

« My five moments for Hand Hygiene »

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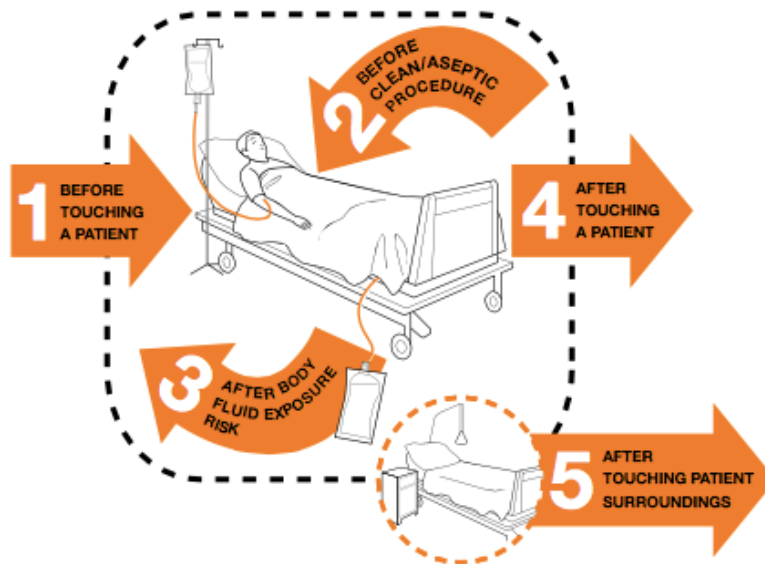
Outline

- **The Patient Zone**
- **The 5 Moments for Hand Hygiene**
- **Key points**

WHO Hand Hygiene Technical Reference Manual

Hand Hygiene Technical Reference Manual

To be used by health-care workers,
trainers and observers of hand hygiene practices



- For health-care workers, trainers and observers
- The manual helps to understand:
 - the importance of HAI
 - the dynamics of cross-transmission
 - the "My five moments for hand hygiene" approach
 - the correct procedures for handrubbing and handwashing
 - the WHO direct observation method

HH, it's all about

and

HOW

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 Rub hands palm to palm;
- 2 Rub back of hand;
- 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.

World Health Organization | Patient Safety | **SAVE LIVES** Clean Your Hands

WHEN

Your 5 Moments for Hand Hygiene

- 1 BEFORE TOUCHING A PATIENT
- 2 BEFORE CLEAN/ASEPTIC PROCEDURE
- 3 AFTER BODY FLUID EXPOSURE RISK
- 4 AFTER TOUCHING A PATIENT
- 5 AFTER TOUCHING PATIENT SURROUNDINGS

Moment	WHEN?	WHY?
1	BEFORE TOUCHING A PATIENT	WHEN? Clean your hands before touching a patient when approaching his/her. WHY? To protect the patient against harmful germs carried on your hands.
2	BEFORE CLEAN/ASEPTIC PROCEDURE	WHEN? Clean your hands immediately before performing a clean/aseptic procedure. WHY? To protect the patient against harmful germs, including the patient's own, from entering his/her body.
3	AFTER BODY FLUID EXPOSURE RISK	WHEN? Clean your hands immediately after an exposure risk to body fluids (and after gloves removed). WHY? To protect yourself and the health-care environment from harmful patient germs.
4	AFTER TOUCHING A PATIENT	WHEN? Clean your hands after touching a patient and her/his immediate surroundings, when leaving the patient's side. WHY? To protect yourself and the health-care environment from harmful patient germs.
5	AFTER TOUCHING PATIENT SURROUNDINGS	WHEN? Clean your hands after touching any object or furniture in the patient's immediate surroundings, when leaving – even if the patient has not been touched. WHY? To protect yourself and the health-care environment from harmful patient germs.

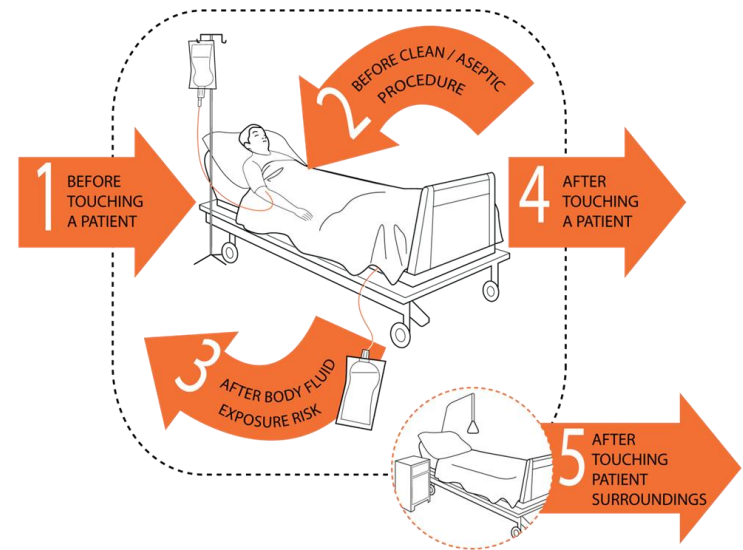
World Health Organization | Patient Safety | **SAVE LIVES** Clean Your Hands

WHO. WHO Guidelines on Hand Hygiene in Health Care First Global Patient Safety Challenge Clean Care is Safer Care. 2009
Pittet D. Hand hygiene: It's all about when and how. ICHE 2008;29:957-9.

The “My 5 Moments for Hand Hygiene” approach

« My 5 Moments for Hand Hygiene » approach at point-of-care

- Minimizes the complexity of hand hygiene
- Logically integrates into the workflow
- Is easy to remember
- Proposes a unified vision for trainer, observer and HCWs
- Is applicable in any healthcare setting
- Is consistent with evidenced-based risk assessment of HAI and spread of MDRO



The Patient Zone

Assumptions

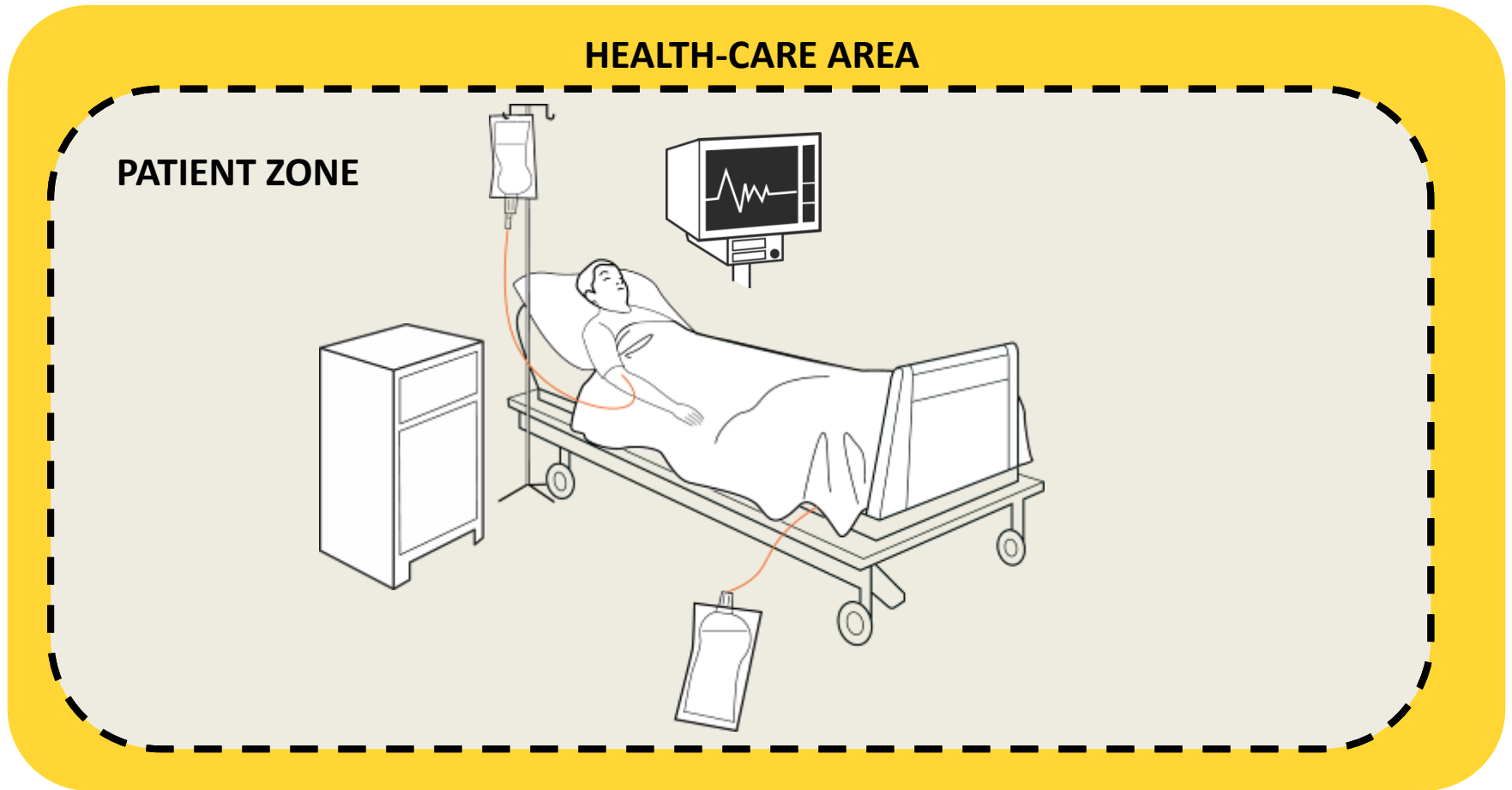
- Patient flora rapidly contaminates entire patient zone
- Patient zone is cleaned between patients

Curtains

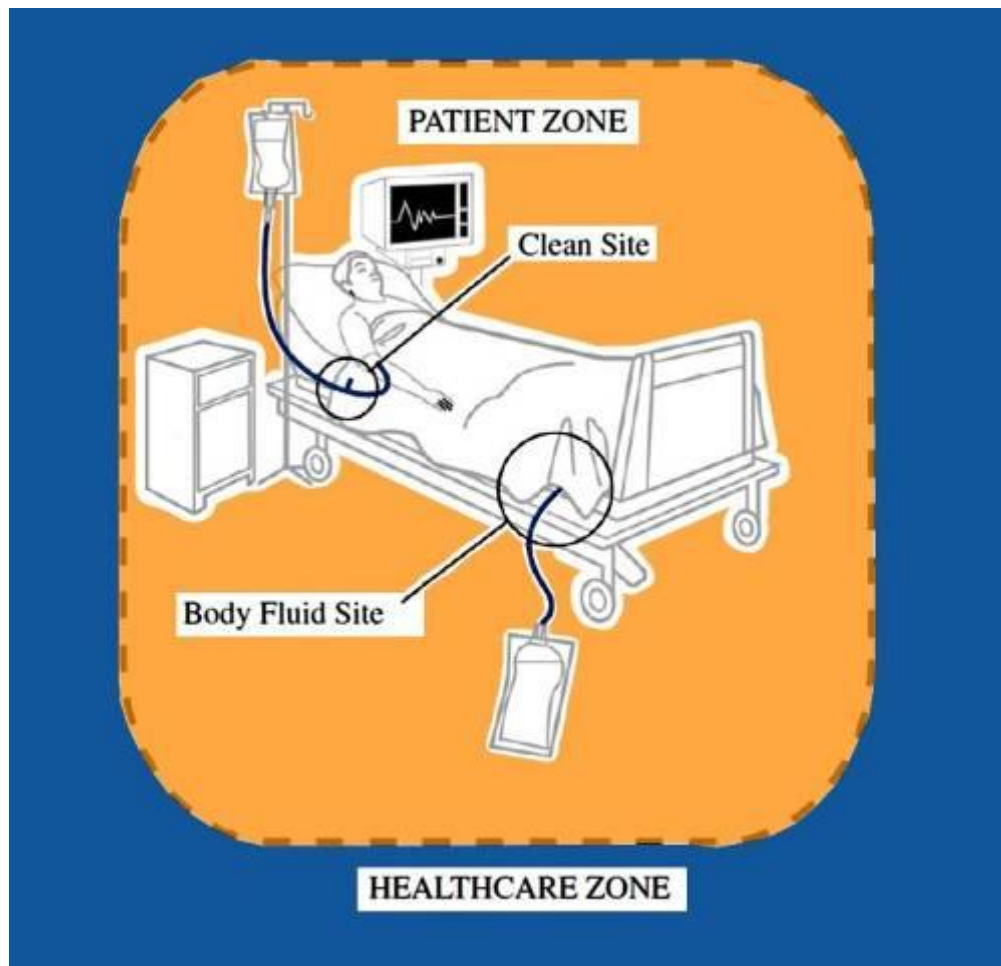
Modified from Ontario Just Clean Your Hands Program

The science behind Just clean your hands presentation

The geographical conceptualization of the transmission risk



Patient Zone



Patient Zone:

- The patient
- Patient's immediate surroundings

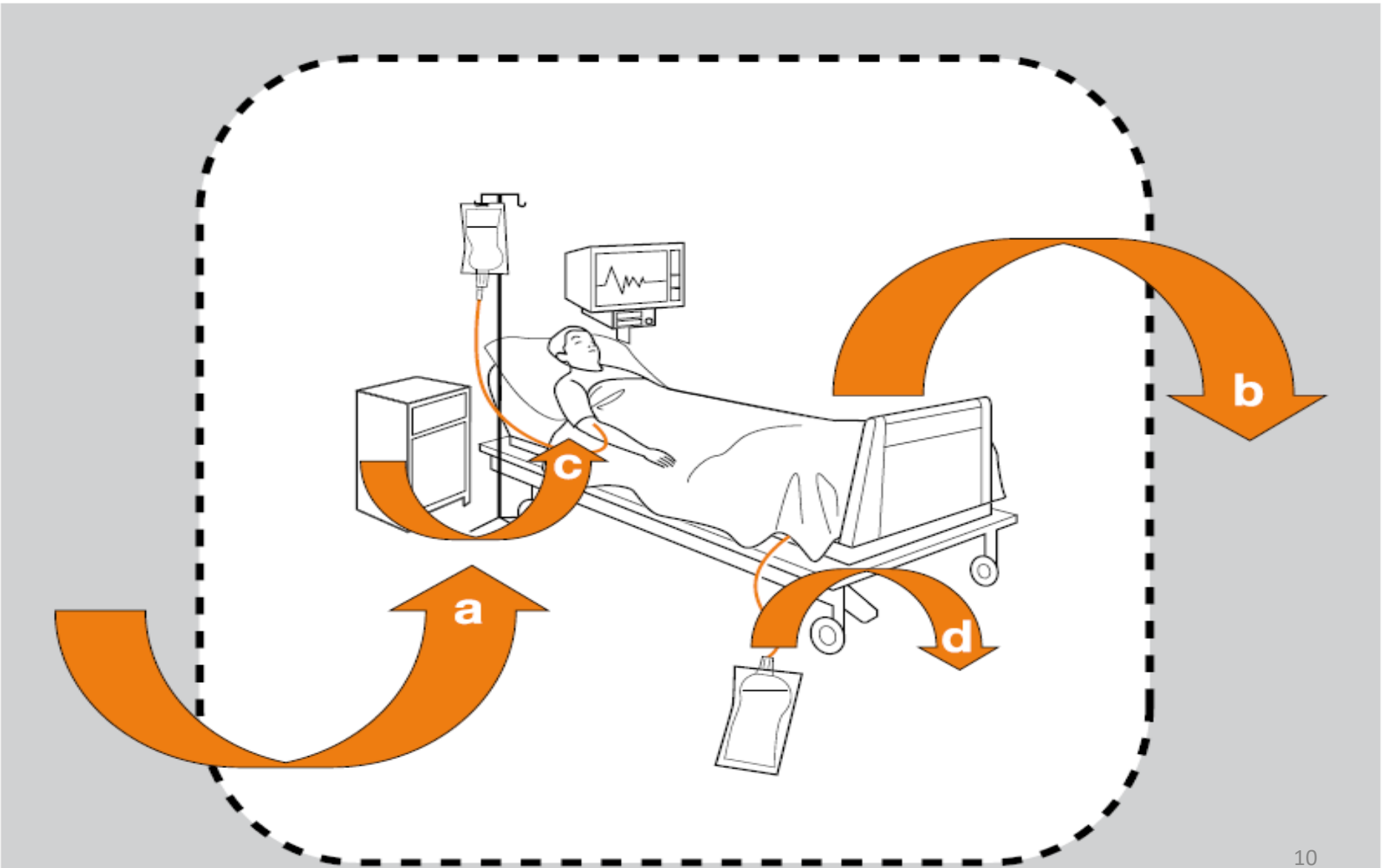
Two Critical Sites

- **Clean site:** infectious risk for the patient
- **Body fluid site:** exposure risk for the HCW and the environment

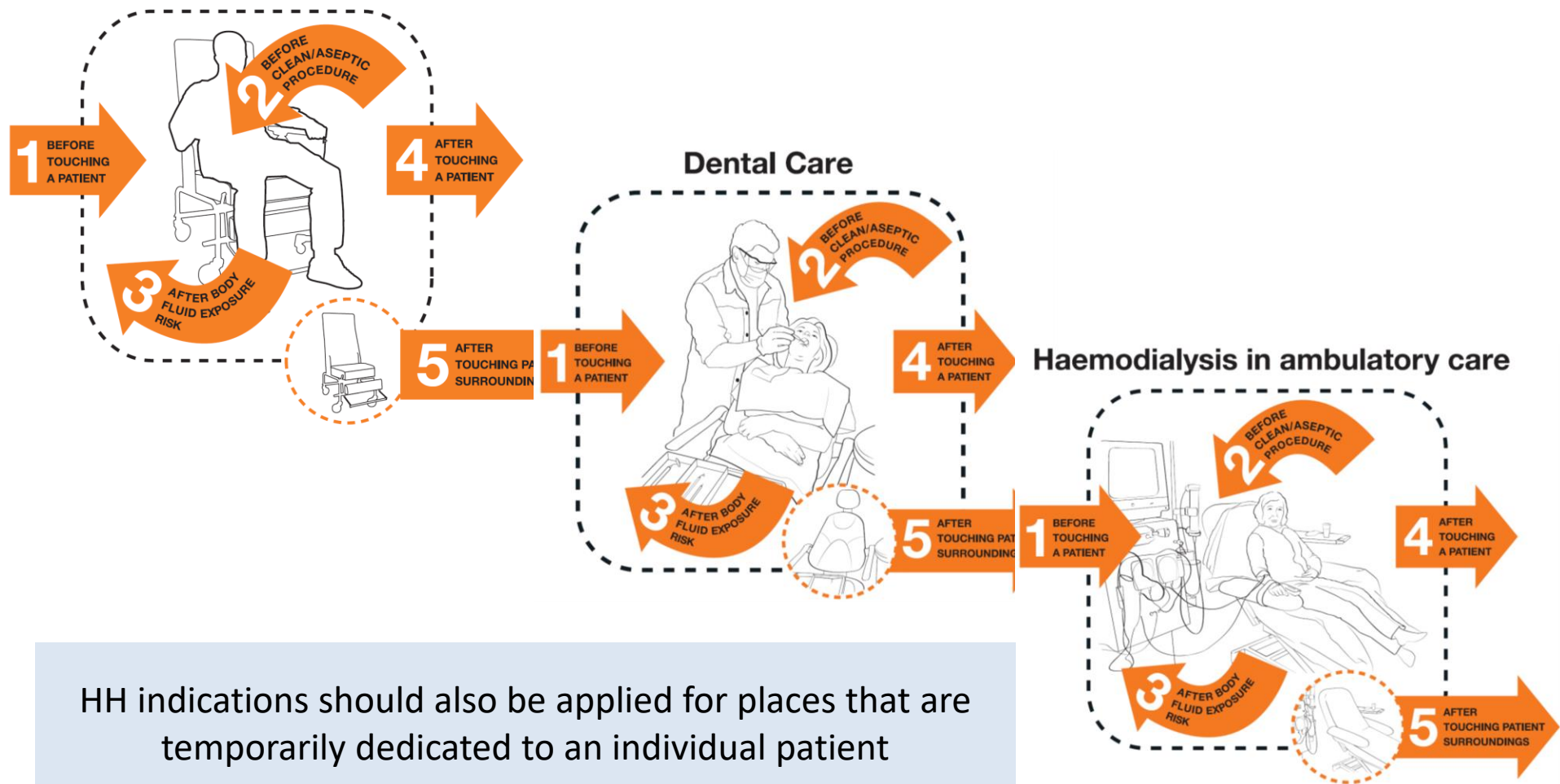
Healthcare Zone:

All surfaces in the health care setting outside the patient zone

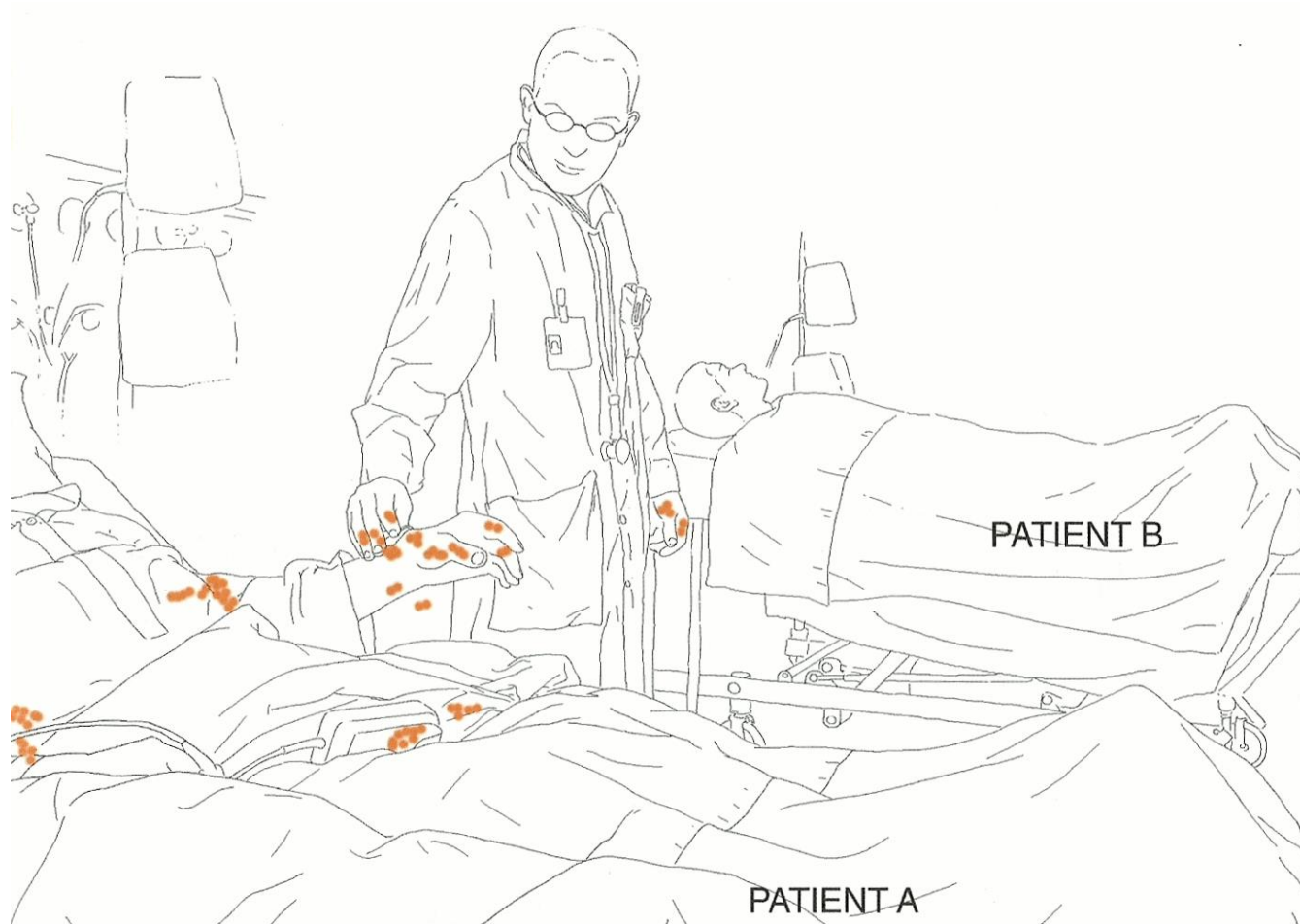
Figure 5. Health-care area and patient zone: dynamics of germ transmission

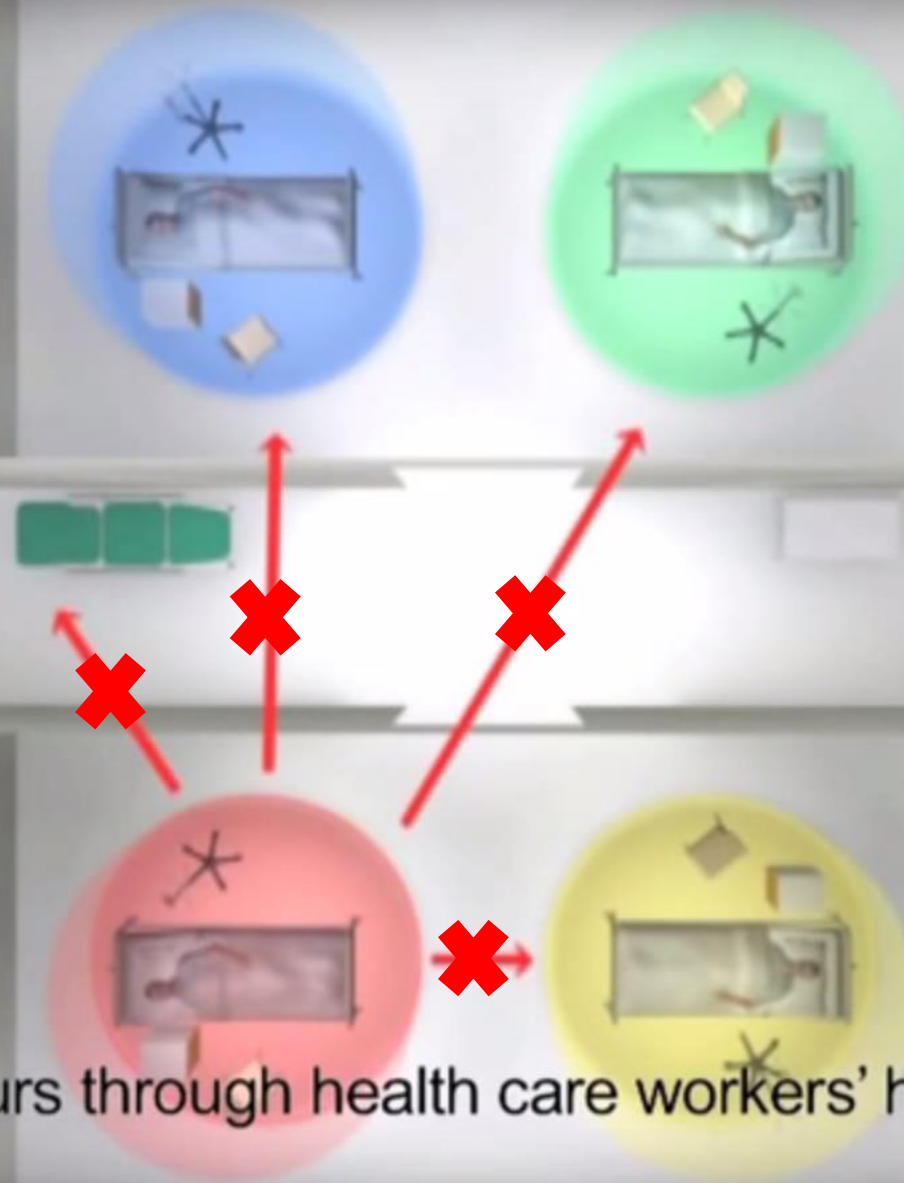


HH and temporarily patient zones



Possible cross contamination between Patient A and Patient B

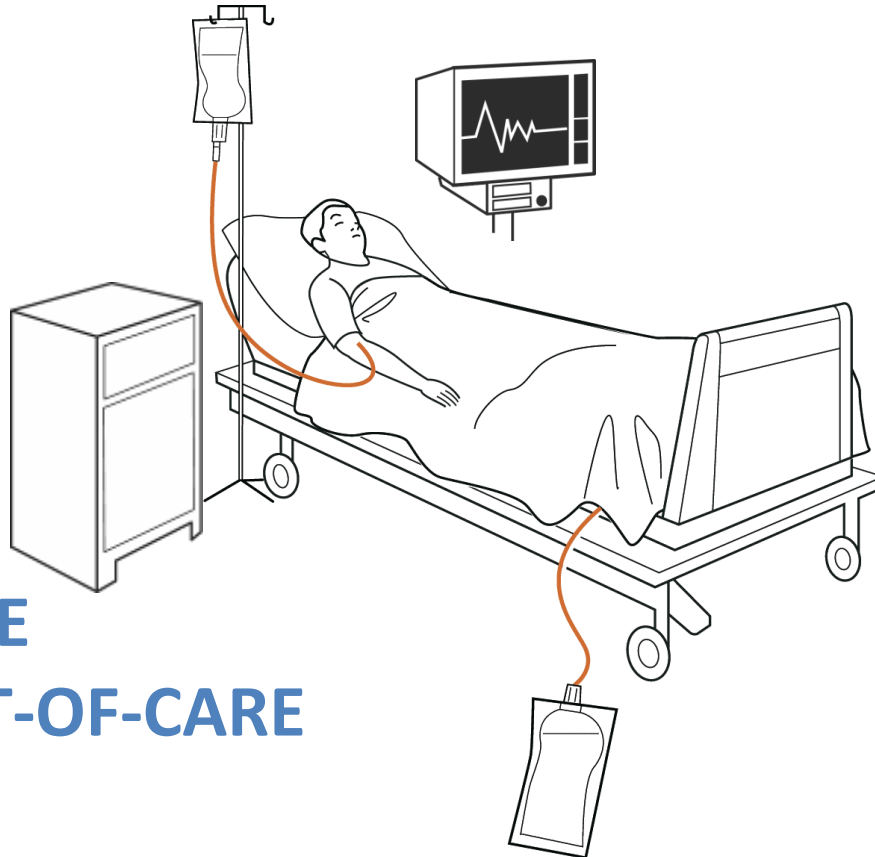




occurs through health care workers' hands.

OPTIMAL HAND HYGIENE

SHOULD BE PERFORMED



**AT THE
POINT-OF-CARE**



Definition of the point-of-care

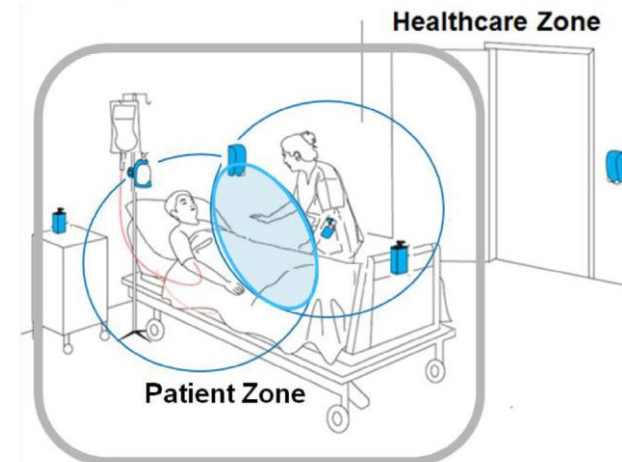
- The place where **three elements** occur together:

- **the patient**

- **the health-care worker**

- **care or treatment**

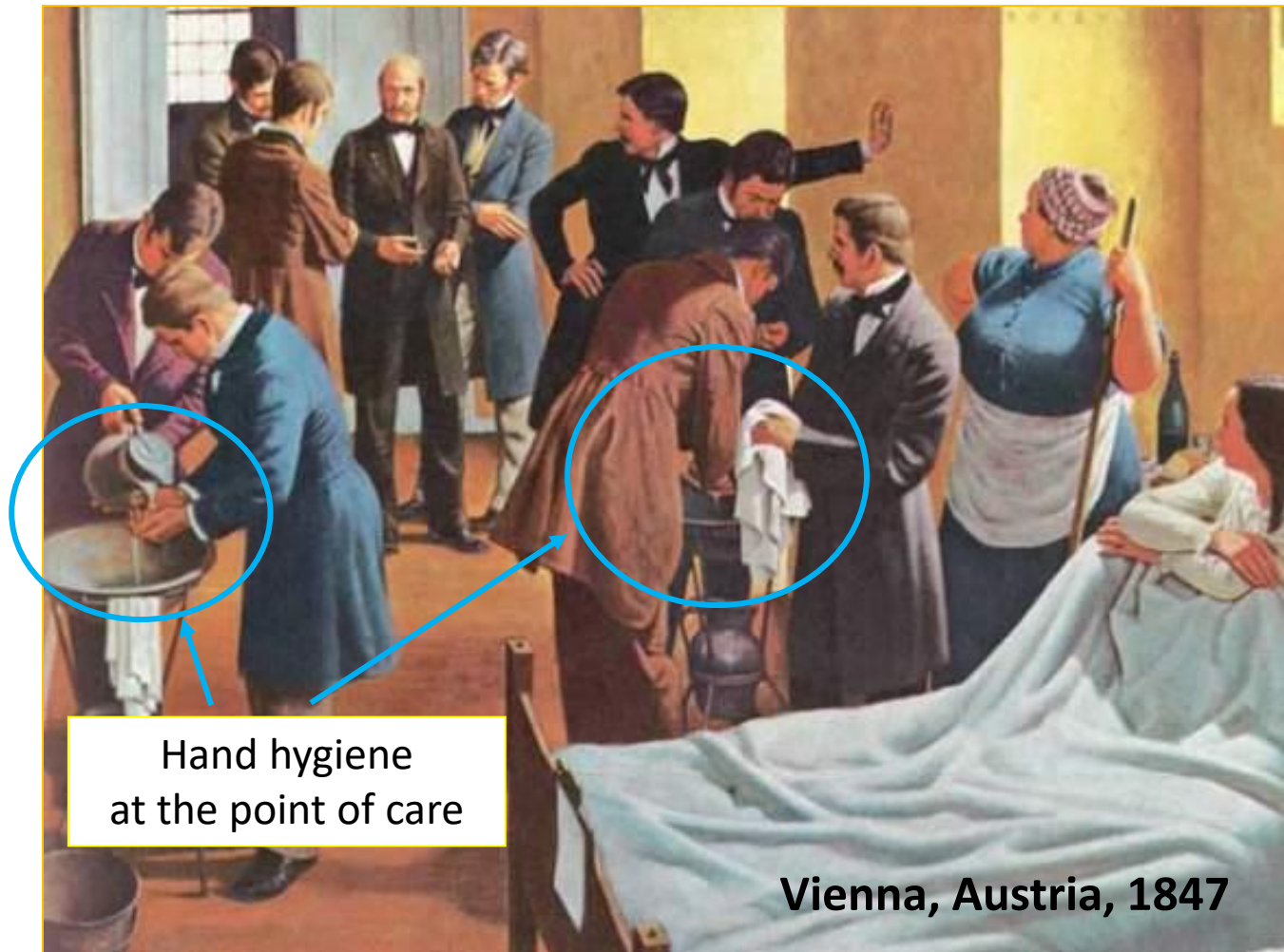
**involving patient
contact (within the
patient zone)**



Kirk J. et al. Am J Infect Control 2016; 44:1095-101

- The concept embraces the need to perform HH at recommended moments exactly where care delivery takes place
- A HH product (e.g. AHBR)- easily accessible and as close as possible (e.g. within arm's reach), where patient care is taking place
- Point-of-care products - accessible without having to leave the patient zone
- Enabling the HCW to quickly and easily fulfil the 5 indications (moments) for HH

To overcome time constraint hand hygiene should be feasible at the point of care



Examples of hand hygiene products easily accessible at the point-of-care



Question

Choose one or more statements that correspond to «*My 5 Moments for Hand Hygiene*» approach at the point-of-care

- ☒ Logically integrates into the workflow and is easy to remember
- ☒ Proposes a unified vision for trainer, observer and HCW
 - Is applicable only in certain healthcare settings
- ☒ Is consistent with evidenced-based risk assessment of HAI and spread of MDRO

Question

Which of the following statements is false?

- An arterial catheter is a critical site in the patient zone and carries infectious risk for the patient
- Nurse chariot is part of patient zone
- The patient, the HCW and the care activity are components of the point of care
- HH product should be easily accessible at the point of care

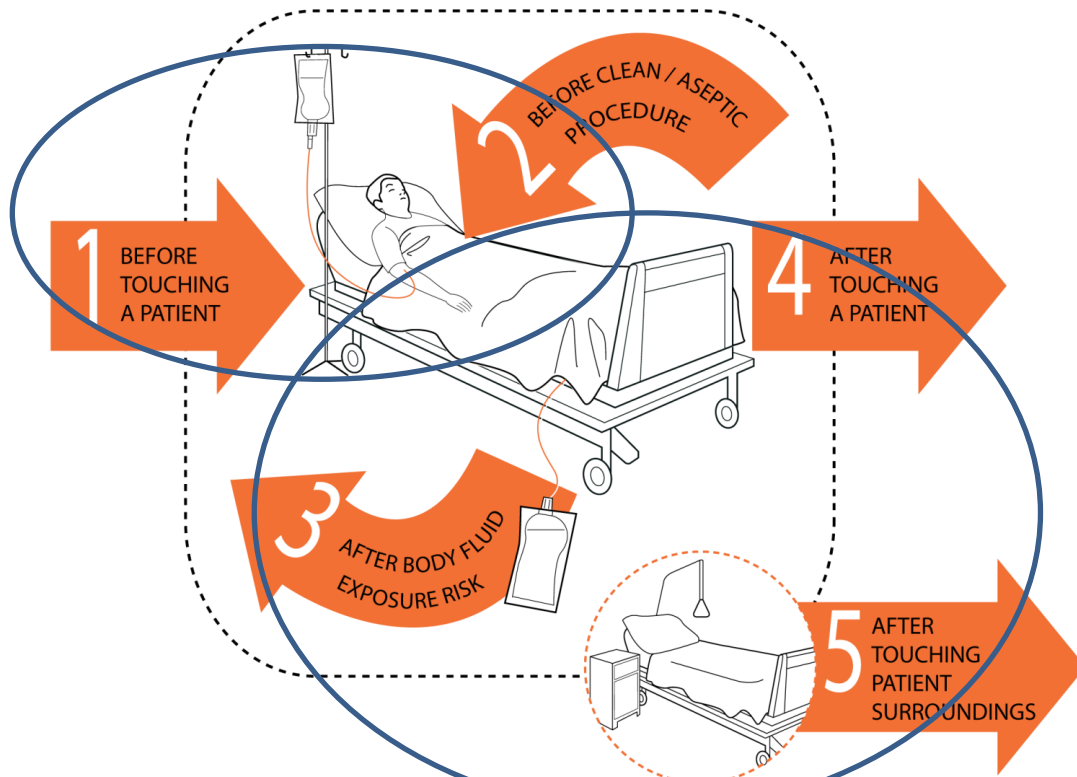
Summary

- Point of care consists of 3 elements: patient, HCW and care activity involving contact with the patient
- HH products should be accessible at the point of care

“My 5 moments for HH” is an approach that is:

- is explicit, easy to remember
- compatible with the workflow
- provides a standard perspective for both HCWs and observers in all kinds of health care facilities
- the distinction between the patient zone and the healthcare area helps to better understand the microorganism transmission risk and the HH indications relevant to that moment.

The WHO 5 Moments for Hand Hygiene



3 Moments «AFTER»

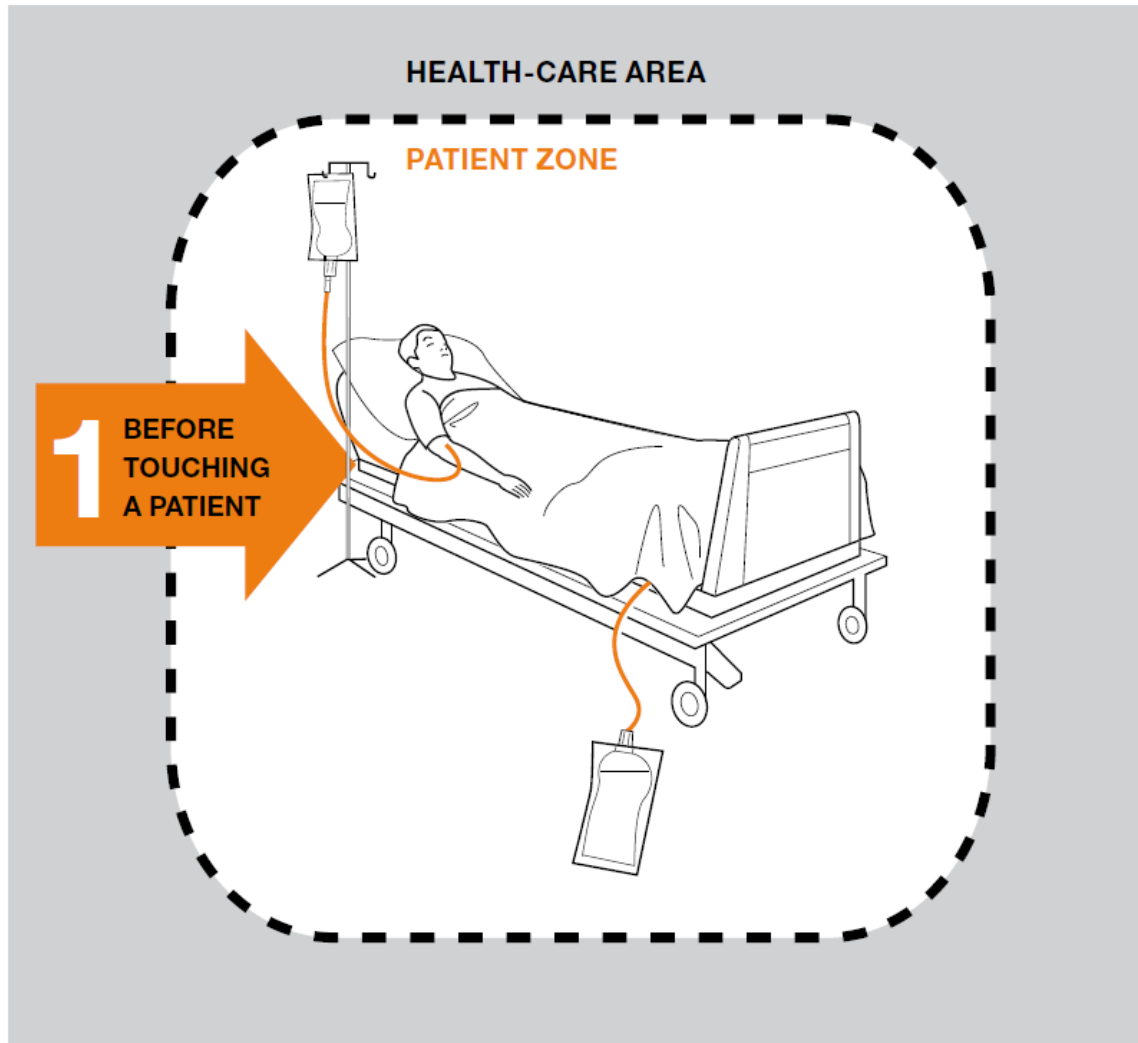
intended to prevent the risk of microbial transmission to the HCW and the healthcare area

2 Moments «BEFORE»:

indicate the need to prevent the risk of microbial transmission to the patient

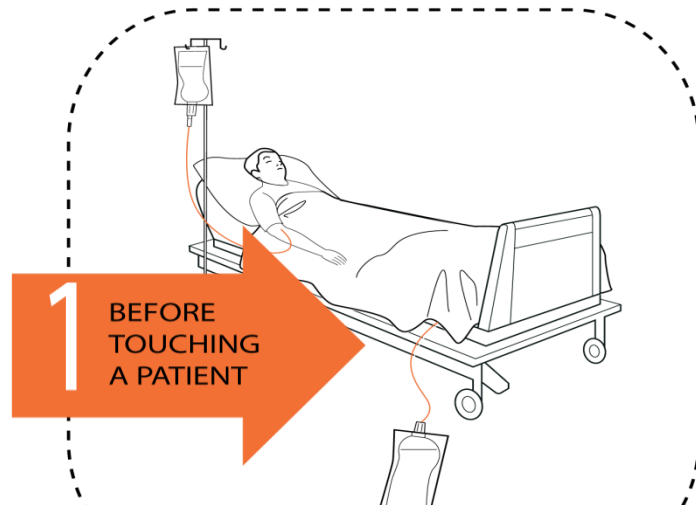
Moment 1

Before touching a Patient



« My five moments » (1) Moment 1

This indication is determined by the occurrence of the last contact with the health-care area and the next contact with the patient.



Reference point **BEFORE**
touching a patient when
approaching her/him

Situations illustrating the contact:

- shaking hands
- taking pulse, blood pressure
- chest auscultation
- abdominal palpation
- helping to move around

Since the HCW has not left the patient zone and on condition of no other indication for HH, further contact with the patient's skin, clothes and surroundings do not require any furthermore hand hygiene action

Patient

Refers to **any part of the patient**, their clothes, or any medical device that is connected to the patient

If the patient were to get out of bed and walk off – what would still be attached to them



Moment 1

When:	Examples:
Touching a patient in any way	Shaking hands, Assisting a patient to move, most Allied health interventions, Touching any medical device connected to the patient (e.g. IV pump)
Any personal care activities	Bathing, Dressing, Brushing hair, Putting on personal aids e.g. Glasses
Any non-invasive observations	Taking a pulse, Blood pressure, Oxygen saturation, Temperature, Chest auscultation, Abdominal palpation, Applying ECG electrodes, CTG
Any non-invasive treatment	Applying an oxygen mask or nasal cannula, Fitting slings/braces, Application of incontinence aids (including condom drainage)

Key Message for Moment 1



If you clean your hands while entering the patient zone:

- you may touch the environment and then touch the patient
- because hands will be contaminated only with that individual patient's pathogens

Example Moment 1

HCW walks in:

- helps patient to sit up,
 - moves over bed table,
 - folds down sheets,
 - moves the chair into position,
 - then assists patient out of bed
-
- **Moment 1-** Prior to touching the patient

Question

The doctor performs HH, auscultates the patient's lungs, moves the bedside table, passes to the other side of the bed to assess muscle strength of the patient's leg

Which of the following is correct?

- Additional HH action is not required as the doctor does not leave the patient zone and there is no new HH indication
- HH should be performed because before touching the patient's leg is an other indication
- HH should be performed after touching the bedside table
- HH is not needed

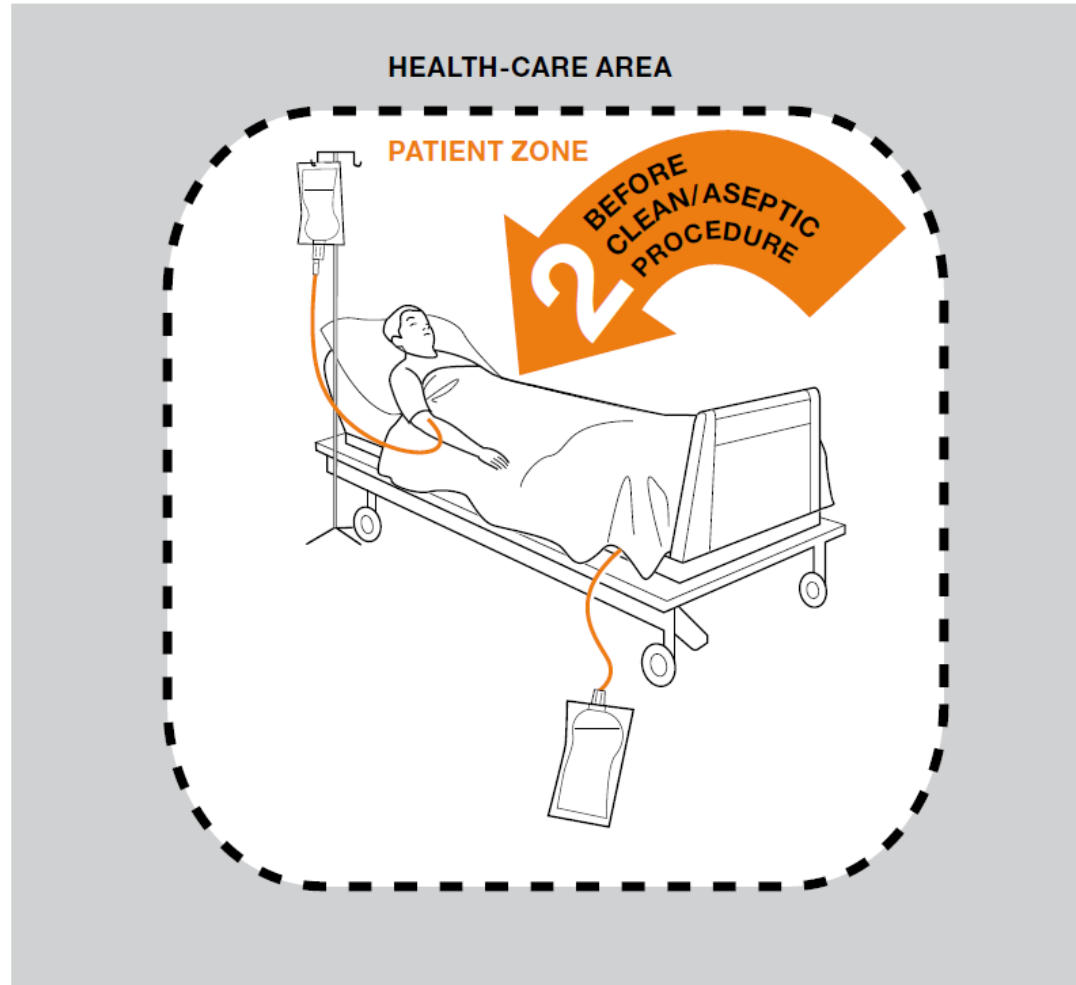
Question

By performing HH before touching a patient, you will protect:

- Yourself from acquiring germs from the patient
- The patient from acquiring germs from your hands
- The health care area from having patient's germs
- The device connected to the patient

Moment 2

Before a Clean/ Aseptic Procedure



« My five moments » (2)

This indication is determined by the occurrence of the last contact with any surface in the health-care area or in the patient zone, and any procedure involving any direct and indirect contact with mucous membranes, non-intact skin or an invasive medical device.

Situations associated with an aseptic task:

- drawing blood sample
- opening a vascular line
- endotracheal suctioning
- oro-dental care
- rectal examination
- eye drop instillation
- wound dressing
- preparing food, medication



Reference point:
IMMEDIATELY BEFORE
a contact with a critical site with
infectious risk for the patient

Procedure

Is an act of care for a patient where there is a risk of direct introduction of a pathogen into the patient's body



<https://www.myamericannurse.com/tube-feeding-aspiration/>



<https://www.medistudents.com/osce-skills/intravenous-cannulation>

Moment 2

When:	Examples:
Insertion of a needle into a patient's skin, or into an invasive medical device	Venipuncture, Blood glucose level, Arterial blood gas, Subcutaneous or Intramuscular injections, IV flush
Preparation and administration of any medications given via an invasive medical device, or preparation of a sterile field	IV medication, NGT feeds, PEG feeds, Baby tube feeds, Dressing trolley
Administration of medications where there is direct contact with mucous membranes	Eye drop installation, Suppository insertion, Vaginal pessary

Moment 2

When:	Examples:
Insertion of, or disruption to, the circuit of an invasive medical device	Procedures involving the following: ETT, Tracheostomy, Nasopharyngeal airways, Suctioning of airways, Urinary catheter, Colostomy/ileostomy, Vascular access systems, Invasive monitoring devices, Wound drains, PEG tube, NGT, Secretion aspiration
Any assessment, treatment and patient care where contact is made with non-intact skin or mucous membranes	Wound dressings, Burns dressings, Surgical procedures, Digital rectal examination, Invasive obstetric and gynaecological examinations and procedures, Digital assessment of newborns palate

Key points on clean/aseptic procedure



Clean/ aseptic procedure

Refers to the medical asepsis definition

= no pathogen introduced into the body during the procedure

≠ sterile condition or sterile body site



www1.racgp.org.au/ajgp/2019/september/post-surgical-wounds-in-general-practice
Leeds Teaching Hospitals NHS Trust

Key points for Moment 2



Hand Hygiene immediately prior to a procedure

- Once HH has been done, nothing else in the patient's environment should be touched prior to the procedure starting
- If gloves are used to perform the clean/aseptic procedure, HH must be performed before they are donned.

Hand Hygiene Australia. www.hha.org.au

Based on the WHO 'My 5 moments for Hand Hygiene', 2009

Key points for Moment 2



Before Aseptic Task :

- Refers to accepted “aseptic” procedures e.g. catheter insertion
- but also **any contact**/procedure involving:
 - Contact with **mucous membranes** e.g. preparing food and medications
 - Contact with non-intact skin that constitutes a risk of pathogen inoculation



<https://www.myamericannurse.com/a-medication-dosage-simulation-strategy-to-improve-patient-safety>

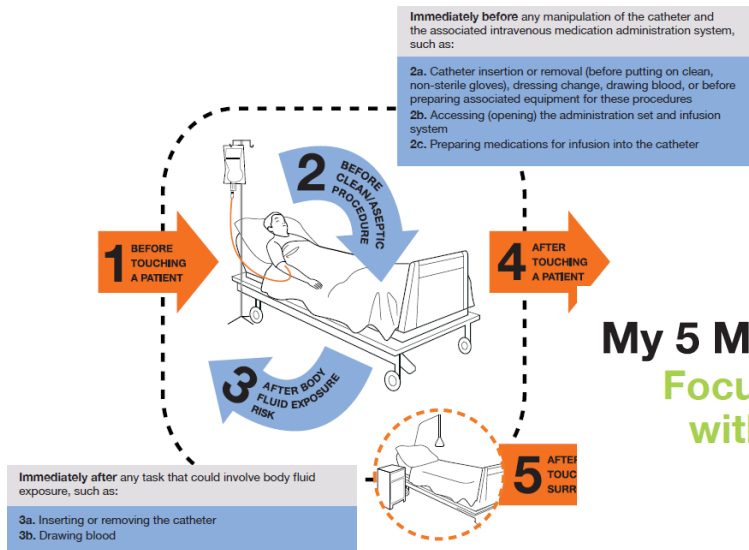
Example Moment 2

- The HCW has made the necessary preparations for taking a blood sample, including disinfecting and applying a tourniquet to the patient's arm. The HCW performs HH, puts on gloves, and inserts the needle in the vein.
- **Moment 2-** Before clean/aseptic procedure

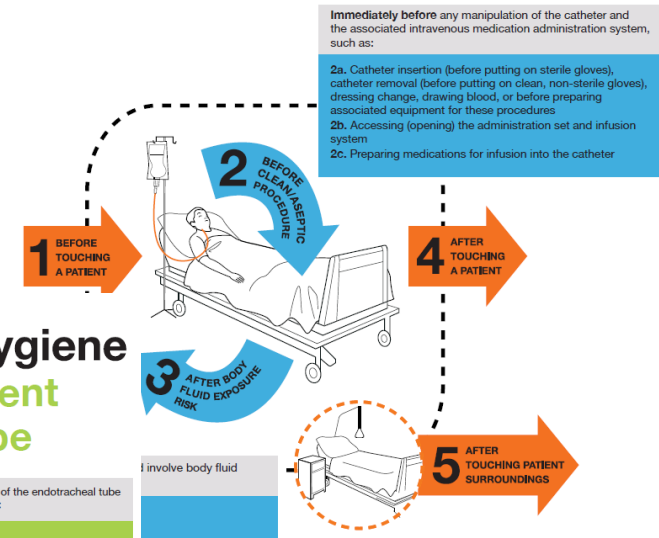
WHO. Hand hygiene technical reference manual, 2009

Reminders for before aseptic procedures

My 5 Moments for Hand Hygiene Focus on caring for a patient with a peripheral venous catheter



My 5 Moments for Hand Hygiene Focus on caring for a patient with a central venous catheter



My 5 Moments for Hand Hygiene Focus on caring for a patient with an endotracheal tube



Question

A nurse instills eye drops to the patient. When does she should perform HH?

- Before touching the eye drops bottle
- Immediately before and after instilling eye drops
- After eye drops instillation
- Before leaving the room



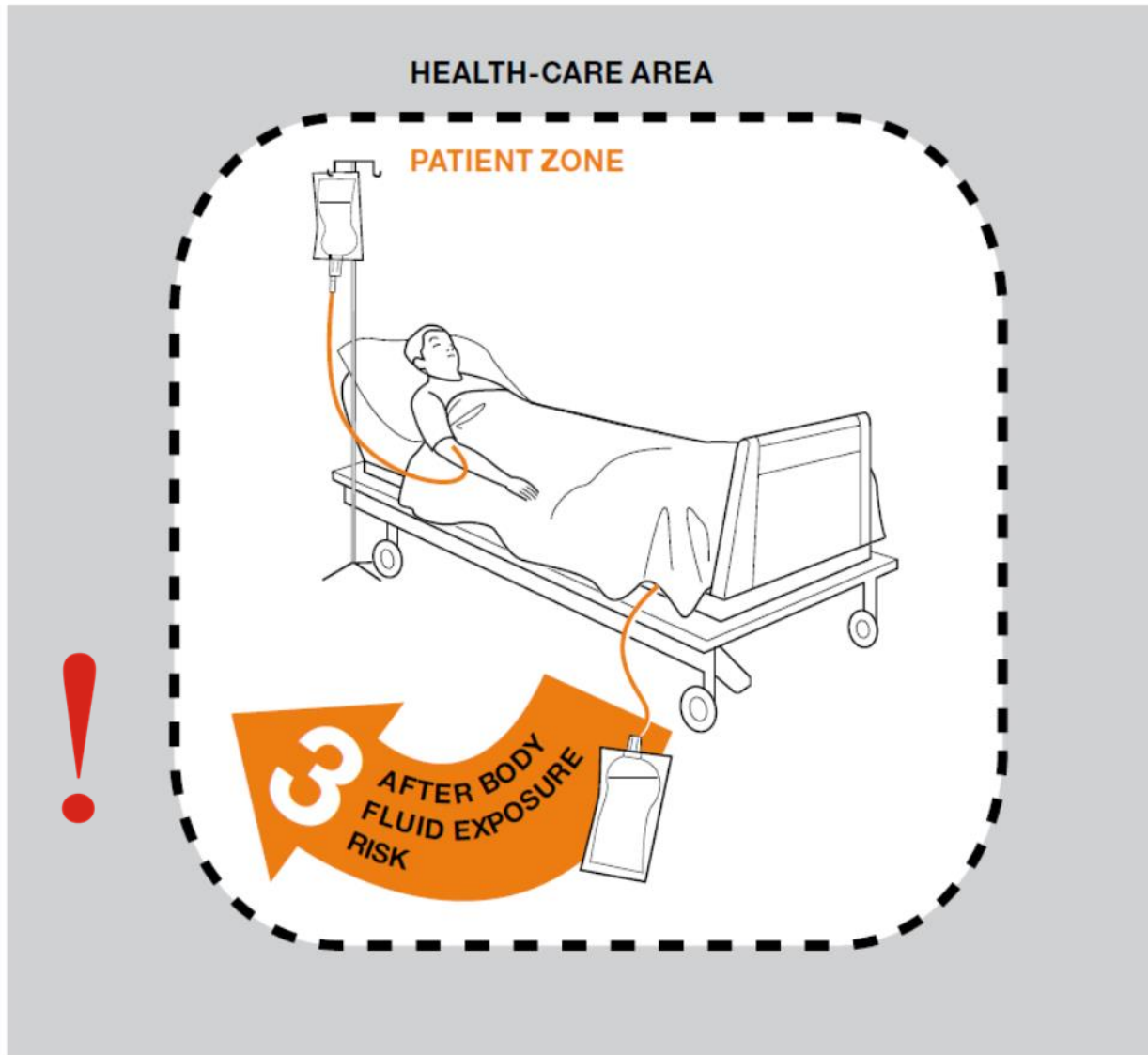
Question

Which of the following situations should not be recorded as before aseptic procedure (Moment 2)

- Measuring blood glucose level
- ◉ Giving glasses to the patient
- Preparing food for the patient
- Feeding by nasogastric tube

Moment 3

After a Procedure or Body Fluid Exposure Risk



« My five moments » (3)

This indication is determined by the occurrence of contact (**even if minimal and not clearly visible**) with blood or another body fluid and the next contact with any surface, including the patient, the patient surroundings or the health-care area

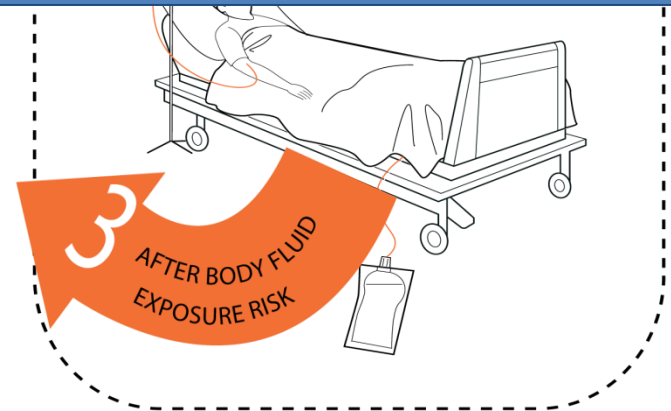
Situations associated to a potential or effective exposure to a body fluid :

- drawing blood sample
- oro-dental care
- vaginal examination
- removing a wound dress
- manipulating fluid sample
- clearing excreta
- cleaning soiled material and areas

Reference point:

IMMEDIATELY AFTER

the task involving exposure risk to body fluids has ended



Actual or potential contact with:

- Blood, lochia
- Saliva or tears
- Mucous, wax, or pus
- Breast milk, colostrum
- Vomitus
- Urine, faeces, semen, or meconium
- Pleural fluid, ascitic fluid or CSF
- Tissue samples, including biopsy specimens, organs, bone marrow, cell samples

Moment 3

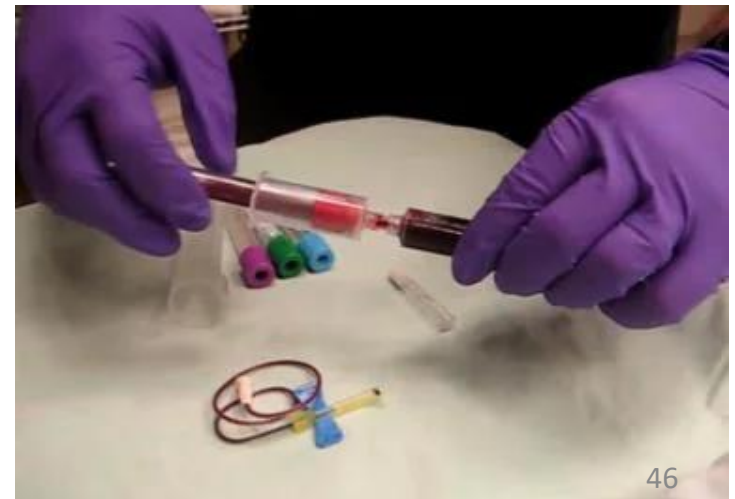
When:	Examples:
After any Moment 2	See Moment 2
After any potential body fluid exposure	Contact with a used urinary bottle / bedpan, Contact with sputum either directly or indirectly via a cup or tissue, Contact with used specimen jars / pathology samples, Cleaning dentures, Cleaning spills of body fluid from patient surroundings, After touching the outside of a drain

Key points for Moment 3



Hand Hygiene **immediately** after a procedure or a body fluid exposure risk

- As hands are likely to be contaminated with body fluid
- If the HCW is wearing gloves at the time of exposure to a body fluid, they must be removed immediately thereafter and HH must be performed



Key points for Moment 3



This action **may be postponed** until the HCW has left the patient surroundings if the HCW has to remove and process equipment (e.g. an abdominal drainage tube) on appropriate premises, and provided that he or she **only touches this equipment before performing HH**



Example for Moment 3

- The HCW worker changes soiled sheets and removes a bedpan from a bed-bound patient, places sheets in a bag and removes gloves, and performs HH.
- **Moment 3** -After a procedure or body fluid exposure risk

Question

The auxiliary nurse enters the room, donnes gloves, empties the urinary bag into a measuring cup, takes it to the dirty utility room without touching anything else, puts it in an automatic opening washer, and takes off the gloves.

In this whole care flow when HH should be performed?

- After emptying the urinary bag
- Before donning gloves to open the urinary bag and after discarding the measuring cup and doffing the gloves
- After putting the measuring cup into the washer
- Before opening the urinary bag

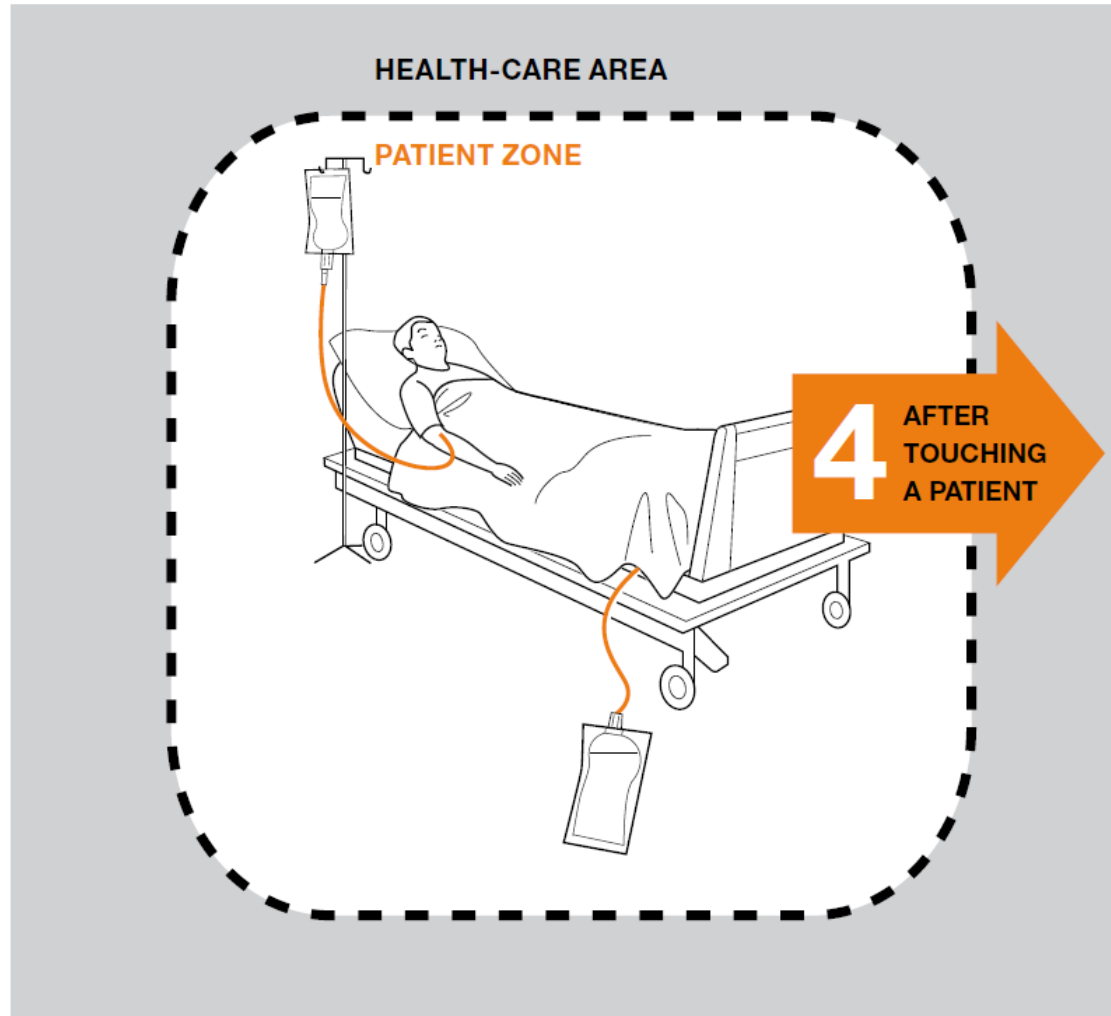
Question

Which of the following situations should not be recorded as after a procedure or body fluid exposure risk (Moment 3) ?

- After a contact with a used bedpan
- After touching the outside of a drain even if it is closed
- ◉ After touching patient's bed remote control
- After cleaning spills of blood

Moment 4

After Touching a Patient



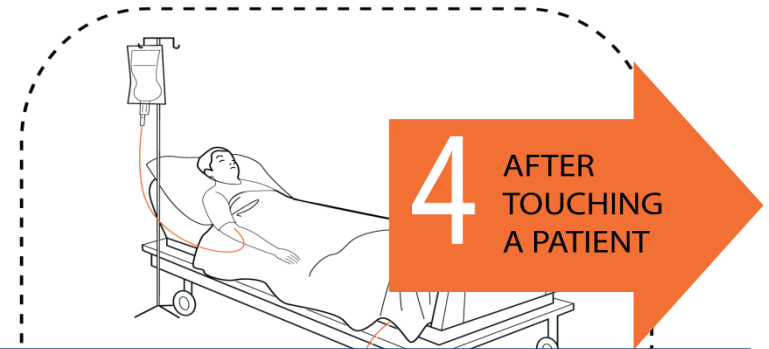
« My five moments » (4)

This indication is determined by the occurrence of the last contact with intact skin or the patient's clothing or a surface in the patient's surroundings (following contact with the patient), and the next contact with a surface in the health-care area

Situations illustrating the contact:

- shaking hands
- taking pulse, blood pressure
- chest auscultation
- abdominal palpation
- helping to move around

Situations containing the indication “before touching a patient” will contain the indication “after touching a patient” necessarily



Reference point:

AFTER

having touched the patient, when leaving the patient's side

Key Message for Moment 4



Hand Hygiene after touching a patient

- This indication cannot be dissociated from Moment 1

Example for Moment 4

- HCW walks in, helps the patient to sit up, folds down the sheets, moves the chair into position, then gets the patient out of bed, then leaves the room

Moment 1 – prior to touching patient

Moment 4 – after touching the patient

Hand Hygiene Australia. www.hha.org.au

Based on the WHO 'My 5 moments for Hand Hygiene', 2009

Question

The physiotherapist helps the patient to walk to his room, places the patient on his bed, and leaves the room

When Moment 4 should be recorded for the physiotherapist?

- ◉ After placing the patient in his bed
 - Before entering the room
 - After closing the patient's room door
 - Before touching bed

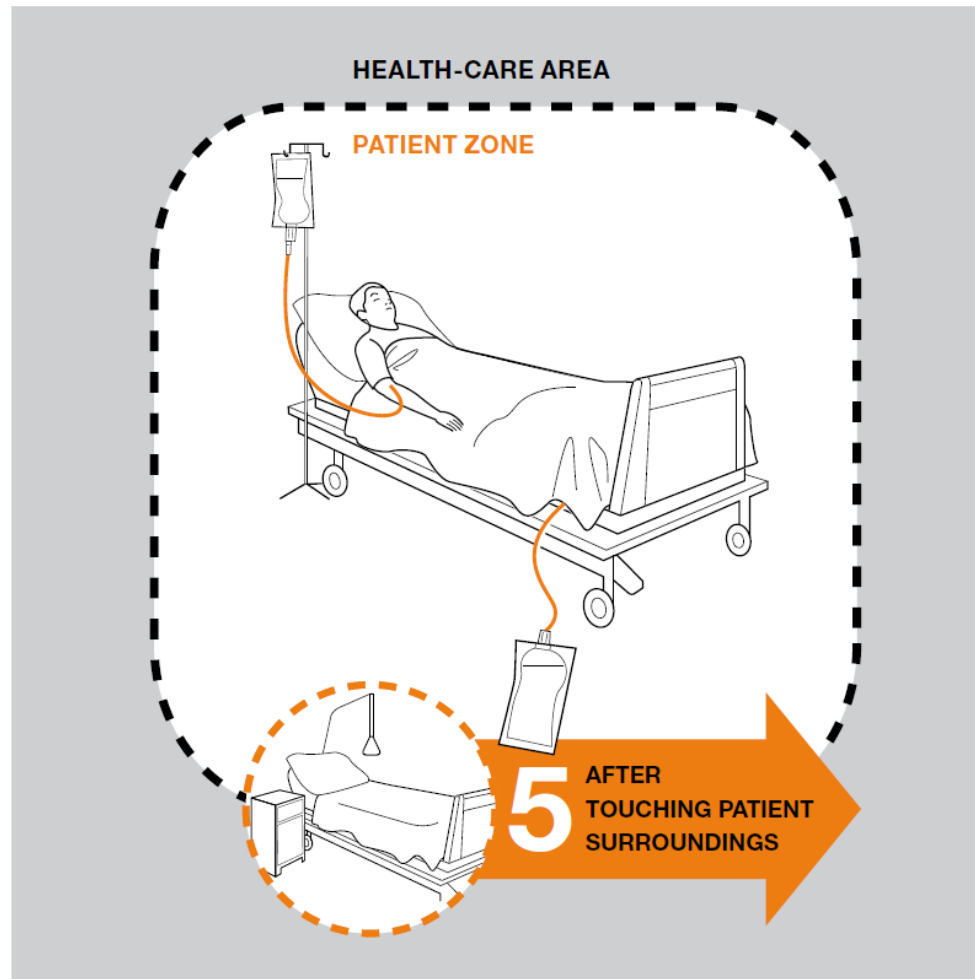
Question

Hand hygiene should be performed after:

- Fitting slings/braces, giving oral medications
 - Taking patient's vital signs e.g. pulse, oxygen saturations
 - Giving care to a patient like bathing, brushing hair
- ☒ All of the above

Moment 5

After touching a patient's immediate surroundings when the patient has not been touched



« My five moments » (5)

The indication occurs between the last contact with the patient surroundings, **without having touched the patient**, and any contact with a surface in healthcare environment

Situations illustrating the limited contact with inanimates:

- adjusting perfusion speed
- clearing monitoring alarm
- changing bed linen
- holding a bed rail
- clearing the bedside table

Reference point:

AFTER

touching any object or furniture when leaving the patient surroundings



Immediate Patient Surroundings

A space temporarily dedicated to an individual patient for that patient's stay

Includes:

- Patient furniture and personal belongings
- Medical equipment – BP machine, monitor
- Medical chart
- Anything touched by HCW while caring for that patient

Hand Hygiene Australia. www.hha.org.au

Based on the WHO 'My 5 moments for Hand Hygiene', 2009

Moment 5

When:	Examples:
After touching the patient's immediate surroundings when the patient has not been touched	Patient surroundings include: Bed, Bedrails, Linen, Table, Bedside chart, Bedside locker, Call bell/TV remote control, Light switches, Personal belongings, Chair, Foot stool, Monkey bar

Key points for Moment 5



- Hand hygiene after touching the patient's surroundings when the patient has not been touched
- For HCWs touching the patient's environment only and not the patient, HH must be performed on leaving the patient zone

Example for Moment 5

- The HCW walks into the patient room, while the patient is sleeping, he turns off the patient's monitor alarm then leaves

Moment 5 – after touching the patient surroundings (without touching the patient)

* If patient had been touched, then this would have been recorded as:

Moment 1 and Moment 4

Question

After preparing medication, the nurse brings the patient's drugs in a cup, puts them on the night table, takes the night table close to the patient, pours some water, and leaves the room.

When the nurse should perform HH?

- Before entering room
- Before touching the night table
- After touching the patient's surroundings
- No HH needed

Question

Before leaving the patient's room HH should be performed:

- After turning off the light above the patient's bed
 - After moving the chair around in the patient's room
 - After giving the book that is on the patient's night table to the patient
- ☒ All of the above

Things to remember



A Moment finishes when a HCW:

- Moves from one patient to another
- Leaves the room on completion of patient care
- Touches the curtain partition in a multi-patient room
- Moves from touching a patient to doing a procedure or vice versa

Things to remember

After body fluid exposure:

- This indication can finish in another area outside a patient room if patient care is not yet completed e.g. transporting a bedpan to the pan room
- There is no indication 'Before Patient Environment'



Thank you

