

# Paraprofessionals Training Part 1

## Your Role in Infection Prevention/ The Chain of Infection/Hand Hygiene

by

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# Objectives

- Describe the different roles (advocate, educator, surveillance, immunization) in infection prevention and how they work together.
- Discuss their role (CNA, housekeeping, dietary, therapy) in infection prevention and the impact on residents and staff.
- Believe that infection prevention is everyone's responsibility
- Define the chain of infection and how to break the chain of infection.
- Discuss **how** their actions can sustain or break the chain of infection.
- Describe **why** it is appropriate to perform hand hygiene.
- Describe **when** it is appropriate to perform hand hygiene.
- Demonstrate the appropriate way to perform hand hygiene.

# Infection Prevention is Everybody's Business



## Who are infection preventionists?

Infection preventionists use their detective skills to find the bad germs and make sure everyone is doing the right things to keep you safe.



Catheters or other devices will be placed in your body after your skin receives proper cleaning.



Healthcare workers will clean their hands before and after they care for you.



Your healthcare workers will wear gloves, gowns, and masks at the right times.

If you are in isolation, you and your visitors may need to do this too.



Your room and any equipment that is used on you will be clean.



# The many roles of the Infection Preventionist

**Coordinate Infection Program  
and Risk Assessment**

**Reduce HAIs to Target Zero**

**Communicator/Collaborator**

**Educator/Leader**

**Policy Development**

**Resident Advocate for  
Wellness**

**Liaison to Public Health**

**Emergency Preparedness**



**Advocate Vaccination Program**

**Assure Hand Hygiene available  
and do audits for compliance**

**Assure Environmental Hygiene**

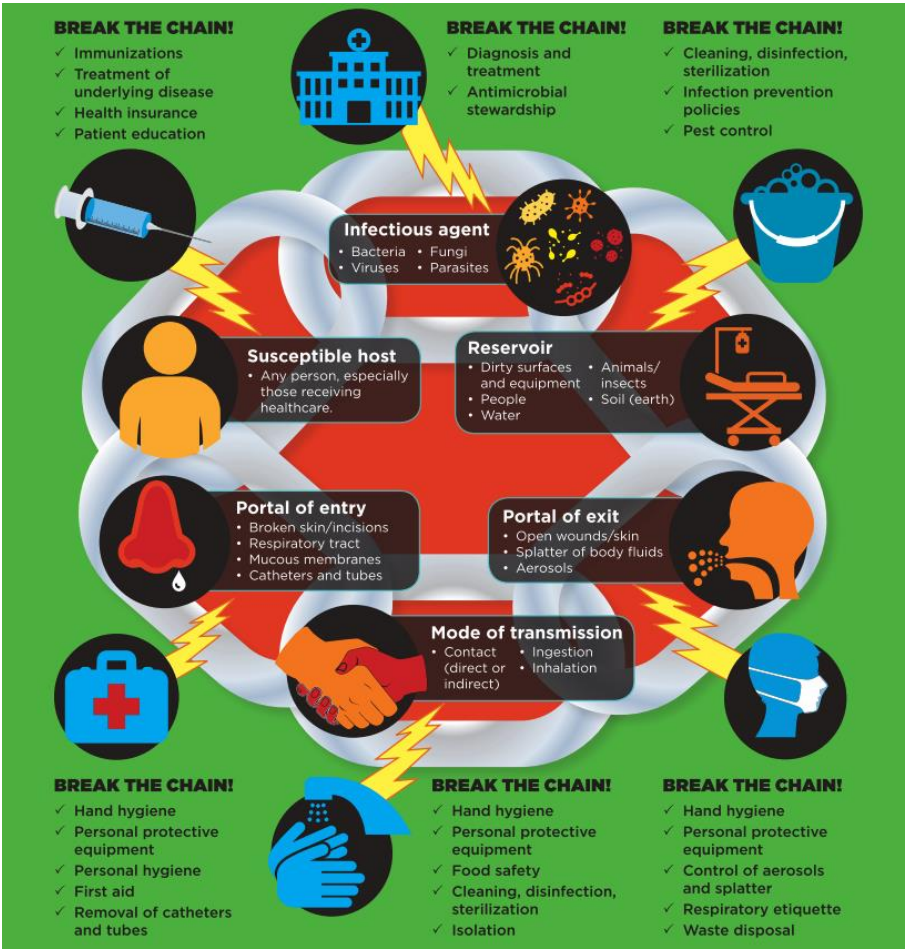
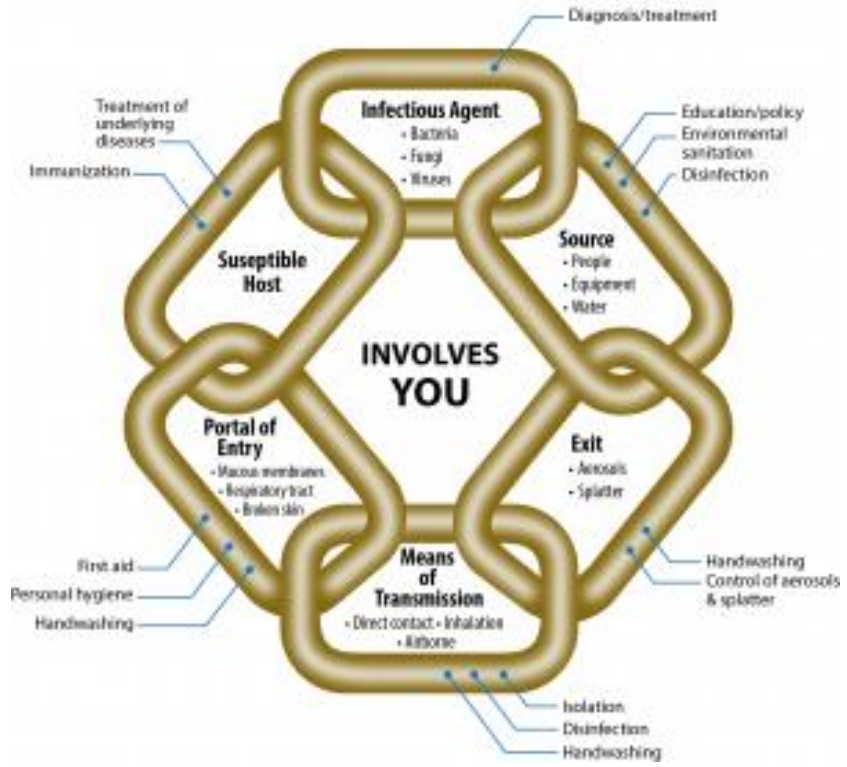
**Infection Surveillance**

**Promote Resident Privacy of  
Health information**

**Critical Thinking**

**Data Management**

# Breaking the Chain





# The Chain of Infection



# Implementing Breaking the Chain!

## Case Study:

- You see Mr. Fall at the end of the long hallway and it appears that he has lost control of his bladder and there is a spill of urine under his wheelchair.
- Discuss how you break the chain of infection?
  - If you are a CNA?
  - If you are Housekeeping?
  - If you are dietary and are passing trays?
  - If Mr. Fall has just left therapy?



# AMERICANS' HAND HYGIENE HABITS

A majority of Americans are getting caught dirty-handed when it comes to their handwashing habits. A survey by SCA, a global hygiene company, uncovered that consumers understand the importance of hand hygiene but their practices may be grossly exaggerated.



On average, you come in contact with 300 surfaces every 30 minutes, exposing you to 840,000 germs\*

**71%**  
say they practice good hand hygiene and wash their hands regularly

yet...

**58%**  
have witnessed others leaving a public restroom without washing their hands

**20%**  
witnessed restaurant employees

**33%**  
witnessed friends

**35%**  
witnessed co-workers

**MORE THAN HALF**

do not wash their hands after riding public transportation, after using shared exercise equipment, or handling money

**39%**  
do not wash their hands after sneezing, coughing or after blowing their nose

\*According to 2011 Toit® Report

On behalf of SCA, KRC Research conducted 1,000 online interviews among a nationally representative sample of adults in the U.S. from February to October 9, 2012.

  
**SCA**  
do Life

# #1 Believe that infection prevention is everyone's responsibility



# Infection Prevention Speaking Up!

- ***Does Hand Hygiene Really Matter?***



6 minute Institute for Health Partnering to Heal Video

<http://health.gov/hcq/trainings/partnering-to-heal/index.html>

Why is it appropriate to perform hand hygiene?

*Good hand hygiene keeps residents from developing infections.*



# Be someone who has Healing Hands



## What Have YOU Touched Today?

Viruses and bacteria can live for several hours on many surfaces.

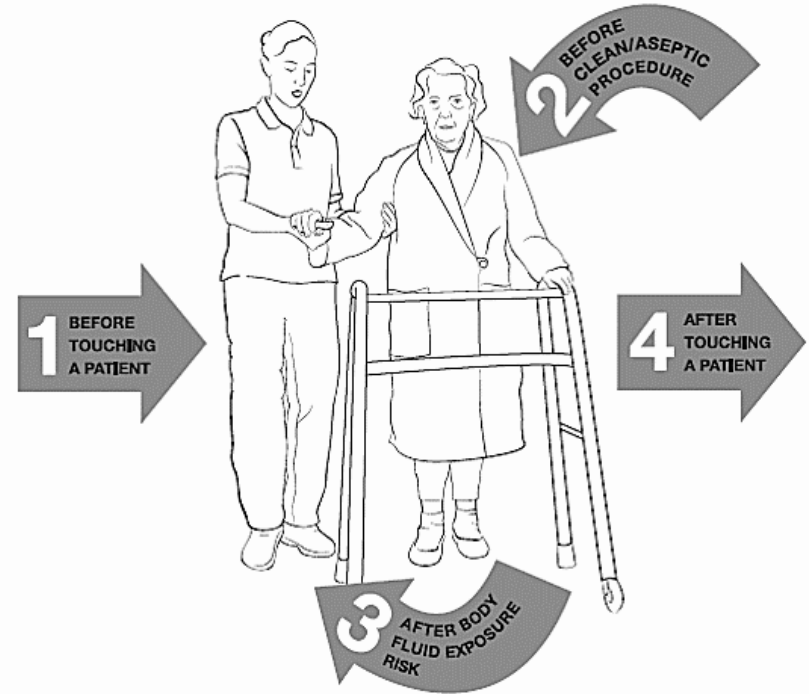
- The IV Bag.
- The Stethoscope.
- The Clipboard Chart.
- The Blood Pressure Gauge.
- The Forceps Clamp.
- The Wheelchair.
- The Bed Rail.

### Scrub Those Germs Away!

© Touch of the Hand 2011 384-8226 www.touchofthehand.com

# Your Moments for Hand Hygiene

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



# World Health Organization (WHO) 5 Moments

It's all about the "zone"



**Regardless of whether gloves are used or not!**

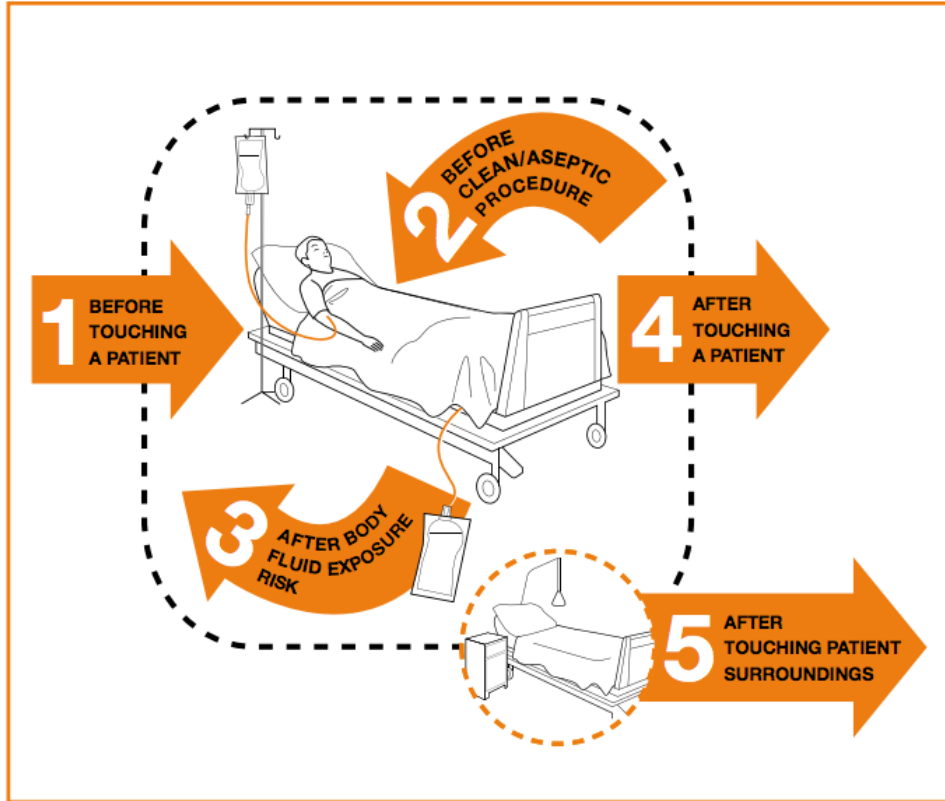
-----indicates zone-----

# World Health Organization (WHO) 5 Moments

It's all about the "zone"

Regardless of whether gloves are used or not!

-----indicates zone-----







# Perform Hand Hygiene = Glove Hygiene Change Gloves!

**Never go from dirty to clean sites without removing gloves and performing HH  
Change gloves ► hand hygiene ► don clean gloves when going from one body site  
to another**

- two different wounds at two different body sites
- between oral and wound care
- between oral care and catheter care
- assisting in toileting and then assisting in ADLs

# What should I use to clean my hands?



## Evidence Based Strategies



### Use Handwashing when:

- Hands are visibly soiled
- For contact enteric precautions
- After using the restroom
- Before and after eating
- After coughing or sneezing
- All other times use ABHR

- Preferred method of hygiene is ABHR
- Use HW if hands feel tacky after multiple uses of hand sanitizer use soap and water

**CDC**  
**Recommendations**

What is the appropriate way to perform hand hygiene:  
**Soap and Water or Alcohol Based Hand rub (ABHR) ???**



Evidence Based  
Strategies



CDC  
Recommendations



# Fingernails Matter

## Infection Transmission & Artificial Nails



### Research tells us . . .

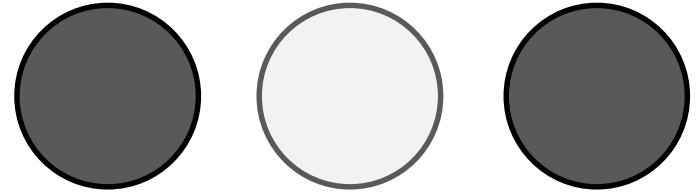
- Colony count of bacteria/ fungi is greater than on native nails
- More likely to harbor gram-negative pathogens on finger tips than with native nails, before and after hand washing
- Study of microflora on the hands of 30 health care workers (Hedderwick et al. 2000)
  - Gm neg *bacilli* with artificial nails 47% vs. native nails 17%
  - Yeast with artificial nails 50% vs. native nails 13%

# The Do's and Don'ts of fingernails



- Artificial fingernails, gel nails or extenders should not be worn.
- Natural nails should not be longer than 0.635 cm or ¼ inch long.
- Nail polish should be removed when chipped.
- Avoid wearing hand jewelry.

# Evidence Supporting the Claim



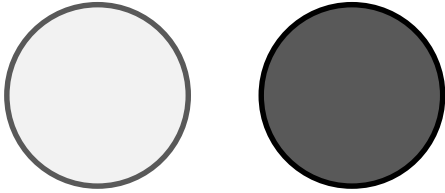
## **Outbreak of pseudomonas infection in a Neonatal Intensive Care Unit**

- Causality – 40 babies were affected, 16 died
- Cause – Growth found in fingernails of staff

## **Hemodialysis related Bacteremia**

- Causality – 5 people on hemodialysis found to have bacteremia sepsis
- Cause – Growth of *Serratia Marcescens* found in the long fingernails of HCW involved. HCW admitted to not washing their hands and having long nails during detaching lid from heparin vial.

# What's the Harm?



## What's the harm with long nails, artificial nails or nail paint varnish?

- Inhibits good hand hygiene
- May reduce your grip or speed while doing various manipulations
- May tear or puncture gloves
- May interfere with putting on gloves
- Can become caught in bedding, dressings and even machinery
- Long nails and artificial nails are a breeding ground for various disease-causing micro organisms and fungi

# How to Hand Wash



## How to wash and dry hands with liquid soap and water



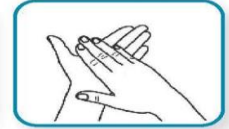
Duration of the entire procedure: **40–60 secs.**



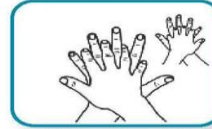
Wet hands with water



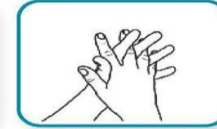
apply enough soap to all hand surfaces



rub hands palm to palm



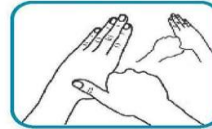
right palm over left dorsum with interlaced fingers and vice versa



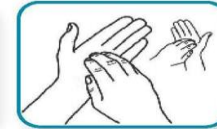
palm to palm with fingers interlaced



backs of fingers to opposing palms with fingers interlocked



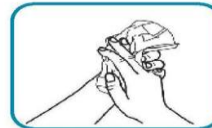
rotational rubbing of left thumb clasped in right palm and vice versa



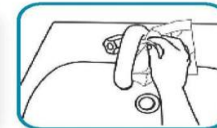
rotational rubbing, backwards and forwards with clasped fingers of right hand in palm and vice versa



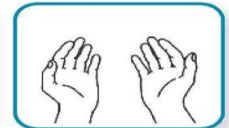
rinse hands with water



dry thoroughly with single use towel



use towel to turn off faucet



...and your hands are safe.



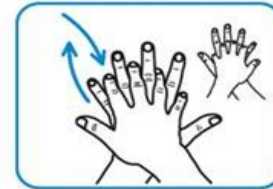
# Sing Happy Birthday twice!

## Six steps to clean hands

Washing your hands properly takes about as long as singing "Happy Birthday" twice, using the images below.



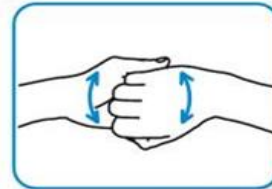
Rub hands palm to palm



right palm over left dorsum  
with interlaced fingers  
and vice versa



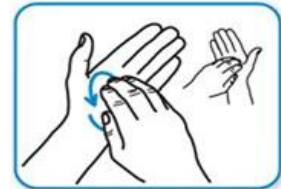
palm to palm with fingers  
interlaced



backs of fingers to opposing  
palms with fingers interlocked

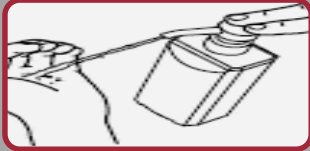


rotational rubbing of left thumb  
clasped in right palm  
and vice versa



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

# How to Hand Rub



1. Apply a palm-full of the product in a cupped hand, covering all surfaces of your palm



2. Rub hands palm to palm in a circular motion



3. Place your Right palm over the back of your Left hand, interlace your fingers and rub back and forth, then switch hands and perform the same motion



4. Put your palms together, interlace your fingers and rub together in an up and down motion to clean in-between your fingers

# How to Hand Rub



5. Place the backs of your fingers to your opposing palms with fingers interlocked and rub against your palms in a side to side motion



6. Clasp your right palm around your left thumb and rub in a rotating motion, then clean your right thumb using your left hand. You can use this same technique to wash around your wrists.



7. Lastly, clean your nail tips. Clasp your fingers of one hand and position them in the palm of your opposite hand. Rub your fingertips backward and forward in a rotational motion against the surface of your palm. Now, switch hands and perform the same cleansing technique.



Once your hands are dry you are ready to go about your day with clean hands!

# Serious Business



# Resident Hand Hygiene Education

**Tell residents not to be afraid to ask anyone...**



- Hands can be contaminated or colonized by potentially harmful bacteria
- Residents can develop an infection from their own flora
- Educate residents on good hand hygiene
- Demonstrate and observe technique
- Reminder when to wash hands
- Best Practice is to Perform HH before resident care when they can see you- Sends message to them that staff hands are clean!

# Visitor Hand Hygiene Education



- Can transmit infectious bacteria to resident and contaminate the environment
- Instruct visitors to wash hands before eating, after using restroom, and after cough or sneezing.
  - It's part of the resident's care in keeping them and their environment safe
  - Visitors should use ABHR upon entry and exit from the residents room

The image features a white background filled with numerous colorful question marks in shades of blue, green, red, yellow, and light blue. In the lower half of the image, several human hands of various skin tones are raised, palms facing forward, as if participating in a Q&A session. The text "Any Questions?" is centered in a bold, dark grey font.

**Any Questions?**