

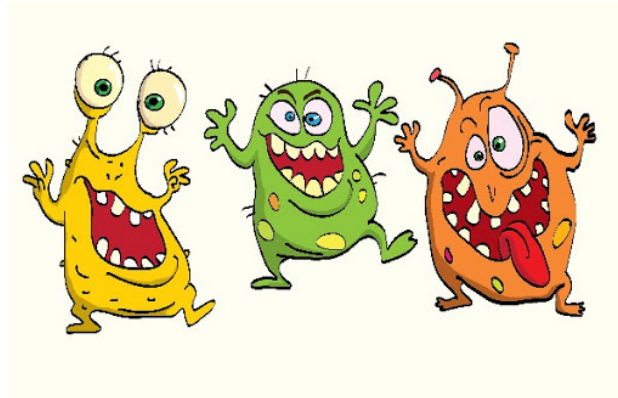


Hand Washing VS. Sanitizing

Mackenzie Hodge, Sydney Kuester, Journey McMillian & Kaeli Somerville

Research Question

When trying to prevent the spread of infectious bacteria, between soap and water and alcohol-based hand sanitizer, which of the two is able to be the most effective in killing infectious bacteria?



Problem Area

- Healthcare professionals
- What is the best method?
- Fast paced environment



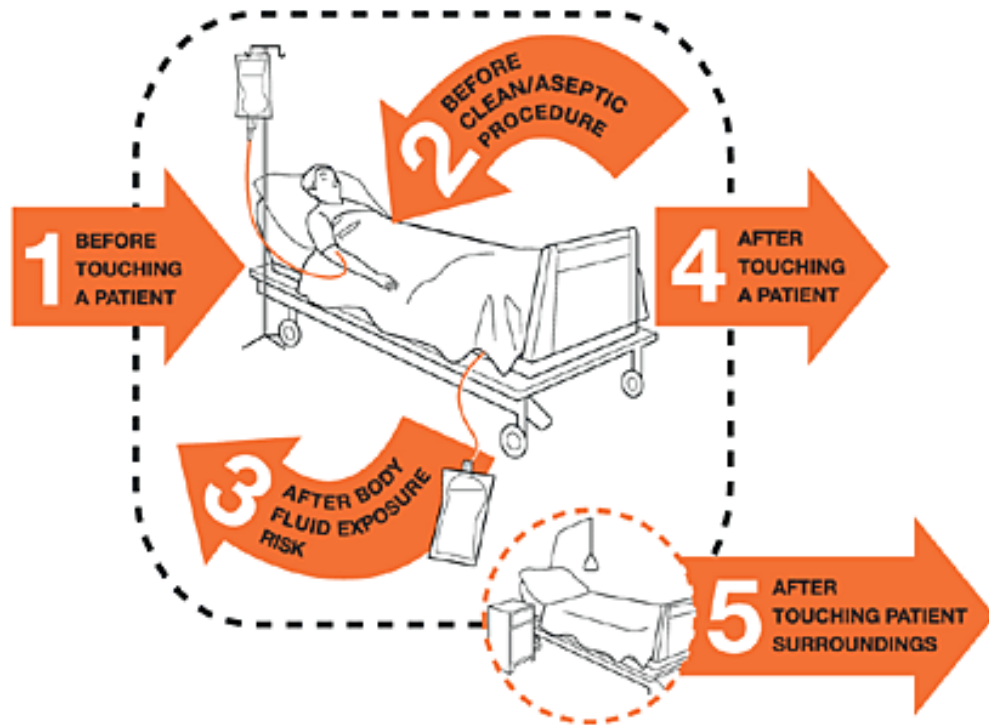


What is the importance of hand hygiene?

- Most effective defense against infection transmission
- Nosocomial infection prevention



When Should We Wash Our Hands?



How should you wash your hands?



Lynn, P. (2019). *Taylor's clinical nursing skills: a nursing process approach*. Philadelphia, PA: Wolters Kluwer Health.

Soap & Water

- Most efficient way
- Clostridium Difficile
- First line of defense




1 in **5** PEOPLE
DON'T WASH
THEIR HANDS


OF THOSE THAT
DO, ONLY
30%
USE SOAP!

Source: 7 separate studies from 1997 to 2007 in public restrooms, food service establishments, schools & colleges

Karten, M. M. (Ed.). (2018, September). Hand Washing: Why Its So Important (for Parents) - Nemours KidsHealth. Retrieved from <https://kidshealth.org/en/parents/hand-washing.html>

Hand Sanitizer

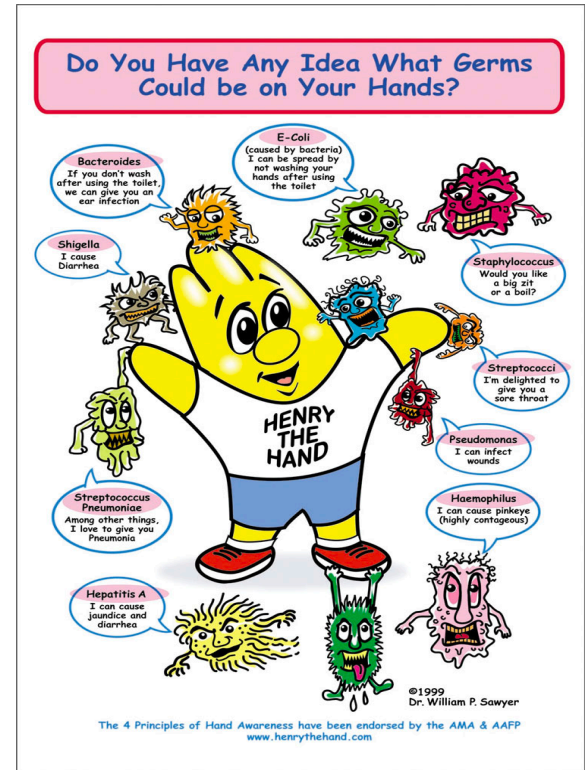
- Must be performed correctly
- Less irritation and dryness
- C. difficile



Centers of Disease Control and Prevention. (CDC) Show Me the Science. (2019, November 26). Retrieved from <https://www.cdc.gov/handhygiene/science/index.html>

Can we over wash?

- Breaking the chain of infection
- Killing off “good” germs
- Transient and resident germs
- Washing off good germs put you at a risk for infection



Centers of Disease Control and Prevention. (CDC) Show Me the Science. (2019, November 26). Retrieved from <https://www.cdc.gov/handhygiene/science/index.html>

Over Drying

- Cracks in the skin
- Gives bacteria access inside
- Soap unable to distinguish
- Hand cream



Hand hygiene's role in decreasing the risk of acquiring resistance to antibiotics?

- Biggest factor in becoming antibiotic resistant
- 2 biggest reasons for patient  ing prescribed antibiotics





Which method is most effective & why?

- Soap and water more effective
- Not using hand sanitizer correctly



References:

Centers of Disease Control and Prevention. (CDC) Show Me the Science. (2019, November 26). Retrieved from

<https://www.cdc.gov/handhygiene/science/index.html>

COVID-19: How to care for dry hands after washing them so much - UCLA Health - Los Angeles, CA. Uclahealth.org. (2020). Retrieved 17 April 2020, from <https://www.uclahealth.org/body.cfm?id=1397&action=detail&ref=5741&fr=true>.

Lynn, P. (2019). *Taylor's clinical nursing skills: a nursing process approach*. Philadelphia, PA: Wolters Kluwer Health.

Karten, M. M. (Ed.). (2018, September). *Hand Washing: Why It's So Important (for Parents)* - Nemours KidsHealth. Retrieved from <https://kidshealth.org/en/parents/hand-washing.html>

Martinez, E., Yui-Hifume, R., Munoz-Vico, F., Jimenez-Noguera, E., Strizzi, J. M., Martinez, I., Garcia-Fernandez, L., Seijas-Vasquez, M. L., Torres-Alegre, P., Fernandez-Campos, M. A., & Gimenez-Sanchez, F. (2018). Effectiveness of a hand hygiene program at childcare centers: A cluster randomized trial. *Pediatrics: Official journal of the American Academy of Pediatrics*, 142(5). <https://doi.org/10.1542/peds.2018-1245>

Shobowale, E. O., Adegunle, B., & Onyedibe, K. (2016). An assessment of hand hygiene practices of healthcare workers of a semi-urban teaching hospital using the five moments of hand hygiene. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4924395/>