

What is BICSL?

- Basic Infection Control Skills License
- MOH Mandatory program for all healthcare workers HCWs aiming to reduce the risk of transmission of infection

Who should undergo BICSL training?

 All HCWs who have direct/indirect contact with patients

BICSL should be renewed every two years

BICSL has seven components

- Hand hygiene
- Use of PPE
- Use of Spillkit
- Needle prick injury
- Transmission based precautions
- Respirator (N95) fit test
- Use of PAPR

What are standard precautions?

Group of precautions that should be followed with all patients regardless of their diagnosis

It includes; hand hygiene, PPE, proper waste disposal, staff health related topics ...etc.

Types of hand hygiene (HH) & duration?

- Hand rub using alcohol-based gel (20-30 sec)
- Hand wash using soap & water (40-60 sec)
- Duration of rubbing should be at least 20 sec
- Surgical hand scrubbing (3-5 min)

Five moments for HH by WHO

- Before patient contact
- Before doing clean/aseptic procedures
- After patient contact
- After exposure (risk) to body fluids
- After touching patient's environment

What are PPE and its indications?

- Personal Protective Equipment
- "Specialized clothing or equipment worn by staff for protection against infectious materials".

Sequence of donning and doffing PPE?

- Donning sequence: HH → Gown → Mask → Goggles/Face shield → Gloves
- Doffing sequence: Gloves → Goggles/Face shield → Gown → Mask → HH

What are "Transmission-based precautions"?

- Also known as Isolation precautions
- It should be used, addition to Standard Precautions, for patients who may be infected or colonized with certain infectious agents for whom additional precautions are needed to prevent infection transmission.

Types of isolation precautions?

- Contact isolation precautions
- Droplet isolation precautions
- Airborne isolation precautions



What you know about contact isolation?

Used to reduce the risk of transmission of microorganisms transmitted by contact with the patient or his environment.

Diseases transmitted by contact:

- Multidrug Resistant Organisms
- Scabies
- Pediculosis

What you know about droplet isolation?

Used to reduce the risk of transmission of microorganisms transmitted by large droplets (> 5 micron in size) generated from the source person during coughing, sneezing, or talking.

Diseases transmitted by droplet:

- Influenza
- Mumps
- Rubella

What you know about airborne isolation?

Used to prevent or reduce the transmission of particles containing microorganisms < 5 micron.

Diseases transmitted through air:

- Pulmonary Tuberculosis
- Chickenpox
- Measles

Gloves indications:

Sterile: used for surgery or aseptic interventions. It's individually wrapped.

Clean:

- Disposable single use gloves (e.g. latex gloves), present in a box, not individually wrapped.
- Used only if there is risk of exposure to blood, body fluids, mucous membrane, infected skin, or contaminated equipment or surfaces
- Should not be used upon contact with intact skin.

Gown indications:

- Protect clothing from contamination with potentially infectious material.
- Used as part of standard precautions or contact isolation precautions.

Surgical mask indications:

- Protect nose & mouth from exposure to respiratory secretions &splash of blood or body fluids.
- Used as part of standard precautions or droplet isolation precautions.

N95 mask indications:

- Reduce the wearer's exposure to airborne particles. It filters out at least 95% of very small (0.3 micron) particles.
- Used as part of airborne isolation precautions.



Extended use of N95 mask:

Wearing the same N95 mask for repeated activities with several patients, without removing the respirator between different patients.

Limited re-use of N95 mask:

- Using the same N95 mask for multiple encounters with different patients but removing it after each encounter.
- The mask is used by one HCW and discarded after 5 times max or according to manufacturer' instructions.

Note!!!

EBGH uses only **extended use of N95 mask**. Staff wears N95 for four hours with surgical mask on top to be changed every after different patient encounter.

Define N95 fit testing?

A test that should be performed annually for each HCW at staff health clinic. The aim is to select the **suitable brand/size of N95 mask** for the HCW that will fulfill the mask function (95% filtration of particles)

Timing and frequency of fit testing:

- Must be repeated annually according to MOH &OSHA guidelines.
- At any time there is change of respirator brand in the organization or there is facial change for the staff (e.g. gaining weight).

What are the types of fit testing?

Qualitative fit testing

It is a pass/fail test method that uses sense of taste or smell or reaction to an irritant to detect leakage into the respirator face piece.

Quantitative fit testing

- ✓ Uses a machine to measure the actual amount of leakage into the face piece
- ✓ It produces a numerical result called a "fit factor."

Goggles & Face shield indications:

Protect eyes, nose, and mouth from expected blood/body fluids splashes

Where to dispose PPE?

All PPE should be disposed of, in regular waste (White/black bags) except the following should be placed in hazardous waste (yellow plastic bag):

- PPE heavily soiled with blood or body fluids
- PPE used for patient with airborne diseases (PTB, Chickenpox, Measles)
- Highly infectious diseases (Ebola, Smallpox, Anthrax, etc.)



What is needle stick injury (NSI)/ Blood & body fluid exposure?

Exposure to contaminated needles, scalpels, or broken glass. The sharps should penetrate the skin, with bleeding noted to be considered as exposure. Moreover splashes of blood or body fluids to mucous membranes is dealt with, in the same way as sharps injury

What are the possible causes of NSI in health care setting?

- Passing sharps between HCWs
- Transferring sharps to a different location.
- Recapping sharps.
- Decontamination of used devices.

What is the process of NSI reporting in your hospital and the first aid measures?

Check "Blood & body fluid exposure poster"

What are causes of biological spills in healthcare settings?

Blood or anybody fluid (Urine, Vomitus, Pus, Feces ...etc.)

What is process of spills management?

Check PDF "Spill Management Procedure"

What is PAPR?

- Powered Air Purifying Respirator
- It is a battery-powered blower that provides positive airflow through a high efficiency particulate air (HEPA) filters provide 99.97% particulate filtration efficiency.

Who should use PAPR?

- Employee who has beard, facial deformity that interferes with N95 fit testing, or failed fit testing.
- If the approved N95 mask is unavailable or unknown fit test.

Components of PAPR

- Hood, helmet, or headpiece
- Breathing tube
- PAPR blower/filtration unit
- Battery pack
- Belt



Only for HCWs who will use PAPR

Donning PAPR and in-use procedure:

- Connect breathing tube to turbo unit: Insert breathing tube into plastic cover and connected properly to air turbo unit until an audible click is heard.
- Put Turbo around waist
- Switch turbo ON
- Connect the breathing tube to the head
- Fit the Head hood to the head

Sequence of doffing PPE & PAPR

- Inside the room clean PAPR (as mentioned before)
- Remove gloves and gown
- Hand hygiene
- Exit room & re-glove
- Tilt the head slightly forward, remove the PAPR hood.
- Using alcohol wipe, clean the PAPR beginning with the inside of the Hood.
- Discard gloves & hand hygiene.

Doffing the PAPR:

- Remove PAPR outside the room.
- Remove the hood by bending over slightly, grasp the back of the head hood with both hands, and remove it off gently.

Sequence of donning PPE& PAPR:

- Preparation of PAPR
- Hand hygiene, gloves, clean PAPR with wipes, discard gloves & hand hygiene
- Putting on PAPR
- Gown
- Gloves

PAPR Cleaning and disinfection:

- Disconnect all component parts of PAPR.
- Blower unit AND all its component parts (blower/filtration unit, battery, breathing tube, and hood/helmet) must be cleaned and disinfected.
- Cleaning of all parts with a clean soft cloth dampened with warm water and mild detergent. Then disinfection with either 0.5 % chlorine solution or Alcohol 70 % after each use.
- Disposal of single use hood or it can be dedicated for one user with disinfection after each use.