

## Hand Hygiene: Why, How & When?

### WHY?

- Thousands of people die every day around the world from infections acquired while receiving health care.
- Hands are the main pathways of germ transmission during health care.
- Hand hygiene is therefore the most important measure to avoid the transmission of harmful germs and prevent health care-associated infections.
- This brochure explains how and when to practice hand hygiene.

### WHO?

- Any health-care worker, caregiver or person involved in direct or indirect patient care needs to be concerned about hand hygiene and should be able to perform it correctly and at the right time.

### HOW?

- Clean your hands by **rubbing them with an alcohol-based formulation**, as the preferred mean for routine hygienic hand antisepsis if hands are not visibly soiled. It is faster, more effective, and better tolerated by your hands than washing with soap and water.
- **Wash your hands with soap and water** when hands are visibly dirty or visibly soiled with blood or other body fluids or after using the toilet.
- If exposure to potential spore-forming pathogens is strongly suspected or proven, including outbreaks of *Clostridium difficile*, hand washing with soap and water is the preferred means.

## HOW TO HANDRUB?

### RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

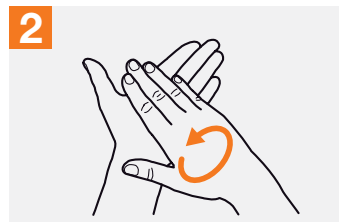
 **Duration of the entire procedure: 20-30 seconds**



**1a** Apply a palmful of the product in a cupped hand, covering all surfaces;

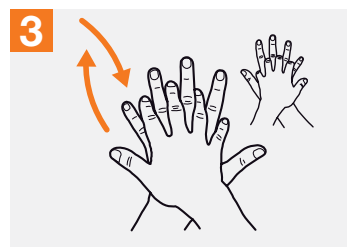


**1b**



**2**

Rub hands palm to palm;



**3**

Right palm over left dorsum with interlaced fingers and vice versa;



**4**

Palm to palm with fingers interlaced;



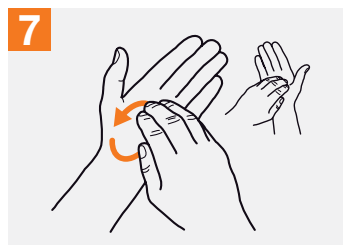
**5**

Backs of fingers to opposing palms with fingers interlocked;



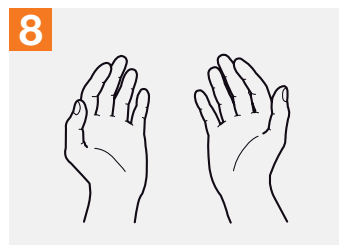
**6**

Rotational rubbing of left thumb clasped in right palm and vice versa;



**7**

Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



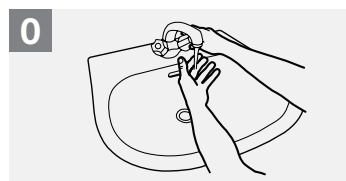
**8**

Once dry, your hands are safe.

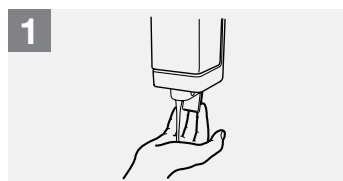
# HOW TO HANDWASH?

## WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

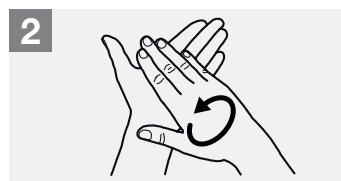
 **Duration of the entire procedure: 40-60 seconds**



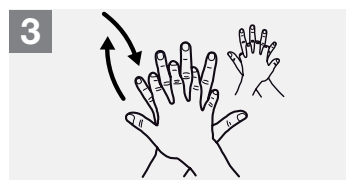
**0** Wet hands with water;



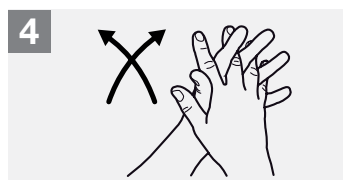
**1** Apply enough soap to cover all hand surfaces;



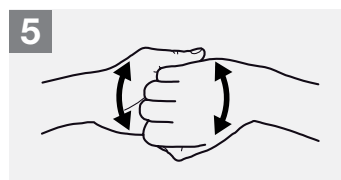
**2** Rub hands palm to palm;



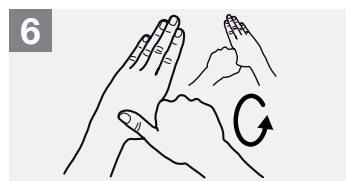
**3** Right palm over left dorsum with interlaced fingers and vice versa;



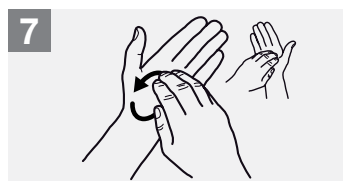
**4** Palm to palm with fingers interlaced;



**5** Backs of fingers to opposing palms with fingers interlocked;



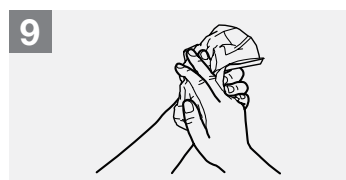
**6** Rotational rubbing of left thumb clasped in right palm and vice versa;



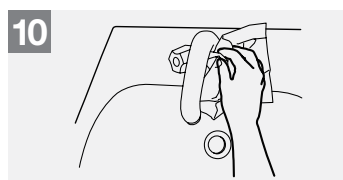
**7** Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



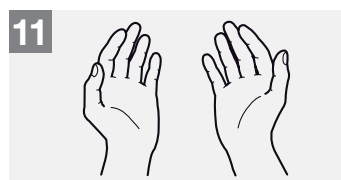
**8** Rinse hands with water;



**9** Dry hands thoroughly with a single use towel;



**10** Use towel to turn off faucet;



**11** Your hands are now safe.

### Hand care

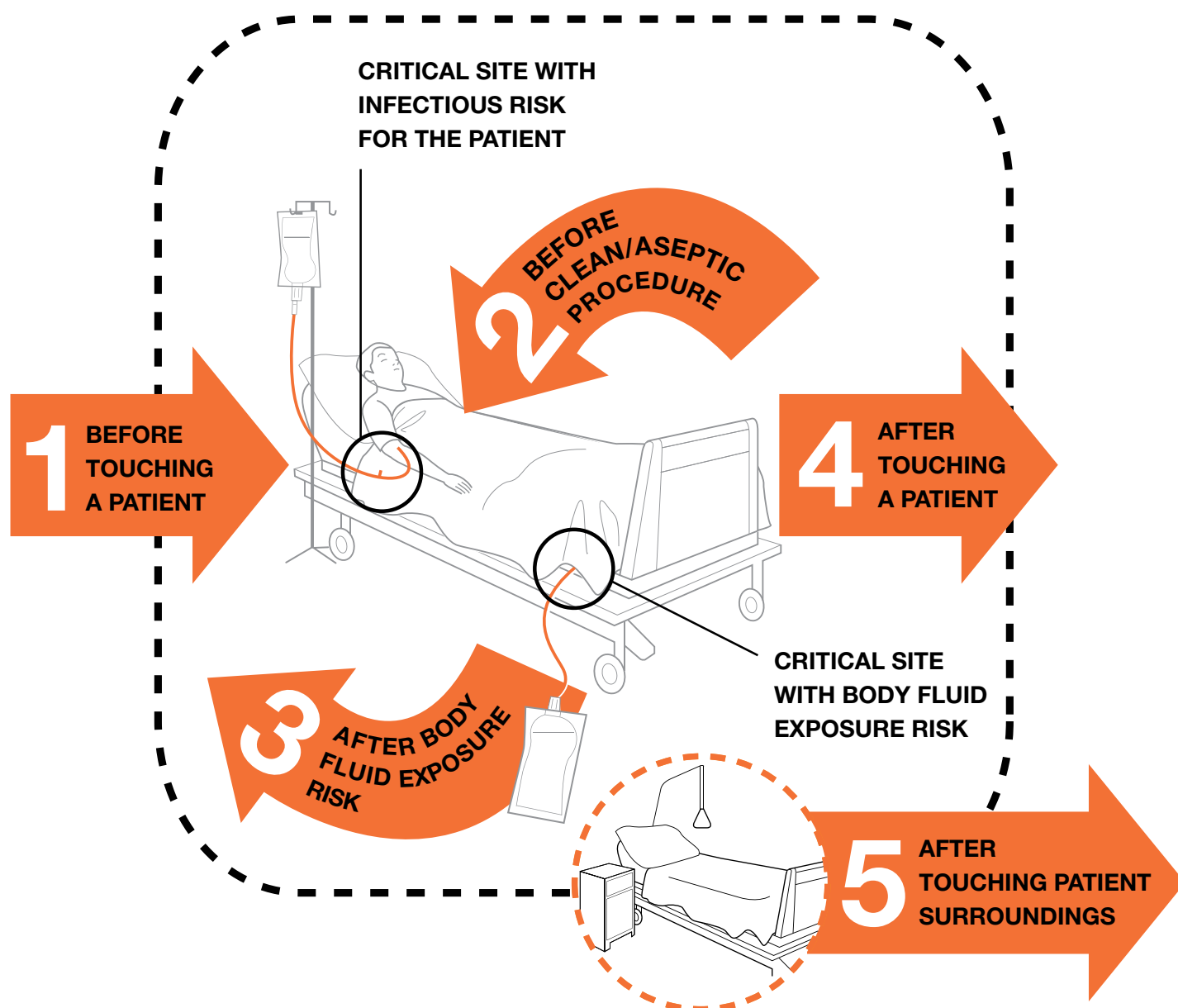
- Take care of your hands by regularly using a protective hand cream or lotion, at least daily.
- Do not routinely wash hands with soap and water immediately before or after using an alcohol-based handrub.
- Do not use hot water to rinse your hands.
- After handrubbing or handwashing, let your hands dry completely before putting on gloves.

### Please remember

- Do not wear artificial fingernails or extenders when in direct contact with patients.
- Keep natural nails short.

## WHEN?

### YOUR 5 MOMENTS FOR HAND HYGIENE\*



**\*NOTE:** Hand hygiene must be performed in all indications described regardless of whether gloves are used or not.

## 1 Before touching a patient

**WHY?** To protect the patient against colonization and, in some cases, against exogenous infection, by harmful germs carried on your hands

**WHEN?** Clean your hands before touching a patient when approaching him/her\*

### *Situations when Moment 1 applies:*

- Before shaking hands, before stroking a child's forehead
- Before assisting a patient in personal care activities: to move, to take a bath, to eat, to get dressed, etc
- Before delivering care and other non-invasive treatment: applying oxygen mask, giving a massage
- Before performing a physical non-invasive examination: taking pulse, blood pressure, chest auscultation, recording ECG

## 2 Before clean / aseptic procedure

**WHY?** To protect the patient against infection with harmful germs, including his/her own germs, entering his/her body

**WHEN?** Clean your hands immediately before accessing a critical site with infectious risk for the patient (e.g. a mucous membrane, non-intact skin, an invasive medical device)\*

### *Situations when Moment 2 applies:*

- Before brushing the patient's teeth, instilling eye drops, performing a digital vaginal or rectal examination, examining mouth, nose, ear with or without an instrument, inserting a suppository / pessary, suctioning mucous
- Before dressing a wound with or without instrument, applying ointment on vesicle, making a percutaneous injection / puncture
- Before inserting an invasive medical device (nasal cannula, nasogastric tube, endotracheal tube, urinary probe, percutaneous catheter, drainage), disrupting / opening any circuit of an invasive medical device (for food, medication, draining, suctioning, monitoring purposes)
- Before preparing food, medications, pharmaceutical products, sterile material

## 3 After body fluid exposure risk

**WHY?** To protect you from colonization or infection with patient's harmful germs and to protect the health-care environment from germ spread

**WHEN?** Clean your hands as soon as the task involving an exposure risk to body fluids has ended (and after glove removal)\*

### *Situations when Moment 3 applies:*

- When the contact with a mucous membrane and with non-intact skin ends
- After a percutaneous injection or puncture; after inserting an invasive medical device (vascular access, catheter, tube, drain, etc); after disrupting and opening an invasive circuit
- After removing an invasive medical device
- After removing any form of material offering protection (napkin, dressing, gauze, sanitary towel, etc)
- After handling a sample containing organic matter, after clearing excreta and any other body fluid, after cleaning any contaminated surface and soiled material (soiled bed linen, dentures, instruments, urinal, bedpan, lavatories, etc)

## 4 After touching a patient

**WHY?** To protect you from colonization with patient germs and to protect the health-care environment from germ spread

**WHEN?** Clean your hands when leaving the patient's side, after having touched the patient \*

### *Situations when Moment 4 applies, if they correspond to the last contact with the patient before leaving him / her:*

- After shaking hands, stroking a child's forehead
- After you have assisted the patient in personal care activities: to move, to bath, to eat, to dress, etc
- After delivering care and other non-invasive treatment: changing bed linen as the patient is in, applying oxygen mask, giving a massage
- After performing a physical non-invasive examination: taking pulse, blood pressure, chest auscultation, recording ECG

## 5 After touching patient surroundings

**WHY?** To protect you from colonization with patient germs that may be present on surfaces / objects in patient surroundings and to protect the health-care environment against germ spread

**WHEN?** Clean your hands after touching any object or furniture when leaving the patient surroundings, without having touched the patient\*

### *This Moment 5 applies in the following situations if they correspond to the last contact with the patient surroundings, without having touched the patient:*

- After an activity involving physical contact with the patients immediate environment: changing bed linen with the patient out of the bed, holding a bed rail, clearing a bedside table
- After a care activity: adjusting perfusion speed, clearing a monitoring alarm
- After other contacts with surfaces or inanimate objects (note – ideally try to avoid these unnecessary activities): leaning against a bed, leaning against a night table / bedside table

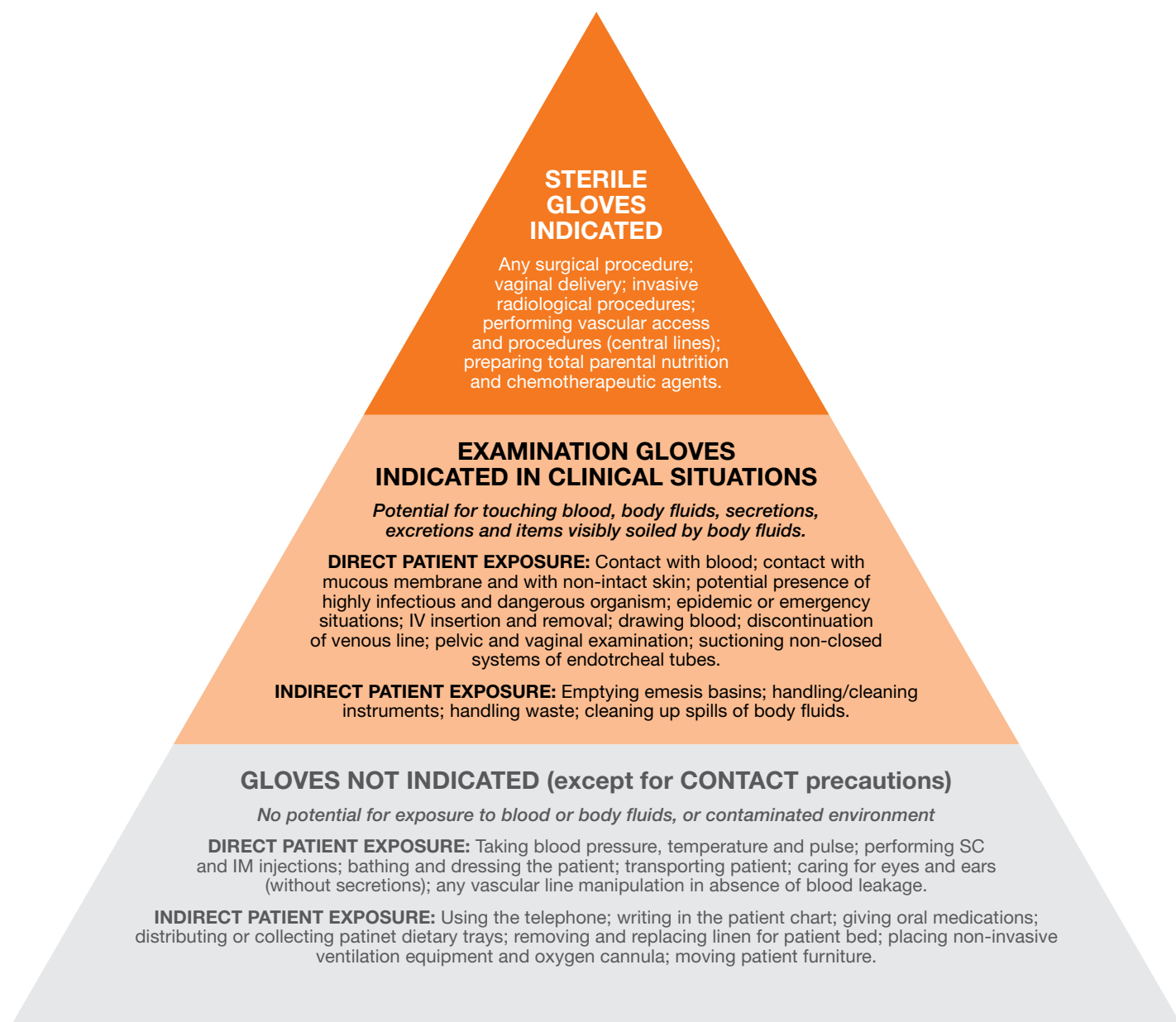
**\*NOTE:** Hand hygiene must be performed in all indications described regardless of whether gloves are used or not.

## HAND HYGIENE AND MEDICAL GLOVE USE

- The use of gloves does not replace the need for cleaning your hands.
- Hand hygiene must be performed when appropriate regardless of the indications for glove use.
- Remove gloves to perform hand hygiene, when an indication occurs while wearing gloves.
- Discard gloves after each task and clean your hands – gloves may carry germs.
- Wear gloves only when indicated according to Standard and Contact Precautions (see examples in the pyramid below) – otherwise they become a major risk for germ transmission.

## The Glove Pyramid – to aid decision making on when to wear (and not wear) gloves

Gloves must be worn according to **STANDARD** and **CONTACT PRECAUTIONS**. The pyramid details some clinical examples in which gloves are not indicated, and others in which clean or sterile gloves are indicated. Hand hygiene should be performed when appropriate regardless of indications for glove use.



## Glossary

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Alcohol-based formulation</b>   | An alcohol-containing preparation (liquid, gel or foam) designed for application to the hands for hygienic hand antisepsis.                                                                                                                                                                                                                                                                          |
| <b>Body fluids</b>                 | Blood; excretions like urine, faeces, vomit; meconium; lochia; secretions like saliva, tears, sperm, colostrum, milk, mucous secretions, wax, vernix; exudates and transudates like lymphatic, pleural fluid cerebrospinal fluid, ascitis fluid, articular fluid, pus (except sweat); organic samples like tissues, cells, organ, bone marrow, placenta.                                             |
| <b>Clean / aseptic procedure</b>   | Any care activity that implies a direct or indirect contact with a mucous membrane, non-intact skin, an invasive medical device. During such a procedure no germs should be transmitted.                                                                                                                                                                                                             |
| <b>Critical site</b>               | Critical sites are associated with risk of infection. They either correspond to body sites or medical devices that have to be protected against harmful germs (called critical sites with risk of infection for the patient), or body sites or medical devices that potentially lead to hand exposure to body fluids and bloodborne pathogens (called critical sites with body fluid exposure risk). |
| <b>Hand care</b>                   | Actions to prevent skin irritation.                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Hand hygiene</b>                | Any action of hygienic hand antisepsis in order to reduce transient microbial flora (generally performed either by handrubbing with an alcohol-based formulation or handwashing with plain or antimicrobial soap and water).                                                                                                                                                                         |
| <b>Indication for hand hygiene</b> | Moment during health care when hand hygiene must be performed to prevent harmful germ transmission and/or infection.                                                                                                                                                                                                                                                                                 |
| <b>Invasive medical device</b>     | Any medical device that enters the body either through a body opening or through a skin or mucous membrane breaking.                                                                                                                                                                                                                                                                                 |