

PERSONAL PROTECTIVE EQUIPMENT

STANDARD PRECAUTIONS



PERSONAL PROTECTIVE EQUIPMENT



CONTENT

A. What are the PPE ?	4
Examination gloves	4
Reusable household gloves	6
Surgical mask	7
Eyes protection	8
Gown or apron.....	9
Summary	10

ABRÉVIATIONS

PPE → Personal Protective Equipment

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This manual is a collective effort by health and education professionals acting as a reference in their area of expertise and having all field experience. Despite all efforts, it's possible that certain errors may have been overlooked in this manual. Please inform the authors of any errors detected at the following email address : msfacademy.nursing@msf.org The authors would be grateful for any comments or criticism to ensure that this manual continues to evolve and remains adapted to the field reality.

HCWS SHOULD BE AWARE THAT PERSONAL CLOTHING WORN AT WORK MAY BECOME CONTAMINATED AND POSE A RISK TO THEMSELVES OR THEIR FAMILIES

It is important for HCWs to wear **work-specific attire**.

Work attire requirements vary according to :

- **place of work**
(examples include department or unit, such as operating room)
- **role**
(doctor, nurse or other healthcare staff involved in patient care)

❗ Refer to your local policy and/or procedures.



- Short-sleeved tunic with a limited number of pockets
- Trousers
- Closed and comfortable shoes

Figure 1 : example of work uniform

PPE is part of standard precautions to protect against :

- occupational exposures such as contact with bodily fluids and toxic chemicals such as disinfectants
- protect **HCWs** and **patients** from the spread of microorganisms on hands or clothing

PPE may be :

- **single-use** → **discarded** immediately after use on a **single patient** or during a specific procedure
- **reusable** → may be used for **multiple patients** but must be **cleaned and disinfected in between**

A. WHAT ARE THE PPE ?



Figure 2: example of examination gloves

EXAMINATION GLOVES

WHEN TO WEAR EXAMINATION GLOVES ?

- Protect from the risk of hand exposure and contamination by blood and bodily fluids
- Protect from contact with germs and reduce possible spread of germs to other areas (*e.g. : from HCW to patient or from a patient to another*)
- Should be systematically worn when HCW hands are cut or wounded when attending a patient

Examination gloves are **non-sterile**.

Examination gloves are **exclusively single use**.

You can **NEVER** use them on different patients or for multiple medical procedures.

ONE pair of gloves should be used for **ONE** procedure for only **ONE** patient.

The use of gloves does not replace the need to perform hand hygiene

(Contamination of hands can still occur because gloves can have micro tears and because HCWs can contaminate themselves during doffing “removing gloves”).

Hand hygiene must be performed systematically **before donning and after doffing gloves**.

Gloves should only be used when needed. When gloves are used excessively, they can contribute to the spread of microorganisms *(when HCWs wear gloves for long periods of time, this can result in spreading germs to themselves, the environment, and other patients).*

WHEN AND HOW TO WEAR EXAMINATION GLOVES?

Non-sterile examination gloves should be worn when :

- There is a potential for touching **blood, body fluids**, *secretions, excretions*
- Items visibly soiled by bodily fluids

Examples during direct patient exposure: Contact with blood, contact with mucous membranes and with non-intact skin, during pelvic and vaginal examinations

Examples during indirect patient exposure: Emptying vomit basins, handling/cleaning instruments, cleaning up spills of body fluids

When the hand hygiene indication occurs before a contact requiring glove use, perform hand hygiene by rubbing with an alcohol-based handrub or by washing with soap and water.

I. HOW TO DON GLOVES:

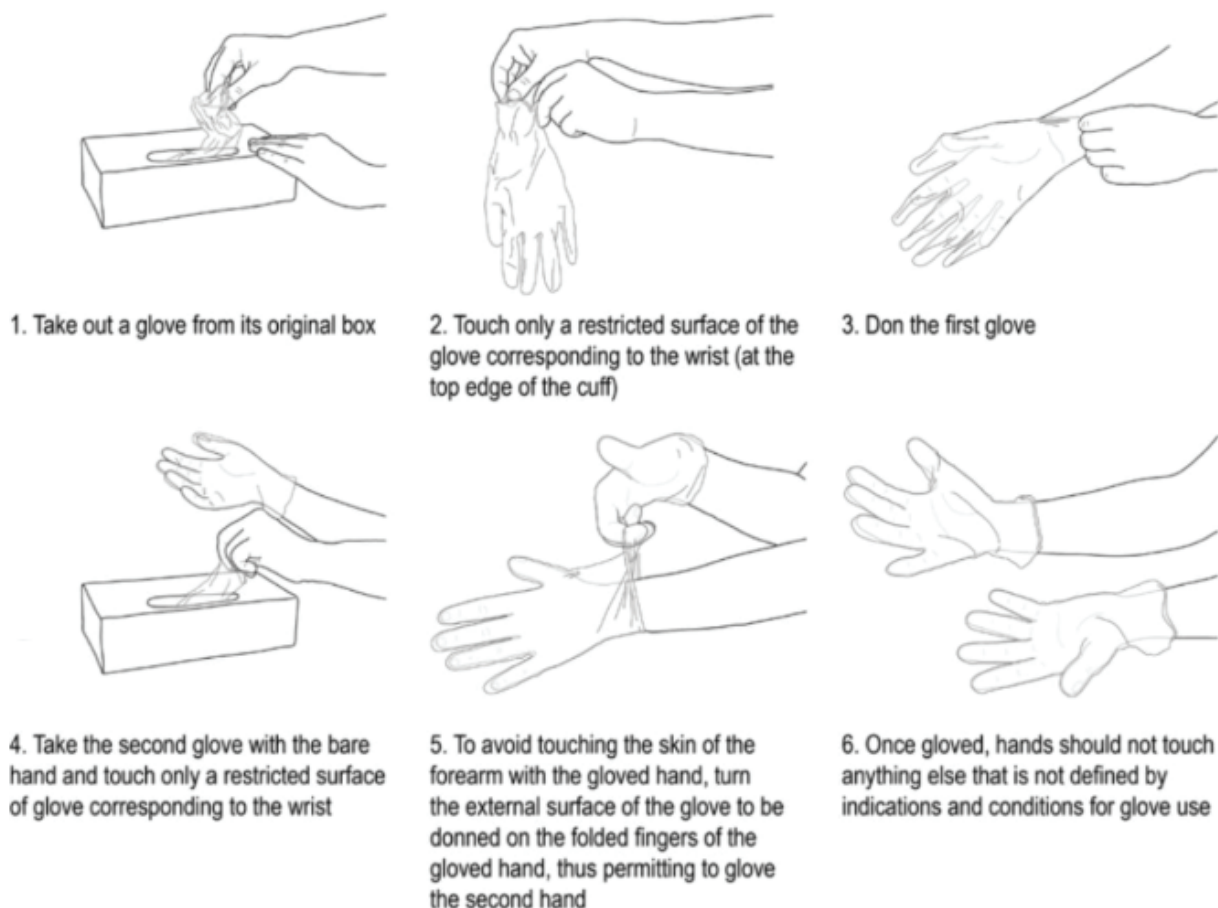


Figure 3: donning examination gloves (WHO guidelines)

WHEN AND HOW TO REMOVE EXAMINATION GLOVES ?

- As soon as gloves are damaged
- When contact with blood or body fluids, non-intact skin and mucous membrane has occurred and has ended
- When contact with single patient and his/her surroundings, or a contaminated body site on a patient has ended
- When there is an indication for hand hygiene (*e.g. in between procedures, even for the same patient*)

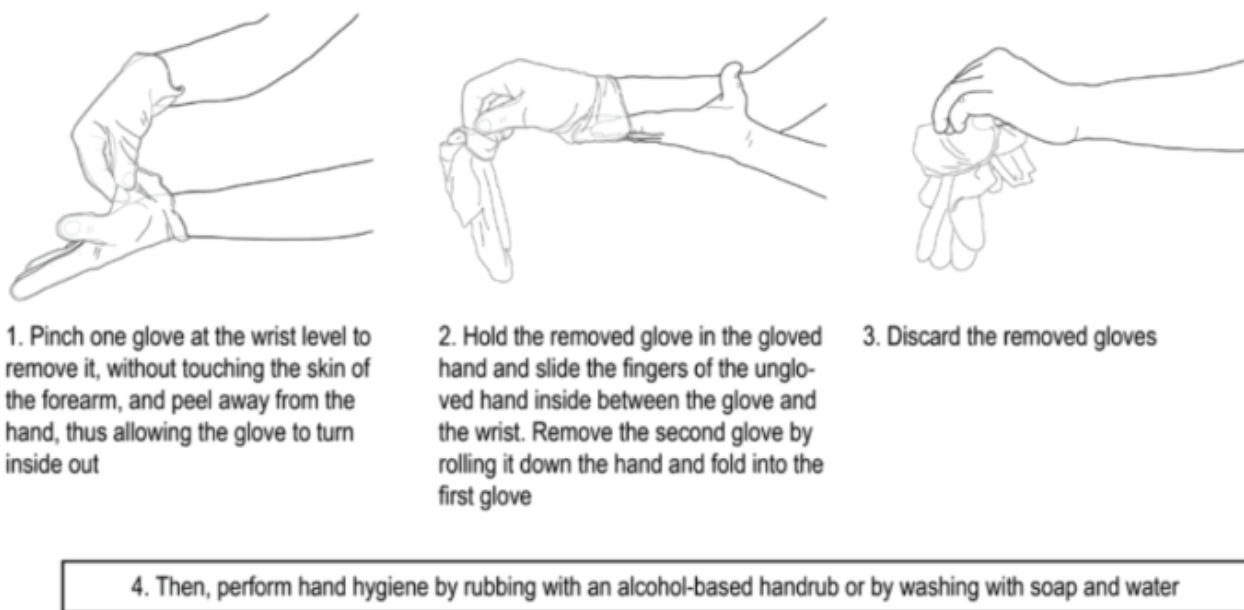


Figure 4 : technique pour enlever les gants d'examen (protocole OMS)

REUSABLE HOUSEHOLD GLOVES

WHEN TO USE HOUSEHOLD GLOVES ?

- Protect against contact with bodily fluids
 - Protect against toxic disinfectants
 - **For cleaning activities**
 - They must be cleaned and disinfected between use and discarded if damaged
- ❗ Refer to local policy



Figure 5 : example of reusable household gloves

SURGICAL MASK

WHEN TO USE A SURGICAL MASK ?

- Protects against the risk of splashes from blood or body fluid *(including urine, feces, vomitus, large wounds, or respiratory secretions)*
- Designed to limit/avoid the transmission of infectious agents exhaled through the wearer's nose and mouth
- Used for respiratory and cough hygiene
- Protect against splashes of toxic disinfectants



Figure 6 : example of surgical mask

HOW TO PUT ON AND TAKE OFF A SURGICAL MASK ?

! A **single-use** item



Figure 7 : correct positioning and doffing of surgical mask

- Discard immediately after use or when visibly soiled, wet or damaged
- Before to put on the mask → hand hygiene
- The wire forms around the nose *(shape the barrette at the top by adjusting with your index fingers)* and the bottom of the mask is pulled below the chin for a complete fit → check for watertightness
- Face *(white side)* to be applied on the mouth
- Remove by the fasteners and then dispose of in the appropriate waste bin
- **Never touch the front part**
- After taking off the mask → hand hygiene

The mask should not be worn inappropriately while it is not needed *(for example on the head, around the neck)* because germs on the mask may be transferred to the HCW or other patients when the mask is touched, and hand hygiene is not performed.



Figure 8 : inappropriate use of the surgical mask

EYES PROTECTION

WHEN TO WEAR GOGGLES AND SHIELDS ?

- Protects face against blood and/or bodily fluid splashes
- Protect against toxic disinfectants (which can damage skin or mucous membranes)



Figure 9: examples of protective glasses/goggles



Figure 10: examples of face shield and surgical mask with shield



Figure 11: eyes protection donning and doffing

HOW TO DONNING AND DOFFING EYES PROTECTION

❗ If **reusable**

→ must be cleaned and disinfected between use

❗ If **single use**

→ must be discarded immediately after use

- Follow instructions or manufacturers
- They all must be discarded if damaged
- Before putting on eye protection → hand hygiene
- Remove by the side branches
- **Never touch the plastic front part**
- After removing eye protection → hand hygiene

BLOUSES ET TABLIERS DE PROTECTION

WHEN TO WEAR GOWN OR APRON ?

- Protect HCW clothing against blood and/or bodily fluid splashes
- **Reusable** apron must be cleaned/disinfected between use
→ Refer to manufacturer instructions
- **Single use** gown must be discarded

Protective gowns are used as a transmission-based precautions to protect from contact with germs and reduce possible spread of germs “from HCW clothes to themselves or other patients or environmental surfaces” (see handout : Transmission-based precautions).



Figure 11 : example of plastic/ rubber reusable apron



Figure 12 : example of single use gown

HOW TO DONNING AND DOFFING GOWN ?



Figure 13 : single use gown donning and doffing

SUMMARY

PPE is part of **standard precautions** to protect against:

- occupational exposures such as contact with bodily fluids and toxic chemicals such as disinfectants
- protect **HCWs** and **patients** from the spread of microorganisms on hands or clothing

PPE may be:

- **Single-use** → **discarded** immediately after use on a **single patient** or during a specific procedure
- **Réutilisables** → may be used for **multiple patients** but must be **cleaned and disinfected in between**

EXAMINATION GLOVES:

ONE pair of gloves should be used for **ONE** procedure for only **ONE** patient.

Non-sterile examination gloves should be worn when:

- There is a potential for **touching blood, body fluids**, secretions, excretions
- Items visibly soiled by bodily fluids

The use of gloves does not replace the need to perform hand hygiene.

Hand hygiene must be performed systematically **before donning** and **after doffing** gloves.



SURGICAL MASK:

- Protects against the risk of blood and body fluid splashes
- Designed to limit/avoid the transmission of infectious agents exhaled through the wearer's nose and mouth
- Used for respiratory and cough hygiene
- Protect against toxic effect of disinfectant (*e.g. : surfanios*)
- **Single use**
- Always perform **hand hygiene before wearing** and **after removal** of the surgical mask



EYE PROTECTION AND PROTECTION GOWN/APRON:

- Designed to protect against dust and body fluid splashes
- Protect against toxic effect of disinfectant (*e.g. : chlorine solution can cause respiratory and skin disease*)

