



Hand Hygiene Review

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So easy a 3 year old can do it!!!



Why is all this important?

Increased rates of nosocomial infections

- 1 in 25 patients get an HAI
- 1 in 9 of those with an HAI will die during their hospital stay

Infected patients:

- Stay longer in hospital
- Die
- Are treated with more toxic and less effective drugs
- Are prone to surgical site infections

Risk Factors for HAIs

- Use of indwelling medical devices such as bloodstream, endotracheal, and urinary catheters
- Surgical procedures
- Injections
- Contamination of the health care environment
- Transmission of communicable diseases between patients and healthcare workers
- Overuse or improper use of antibiotics

Top Pathogens Per CDC as of April 2014

- Clostridium difficile (12%)
- Staph including MRSA (11%)
- Enterobacteriaceae
 - * Klebsiella sp. (10%)
 - * E. coli (9%)
- Enterococcus (9%)
- Pseudomonas (7%)

What is Hand Hygiene

- Hand hygiene is a general term for removing microorganisms with a disinfecting agent such as alcohol or soap and water

Option 1

- Alcohol-based hand sanitizer

Option 2

- Hand washing with soap and water

Gloves DO NOT replace the need for Hand Hygiene before touching patients

Evidence-Based Theory

- Substantial epidemiologic evidence supports that hand hygiene reduces the transmission of healthcare-associated pathogens and the incidence of health-care associated infections
- The importance of hand hygiene is universally acknowledged by organizations such as the Joint Commission, World Health Organization (WHO) and Centers for Disease Control (CDC), which recommend or require hand hygiene practices and interventions to improve hand hygiene compliance in order to reduce health care-acquired infections

HAND HYGIENE!!!

- A 2013 study at the U of Penn showed ICU compliance at 26% and non-ICU compliance at 36%
- Across the US the compliance rates have been historically low averaging 48% as of 2013
- The first formal guidelines have been around as long as I have! CDC released them in 1975!
- Ignaz Semmelweis - The Savior of Mothers in 1847 found out that new mothers wouldn't die from Childbed Fever if their doc would simply wash his hands when he delivered their babies

The “X”s Represent “High Touch” Areas where bacteria can be found



Bacteria is EVERYWHERE!!!



Tips for Infection Prevention for Residents

- Practice good hand hygiene
- Make sure attendings wash up
- Know the location of hand hygiene resources
- Don't substitute gloves for hand hygiene

- An article in the July 6, 2004, *Annals of Internal Medicine*, for instance, found that less than 60% of physicians in a Swiss university hospital complied with hand hygiene guidelines.
- Robert A. Weinstein, FACP, chair of the infectious diseases division at Chicago's Cook County Hospital, noted in an accompanying editorial that in the United States, "hand hygiene rates average 40% to 60% on a good day."

Hand Hygiene – When?

<p>HAND HYGIENE FIVE MOMENTS OF CARE</p>  <p>CLEAN YOUR HANDS</p>	<p>#1 before touching a patient</p>
	<p>#2 after touching a patient</p>
	<p>#3 before a clean or aseptic procedure</p>
	<p>#4 after a body fluid risk</p>
	<p>#5 after touching patient's surroundings</p>

Tips for Infection Prevention for Residents

- Clean diagnostic equipment that touches patients
- Using two alcohol wipes to clean the bell of your stethoscope. Use one to clean and one to disinfect.
- Also observe rules for keeping diagnostic equipment within isolation zones
- Wear clean clothing
- Get recommended vaccinations

Tips for Infection Prevention for Residents

- Learn proper disposal and cleanup techniques: Learn the location of disposal containers and who to call when something needs to be cleaned up professionally. Simply wiping up a spill, especially if it contains body secretions, is not good enough.
- Realize that compliance is everyone's job: "Doctors need to understand that they can create harm by not following basic precautions, and they need to take a conscious, careful attitude toward infection control,"

Final Thought...

We've also tried to infuse hand hygiene practices with other infection prevention programs. As we said from the start, if we can't get handwashing right, then everything we're trying to do for pneumonia, or urinary tract infections, or central line infections is not going to be as effective because hand hygiene is such a foundational practice.

- Vanderbilt University Medical Center Epidemiologist Dr. Tom Talbot
- Their compliance has stayed in the 90% range consistently for 4 years

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