

الإدارة العامة لمكافحة عدوى المنشآت الصحية
General Directorate of
Infection Prevention and Control
(GDIPC)

Guidance for the Proper Selection and Use of
Personal Protective Equipment (PPE) in
Healthcare Settings

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Guidance for the Proper Selection and Use of Personal Protective

Equipment (PPE) in Healthcare Settings

Introduction:

Personal protective equipment, or PPE, as defined by the Occupational Safety and Health Administration (OSHA), is “specialized clothing or equipment, worn by an employee for protection against infectious materials.”

Purpose of this guide:

1. to improve personnel safety in the healthcare environment through appropriate use of PPE.
2. to provide information on the selection and use of PPE in healthcare settings.
3. To prevent abuse of PPE and subsequently save the resources.

Factors Influencing PPE Selection

A. The type of anticipated exposure.

This is determined by the type of anticipated exposure, such as touch, splashes or sprays, or large volumes of blood or body fluids that might penetrate the clothing. PPE selection, in particular the combination of PPE, also is determined by the category of isolation precautions a patient is on.

B. The durability and appropriateness of the PPE for the task.

For example, whether a gown or apron is selected for PPE, or, if a gown is selected, whether it needs to be fluid resistant, fluid proof, or neither.

Proper PPE selection and use measures:

Based on the isolation precaution needed for each patient:

Airborne precautions:

PPE needed (N95 high efficacy respirator or PAPR, isolation gown, gloves, goggles or face shield)

Indications of airborne precautions:

- Care of patient suspected or confirmed diseased with airborne transmitted disease e.g. Measles (rubeola), open pulmonary TB, draining extra pulmonary TB, Herpes zoster (varicella-zoster)
- AGPs air sole generating procedures, are procedures that stimulate coughing and promote the generation of aerosols e.g. positive pressure ventilation (BiPAP and CPAP), endotracheal intubation, airway suction, high frequency oscillatory ventilation, tracheostomy, chest physiotherapy, nebulizer treatment, sputum induction, nasopharyngeal swapping and bronchoscopy.

Droplet precautions:

PPE needed (surgical mask, isolation gown, gloves, goggles or face shield)

Indications of airborne precautions:

- Care of patient suspected or confirmed diseased with droplet transmitted disease e.g. Influenza, Meningitis Haemophilus Influenza type b, Meningitis Neisseria meningitides, Mumps, Pertussis, Plague, Rubella (German measles), Viral hemorrhagic fevers due to Lassa, Ebola, MERS Cov, COVID-

Contact precautions:

PPE needed (isolation gown, gloves)

Indications of contact precautions:

Care of patient suspected or confirmed diseased with contact transmitted disease e.g. MRSA, VRE, diarrheal illnesses, scabies

NOTE that some infections need to combine more than one type of precautions e.g. COVID-19 is droplet and Contact precautions

Important notes:

1. High efficacy respirator (N95) never used with stable MERS CoV, COVID-19 cases except during aerosol generating procedures (ASPs).
2. It is not allowed for hospital staff to wear High efficacy respirator out of isolation room or dealing with patient under airborne isolation precautions and never be used in some departments e.g. CSSD, kitchen, medical files, outpatient clinics, reception.
3. All Bearded HCWs are not allowed to use High efficacy respirator (N95) and they have to wear powered air purifying respirator (PAPR) when needed.

4. Remove gloves after contact with a patient and/or the surrounding environment (including medical equipment) using proper technique to prevent hand contamination.
5. Do not wear the same pair of gloves for the care of more than one patient.
6. Do not wash gloves for the purpose of reuse since this practice has been associated with transmission of pathogens.
7. Change gloves during patient care if the hands will move from a contaminated body-site (e.g., perineal area) to a clean body-site.
8. Wear a gown to protect skin and prevent soiling or contamination of clothing during procedures and patient-care activities when contact with blood, body fluids, secretions, or excretions is anticipated or while caring patients under isolation precautions.
9. Routine donning of gowns upon entrance into a high risk unit (e.g., ICU, PICU, NICU, CCU unit) is not indicated.

10. All personal protective equipment used only for a certain task with certain patient and should be removed and discarded before leaving the patient care area or patient room except high efficacy respirator (N95) must be removed outside the patient room.
11. In visual triage for respiratory symptoms the surgical mask not allowed to be worn by the triage nurse except when there is a patient with respiratory symptoms and scored 4 or more for suspected MERS CoV or scored 6 or more for COVID-19 patients as a part of patient training to wear the surgical mask.
12. The surgical mask never to be hanged around the neck.
13. Surgical mask never be used as face cover by female HCWs.
14. Remember, PPE is available to protect you from exposure to infectious agents during healthcare.
15. It is important that you know what type of PPE is necessary for the procedures you perform AND that you use it correctly.

16. High efficacy respirator (N95) not allowed to be used by non HCWs
and also outside the healthcare settings.

References:

1. Type and Duration of Precautions Recommended for Selected Infections and Conditions, Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007) updated 2018
<https://www.cdc.gov/infectioncontrol/guidelines/isolation/appendix/type-duration-precautions.html>
2. Guidance for the Selection and Use of Personal Protective Equipment (PPE) in Healthcare Settings
<https://www.cdc.gov/hai/pdfs/ppe/ppeslides6-29-04.pdf>
3. OSHA Safety and Health Program Management Guidelines
[OSHA Safety and Health Program Management Guidelines](#)

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