Hand Hygiene: Preventing avoidable harm in our care

Hand Hygiene Training Presentation for Healthcare Workers in Community and Primary Care

National HSE HCAI AMR Clinical Programme 2017
What we will cover

- Why you should clean your hands
- What are Healthcare associated Infections
- The ‘5 Moments of Hand Hygiene’
- The golden rules of hand hygiene
- Hand hygiene and glove use
- Hand Hygiene Technique
Learning outcomes

• Consider the current experiences for using hand hygiene in your workplace

• Understand why, how and where hand hygiene is important

• How to make improvements to achieve hand hygiene compliance that is safe
The impact of HCAI on our patients

HCAI can cause:

- more serious illness
- prolonged stay in a health-care facility
- long-term disability
- excess deaths
- high additional financial burden to health services
- high personal costs on patients and their families
What are Healthcare Associated Infections

- An infection that is acquired after contact with healthcare services. Examples include Clostridium difficile (C diff.) and methicillen resistant Staphylococcus aureus (MRSA)

- A bacteria commonly referred to as C diff which can be acquired after antibiotic use

- Spread from person to person or picked up in the environment/equipment or healthcare workers hands that is contaminated with C diff.

- (MRSA) can be transmitted from person to person or again from the healthcare workers hands, environment or equipment
Infectious Disease
Any germs that can cause disease including bacteria, viruses, parasites and fungus

Susceptible Host
Persons at risk for getting an infection including elderly, young babies, people with chronic disease such as diabetes, asthma. Having a wound or devices such as cannulas and catheters or feeding tubes in the body

Reservoir
Places where the germs can live and spread include food, water, toilet seat, door handles, human faeces and other body secretions

Portal of Entry
Where germs enter the body including open wounds, catheters, feeding tubes, cannulas, or mucous membranes

Mode of Transmission
How the germs spread either by direct contact such as person to person by hands or indirect contact including the environment or equipment used to provide care

Portal of Exit
Where the germs leave the reservoir: includes the nose, mouth, back passage, urinary tract or blood and body fluids
For an infection to develop, each link of the chain must be connected.

Remember breaking ANY link of the chain can stop the transmission of infection!
Example of a HCAI which is preventable

Catheter associated urinary tract infections (CAUTI).

By reducing the number of people that access or manipulate devices including catheters, cannulas and feeding tubes.

By ensuring that those that do make contact with devices, do it consistently correct.

Good hand hygiene practices will help reduce the risk of catheter associated urinary tract infection for the person that has the urinary catheter in place.
What is Hand Hygiene?

Hand Hygiene includes cleaning hands with alcohol-based hand rub (ABHR) or soap and water in order to remove germs, also known as microorganisms.
So **why** and **when** should we clean our hands during our work?
Why we clean our hands

- Protect patients and clients against harmful germs carried on your hands or present on his/her skin

- Protect yourself and the environment from harmful germs
1. Germs present on resident/clients skin and immediate environment surfaces

2. Germs transfer onto healthcare workers hands

3. Germs survive on hands for several minutes

4. Hand hygiene not carried out or done correctly results in hands remaining contaminated

5. Contaminated hands transmit germs via direct contact with patient/resident or their immediate environment
Why is Hand Hygiene so important?

- One of the single most effective measures for preventing the spread of infection and HCAIs
- If done properly can be up to and over 90% effective
- Up to 70% (of some) HCAIs are preventable
Where should you clean your hands?

- Hand hygiene is important in all places where health care is provided. This includes hospitals, residential facilities and primary care settings including the patients home.

- Busy health care providers need access to hand hygiene products where patient care is taking place.

- Providing alcohol-based hand rub at the point of care (within arms reach) is an important system support to improve hand hygiene which is recommended as the most effective method providing hands are visibly clean.
Time constraint = major obstacle for hand hygiene

• Adequate handwashing with water and soap requires 40–60 seconds

• Average time usually adopted by health-care workers: <10 seconds

• Alcohol-based handrubbing: 20–30 seconds.
How does hand hygiene work?

- Hand hygiene with alcohol-based hand rub – correctly applied – **kills** organisms in seconds in routine care.

- Exceptions are if hands are visibly dirty or when caring for someone with diarrhea who is suspect to have *Clostridium difficile* (C.diff)

- Hand hygiene with soap and water – done correctly – removes organisms.
My “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
My “5 Moments for Hand Hygiene”

1. Before touching a patient
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Moment 1
Before Touching the patient/resident

When
Clean the hands before touching the person you are delivering care to

Why
To protect the persons receiving care from harmful micro-organisms carried on the HCWs hands

Examples
- Helping someone to get washed or dressed
- Prior to changing incontinence wear
- Taking pulse, blood pressure, examination of skin, abdominal palpation
Moment 2
Before a Clean/Aseptic Procedure

**When** - clean the hands immediately before performing an aseptic or clean procedure

**Why** - to protect against micro-organisms from entering the person's body

**Examples**
- Oral care, giving eye drops, suctioning
- Skin lesion care, wound dressing, giving an injection
- Urinary catheter insertion and catheter care
- Accessing /commencing a tube feeding system
- Preparation of medication, or doing a dressing
- Taking specimen samples including blood and urine
Moment 3
After Body Fluid Exposure Risk

**When** - clean the hands immediately after an exposure risk to body fluids (and after glove removal)

**Why** - to protect the HCW and the healthcare environment from harmful micro-organisms

**Examples**
- Clearing up urine, faeces, vomit, handling waste (soiled dressings, tissues, incontinence pads),
- Cleaning of contaminated and visibly soiled material from equipment or the environment (bathroom, commodes)
- Taking blood, urine or faecal samples, emptying urinary catheters
**Moment 4**

**After Touching the Client/Resident**

*When* - clean the hands after directly touching the person you are when you have completed the care you are providing.

*Why* - to protect the HCW and the healthcare environment from harmful micro-organisms.

**Examples**

- Helping someone to get washed, get dressed,
- Taking pulse, blood pressure.
- After completing an examination on someone.
Moment 5
After Touching the Patient/Residents Surroundings

When leaving patients home
Clean the hands after touching any object or furniture or personal items belonging to the person you are caring for which includes their home, even if the person has not been touched.

Why - to protect the HCW and the healthcare environment from harmful micro-organisms
Examples
• Touching personal items
• Leaving someone’s home after providing care
Your Moments for Hand Hygiene
Paediatric Consultation

1. Before touching a patient
   - WASH: Clean your hands before touching a patient.
   - WHY: To protect the patient against harmful germs carried on your hands.

2. Before clean/aseptic procedure
   - WASH: 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
   - WASH: Clean your hands immediately after a procedure involving exposure risk to body fluids (and after glove removal).
   - WHY: To protect yourself and the environment from harmful patient germs.

4. After touching a patient
   - WASH: Clean your hands after touching the patient at the end of the encounter or when the encounter is interrupted.
   - WHY: To protect yourself and the environment from harmful patient germs.

World Health Organization
SAVE LIVES
Clean Your Hands

March 2012
Your Moments for Hand Hygiene

Vaccination Campaign

1. BEFORE TOUCHING A PATIENT
   - Wash your hands before touching a patient.
   - To protect the patient against harmful germs carried on your hands.

2. BEFORE CLEAN/ASEPTIC PROCEDURE
   - Clean your hands immediately before performing a clean/aseptic procedure.
   - To protect the patient against harmful germs, including the patient's own, from entering his/her body.

3. AFTER BODY FLUID EXPOSURE RISK
   - Clean your hands immediately after a procedure involving exposure to body fluids (and other glove removal).
   - To protect yourself and the environment from harmful patient germs.

4. AFTER TOUCHING A PATIENT
   - Clean your hands after touching the patient at the end of the encounter or when the encounter is interrupted.
   - To protect yourself and the environment from harmful patient germs.

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The **golden rules** for Hand Hygiene

- Hand hygiene must be performed exactly where you are delivering health care to patients (at the point-of-care).

- During health care delivery, there are 5 moments (indications) when it is essential that you perform hand hygiene ("My 5 Moments for Hand Hygiene" approach).

- To clean your hands, you should prefer **handrubbing** with an alcohol-based hand rub, if available. Why? Because it makes hand hygiene possible right at the point-of-care, it is faster, more effective, and better tolerated.

- You should wash your hands with soap and water when visibly soiled or caring for someone with diarrhoea who may be suspected to have *Clostridium difficile*.

- You must perform hand hygiene using the appropriate technique and time duration.
Bare the wrists!

- Plain ring/band only to be worn
- Remove wrist watch/jewellery at the beginning of work
- No long sleeves should be worn when delivering care
- Keep nails short
- Artificial nails /nail varnish should not be worn
Hand Hygiene technique
Practical Demonstration

It is possible to use the same technique in principal for applying alcohol hand rub and hand washing to ensure that the product covers all part of the hands.

The difference is

• **Alcohol hand rub**: apply approximately 3-5 mls and clean hands as per technique demonstrated

• **Handwashing**: wet hands, apply soap, clean all surfaces of the hands, rinse off and dry with paper towels

Now Practice the hand hygiene technique following demonstration
Support the person you are providing care to in attending their own Hand Hygiene

- Hand washing with soap and water or alcohol hand rub is important to anyone who is mobile
- Alcohol hand rub or patient hand wipes are useful to assist in hand hygiene with someone who is less mobile
- The most important times to ensure that assistance is provided with hand hygiene
  - After using the toilet
  - Before meals
Gloves are the worst enemy of hand hygiene!

- Wearing gloves is a significant risk factor for poor hand hygiene compliance and germ transmission.
- The use of gloves does not replace the need for cleaning your hands.
- Wear gloves only when indicated.
- Always remember that it is essential to perform hand hygiene on removal of gloves.
Some **key** issues to remember

- Cover cuts and abrasions with a waterproof dressing or plaster
- Thorough rinsing and drying of hands after washing will prevent skin irritation
- Use disposable paper hand towels for drying hands
- Apply hand cream frequently to prevent skin dryness.
Keep up the knowledge

- Hand Hygiene education is mandatory with updates every 2 years required and should be part of induction training.
- Infection prevention and control should be on everyone's agenda.
- Everyone is responsible for their own hand hygiene practices.
- Lack of appropriate facilities or resources to perform hand hygiene should be brought to your line managers' attention immediately.
In Summary-
we have covered......

- Why you should clean your hands
- Health care associated infections
- The ‘5 moments of hand hygiene’
- Hand hygiene technique for using alcohol hand rub and hand washing
- The golden rules of hand hygiene
- Hand hygiene and glove use.
Cleaning hands at the right time and in the right way

For all the lives we touch.

Thank you