



**衛生防護中心**  
Centre for Health Protection

**Scientific Committee on Infection Control**

**Recommendations on Hand Hygiene and  
Use of Gloves in Health Care Settings**

**Scientific Committee on Infection Control, and  
Infection Control Branch, Centre for Health Protection,  
Department of Health**

**November 2017**



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# Recommendations on Hand Hygiene and Use of Gloves in Health Care Settings

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## Introduction

- 1 Health care associated infection (HCAI) is a major problem for patient safety and its impact can result in increased patient's mortality and morbidity, increased resistance of microorganisms to antimicrobial agents, a massive additional financial burden for the health system (1). Hand hygiene (HH) is considered the single most important factor to reduce the risk of HCAI (2). In this document, the recommendations are mostly adopted from the WHO Guidelines on Hand Hygiene in Health Care (2009) (3). The key infection control issues related to HH is presented for information by the local infection control practitioners (ICPs).
- 2 For purpose of discussion, the follow definitions are used:
  - 2.1 *“Hand washing” is defined washing hands with plain or antimicrobial soap and water (3).*
  - 2.2 *“Alcohol-based handrub” (ABHR) is defined as an alcohol-containing preparation (liquid, gel or foam) designed for application to the hands to inactivate microorganisms and/or temporarily suppress their growth. Such preparations may contain one or more types of alcohol, other active ingredients with excipients, and humectants (3).*
  - 2.3 *“Hand hygiene” is a general term referring to any action of hand cleansing with water and soap or alcohol-based handrub (3).*
  - 2.4 *“Medical gloves” is defined as disposable gloves used during medical procedures; they include examination (sterile or non-sterile) gloves, surgical gloves, and medical gloves for handling chemotherapy agents (chemotherapy gloves) (3).*

## I. Hand Hygiene

### 3 Five moments for HH for all health care facilities (3)

- 3.1 Before touching a client
- 3.2 Before clean/ aseptic procedure
- 3.3 After body fluid exposure risk
- 3.4 After touching a client
- 3.5 After touching client surroundings

(Refer to Appendix I for 5 moments for hand hygiene and other moments for Hand Hygiene in ambulatory setting)

### 4 Other examples of general indications for HH (3,4)

- 4.1 Moving from a contaminated body site to another body site during care of the same patient
- 4.2 Before commencing and leaving work
- 4.3 Before entering and leaving patient room
- 4.4 Before applying or removing Personal Protective Equipment (PPE)
- 4.5 After handling contaminated waste
- 4.6 When preparing or handling food, drinks or medication for clients
- 4.7 Whenever hands are visibly soiled

### 5 Agents for hand hygiene

#### Hand hygiene with soap and water (3)

- 5.1 Hands are visibly soiled
- 5.2 Hands must be rinsed and dried thoroughly
- 5.3 When caring for patients known or suspected to have spore-forming pathogens such as *Clostridium difficile*

#### Hand hygiene with ABHR

- 5.4 Use an ABHR as the preferred means for routine hand hygiene in all other clinical situations if hands are not visibly soiled (3).
- 5.5 ABHRs are preferred over antimicrobial or plain soap and water because of their superior microbiocidal activity, reduced drying of the skin, and convenience (5).
- 5.6 ABHRs with concentration of 70-80% should be used in

health care facilities as they are more effective in inactivating the non-enveloped virus such as norovirus, rotavirus, hepatitis A, enterovirus. Concentrations higher than 80% are being less potent because proteins are not denatured easily in the absence of water (3).

- 6 In order to ensure hand hygiene performing effectively (3,4)
  - 6.1 Fingernails should be kept short.
  - 6.2 Artificial nails or nail enhancements should be avoided.
  - 6.3 Wrist and hand jewellery should be avoided (rings are preferred not be worn, otherwise keep minimum of a plain ring).
  - 6.4 Long sleeves should be rolled up.
  - 6.5 Cuts and abrasions should be covered with a waterproof dressing.
- 7 Proper hand hygiene technique should follow “7 steps” and rub hands for at least 20 seconds (3).  
(Refer to Appendix III for CHP poster of “7 steps on hand hygiene”)
- 8 Hand care measures (7)
  - 8.1 Hot water for hand washing should be avoided.
  - 8.2 Soap and ABHR should not be used concomitantly.
  - 8.3 Hands should be dried thoroughly before donning gloves.
  - 8.4 Aqueous based hand lotion or cream should be applied regularly.
  - 8.5 Prolonged and inappropriate use of gloves should be avoided.
  - 8.6 Alternative HH products and support should be provided to HCWs with skin irritation/problems.

## II. Use of Gloves

- 9 Medical gloves use by health care workers (HCWs) is recommended for (3):
  - 9.1 To reduce the risk of contaminating HCWs’ hands with blood and other body fluids;
  - 9.2 To reduce the risk of germ dissemination to the environment and of transmission from the HCWs to the patient and vice versa, as well as from one patient to

another.

- 10 General indications for gloving (3)
  - 10.1 Before a sterile condition.
  - 10.2 Anticipation of a contact with blood or another body fluid, regardless of the existence of sterile conditions and including contact with non-intact skin and mucous membrane.
  - 10.3 Contact with a patient (and his/her immediate surroundings) during contact precautions.
- 11 General indications for glove removal (3)
  - 11.1 As soon as gloves are damaged (or non-integrity suspected).
  - 11.2 When contact with blood, another body fluid, non-intact skin and mucous membrane has occurred and has ended.
  - 11.3 When contact with a single patient and his/her surroundings, or a contaminated body site on a patient has ended.
  - 11.4 Moving from a contaminated body site to another body site during care of the same patient
  - 11.5 When there is an indication for hand hygiene.
- 12 Medical gloves should be selected appropriate to job task, patient-care activities and hand size (3). Powdered medical gloves should not be used because these products present additional or increased risk including inflammation, granulomas, and respiratory allergic reactions to HCWs and patients when powder inhaled or when exposed to internal tissue during oral, vaginal, gynecological, and rectal exams (8).
- 13 Medical gloves should be discarded immediately after removal. Gloves should not be washed, decontaminated, or reprocessed for any reuse purpose (3,5). Disinfection of gloved hands with ABHR is not recommended.
- 14 The use of gloves does not replace the need for hand hygiene (3,5,6). In situation where gloves are removed because of a tear or a puncture and the HCW has had contact with blood or another body, hand washing with soap and water is necessary as it is

considered to be equivalent to a direct exposure to blood or another body fluid (3).

### **III. Hand Hygiene Improvement Strategy**

- 15 The strategy for hand hygiene promotion programmes use in all health care services should be multimodal including system change, training and education, observations and feedback, reminders and a safety climate, to have a significant influence on behaviours of HCWs (3).
- 16 Hand hygiene education should be provided to HCWs (7).
  - 16.1 HH education should be a mandatory component for training at induction and on regular basis thereafter.
  - 16.2 Content of HH education should be appropriate to individual health care setting and it should include but not limited to the importance of HH, the indications for HH, the advantages and disadvantages of various methods/products used in HH, HH technique, HH audit result sharing especially in high risk hand contamination of patient-care activities, hand care measures and practical demonstration.
- 17 Hand hygiene audit should be performed (7).
  - 17.1 Regular monitor HCWs' adherence to recommended HH practices with performance feedback should be performed.
  - 17.2 Hand hygiene audits should form part of quality improvement programme.
- 18 Encourage partnerships between patients, their relatives or carers, and HCWs to promote hand hygiene in health care settings.
  - 18.1 Patient empowerment is a process through which people gain greater control over decisions and actions affecting their health and should be seen as both an individual and a community process (3).
  - 18.2 Patients, their relatives or carers should be provided with information about the need for HH and how to keep their hands clean (7).



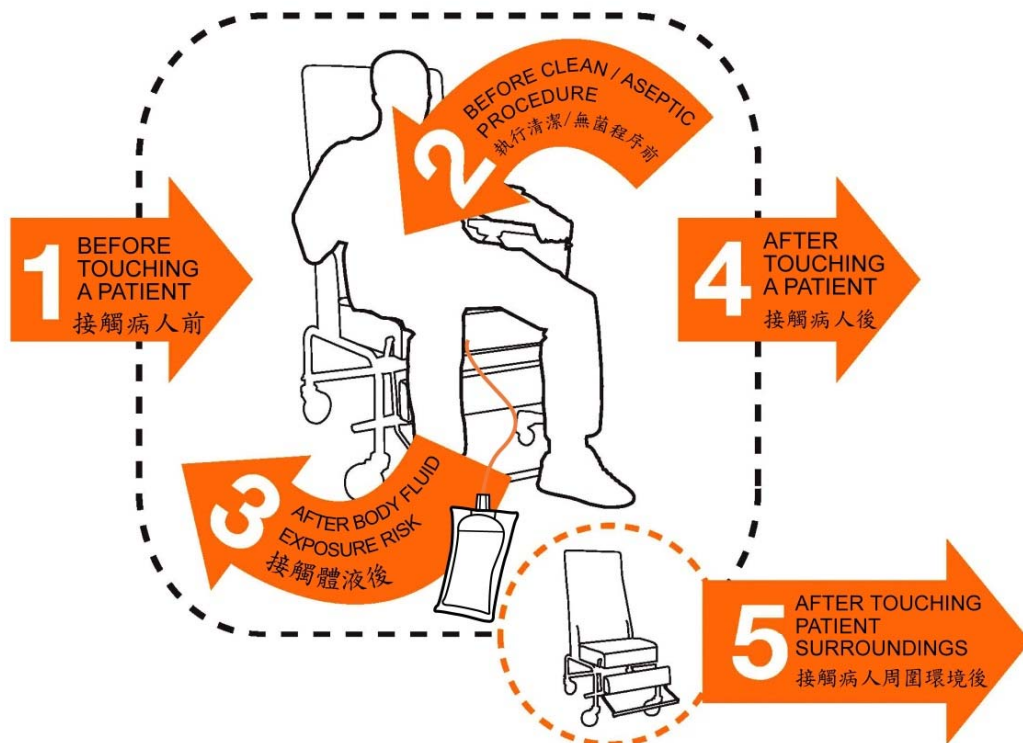
- 18.3 Provision of hand hygiene facilities must be tailored to patient need (4).
- 18.4 Patients and visitors should be offered the opportunity to clean their hands at appropriate time (7).
- 18.5 HCWs should take opportunities to educate patients, their relatives or carers on HCAI and hand hygiene (3).

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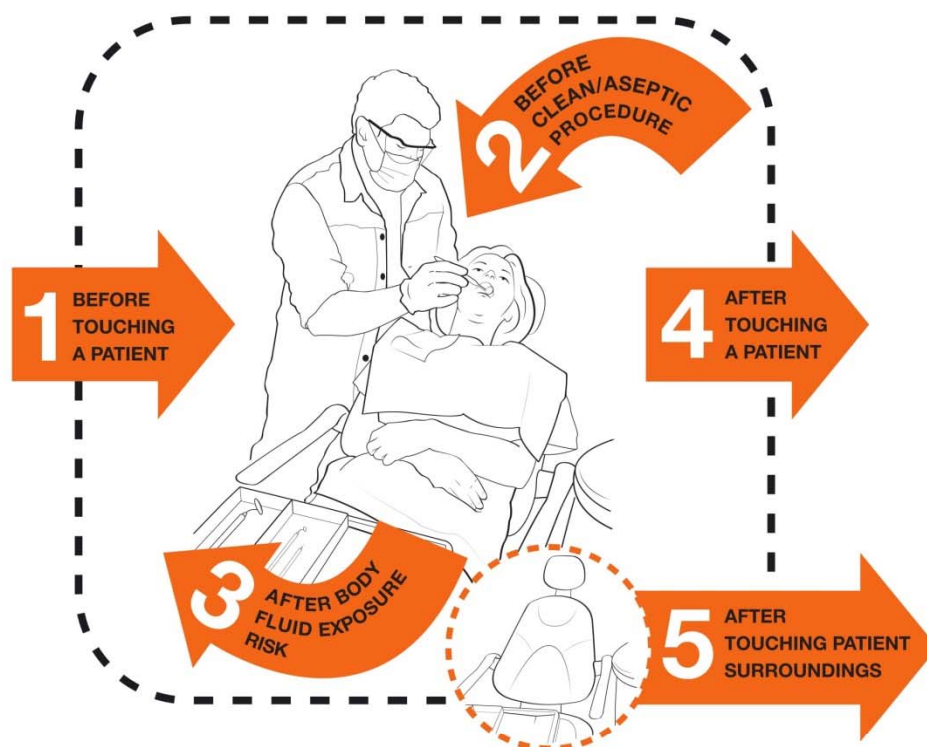
## 5 Moments for Hand Hygiene

### 潔手五時刻



# Your 5 Moments for Hand Hygiene

## Dental Care



<b>1</b> BEFORE TOUCHING A PATIENT	<b>WHEN?</b> Clean your hands before touching a patient. <b>WHY?</b> To protect the patient against harmful germs carried on your hands.
<b>2</b> BEFORE CLEAN/ASEPTIC PROCEDURE	<b>WHEN?</b> Clean your hands immediately before performing a clean/aseptic procedure. <b>WHY?</b> To protect the patient against harmful germs, including the patient's own, from entering his/her body.
<b>3</b> AFTER BODY FLUID EXPOSURE RISK	<b>WHEN?</b> Clean your hands immediately after a procedure involving exposure risk to body fluids (and after glove removal). <b>WHY?</b> To protect yourself and the environment from harmful patient germs.
<b>4</b> AFTER TOUCHING A PATIENT	<b>WHEN?</b> Clean your hands after touching the patient at the end of the encounter or when the encounter is interrupted. <b>WHY?</b> To protect yourself and the environment from harmful patient germs.
<b>5</b> AFTER TOUCHING PATIENT SURROUNDINGS	<b>WHEN?</b> Clean your hands after touching any object or furniture in the patient surroundings when a specific zone is temporarily and exclusively dedicated to a patient - even if the patient has not been touched. <b>WHY?</b> To protect yourself and the environment from harmful patient germs.



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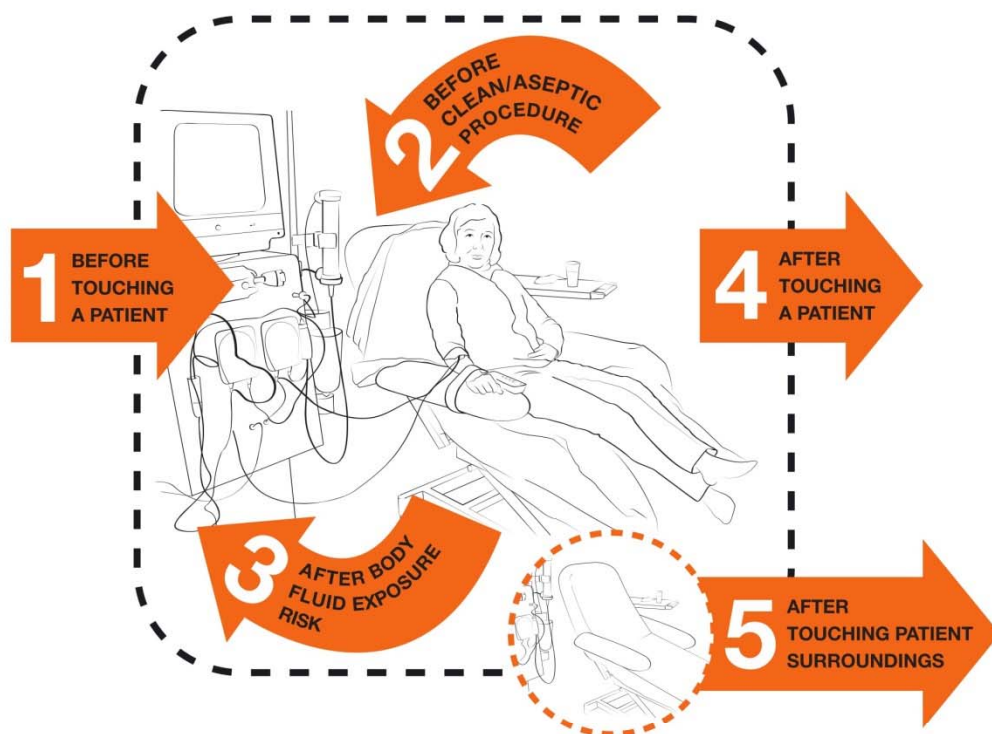
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March 2012

# Your 5 Moments for Hand Hygiene

## Haemodialysis in ambulatory care



<b>1</b>	<b>BEFORE TOUCHING A PATIENT</b>	<b>WHEN?</b>	Clean your hands before touching a patient.
		<b>WHY?</b>	To protect the patient against harmful germs carried on your hands.
<b>2</b>	<b>BEFORE CLEAN/ASEPTIC PROCEDURE</b>	<b>WHEN?</b>	Clean your hands immediately before performing a clean/aseptic procedure.
		<b>WHY?</b>	To protect the patient against harmful germs, including the patient's own, from entering his/her body.
<b>3</b>	<b>AFTER BODY FLUID EXPOSURE RISK</b>	<b>WHEN?</b>	Clean your hands immediately after a procedure involving exposure risk to body fluids (and after glove removal).
		<b>WHY?</b>	To protect yourself and the environment from harmful patient germs.
<b>4</b>	<b>AFTER TOUCHING A PATIENT</b>	<b>WHEN?</b>	Clean your hands after touching the patient at the end of the encounter or when the encounter is interrupted.
		<b>WHY?</b>	To protect yourself and the environment from harmful patient germs.
<b>5</b>	<b>AFTER TOUCHING PATIENT SURROUNDINGS</b>	<b>WHEN?</b>	Clean your hands after touching any object or furniture in the patient surroundings when a specific zone is temporarily and exclusively dedicated to a patient - even if the patient has not been touched.
		<b>WHY?</b>	To protect yourself and the environment from harmful patient germs.



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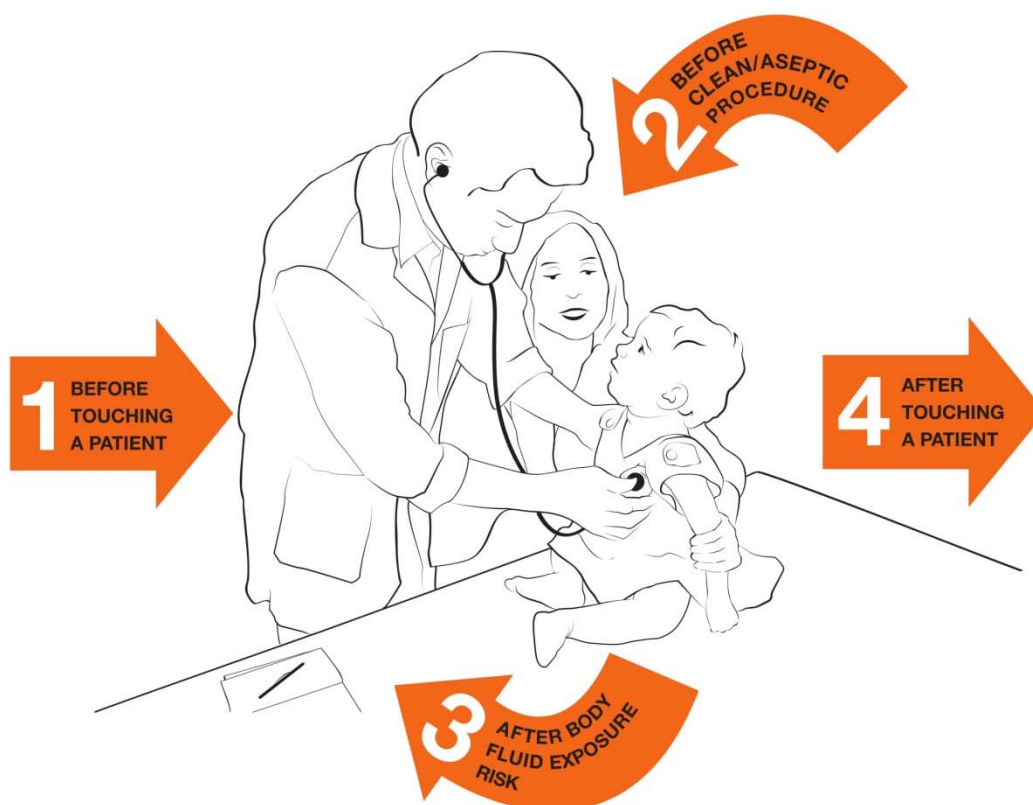
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# Your Moments for Hand Hygiene

## Paediatric Consultation



<b>1</b>	<b>BEFORE TOUCHING A PATIENT</b>	<b>WHEN?</b>	Clean your hands before touching a patient.
		<b>WHY?</b>	To protect the patient against harmful germs carried on your hands.
<b>2</b>	<b>BEFORE CLEAN/ASEPTIC PROCEDURE</b>	<b>WHEN?</b>	Clean your hands immediately before performing a clean/aseptic procedure.
		<b>WHY?</b>	To protect the patient against harmful germs, including the patient's own, from entering his/her body.
<b>3</b>	<b>AFTER BODY FLUID EXPOSURE RISK</b>	<b>WHEN?</b>	Clean your hands immediately after a procedure involving exposure risk to body fluids (and after glove removal).
		<b>WHY?</b>	To protect yourself and the environment from harmful patient germs.
<b>4</b>	<b>AFTER TOUCHING A PATIENT</b>	<b>WHEN?</b>	Clean your hands after touching the patient at the end of the encounter or when the encounter is interrupted.
		<b>WHY?</b>	To protect yourself and the environment from harmful patient germs.



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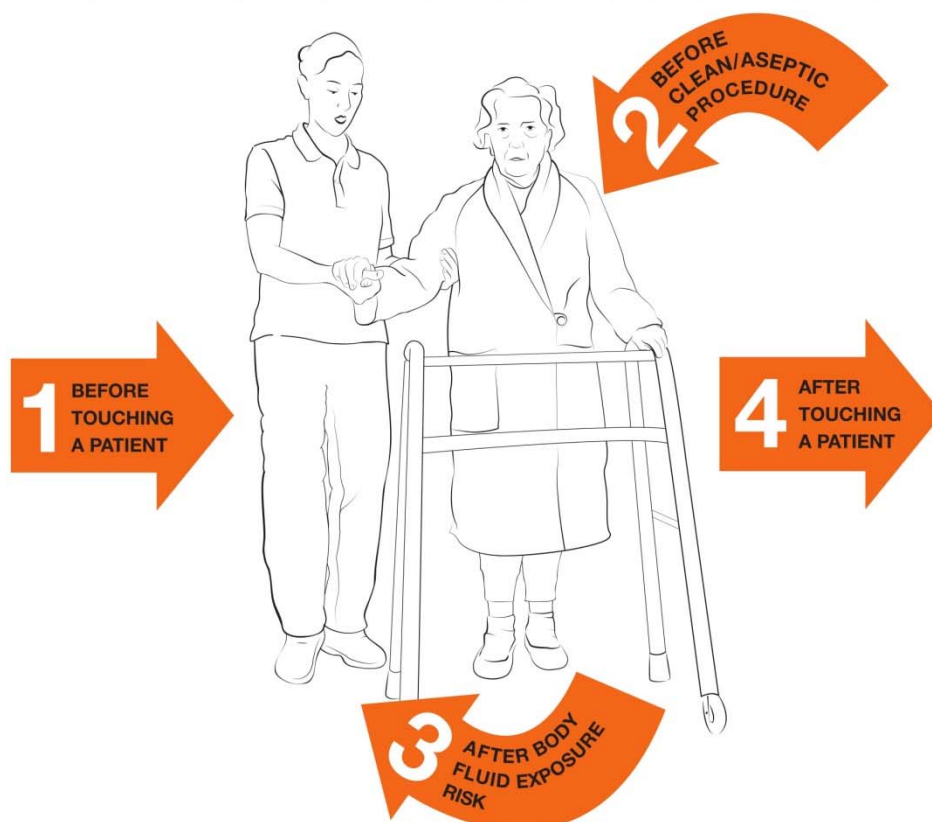
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# Your Moments for Hand Hygiene

## Health care in a residential home



<b>1</b>	<b>BEFORE TOUCHING A PATIENT</b>	<b>WHEN?</b>	Clean your hands before touching a patient.
		<b>WHY?</b>	To protect the patient against harmful germs carried on your hands.
<b>2</b>	<b>BEFORE CLEAN/ASEPTIC PROCEDURE</b>	<b>WHEN?</b>	Clean your hands immediately before performing a clean/aseptic procedure.
		<b>WHY?</b>	To protect the patient against harmful germs, including the patient's own, from entering his/her body.
<b>3</b>	<b>AFTER BODY FLUID EXPOSURE RISK</b>	<b>WHEN?</b>	Clean your hands immediately after a procedure involving exposure risk to body fluids (and after glove removal).
		<b>WHY?</b>	To protect yourself and the environment from harmful patient germs.
<b>4</b>	<b>AFTER TOUCHING A PATIENT</b>	<b>WHEN?</b>	Clean your hands after touching the patient at the end of the encounter or when the encounter is interrupted.
		<b>WHY?</b>	To protect yourself and the environment from harmful patient germs.



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# Your Moments for Hand Hygiene

## Vaccination Campaign



<b>1</b>	<b>BEFORE TOUCHING A PATIENT</b>	<b>WHEN?</b>	Clean your hands before touching a patient.
		<b>WHY?</b>	To protect the patient against harmful germs carried on your hands.
<b>2</b>	<b>BEFORE CLEAN/ASEPTIC PROCEDURE</b>	<b>WHEN?</b>	Clean your hands immediately before performing a clean/aseptic procedure.
		<b>WHY?</b>	To protect the patient against harmful germs, including the patient's own, from entering his/her body.
<b>3</b>	<b>AFTER BODY FLUID EXPOSURE RISK</b>	<b>WHEN?</b>	Clean your hands immediately after a procedure involving exposure risk to body fluids (and after glove removal).
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<b>4</b>	<b>AFTER TOUCHING A PATIENT</b>	<b>WHEN?</b>	Clean your hands after touching the patient at the end of the encounter or when the encounter is interrupted.
		<b>WHY?</b>	To protect yourself and the environment from harmful patient germs.



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## Appendix II: Hand hygiene technique





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