

# PERSONAL PROTECTIVE EQUIPMENT (PPE)



GDIPC

الإدارة العامة لمكافحة عدوى المنشآت الصحية

General Directorate of Infection Prevention and Control in Healthcare Facilities

## Personal Protective Equipment (PPE):

- ❑ Personal Protective Equipment (PPE) is used to create a barrier between HCWs and patients, body substances, or surfaces.
- ❑ Appropriate PPE (gloves/gowns/plastic aprons/eye protection) should be used to prevent skin, eyes, mucous membrane, airways and clothing exposure.

## Personal Protective Equipment (PPE):

- ❑ Components of PPE can be used alone or in combination based on the degree and risk of exposure in order to achieve desired level of protection

## Hand Hygiene:

### Element : B-2

- **Sub- Element (4)**
- **Activities for auditing:**
  - ✓ **(D)** documentation
  - ✓ **(SI)** staff interview
  - ✓ **(O)** observation
- **Score (0-1-2)**

## Sub- Element (B-2.1)

**There are written infection prevention & Control policies and procedures for PPE including types, indications, donning, doffing, disposal and safety. (D)**

## Review:

- Policies & Procedures for Personal Protective Equipment use which should be comprehensive incorporating major domains as follows:
  - Gloves:**
    - ✓ Types of gloves
    - ✓ Glove material
  - Gowns / Plastic Aprons:**
    - ✓ Types of gowns

## Review:

- Mask & Respirators (N - 95)**
- ✓ Types of Masks
- Protective Eye / Face wear**

## Review:

### Indication of PPE use:

- ✓ PPE is indicated to be used based on risk assessment as part of standard precautions & Transmission based precautions.
- ✓ (All isolation precautions must be used together with Standard Precautions)
- ✓ **Contact**
- ✓ **Droplet and**
- ✓ **Airborne**

## Review:

### Sequence of donning and doffing of PPEs:

- ✓ (With eyewear, e.g., goggles or face shield) before entering and leaving a patient's room:
- ✓ **Donning**
- ✓ **Doffing**

## Review:

### Disposal of PPEs:

- ✓ Single-use PPE disposal
- ✓ Reusable PPE

### Safety

- ✓ PPE should be used with extreme safety in order to avoid risk of acquiring infection

## Review:

### Other domains of Policies & procedures:

### P/P for PPE use should be:

- ✓ **Fully applicable:** all elements of the policy can be applied and comply with the hospital's scope of services
- ✓ **Based on scientific references approved by MOH** (GCC, CDC, WHO & APIC)
- ✓ **Signed from authorized personnel** (i.e., owner of the policy / hospital director or Medical director / concerned department)
- ✓ **Approved by IC committee**
- ✓ **Valid** (updated within 2 - 3 years and when indicated).

## Sub- Element (B-2.2)

**PPE is available in all patients care areas in adequate amounts and proper qualities. (D, O, SI)**

## Review:

- PPE checklist for each unit / isolation room / wards and others patient care areas
- PPE checklist should include available quantity of each type of PPE with daily monitoring of consumption.

## Review:

CDC PPE Burn Rate Calculator designed for COVID 19 can be used as an example. This excel spreadsheet will help healthcare facilities to plan and optimize the use of personal protective equipment (PPE) for response to coronavirus disease 2019 (COVID – 19)

<https://www.cdc.gov/coronavirus/2019-nCoV/hcp/infection-control.html#VID-19>

## Observe:

- Availability of various types of PPE in all patient care areas
- Assess the quality

**(Quality can be assessed while HCWs are donning PPE. Moreover, if PPE is NOT donned according to the required size of healthcare worker, would pose risk of acquiring infection. )**

## Interview:

- Head nurse in all units about the availability of all types & sizes of PPE.
- Ask if she is satisfied with the quality of PPE provided.
- Ask about the process /mechanism of ensuring PPE availability at all times in all circumstances.

## Sub- Element (B-2.3)

**PPE is used according to the standard and/or transmission-based precautions through regular training on proper usage, and safety measures by infection Prevention & control practitioners. (O, SI)**

## Observe:

- ❑ In different patient care if the health care workers are adhering with PPE policy. HCWs should use PPE judiciously based on specific indication & risk assessment. There should be no overuse or misuse of PPE.

## Observe:

### Example:

### During visit in various hospital units observe staff practice:

- ✓ If patient is under contact isolation which PPE they are using, where they are doffing PPE & assess the sequence & technique while doffing PPE.
- ✓ You may observe staff moving with PPE (Mask & gowns) & using computers with gloved hands.
- ✓ Open waste receptacles at random in isolation rooms to check if they are doffing PPE at appropriate places. (You may observe N - 95 mask inside isolation room waste receptacle)

## Interview:

- ❑ Staff in different categories (Doctors, nurses, housekeeping, respiratory therapist etc.) about the required PPE in different situations.
- ❑ Ask about PPE used for contact, droplet, & airborne precautions.
- ❑ Ask about the training received from IC department on PPE use.

Ask them to simulate donning & doffing by giving different scenario and assess PPE selection, technique & steps of donning & doffing etc.

## Observe:

### Example:

- During visit in various hospital units observe staff practice:
  - ✓ If patient is under contact isolation which PPE they are using, where they are doffing PPE & assess the sequence & technique while doffing PPE.
  - ✓ You may observe staff moving with PPE (Mask & gowns) & using computers with gloved hands.
  - ✓ Open waste receptacles at random in isolation rooms to check if they are doffing PPE at appropriate places. (You may observe N - 95 mask inside isolation room waste receptacle)

## Sub- Element (B-2.3)

**Respirator fit testing is conducted for all HCWs based on the national regulations needed' frequency or when required. (D, SI)**

- ❑ **Respirator fit Test:** The use of a protocol to evaluate the fit of a respirator qualitatively or quantitatively on an individual
- ❑ **Quantitative Fit Test:** A test method uses an instrument to assess the amount of leakage into the respirator to assess the adequacy of respirator fit.
- ❑ **Qualitative Fit Test:** A pass/fail test method relies on the subject's sensory response to detect a challenge agent and assess respirator fit adequacy

## Frequency of Fit Testing as per National Regulations:

- ❑ Fit testing must be performed before using a respirator and must be repeated every **year**.
- ❑ Fit testing must be conducted when there are **changes of respirator** or a **facial change** , **weight loss**, **cosmetic surgery**, **facial scarring**,

## Review:

- ❑ Policies & procedures for Respirator fit test
- ❑ Check database containing the fit test data for all Health Care Workers *specifying name , designation, department / Area of work, Type of Fit Test, Date of Fit test, Type, Model , size of N -95 Respirator for whom he or she was fit tested etc.*

## Review:

- ❑ For those HCWs with beards or unfit for N -95 respirators due any medical reason must be mentioned clearly in data base. (*FIT test failed – eligible for PAPR ONLY*).
- ❑ Check for total number of health care workers in the hospitals and calculate Percentage % of fit test coverage.
- ❑ Check sample of fit test ID provided to the staff to ensure it contains all required information.

## Interview:

- Infection Prevention and control team members about the frequency of N-95 fit test.
- Ask about other criteria for repeating fit test as per National Regulations.
- Ask about the type of fit test conducted and if they are aware regarding correct method of conducting fit test.
- visit of different clinical areas