

Homecare Infection Control and OSHA Update 2014

**Satellite Conference and Live Webcast
Wednesday, April 2, 2014
2:00 – 4:00 p.m. Central Time**

**Produced by the Alabama Department of Public Health
Video Communications and Distance Learning Division**

Faculty

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Hand Hygiene

- Hand washing is easy to do and it is one of the most effective ways to prevent the spread of many types of infection and illness
- Clean hands can stop germs from spreading from one person to another and throughout an entire community

Two Methods of Hand Hygiene

- Soap and water
- Waterless alcohol - based gel product






Liquid Soap or Bar Soap

- Liquid antimicrobial soap is preferred over bar soap
- Bacteria can grow on bar soap, especially if it is resting in water
- Liquid soap containers may become contaminated
- Carry as small a container as possible
- If you refill a container, be sure that the container is clean and dry



Hand Washing

- Hand washing is like a "do-it-yourself" vaccine
- It involves six simple and effective steps you can take to reduce the spread of infection

Steps for Hand Washing Using Soap and Water

- 1: Wet hands under warm running water 
- 2: Apply soap 
- 3: Rub hands palm to palm, palm to dorsum, interlace fingers, do not forget the thumbs fingernails
- 4: Rinse hands well 

Steps for Hand Washing Using Soap and Water

- 5: Dry hands well using a clean paper towel 
- 6: Use towel to turn off faucet
 - Organisms are transferred to various types of surfaces in much larger numbers from wet hands than from hands that are thoroughly dried 

Use of Waterless Alcohol Gel Products

- Alcohol is an antiseptic agent that can be used to decontaminate hands that are not visibly soiled
- Only use waterless alcohol hand washing products when soap and water are not available

Steps for Using Waterless Alcohol Gel Products

- 1: Apply small amount of gel product in a cupped hand
 - A general rule – apply 5 ml. (1 tsp)
 - Follow manufacturer's recommendations regarding the amount of to use

Steps for Using Waterless Alcohol Gel Products

- 2: Rub hands palm to palm, palm to dorsum, interlace fingers, and do not forget the thumbs
- 3: Once dry, your hands are clean
 - Duration of this entire process should take 20 - 30 seconds

Indications for Hand Hygiene

- Pre and post patient care
- Between tasks
- After removal of gloves
- When handling food
- Sneezing
- Touching hair
- Using toilet



Frequent Hand Washing

- Frequent hand washing can strip the skin of natural oils and lead to dryness, cracking and irritation which increases the risk of colonization and infection
- Lotions and creams should be used with care

Artificial Nails

- Review agency policy regarding artificial nails
- Health care workers who wear artificial nails are more likely to harbor gram-negative pathogens on their fingertips than are those who have natural nails, both before and after hand washing
- Fingernails should be kept short, remove any flaking or peeling polish

Jewelry

- Several studies have demonstrated that skin underneath rings is more heavily colonized than comparable areas of skin on fingers without rings
- One study found that 40% of nurses harbored gram-negative bacilli on skin under rings and that same organism exist under their rings for several months

Personal Protective Equipment (PPE)

- Use gloves for any task involving a potential for contact with non-intact skin, mucous membranes and blood or body fluids
 - Except sweat
- If in doubt, wear gloves

PPE

- Change gloves:
 - If torn
 - Between procedures on the same patient
 - After any contact with patients known to have multi - drug resistant bacteria

PPE

- Remove gloves as soon as possible after a task is completed to prevent cross contamination
- Do not touch your face or adjust PPE with contaminated gloves
- Always wash hands after gloves are removed
- Do not wash or reuse disposable single use gloves

PPE

- Latex gloves are made from natural rubber
- If allergic to latex, vinyl gloves may be an option

PPE

- Latex allergies may include:
 - Skin rash
 - Hives
 - Flushing
 - Nasal, eye and sinus symptoms

PPE

- Aprons provides a basic barrier to protect you and also protect your patient
- Wear an apron when performing care that may result in your uniform becoming soiled
- Gowns may be worn during patient care activities when you anticipate your uniform may have contact with blood or body fluids

PPE

- Wear mask and/or eye protection when there is a possibility of splashes or sprays to the facial area
- Masks / facial shields should protect the nose and mouth and prevent fluid penetration
- Goggles or safety glasses should fit snugly over and around eyes or eyeglasses

PPE

- Personal glasses are not a substitute for goggles

PPE

- | | |
|------------|-------------|
| • Donning: | • Removing: |
| – Gown | – Gloves |
| – Mask | – Goggles |
| – Goggles | – Gown |
| – Gloves | – Mask |

PPE

- Change equipment when torn or heavily contaminated
- Perform hand hygiene immediately after removing all PPE

Standard Precautions

- A set of basic infection prevention practices intended to prevent transmission of infectious diseases from one person to another
- We do not always know if a person has an infectious disease, so standard precautions should be applied to every person every time to assure that transmission of disease does not occur

Contact Precaution

- Used when a person has a type of bacteria or virus on the skin or in a sore, or elsewhere in the body, such as the intestine, that can be transmitted to someone else if that person touches the infected individual or contaminated surfaces or equipment near the infected individual
 - Gown and gloves are required

Droplet Precautions

- Used to prevent the spread of diseases caused by large respiratory droplets that are produced by coughing, sneezing (e.g., influenza)

Airborne Precautions

- Used to prevent the spread of infectious organisms that remain suspended in the air and travel great distance
 - Measles, chickenpox, pulmonary tuberculosis

Respiratory Etiquette

- Cover your nose and mouth with a tissue when cough or sneeze, dispose of the tissue in a waste basket, and wash your hands
- Do not have a tissue, sneeze or cough into your sleeve

Prevention

- Stay home when you are sick
- Do not share eating utensils, drinking glasses, towels or other personal items

Hepatitis

- Means inflammation of the liver, and also refers to a group of viral infections that affect the liver
- Hepatitis A, B, C, D, E exist but the most common types are A, B, and C

Hepatitis A (HAV)

- Hepatitis A is usually spread when a person ingests fecal matter, even in microscopic amounts, from contact with objects, food, or drinks contaminated by feces or stool from an infected person

HAV

- Hepatitis A can be spread when:
 - An infected person does not wash his or her hands properly after going to the bathroom and then touches objects or food
 - A caregiver does not properly wash his or her hands after changing diapers or cleaning up the stool of an infected person

HAV

- Someone engages in certain sexual activities, such as oral-anal contact with an infected person

HAV Symptoms

- Most people do not have any symptoms
- If symptoms occur they may include:
 - Fever
 - Fatigue
 - Loss of appetite
 - Nausea
 - Vomiting

HAV Symptoms

- Abdominal pain
- Dark urine
- Clay-colored bowel movements
- Joint pain
- Jaundice

HAV Vaccine

- Two intramuscular (IM) injection each given 6 months apart
- CDC recommends vaccination for children 1 year or older, homosexual and bisexual men, IV drug users and travelers to endemic countries

Hepatitis B (HBV)

- Hepatitis B is usually spread when blood, semen, or other body fluids from a person infected with the Hepatitis B virus enter the body of someone who is not infected
- This can happen through sexual contact with an infected person or sharing needles, syringes, or other injection drug equipment

HBV

- Hepatitis B can also be passed from an infected mother to her baby at birth
- In the United States, approximately 1.2 million people have chronic Hepatitis B
- Unfortunately, many people do not know they are infected

HBV Symptoms

- Fever
- Fatigue
- Loss of appetite
- Nausea
- Vomiting
- Abdominal pain
- Dark urine

HBV Symptoms

- Clay - colored bowel movements
- Joint pain
- Jaundice

HBV Vaccine

- A yeast product (not blood), and is 96% effective
- Children - 3 shot series
 - Given at birth
 - 1 - 2 months
 - 6 - 18 months

HBV Vaccine

- Adults - 3 shots series:
 - Initial shot (0 month)
 - 1 month
 - 6 month
- HAV / HBV combo vaccines available
 - Initial, 1 month, and 6 months

Hepatitis C (HCV)

- Hepatitis C virus infection is the most common chronic blood - borne infection in the United States
- Hepatitis C is usually spread when blood from a person infected with the Hepatitis C virus enters the body of someone who is not infected

HCV

- Today, most people become infected with Hepatitis C by sharing needles or other equipment to inject drugs
- Other methods are through sexual and perinatal (less frequent) and sharing toothbrushes, razors, etc.

HCV

- If symptoms occur with acute infection, they can appear anytime from 2 weeks to 6 months after exposure
- Symptoms of chronic Hepatitis C can take up to 30 years to develop
- Damage to the liver can silently occur during this time
- When symptoms do appear, they often are a sign of advanced liver disease

HCV Symptoms

- Fever
- Fatigue
- Loss of appetite
- Nausea
- Vomiting
- Abdominal pain
- Dark urine

HCV Symptoms

- Grey - colored stools
- Joint pain
- Jaundice

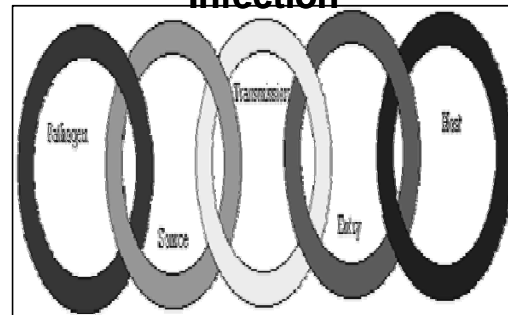
HCV Vaccine

- Currently, there is no vaccine to prevent HCV and there is no cure

Preventing HCV

- Avoid risky behaviors such as illegal drug use, engaging in unprotected sex, sharing needles, razors or toothbrushes
- HCV carriers should avoid donating blood, organs, tissue or semen

Links in the Chain of Infection



References

- Centers for Disease Control Morbidity and Mortality Weekly Report; Guideline for Hand Hygiene in Health-Care Settings
- <http://www.cdc.gov/handhygiene/Guidelines.html>
- <http://www.cdc.gov/Features/HandWashing/http://www.cdc.gov/hepatitis/>

References

- Epidemiology and Prevention of Vaccine-Preventable Diseases
- The Pink Book: Course Textbook 12th Edition Second Printing (May 2012)