

Use of Personal Protective Equipment (PPE)

Types of PPE

- Disposable surgical cap
- Disposable latex gloves (always use appropriate size)
- Clean Work Uniform/Scrubs and shoes
- Disposable surgical masks
- Disposable plastic apron
- Disposable medical protective gown/Impermeable coverall
- Disposable shoe covers
- Medical protective masks (N95)
- Goggles/face shields
- Full face respirator protective devices
- Powered air purifying respirators

When to wear the PPE

| Level | Area of Care | Which PPE |
|--|---|--|
| Level 1 (COVID-19 status Unknown or Negative) | <ul style="list-style-type: none"> • Screening area • Pre-examination Triage • General Outpatient unit • Labor ward and NBU screening area | <ul style="list-style-type: none"> • Disposable surgical masks • Disposable latex gloves • Disposable surgical cap • Clean Work Uniform/Scrubs • Disposable plastic apron |
| Level 2 (COVID-19 status suspect or positive) | <ul style="list-style-type: none"> • Fever isolation area • Isolation ward including ICU • Non respiratory specimen examination area • Imaging examination • Cleaning of instruments | <ul style="list-style-type: none"> • Disposable N95 mask • Disposable latex gloves • Disposable surgical cap • Clean Work Uniform/Scrubs • Disposable plastic apron • Disposable Impermeable coverall • Goggles/face shield |
| Level 3 (COVID-19 status positive) | <ul style="list-style-type: none"> • When staff is testing for COVID-19 • When performing procedures that may splash respiratory secretions/body fluids e.g. intubation, tracheostomy, endoscopy, surgery, autopsy. | <ul style="list-style-type: none"> • Disposable N95 mask • Disposable latex gloves • Disposable surgical cap • Clean Work Uniform/Scrubs • Disposable plastic apron • Disposable Impermeable coverall (medical protective uniform/gown) • Goggles/face shield • Full face respirator protective devices • Powered air purifying respirators |

- All staff at the healthcare facilities must wear medical surgical masks
- All staff working in the emergency department, outpatient department of infectious diseases, outpatient department of respiratory care, department of stomatology or endoscopic examination room (such as gastrointestinal endoscopy, bronchofibroscope, laryngoscopy, etc.) must upgrade their surgical masks to medical protective masks {N95} based on Level I protection;
- Staff must wear a protective face screen based on Level II protection while collecting respiratory specimens from suspected/confirmed patients.

How to Wear a Surgical Face Mask

- Who should wear a surgical face mask**
 1. All health workers and care takers in all levels of protection - at high risk of infection due to close contact with COVID-19 patients
 2. Individuals sick with fever and cough – to protect those around them through droplets when they cough or sneeze
- Steps to wear a surgical mask**
 1. Wash your hands with soap and running water or sanitize with a 70% alcohol-based hand rub (ABHR) before touching the mask
 2. Inspect the mask for holes and tears
 3. Identify the top of the mask by locating the end with the metal band
 4. Identify the side of the mask to be placed inside, usually the white part of the mask
 5. Fit the mask on your face with the metal band at the top and the white part next to your nose and mouth
 6. Pinch the metal/stiff band so it moulds to the shape of your nose
 7. Secure the straps over your ears or tie the strands at the back of your head depending on which mask you have
 8. Adjust the mask to cover your mouth and chin and make sure there are no gaps between your face and the mask
 9. Do not touch the front of the mask while using it to avoid contaminating your hands. If you accidentally touch it, wash your hands with soap and running water or sanitize with 70% ABHR
 10. Relax and breath normally, you will get used to feeling the mask on your face. Do not expose your nose to breath
 11. Replace the mask when it gets too damp or after 8 hours of use
- Steps to remove a surgical mask**
 1. Wash your hands with soap and water or sanitize with 70% ABHR
 2. Remove the elastic strands over your ears or the strands over your head without touching the front of the mask
 3. Keep the mask away from your face. Discard immediately in a closed bin. Never reuse a used surgical mask
 4. Wash your hands with soap and water or sanitize with 70% ABHR

How to Wear an N95 Respirator Mask

- Usually worn in level 2 and 3 protection after wearing gloves
- Steps to wear respirator include;**
 1. Hold the respirator in the palm of the gloved hand with the straps facing the floor
 2. Place the respirator on your face covering the nose and mouth
 3. Pull the bottom strap up and over your head and put it behind the head and below your ears
 4. Pull the top strap and over your head to the crown of your head
 5. Mould the nose piece of the respirator over the bridge of your nose so as to obtain a tight seal.
 6. Perform a seal check by making sure the respirator is well fitted to the skin on your face and covering fully the nose and mouth. Exhale heavily, if air leaks out, ensure correct position and tight seal.
 7. Follow manufacturer's instructions
- Steps to remove the respirator;**
 1. Bend forward slightly
 2. Pull bottom strap over your head
 3. Maintain the hold on the first strap and use another hand to pull the top strap over the head
 4. Do not touch the front surface of the mask
 5. Place in a zip lock bag for cleaning and reuse or discard if damp
 6. Follow manufacturer's instructions

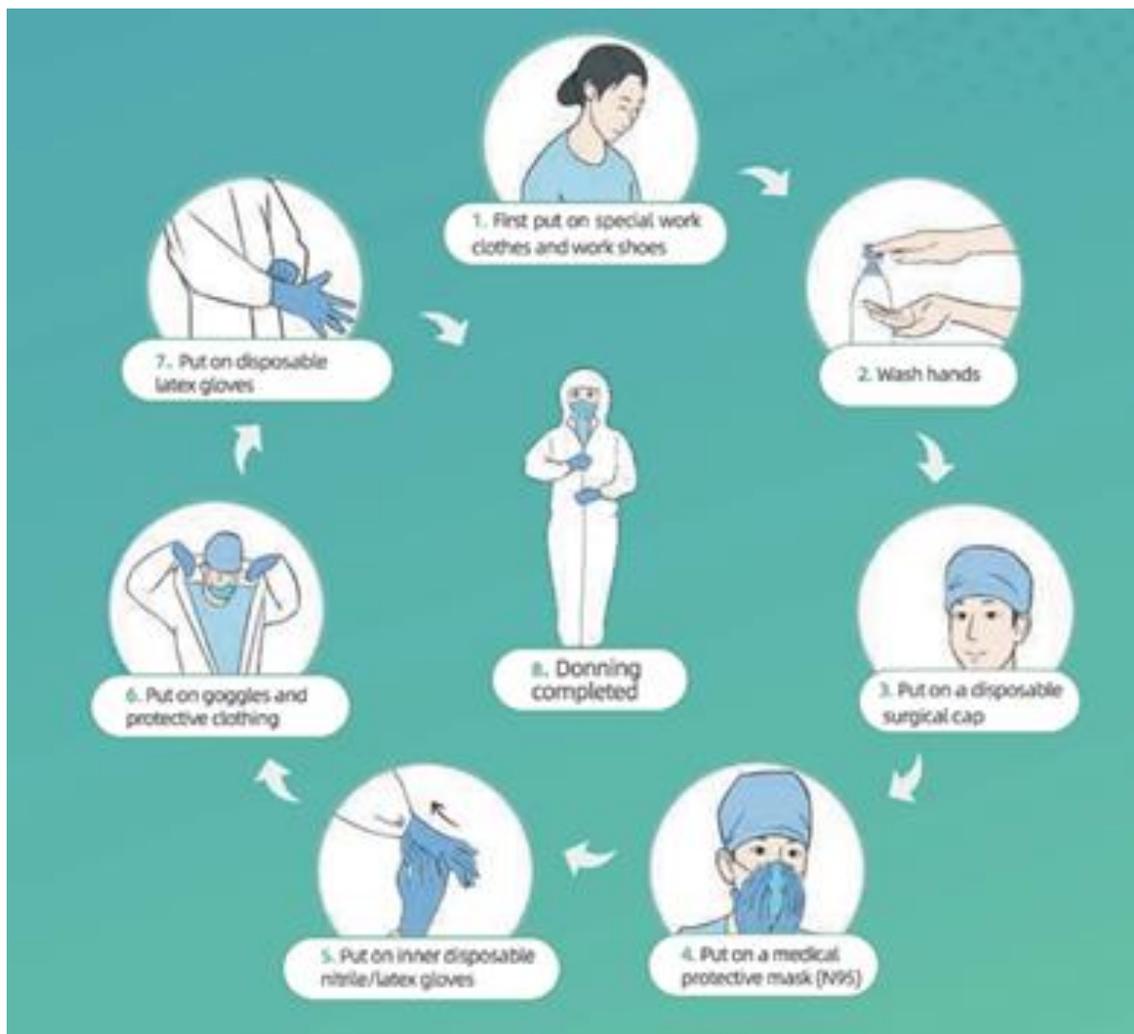
How to Wear a Face Shield/Googles

- Usually worn in level 2 and 3 protection
- Steps in wearing include;**
 1. Hold the shield/googles in your gloved hand and bend forward slightly
 2. With the shield/googles facing your face, place the shield on your forehead or the goggles on your eyes with one hand and use the other hand to pull the strap over your head and secured at the back of your head
 3. Ensure the shield/googles is firmly placed and cannot be moved
 4. Ensure you can see clearly
 5. Follow manufacturer's instructions
- Steps in removing include;**
 1. Without touching the front of the shield or the goggles, pull the strap at the back of the head over your head
 2. Place shield/googles in 0.5 chlorine for cleaning

Donning PPE

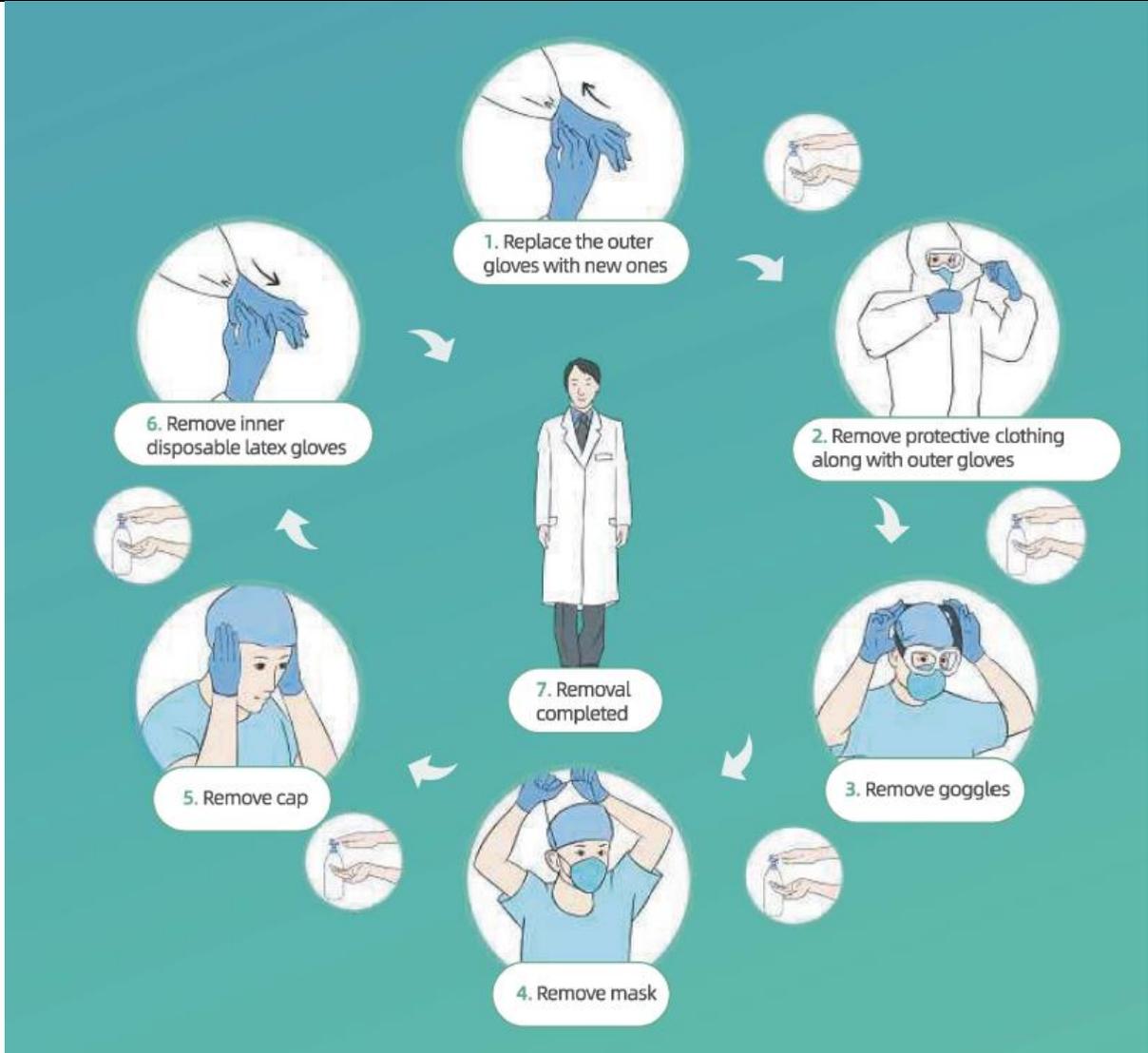
- To be done in the clean zone
- Donning PPE choice based on care to be provided and materials available
- Items needed for effective donning;**
 1. Clean Work Uniform/Scrubs
 2. Clean washable boots
 3. Running water, soap and disposable towels
 4. 70% Alcohol based hand rub
 5. Disposable surgical cap
 6. Respirator (N95 mask)
 7. Three sets of latex gloves
 8. Impermeable coverall
 9. Plastic apron
 10. Shoe covers
 11. Goggles/face shield
 12. Freshly prepared 0.5 chlorine (1 part Jik:6 parts water solution)
 13. Mirrors
 14. A trained observer
 15. Personal clean staff lockers to store watches, rings, bracelets etc
- Steps in donning PPE for level 3 protection**
 1. Wash your hands when you get into the unit.
 2. Remove watch, jewellery & pocket contents and store safely in the locker
Empty bladder if necessary. Ensure nails are short and clean.
 3. Wear Work Uniform/Scrubs
 4. Wear washable boots/plastic or rubber comfortable shoes
 5. Ensure all items are available and in the right sizes and condition
 6. Secure hair with hair cap
 7. Ensure a mirror view
 8. Ensure a trained observer is present to observe and check off check list
 9. Sanitize with 70% ABHR
 10. Put on boot covers. Ensure they are snugly fit and covering the ankle and cuff
 11. Put on inner gloves. This is not a sterile procedure. Ensure the gloves fit snugly
 12. Put on coverall/gown. Allow easy movement. Try bending
 13. Make thumb holes. Ensure there is no space between the sleeves and inner glove
 14. Put on N95 respirator
 15. Put on hood so it completely covers the ears and neck and extends to shoulders

16. Put on the outer plastic apron over the head slowly and tie at the back especially if patient has diarrhoea and vomiting.
17. Put on the outer gloves. The observer may help you wear them. The extra layer helps to detect a tear in the gloves easily and is useful in the doffing process
18. Put on goggles/face shield.
19. Confirm if well donned using the mirror. Ensure easy full range movement
20. Trained observer inspects if fully donned
21. Perform care



Doffing PPE

- ❑ To be done in the contaminated zone immediately after finishing all necessary procedures
- ❑ **Items needed for effective donning;**
 1. Running water, soap and disposable towels
 2. 70% Alcohol based hand rub
 3. Freshly prepared 0.5 chlorine (1part Jik:6 parts water solution)
 4. Mirrors
 5. A trained observer
 6. A closed highly infectious labelled bin
- ❑ **Steps for doffing PPE**
 1. Trainer observer inspects the PPE for possible contamination/tears (if contaminated, disinfect with 0.5 chlorine)
 2. Disinfect outer gloves with 0.5 chlorine
 3. Remove plastic apron inside out and dispose in closed bin with red bag
 4. Inspect the PPE again
 5. Disinfect outer gloves with 0.5 chlorine
 6. Remove disposable boot covers and place in closed bin with red bag.
 7. Inspect and disinfect the outer gloves
 8. Remove goggles and place in decontamination bucket containing 1:6 jik for 10 minutes
 9. Remove outer gloves and Disinfect inner gloves
 10. Remove hood
 11. Remove coverall by lifting the chin and tracing the zip from belly going up. Don't touch the inside. Remove all the coverall and dispose in the closed bin with red bag.
 12. Disinfect and then remove the inner gloves. Place in closed bin with red bag
 13. Perform hand hygiene with soap and water or 70% ABHR
 14. Put on new pair of gloves
 15. Remove N95 respirator
 16. Disinfect gloves with 0.5 chlorine
 17. Disinfect washable boots and step into low risk area.
 18. Disinfect and remove gloves. Discard in closed bin with yellow bag
 19. Perform hand hygiene with soap and water or 70% ABHR
 20. Inspect for any visible contamination using a mirror
 21. Remove washable boots and ensure they are washed with 0.5 chlorine
 22. Take a shower and change clothes



References

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