

“I’ve got nothing to wear” Personal Protective Equipment P.P.E.



SAFE PATIENT CARE COURSE 2017

Learning outcomes



- What is PPE?
- Why wear PPE?
- Types of PPE
- Clinical examples Q&A
- Discuss sequence for donning and doffing PPE for Influenza
- Demonstrate how to safely put on (don) and remove (doff) PPE for contact precautions and airborne precautions

Personal Protective Equipment



- PPE stands for personal protective equipment. PPE means any device or appliance designed to be worn or held by an individual for protection against one or more health and safety hazards (Health & Safety Authority)
- P.P.E.is recommended when contact with blood and body fluids, (except sweat) is anticipated

PPE & Standard precautions



- P.P.E is part of Standard Precautions
- Standard precautions are a set of practices which when used by HCWs prevent the spread of Healthcare associated infections or (HCAI) to HCW and patients

PPE required



- PPE required is based on the nature of the task ie.
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- 1. Risk of exposure to blood and body fluids
- 2. The risk of contamination

Transmission based precautions



- Used in addition to standard precautions as required when extra protection is needed
- Contact: Norovirus/Clostridium Difficile
- Droplet: Influenza/Meningitis/
- Airborne :Pulmonary Tuberculosis TB, Chicken pox

Why wear P.P.E.



- Protect residents from infection
- Protect the HCW from exposure to blood and body fluids
- P.P.E. **must** be provided by the employer
- HCW **must** wear PPE at the
 - 1. Correct time
 - 2. For Correct duration

Types of PPE



- Gloves/ Protect hands
- Gowns aprons /skin and clothing
- Masks and Respirators/ nose and mouth
- Respirators/ airborne infections
- Face shields/ mouth nose eyes

Aprons



- Single use only
- Used for potential contact with blood or body fluids
- For direct contact with infectious resident or their environment
- Dispose of used aprons in clear / black bag unless soiled with blood or body fluids(dispose of into healthcare risk waste)and perform hand hygiene

Gowns



- Used if potential for spraying or splattering of blood or body fluids is anticipated
- Single use disposable
- Secure neck and waist
- Fluid resistant
- Must be correctly applied with opening to back



Surgical and Respirator Masks



- Protects HCW from aerosols
- FFP filtered face protection
- FFP1 surgical/ procedural masks
- FFP2 use for routine care with confirmed pulmonary/laryngeal Tuberculosis residents.
- FFP3 masks use for patients with confirmed TB when carrying out aerosol generating procedures and routinely with MDR-TB patients

Eye and face protection



- Position goggles over eyes and secure to head using the ear pieces or headband
- Position face shield over face and secure on brow with headband.
- Adjust to fit correctly
- Glasses are not PPE!

Gloves when, and why



- Gloves should be worn During patient activities that involve exposure to blood and all other body fluids, (including contact with mucous membranes and non-intact skin)
- Change between patient
- During contact precautions
- During outbreak situations
- NB. Gloves do not provide complete protection against hand contamination WHO (2009)

Glove types



- Types of gloves Latex, vinyl, rubber and nitrile
- Latex/Nitrile gloves used for healthcare delivery (powdered polythene or vinyl gloves are not to be used for healthcare)
- Powdered gloves are no longer recommended for use HSE (2011) and HSA (2016).
- Must conform to E.U. Standards
- Don't reuse, rewash gloves and dispose of if torn

Inappropriate Glove Use



- Waste of resources,
- Can increase cross–transmission of infection
- Missed hand hygiene opportunities not using the 5 moments of hand hygiene (WHO 2009).
- Moment 3 decontaminate hands before applying and after removal of gloves
- Refer to Glove Pyramid for indications for wearing gloves and times when it is not indicated to wear gloves

**STERILE
GLOVES**
Indicated
for
aseptic procedures.

**CLEAN EXAMINATION GLOVES
INDICATED
IN CLINICAL SITUATIONS**

Where there is
Potential for touching blood, body fluids,
secretions,
excretions and items visibly soiled by
body fluids

DIRECT RESIDENT EXPOSURE: contact with blood;
Mucous membranes and non-intact skin;
IV insertion and removal;
taking blood; discontinuation of venous line;
glucometer usage; changing/emptying urinary catheter bags;
suctioning non-closed systems of endotracheal tubes.

INDIRECT RESIDENT EXPOSURE: emptying emesis basins;
handling waste; handling soiled equipment;
handling soiled linen; cleaning up spills of body fluids.

GLOVES NOT INDICATED (except for CONTACT precautions)
Where there is no potential for exposure to blood or body fluids, or contaminated environment

DIRECT RESIDENT EXPOSURE: taking blood pressure, temperature and pulse; performing SC or IM injections;
bathing and dressing the patient; transporting patient; caring for eyes and ears (without secretions);
any vascular line manipulation in absence of blood leakage.

INDIRECT RESIDENT EXPOSURE: using the telephone; writing on the patient chart; giving oral medication; distributing or
collecting patient meal trays; removing and replacing linen on patient bed; placing non-invasive ventilation equipment
and oxygen cannula; moving patient furniture

Personal Protective Equipment (PPE)

Adapted for Influenza



Correct sequence for putting on and removing PPE to prevent contamination of the face, mucous membranes and clothing

Putting on PPE

1. Decontaminate hands
2. Put on disposable apron/gown
3. Put on surgical mask or FFP2/3 respirator* as indicated

For FFP2 or FFP3 respirators:

Fit Check

- A. Place mask over nose, mouth and chin
- B. Fit flexible nose piece over nose bridge
- C. Secure on head with elastic
- D. Adjust to fit
- E. Inhale – mask should collapse
- F. Exhale – check for leakage around face



4. Put on goggles if required - (If goggles fog up, the respirator is not fitted correctly, adjust and repeat fit check)
5. Put on gloves

Removing PPE

In patient's room

1. Remove gloves (avoid touching the outside of the gloves)
2. Decontaminate hands
3. Remove goggles
4. Remove gown or apron (avoid touching the front of the gown/apron)



In ante room or directly outside patient's room. Ensure door is closed

5. Remove mask/respirator by breaking the ties. If ties are elastic grasp and lift ties from behind your head and pull off mask/respirator away from your face. Avoid touching the front of the mask/respirator & use ties to discard



6. Discard mask/respirator (& gloves/aprons/gowns/goggles contaminated with blood or body fluids) as healthcare risk waste
7. Decontaminate your hands

* An FFP2/3 respirator is the same as an FFP2/3 mask

Sequence of donning and doffing P.P.E. For influenza(HPSC)2013



DONNING PPE

- Decontaminate hands
- Put on gown/apron
- Put on surgical mask, FFP2, FFP3
- Put on goggles
- Put on gloves

DOFFING PPE

- Remove gloves
- Decontaminate hands
- Remove goggles
- Remove aprons
- Remove mask
- Discard PPE
- Decontaminate hands

How to apply a respirator mask



- Place over face
- Tie straps behind head
- Breathe in mask should collapse
- Breath out
- Should fit correctly to work effectively



Removing P.P.E.



- Remove gloves avoid touching the outside of the glove
- Decontaminate hands
- Remove goggles
- Remove gown or apron (avoid touching front)
- Remove mask by breaking ties
- Discard all P.P.E. Contaminated with blood and body fluids as healthcare risk waste

PPE Do's and Dont's



- Don't resist urge to touch face
- Limit items and surfaces touched
- Change gloves if torn
- Remember to try and avoid contamination

P.P.E.



- Should be worn on a single use episode of care and discarded after use
- Don or put on P.P.E.as close as possible to and remove before leaving the patient area
- Perform hand hygiene as per 5 Moments of Hand Hygiene

Clinical examples Q&A



- Giving a bedbath
- Suctioning oral secretions
- Transporting a resident in a wheelchair
- Responding to an emergency where blood is spurting
- Venepuncture
- Cleaning a resident soiled with diarrhoea
- Taking vital signs
- Empty or changing a catheter bag

Answers



- Giving a bedbath **none**
- Suctioning oral secretions **gloves mask /gown**
- Transporting a resident in a wheelchair **none**
- Responding to an emergency where blood is spurting
gloves **fluid resistant gown mask or faceshield & Gloves**
- Venepuncture **gloves**
- Cleaning a resident soiled with diarrhoea **gloves+- apron**
- Taking vital signs **none**
- Emptying or changing a catheter bag **gloves and aprons**

Donning & Doffing



- Donning and doffing demonstration of PPE
- For contact precautions
- For airborne precautions

• Questions