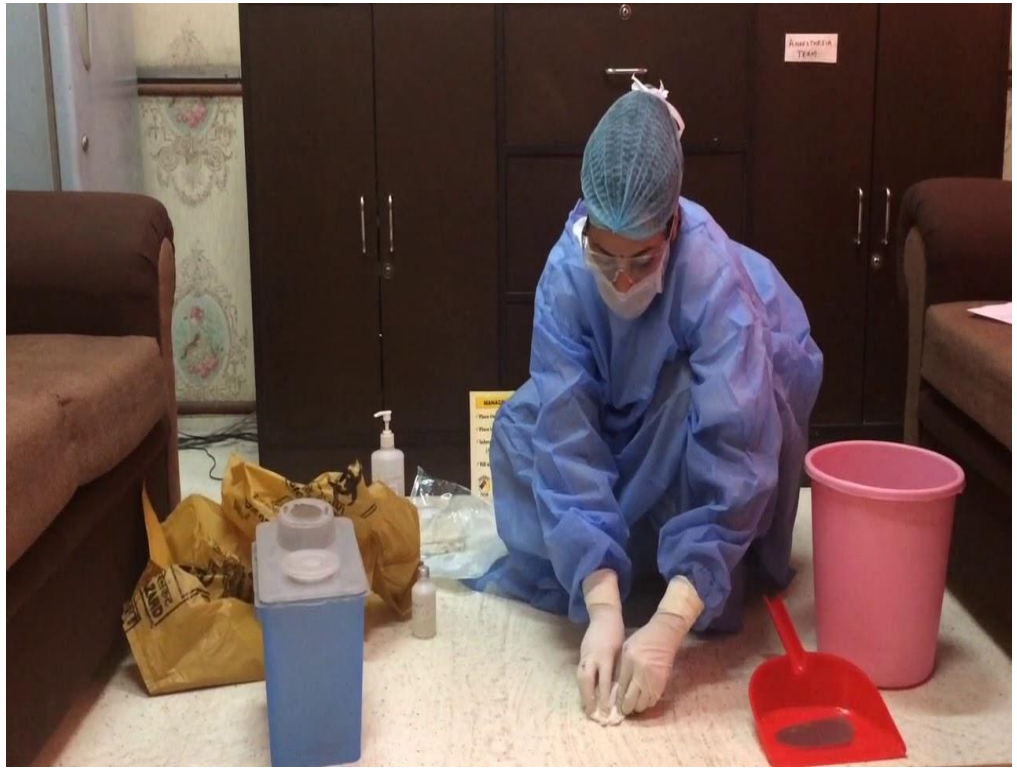
- Old newspapers.
- Yellow bio hazard bag.
- All PPE (Cap, goggles, face mask, gloves, boots).
- Chlorine tablet.
- Measuring cup.
- Tongs.
- Scoop and brush.

Handling Blood and Body Fluid Spillage

Before handling blood and body fluid spillage, a housekeeping staff should wear appropriate PPE.

Spill Management on Non-porous Surface

If the surface is nonporous, then it should be decontaminated with 1% sodium hypochlorite solution.



Handling Large Spill

The steps involved in handling large spills of concentrated infectious agents in the laboratory are:

1. The contaminated area should be confined.
2. The area should be flooded with a liquid chemical germicide before cleaning.
3. The area should be decontaminated with fresh germicidal chemical of at least intermediate-level disinfectant potency.

Safety Measures

Appropriate warning signs such as **“Caution: Wet floor”** should be placed to notify people walking in the area that the area might be slippery. The warning sign should remain on the surface until the surface is dry.

All housekeeping staff should wear appropriate PPE while performing house keeping activities.

Rodents and Pest Control

Hospital should adhere to rodents and pest control standards in both clinical and non-clinical areas of the hospital.

Hospital should ensure that appropriate pest control contract is in operation and that the designated person must be informed about sightings of rodents and/or other pests.

Disinfection

Disinfection is a process where most microbes except bacterial endospores are removed from a defined object or surface.

Based on its utility, the type of disinfectant solution, its concentration and frequency of use for different environmental areas and instruments or materials should be determined.

How to select a disinfection agent?

A disinfection agent should be selected based on the following criterion:

- Intended use and appropriateness.
- Degree of disinfection required.
- Spaulding's classification.
- Safety.
- Turn-around-time (TAT).

Note: Disinfection will be dealt in detail in one of the sessions on HIC standard 1d- Sterilisation and disinfection.

CSSD

Do's	Don'ts
▪ Clean areas. ▪ Restricted entry ▪ Unidirectional flow. ▪ Use appropriate quality indicators. ▪ Store sterilised items in clean areas.	▪ Stack instruments in the washers.

Note: Ascertain shelf life of sterilised items and maintain accordingly.

Sorting and Transporting Linen

From laundering point of view, hospital linen can be classified into following categories:

Dirty linen

Used linen without any stains.

Soiled linen

Linen soiled with blood and body fluids.

Infected linen

Linen used by a patient with a known infection nevertheless soiled or not.

Note: Linen is categorised as wet (soiled and infected) and dry linen.

Documentation

Apex manual

- Standard precautions.
- House keeping protocols.
- Cleaning, disinfection and sterilisation protocols.
- Linen and laundry management.

Registers/cleaning checklist

- Cleaning process.

CSSD registers

- Details of the sterilised items(Batch, load, name of the items, expiry date and the QC records).
- Dispatch, condemnation and QC.

Note: Supervisors should regularly check the cleaning process. Records of pest control should be maintained.

HIC 3: Bio-medical waste (BMW) management practices are followed.

HIC 3a: The hospital is authorised by prescribed authority for the management and handling of bio-medical waste.

HIC 3b: Proper segregation and collection of bio-medical waste from all patient care areas of the hospital is implemented and monitored.

HIC 3c: Bio-medical waste treatment facility is managed as per statutory provisions (if in-house) or outsourced to authorised contractor(s).

HIC 3d: Requisite fees, documents and reports are submitted to competent authorities on stipulated dates.

HIC 3e: Appropriate personal protective measures are used by all categories of staff handling bio-medical waste.

Safe Disposal of Bio-medical Waste (BMW)

- Ensure safe segregation and waste disposal.
- Waste contaminated with blood, body fluids, secretions, excretions, human tissues and laboratory waste should be considered as biomedical waste and handled in accordance with local regulations.
- Discard single use consumables properly.

Steps Involved in BMW Management

Generation

- Display posters near bins.
- Discard BMW into appropriate colour-coded bins.
- Staffs generating waste are responsible for segregating at source.

Segregation

- Staff generating waste: Segregate waste into individual bags, mark and bar code the bags.
- Infection control nurse: Monitor the process.
- Take corrective actions, if need be.

Steps Involved in BMW Management

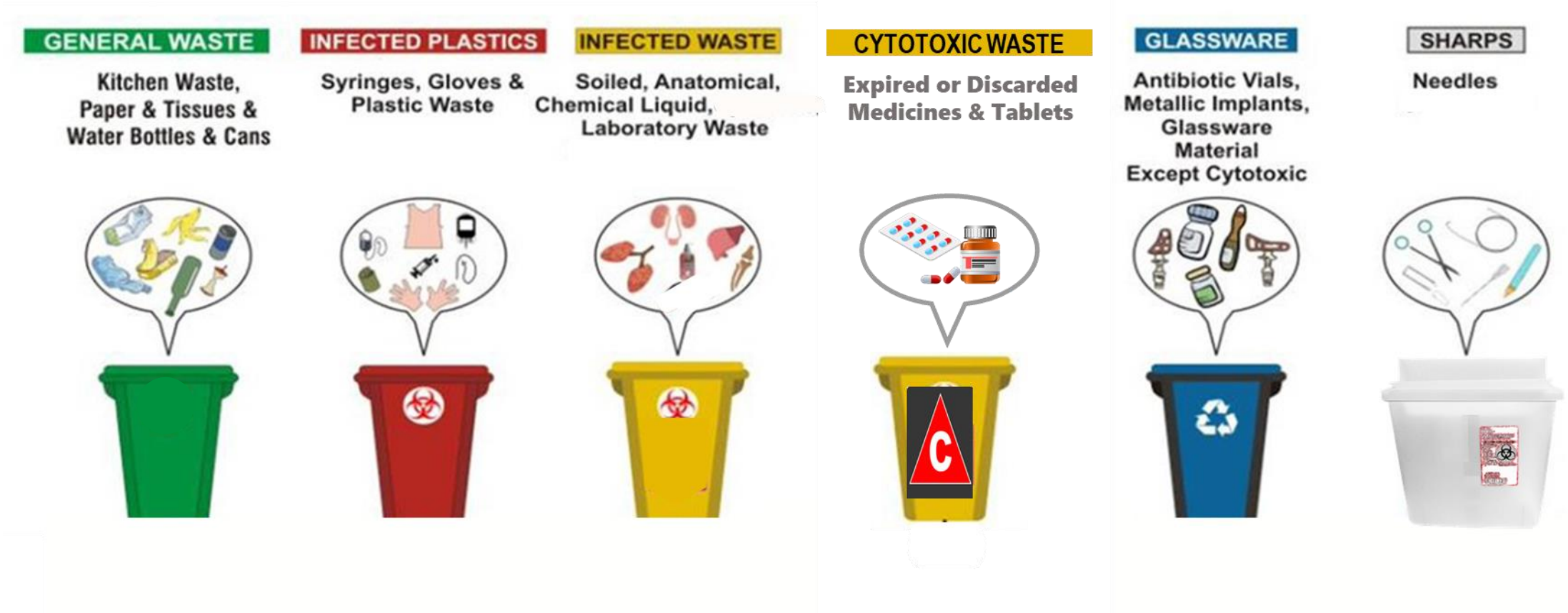
Temporary storage area

- Demarcate area for storing BMW.
- Transport BMW to storage area in a closed container.
- Ensure area is clean and protected .
- Ensure availability of hand washing facilities and trolley wash areas.

Transport

- Send waste to treatment facility within 48 hours.
- Transport in safe manner.
- Use proper vehicles.
- Weigh BMW colour wise and record measurement.
- Document time of collection and quantity of waste.

Segregation of BMW – Colour Coding (2018)



Monitoring Biomedical Waste Management Audit Form

Bio Medical Waste Management Audit Form

Name of Auditors:..... **Date:**.....

Sl No	Check	Ward / Department			
1	Whether Biomedical Waste Management (BMWM) posters are displayed?	Yes / No	Yes / No	Yes / No	Yes / No
2	Is the waste segregated at the site of generation?	Yes / No	Yes / No	Yes / No	Yes / No
	Colour coded bins as per BMW Guide line:				
3	Red bin available?	Yes / No	Yes / No	Yes / No	Yes / No
4	Whether Infectious materials such as Soiled Cotton, Gauzes, POP, etc are disposed in Red bin?	Yes / No	Yes / No	Yes / No	Yes / No
5	Yellow bin available?	Yes / No	Yes / No	Yes / No	Yes / No
6	Whether human tissues, organs, body parts, placenta, pathological and surgical waste and microbiology waste are disposed in Yellow bin?	Yes / No	Yes / No	Yes / No	Yes / No
7	Blue bin available?	Yes / No	Yes / No	Yes / No	Yes / No
8	Whether all used Plastics, Rubber, Plastic syringes, Drip set, Catheters, Rubber Gloves are disposed in Blue bin?	Yes / No	Yes / No	Yes / No	Yes / No
9	White bin available?	Yes / No	Yes / No	Yes / No	Yes / No
10	Whether empty injection vials, ampoules, glass bottles are disposed in White bin?	Yes / No	Yes / No	Yes / No	Yes / No
11	Black bin available?	Yes / No	Yes / No	Yes / No	Yes / No
12	Whether Non infectious general wastes such as paper, medicine covers, card boards, cartons, fruits & vegetables, food waste etc. are disposed in Black bin?	Yes / No	Yes / No	Yes / No	Yes / No
13	Whether Light Blue / White puncture proof container available.	Yes / No	Yes / No	Yes / No	Yes / No
14	Whether Needles & Blades are disposed in Light blue / white puncture proof container?	Yes / No	Yes / No	Yes / No	Yes / No
15	1% Sodium hypochlorite Solution is available?	Yes / No	Yes / No	Yes / No	Yes / No
16	Are the bins overfilled?	Yes / No	Yes / No	Yes / No	Yes / No
17	Are the bins emptied when it is filled up to ¾ th level?	Yes / No	Yes / No	Yes / No	Yes / No

Monitoring Biomedical Waste Management Audit Form

18	Is the waste collected is stored more than 48 hrs?	Yes / No	Yes / No	Yes / No	Yes / No
19	Is the waste transported in closed containers?	Yes / No	Yes / No	Yes / No	Yes / No
20	Are the bins cleaned with soap and disinfectant regularly?	Yes / No	Yes / No	Yes / No	Yes / No
21	Whether BMW Register is maintained?	Yes / No	Yes / No	Yes / No	Yes / No
22	Whether Mercury Spill kit is available?	Yes / No	Yes / No	Yes / No	Yes / No
23	Whether Blood spill kit is available?	Yes / No	Yes / No	Yes / No	Yes / No
24	Post exposure Prophylaxis Kit is available?	Yes / No	Yes / No	Yes / No	Yes / No
25	Are personal protective equipments (gloves, mask, cap, boots) are worn by BMW handlers?	Yes / No	Yes / No	Yes / No	Yes / No

Action to be taken:

Points to Remember: Hospital

- Obtain license for generating waste.
- Have MOU with outsourced collection agency.
- Submit Form IV (annual report) to PCB. (every June 30th)
- Initiate renewal of authorisation three months prior to expiry of the license.
- Submit accident/incident report to PCB.

Note: The outsourced collection agency and in-house waste treatment facility should have appropriate license. Once in six months, appropriate hospital personnel should conduct site visits of the outsourced agency and document their findings.

Points to Remember: Staff

- Wear PPE.
- Ensure availability of hand washing facilities.
- Be familiar with hazards that might occur during biomedical waste management.
- Be familiar with proper use of PPEs.
- Segregate BMW appropriately.

Any Questions

Thank You!