



Indiana University Health

Why Does Hand Hygiene Matter?

This presentation will

Explain why hand hygiene matters

Explain how to perform hand hygiene

Describe how and when to perform a crucial conversation regarding Hand Hygiene

The History of Hand Hygiene

1800's: Louis Pasteur and Robert Koch proved that **microbes could cause fatal diseases.**

1961: U.S. Public Health Service recommended for healthcare workers to **wash their hands for 1-2 minutes prior to patient contact**

1980's: The first national **hand hygiene guidelines were published**

2002: HICPAC defended **alcohol based hand rub as the standard of care** in healthcare settings.

1847: Dr. Ignaz Semmelweis discovered that fatal childbed fever occurred more when the patient was cared for by the medical students compared to those patients cared for by the midwives. He discovered that students normally had just come from performing autopsies on patients who died from sepsis. **After he instituted a strict hand washing policy, mortality rates dropped by 10 to 20 fold within 3 months.** This demonstrated that diseases could be reduced by a simple hygienic practice.

1966: Lupe Hernandez found out that **alcohol can be delivered through the medium of gel** to provide a way to quickly cleanse.

1995: CDC recommendations to use **alcohol-based hand gels or an antimicrobial soap should be used between each patient contact**

The FACTS



In 2011, world wide 75,000 people died from HAIs (Healthcare Acquired Infections).

**That is equal to almost 4
Boeing 747 going down
every day!!! (CDC)**

The FACTS

The number of people who **die from HAIs** is estimated to be **more** than the **total deaths** from:

- Motor vehicle accidents
- Breast cancer
- AIDS (Institute of Medicine)

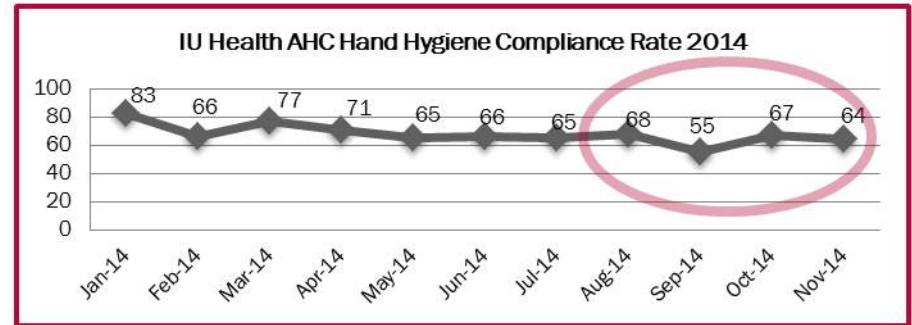
COMBINED

Why is hand hygiene important and why do we measure the compliance?



Why is hand hygiene important?

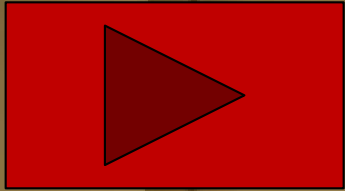
- Health-care workers (HCW) hands are the most common way health-care-associated pathogens are transmitted from one patient to another.
- Therefore, hand hygiene is one of the most important actions you can take to prevent the spread of infections.
- Hand hygiene is measured at IUH through direct observation of the healthcare worker performing the 5 moments.



Why is hand hygiene measurement important?

- Accurate data on our performance is essential so we can learn about barriers to hand hygiene and develop plans for improvement.
- Hand hygiene measurement is required for regulatory purposes and to measure our progress.

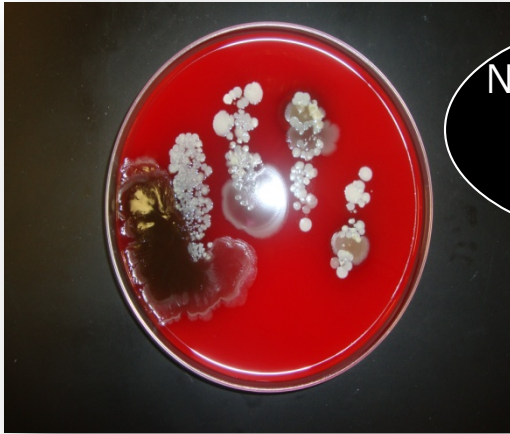
Why Hand Hygiene????



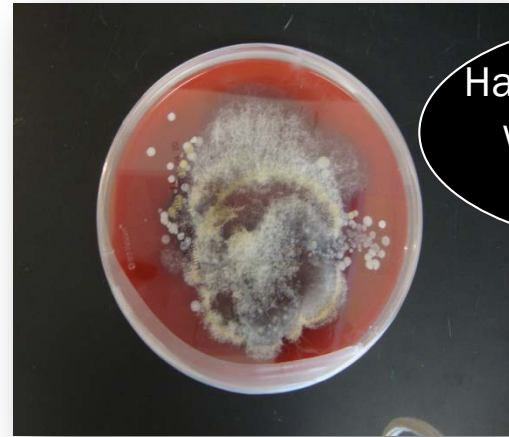
What if bacteria were NOT invisible?



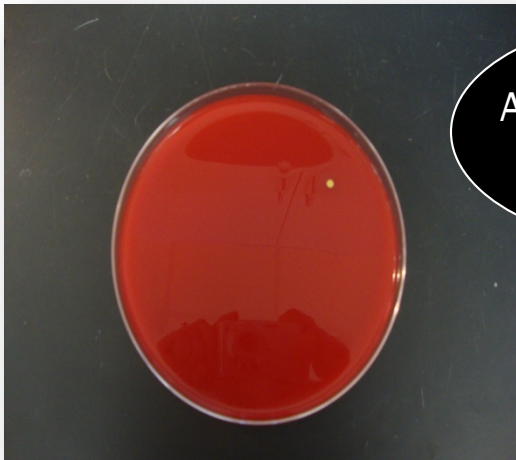
Is Hand Hygiene Effective?



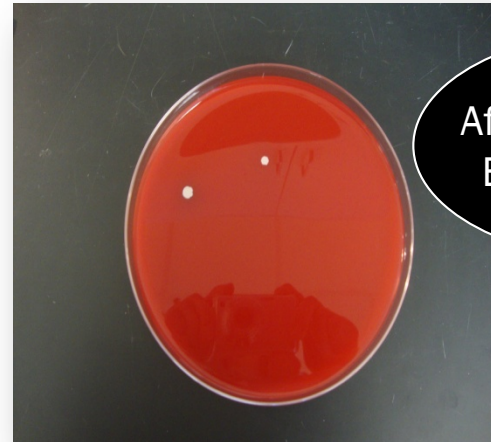
Nurse's glove while
caring for an
isolation patient



Hand of an employee
while in common
work area



After washing with
soap and water



After using Alcohol
Based Hand Rub

Clean and dirty hands of healthcare workers were cultured and plated on petri dishes. Dirty hands grew MRSA, VRE and other pathogens

Who should perform hand hygiene?

Any person involved in direct or indirect patient care

Families

Visitors

Patients

What should I use to clean my hands?

Soap and Water

1. When your hands are visibly soiled
2. For enteric isolation
3. After using the restroom
4. Before and after eating
5. After Coughing and Sneezing

Hand Sanitizer

- Preferred method for hand hygiene because of its ease of use and availability
- Wash your hands with soap and water if you feel that your hands become too tacky after multiple uses of hand sanitizer (CDC).

How to hand wash with soap and water:



Wet hands with water;



Apply enough soap to cover 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;



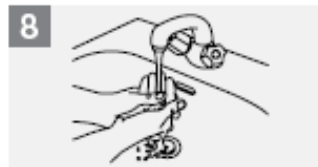
Backs of fingers to opposing palms with fingers interlocked;



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



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



Rinse hands with water;



Dry hands thoroughly with a single use towel;



Use towel to turn off faucet;



Your hands are now safe.

Critical components for effective hand washing:

1. Wet hands
2. Apply adequate soap
3. Scrub all surfaces
4. Scrub for a minimum of 15 seconds
5. Dry hands thoroughly
6. Turn off faucet with paper towel to prevent recontamination

Scrub for a minimum of 15 seconds (Sing Happy Birthday)

How to perform hand hygiene with alcohol rub:



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



1b Rub hands palm to palm;



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;



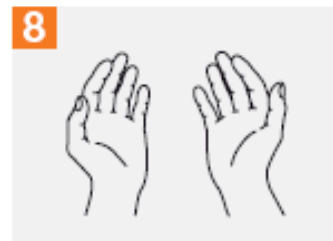
5 Backs of fingers to opposing palms with fingers interlocked;



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.

Critical components for effective hand hygiene with alcohol:

1. Dispense an adequate amount of product to cover all surfaces of your hands.
2. Rub product on all surfaces of hands paying special attention to your nails
3. Rub until dry

Chain of Infection



In order to understand the importance of hand hygiene, it is imperative to know the chain of infection.

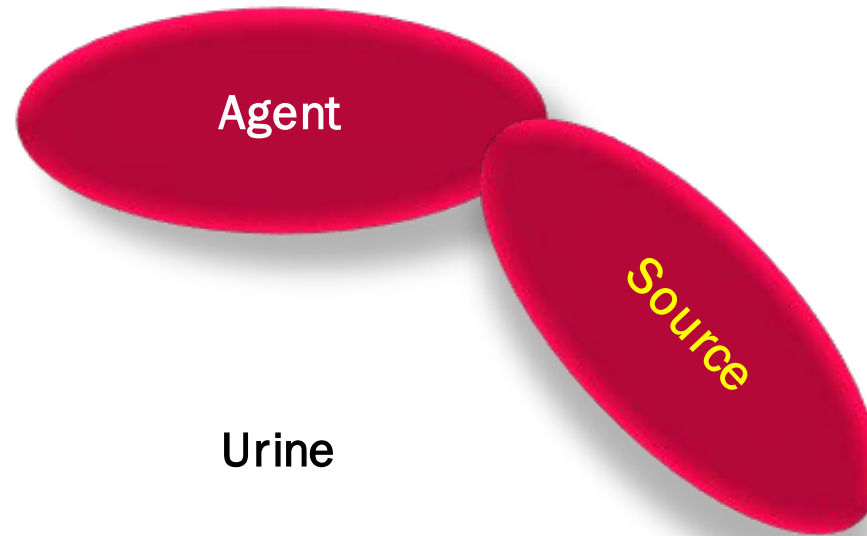
Chain of Infection



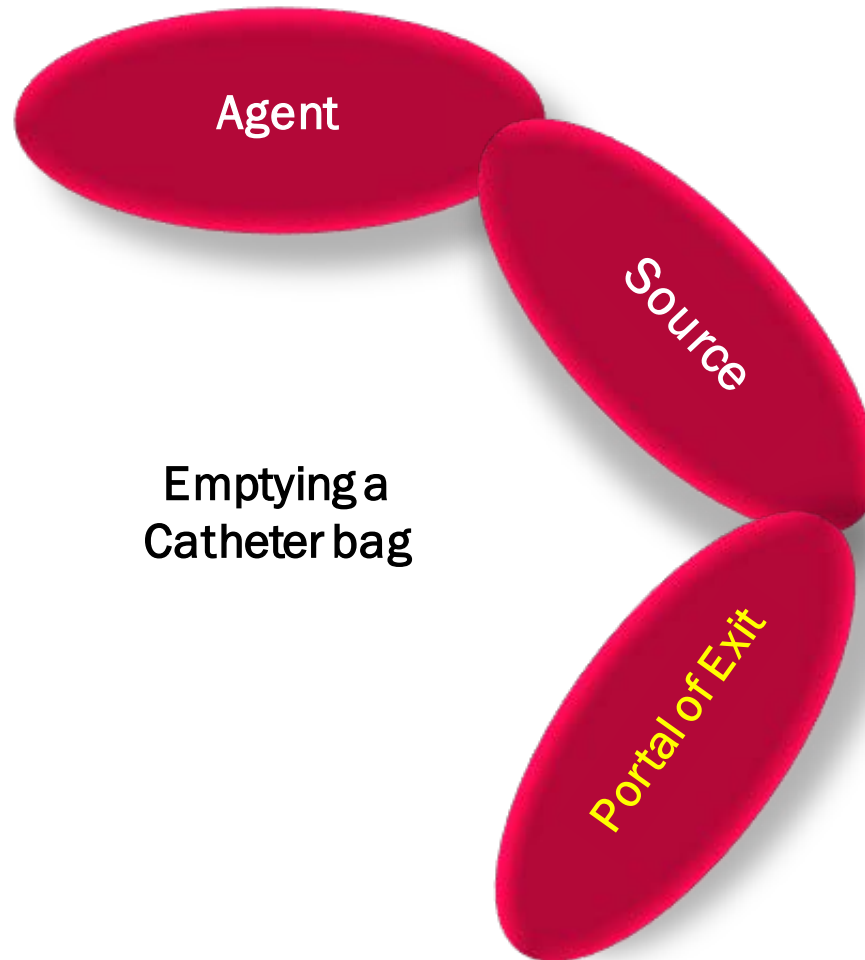
Agent

CRE

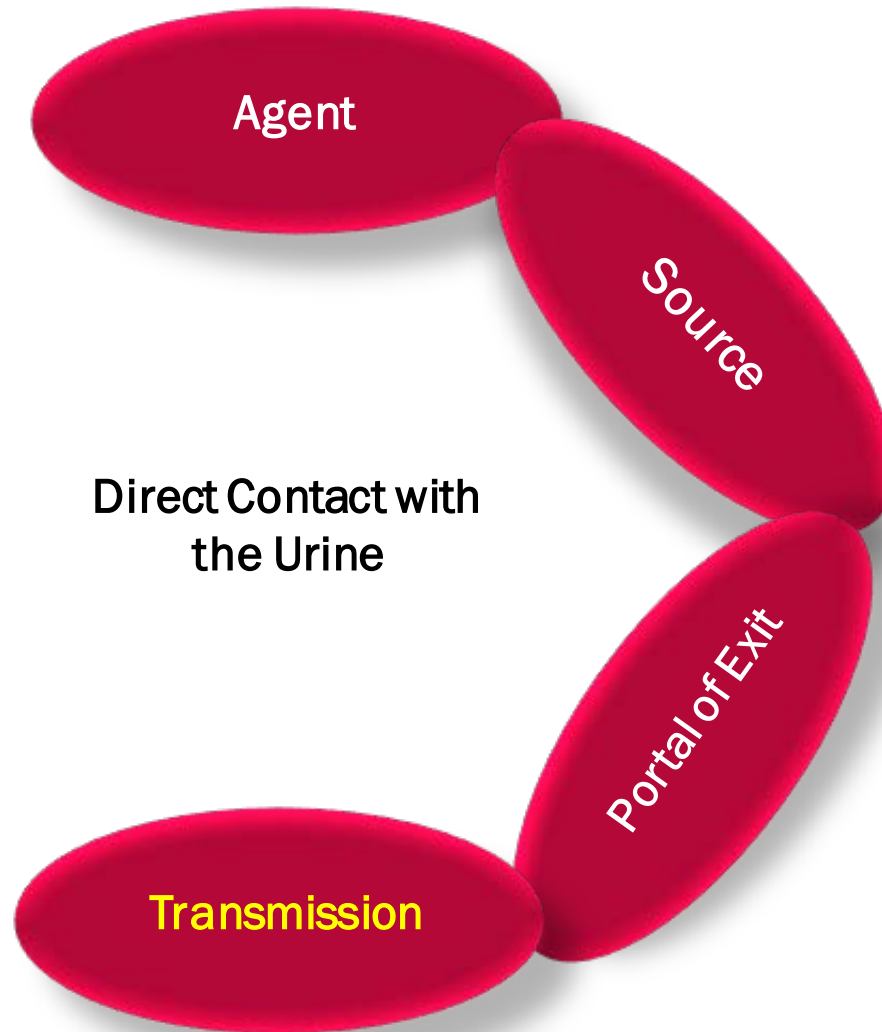
Chain of Infection



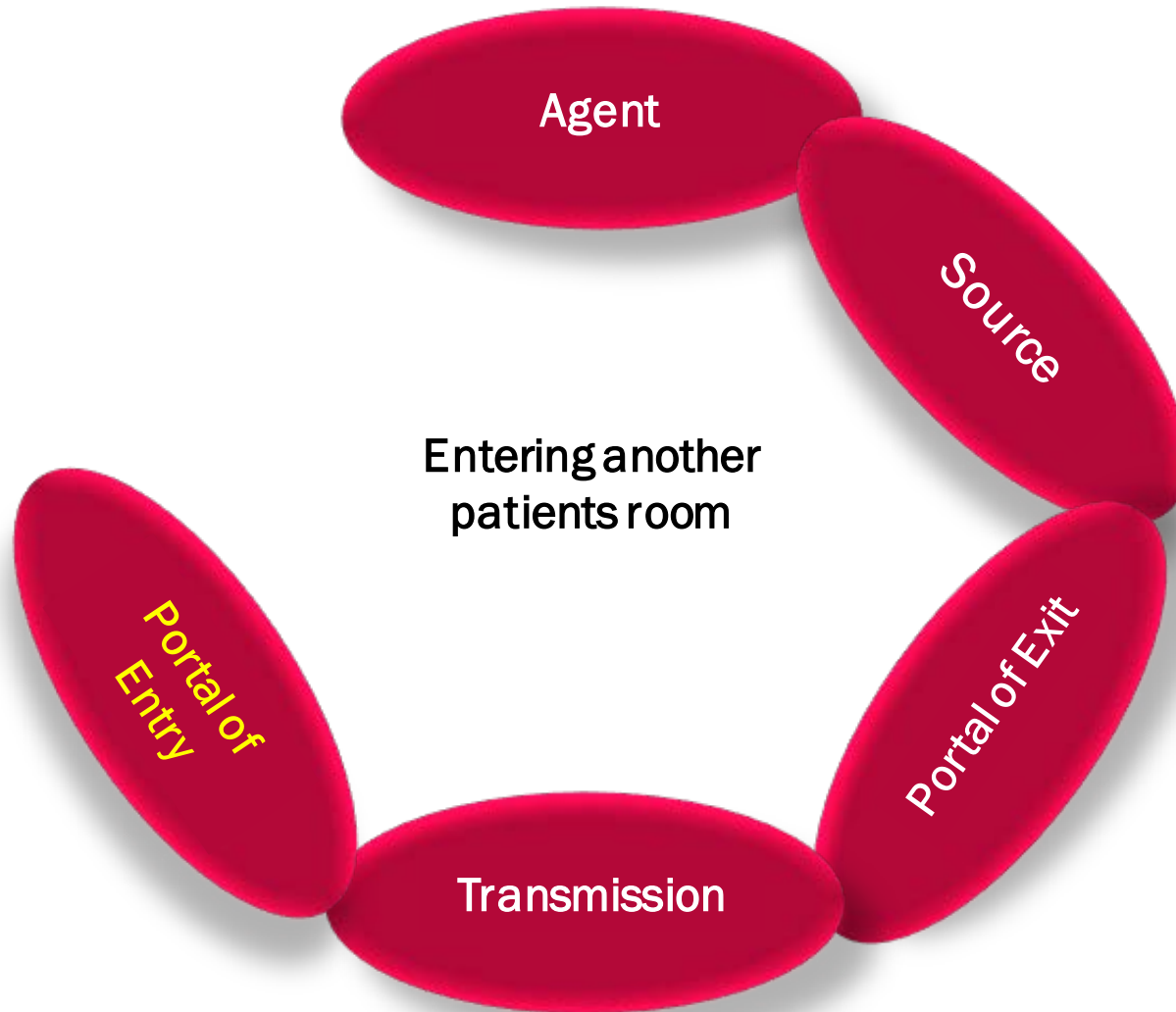
Chain of Infection



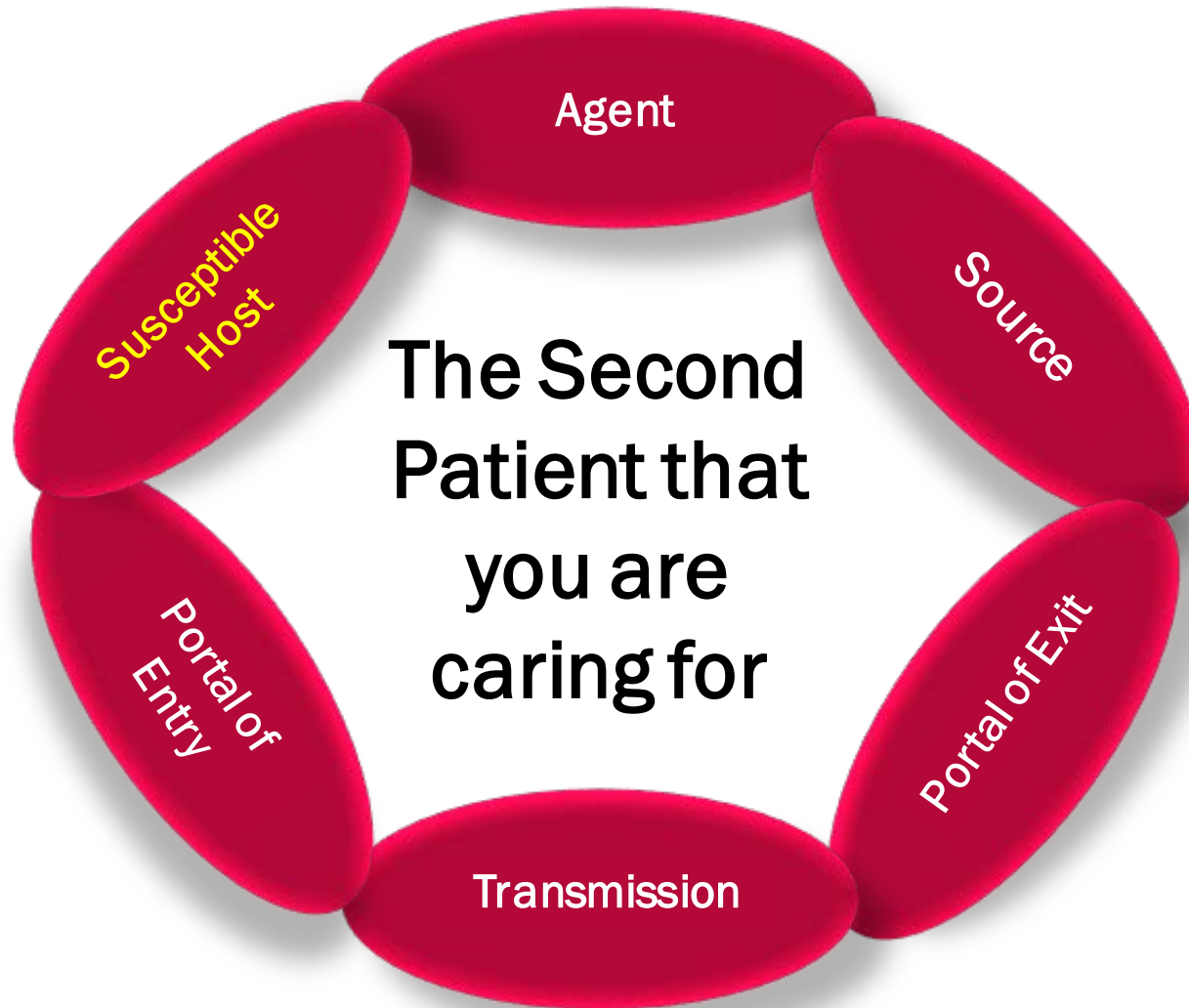
Chain of Infection



Chain of Infection



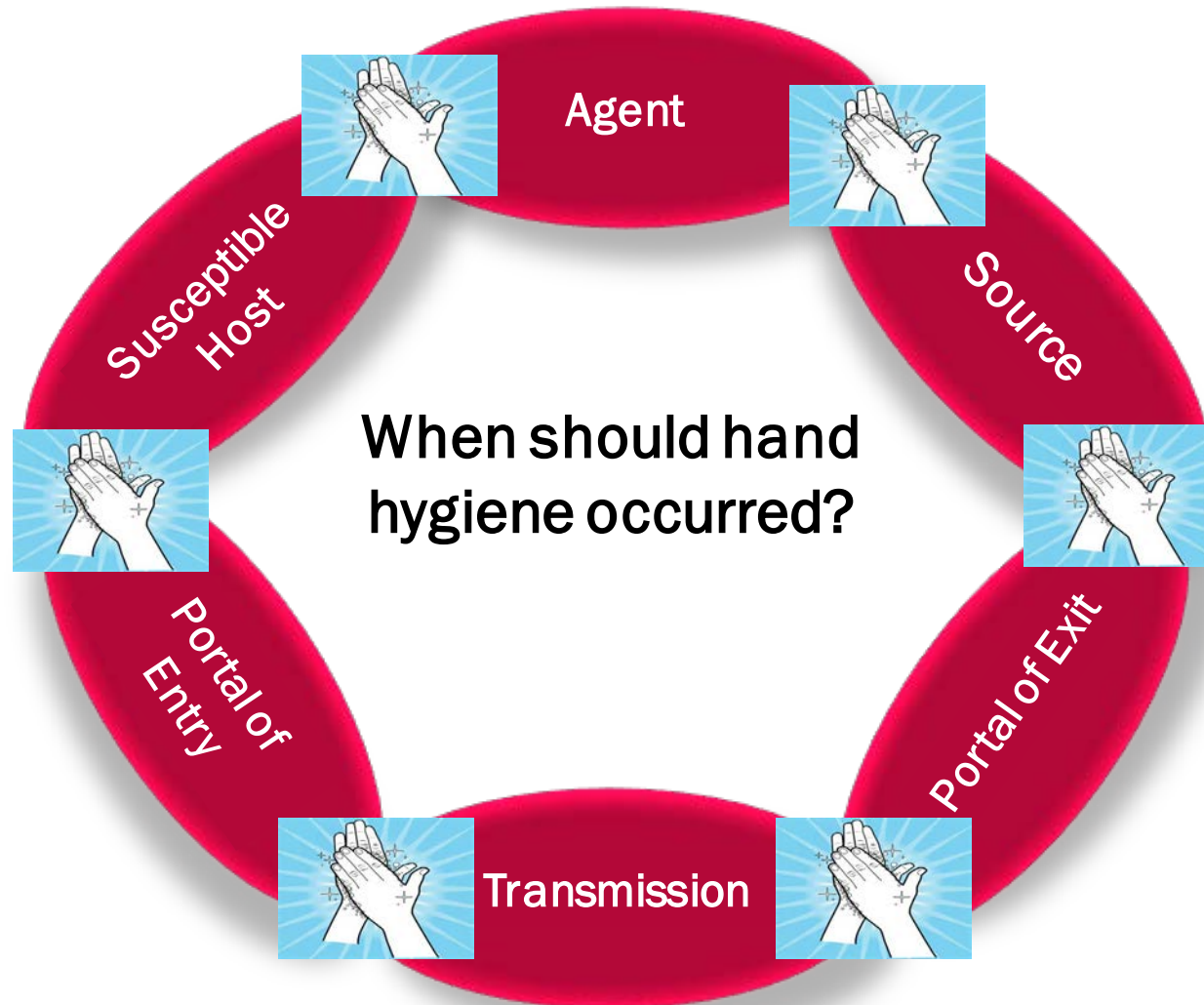
Chain of Infection



Chain of Infection



Chain of Infection



Chain of Infection



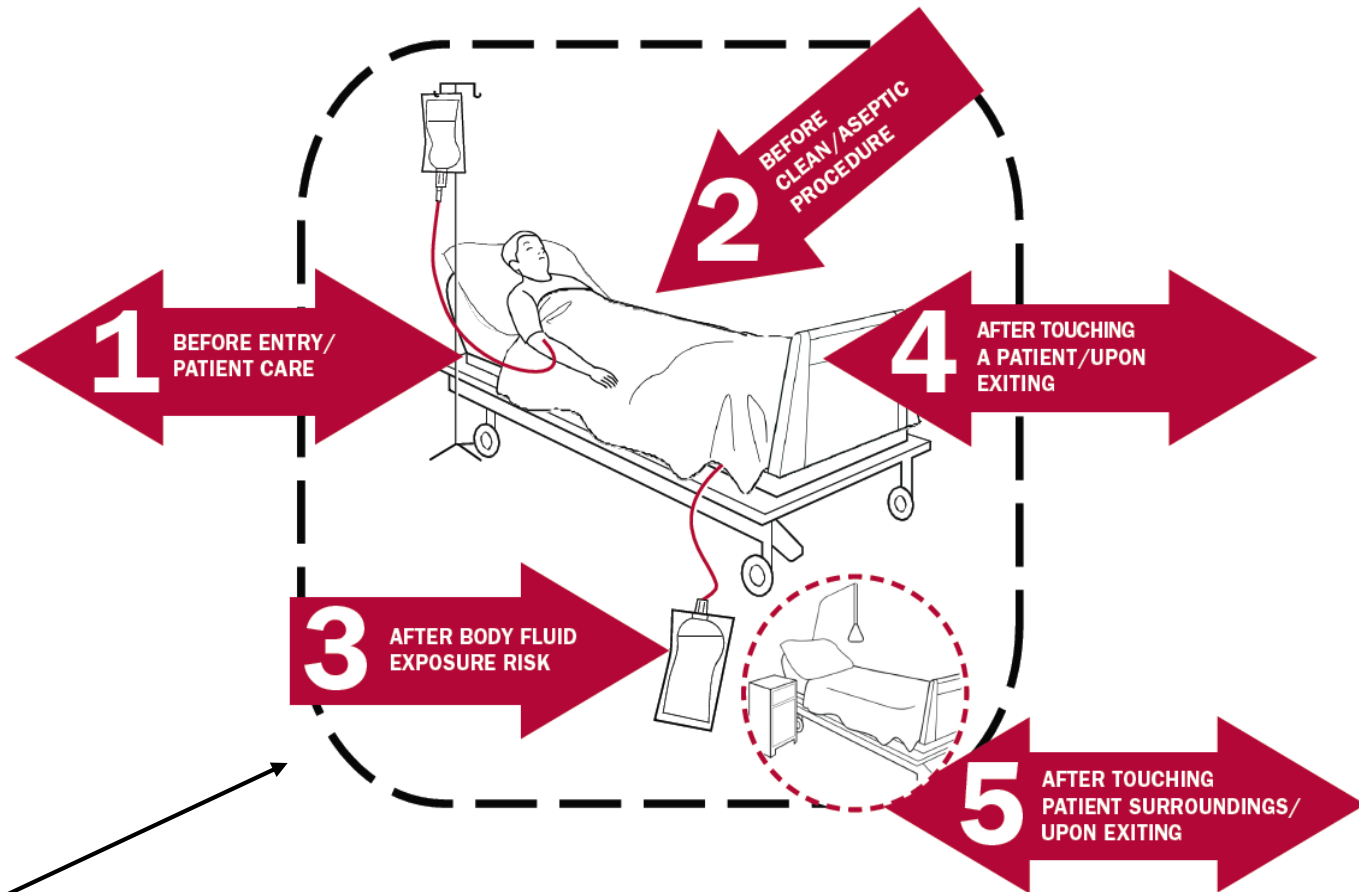
Hand Hygiene can
Break the Chain.

Interruption to any
part of the chain...

- Renders microorganism inactive
- Stops further spread of disease

When to perform hand hygiene?

The 5 moments for hand hygiene:



The dotted line above represents the **patient zone**. The patient zone includes the patient and the surfaces and equipment that is temporarily dedicated to that patient.

Hand Hygiene should always occur before and after glove use



- Gloves do not replace the need to perform hand hygiene.
- When moving from dirty to clean task, the gloves must be removed because hand hygiene is required.
- Always clean hands before donning gloves.
- Dirty hands inside gloves are a perfect breeding ground for bacteria to replicate.
- Never reuse gloves.





What could happen if I don't do hand hygiene?



<https://www.flickr.com/photos/39582141@N06/8436403132/>

This is Jen

- Jen came into the hospital for fever of unknown origin.
- Blood cultures showed that Jen has *Methicillin resistant Staph Aureus* (MRSA) in the blood and no other organisms.
- Alex, Brian, and Jackie have been Jen's primary providers for the past week.
- On day 8 of Jen's stay she spiked another fever.
- Blood cultures showed that she was positive for *Carbapenem-resistant Enterobacteriaceae* (CRE).
- Brian and Jackie have both cared for a patient with CRE on the same unit that week.
- CRE has a mortality rate of 50% when it gets in the blood.
- Jen died 6 days later.

What could happen if I don't do hand hygiene?



<http://phil.cdc.gov/phil/details.asp>

This is Adam

- Adam came to the hospital with diarrhea and was placed into enteric isolation.
- Four nurses have been caring for Adam. One nurse didn't think that Adam's bowel movements smelled like *C. difficile*.
- She cared for Adam for 2 days while only using hand sanitizer.
- Adam tested positive for *C. difficile*.
- That week, the nurse and 4 other patients also tested positive for *C. difficile*.

What about at home?



This is Tim

- Tim is an admissions clerk.
- Tim placed an admission bracelet on a patient's arm as she arrives to the hospital not knowing what she is here for.
- Tim leaves the hospital without washing his hands.
- Tim makes dinner for his teenage daughter and himself that evening.
- Tim and his daughter end up sick later that week.

<https://www.flickr.com/photos/41284017@N08/14923126404/>

WHY hand hygiene?

Practice good hand hygiene to protect:

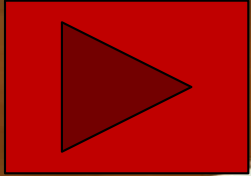
- **Your patients**
- **Yourself**
- **Your family**



Indiana University Health

Crucial Conversations and Hand Hygiene

Crucial Conversations



Watch the video above by clicking on the play button.

Some examples of a crucial conversation phrasing:

“I saw/heard something I don’t understand: [fill in the blank with the offensive behavior]. This is not consistent with what I know of you as a professional. Help me understand what was going on.”

“You are a valued member of the team [and mention why], which is why I came to you.”

The Culture of Safety

If you see something, say something

- We all have the same goal of keeping our patients safe
- Remember it's not personal
- It's the right thing to do
- We all need reminders sometimes
- Your patient appreciates it
- We are all in this together

DON'T DO IT!



What happens if we **don't** improve our hand hygiene???

**Patients continue
to get harmed**

DON'T DO IT!



What happens if we **don't** improve our hand hygiene???

**Increases cost of
healthcare**

DON'T DO IT!



What happens if we **don't** improve our hand hygiene???

Isolation increases

DON'T DO IT!



What happens if we **don't** improve our hand hygiene???

**Patient have
longer stays
at the
hospital**

DON'T DO IT!



What happens if we **don't** improve our hand hygiene???

**More people have distrust
in the care they are
provided at healthcare
systems**

DO IT!



What happens if you **do** practice hand hygiene?

Less people get harmed

DO IT!



What happens if you **do** practice hand hygiene?

**Cost of healthcare
drops**

DO IT!



What happens if you **do** practice hand hygiene?

Increase team work
We're all in this together!

DO IT!



What happens if you **do** practice hand hygiene?

Patients go home sooner

DO IT!



What happens if you **do** practice hand hygiene?

**Isolation
decreases**

DO IT!



What happens if you **do** practice hand hygiene?

**We
eliminate
HAIs**

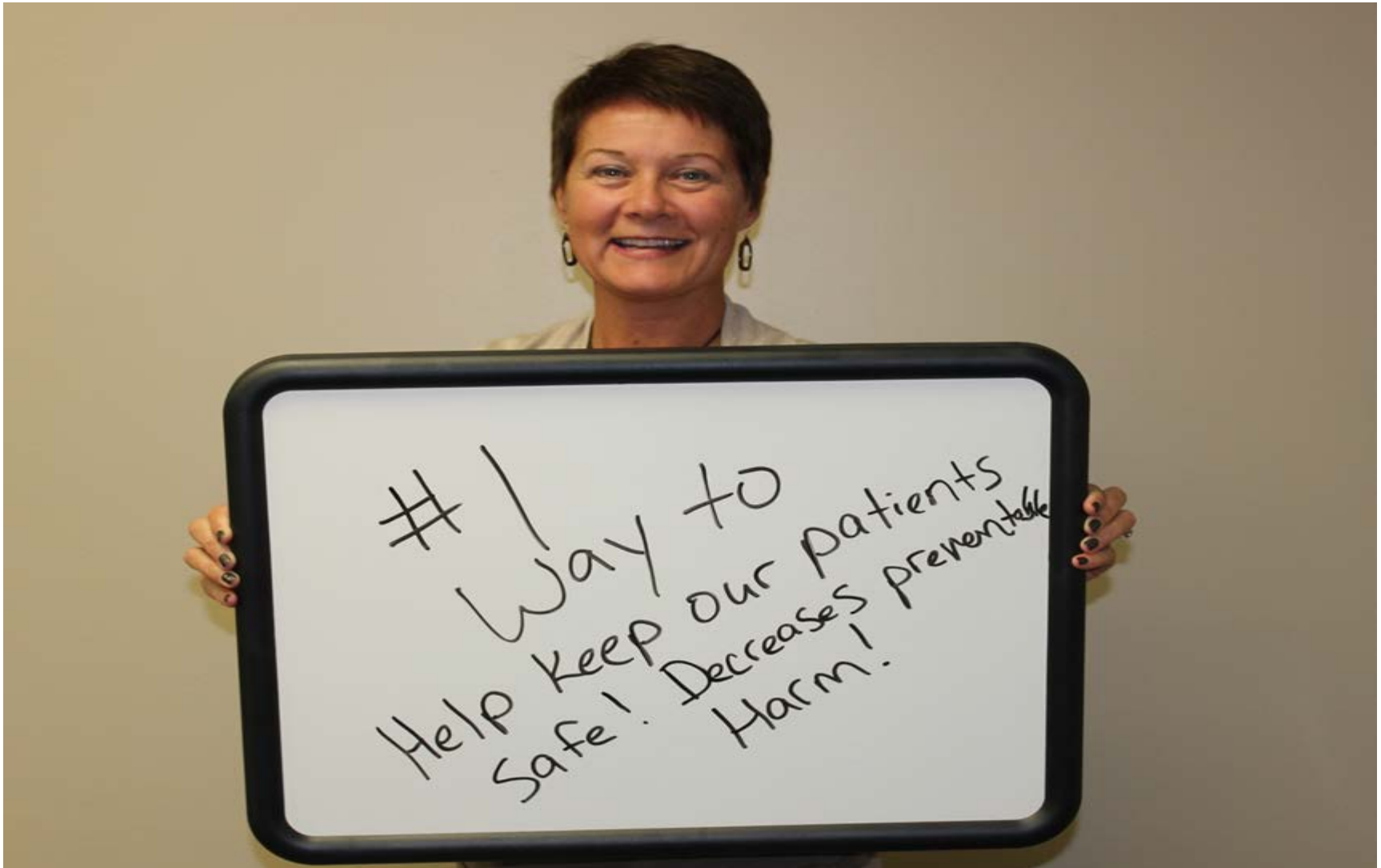
Healing Hands Start With YOU

You will either be observing hand hygiene compliance and/or could be observed as part of our patient safety program.

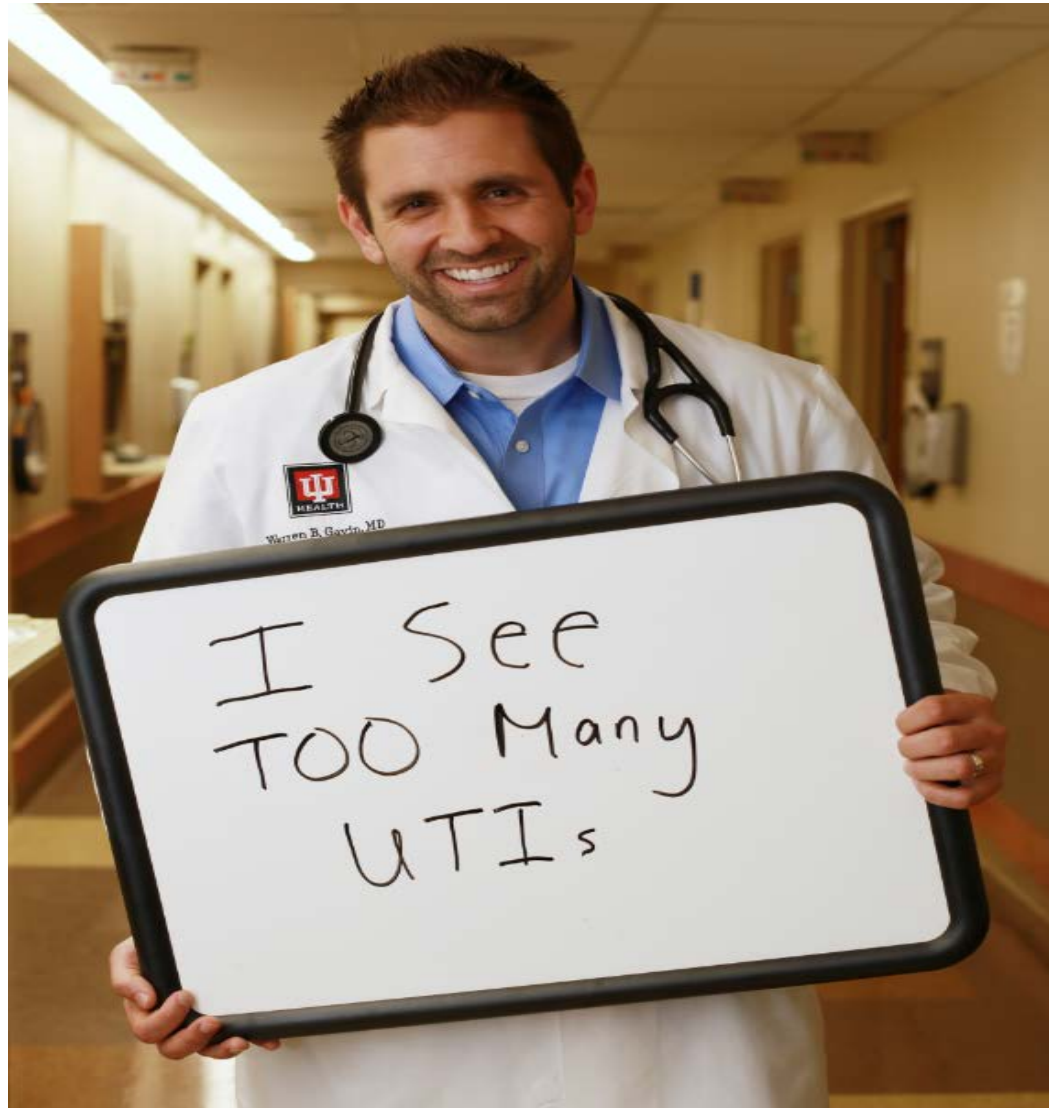
It is our professional responsibility to our patients, families and ourselves to perform hand hygiene.

The second module of hand hygiene will be over measurement and the WHO 5 moments

I do it because...



I do it because...



I do it because...



I do it because...



I do it because...



I do it because...



I do it because...



I do it because...



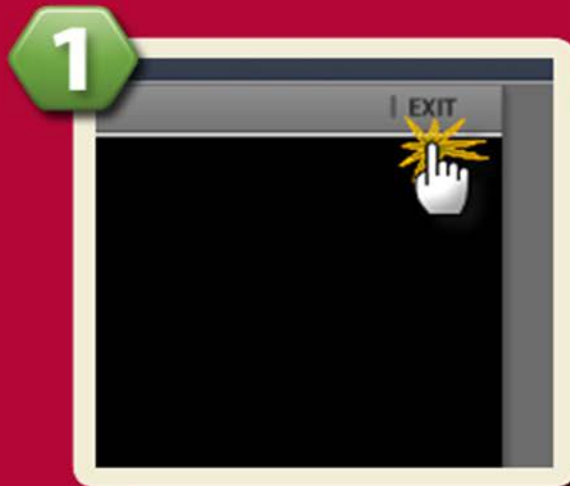
**Why does
Hand Hygiene
matter to
you?**



Indiana University Health

How to exit this WBT

In order to exit this WBT and receive credit, you must close the program by:



Click the 'exit' button in the upper right-hand corner.



When the drop-down menu appears, click the 'exit now' button.