Section 4 – Breaking the Chain of Infection in the Adult Care Home

(S-1) Title Slide

(S-2 &3) Objectives

- 1. Describe the cleaning and disinfection of surfaces, floors, high-touch areas, and resident living areas in order to prevent infection in the adult care home.
- 2. Describe Transmission-Based Precautions.
- 3. Compare and contrast Contact Precautions, Droplet Precautions, and Airborne Precautions.
- 4. Explain the correct disposal of sharps.
- 5. Define an outbreak and list steps needed to manage an outbreak in an adult care home.
- 6. Describe two dangerous infections common in adult care homes influenza and Norovirus.

NOTE: Additional requirements by the N.C. Department of Labor (Occupational Safety and Health Division) and N.C. Department of Environment and Natural Resources (Division of Waste Management), exist with the disposal of medical waste or "regular medical wastes". Information in this section only covers a few of the requirements related to cleaning, disinfection and disposal of contaminated items.

Content	Notes	
(S-4) Recall		
 Infection is a disease or condition of the body when harmful germs get into the body and grow in number Harmful germs are tiny living things that live almost everywhere – both inside and outside of our bodies that cause problems or disease Infection prevention is all of the things that people do to control and prevent the spread of infection Infection prevention is extremely important in adult care homes Only way to stop the spread of infection is to break the chain of infection Will now learn many more ways that you can break the chain of 		
infection and prevent the spread of infection in adult care homes		
Research the types of cleaning solutions and disinfectants used at the adult care home where your students work. Add this information to the content when appropriate to individualize the instruction for each unique adult care home. It would also be helpful to show the actual		
products, read purposes, and read directions for use to students.		
TEACHING TIP #10: Policy and Procedure Manuals		
Review the policy and procedure manuals at the adult care home regarding the cleaning/disinfecting of surfaces, floors, and carpeting. Add this information to the content when appropriate to individualize the instruction for each unique adult care home. It would also be helpful to show the actual policy and procedure manuals to the students and point out where they are located at the facility.		

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(S-5) Care of the Adult Care Home Environment

- Important to learn about basic housekeeping in an adult care home as a means to prevent the spread of infection
- A clean environment very important in prevention of infection
- Routine cleaning is important to make sure that environment is clean and dust-free
- Harmful germs may be present in dirt that can be seen and regular cleaning helps to get rid of these germs
- Before cleaning and/or disinfecting areas of the adult care home always review policy/procedures and read/follow directions for use of each product
 - o Floors, wall, and tabletops
 - o Resident living areas
 - High touch surfaces, such as door knobs, hand rails, light switches, and surfaces in and around resident toilets
- For cleaning surfaces in non-resident areas, such as administrator offices, use detergent and water, per adult care home policy/procedures and follow directions for use of the product
- For walls, blinds, and window curtains, in resident areas, clean when visibly dusty or dirty using appropriate product, per adult care home policy/procedures and follow directions for use of the product
- Follow adult care home policy/procedures for routine care and deep cleaning of floor carpeting
- Vacuum carpeting in public areas and in general resident areas regularly with equipment with appropriate filter that is working well and designed to not stir up dust, but rid the area of dust
- Follow adult care home policy/procedures for dealing with spills on carpeting; spot-clean blood or body fluid spills, using correct cleaner and disinfectant, following directions per use of product
- Follow adult care home policy/procedures for effective use of mops, cloths, and solutions
- Prepare cleaning solutions daily or as needed, and replace with fresh solution according to adult care home policy/procedures
- Change mop head at the beginning of each day and also according to policy and procedure(change more frequently in accordance with policy if blood or vomitus present)
- Clean mops and cloths after use and allow to dry before re-use; or use single-use, disposable mop heads and cloths

(S-6) Spills on Floor

- Clean up spills based on procedures listed in adult care home's infection prevention policy
- In general
 - o Put on gloves

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o Absorb spill	
 Clean area with correct product, following directions on the product label 	
 Discard waste in appropriate container (a biohazard bag if spill involves body fluids) 	
 Apply disinfectant to area, following directions of product 	
o Place warning cone or sign to warn others if there is wet surface	
(S-7) Spills on Floor	
Why are spills on the floor involving body fluids especially	
dangerous in an adult care home?	
Spills that involve body fluids are safety threat in adult care homes	
for two (2) reasons	
o Falls	
o Risk of infection	
(S-8) Sharps – Description	
Items with corners, edges, or projections that can cut or pierce the	
skin	
Examples – needles, needles with syringes, needles with attached	
tubing, lancets, and razor blades	
(S-9) Sharps – Rules	
Always think SAFETY, SAFETY when handling sharps	
Wear gloves and be careful when using or handling anything sharp	
that could have touched blood or body fluids	
Be careful not to cut self or resident during shaves	
Be careful not to jab yourself with a sharp	
NEVER, EVER re-cap a needle or other sharp object because you may jab yourself	
<u>NEVER, EVER</u> put anything sharp in a regular trashcan	
(S-10) Sharps – Disposal	
Always think SAFETY, SAFETY when disposing sharps	
ALWAYS put anything sharp that has been used on a resident in a	
sharps container (also called – needle disposal container or sharps	
box)	
 A special biohazard container used for disposal of sharps 	
 Is puncture resistant and leak-proof 	
Stored in a stable and upright position	
Closable and Secure lid for disposal	
Labeled with warning that contents of container are harmful or	
color coded. (i.e., universal biohazard symbol with the word "biohazard" or color coded red.)	
2.ond2ard of color coded really	

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•	 SAFETY, SAFETY NEVER, EVER stick your hand or fingers in a sharps container NEVER, EVER try to cram just one more needle in the sharps container NEVER, EVER over fill a needle disposal box – it should only be filled ¾ full and then disposed of per facility policy 		
TE	ACHING TIP #11: Sharps Container		
Sh	ow a sharps container.		
(S-	11) Medical Waste Disposal		
•	Disposable syringes, needles, finger stick devices and other sharps, as well as blood of 20 cc's or more shall be treated and disposed of as mandated by North Carolina Law		
	12) Disposal of Trash and Supplies such as gloves, dressings and		
• ba	ndages Important to know the proper way to dispose of trash		
•	Plain trash that does not have blood or body fluids on it – throw		
	away in regular trashcan <u>BUT</u> , if a piece of trash (a tissue, bandage,		
	tubing, or other things meant to be thrown away) has blood or body fluids you may not be able to throw away in regular trash. It is		
	important you follow your facility's policies and procedures for		
	disposal of items or trash with blood or body fluids		
•	If trash has blood or other potentially infectious material (OPIM)		
	and unable to contain these materials even when compressed, i.e., saturated, dripable or flakable, the trash must be:		
	 Disposed of in biohazard bags 		
	o Kept covered		
	o <u>Taped when closed</u>		
•	Because the best place to throw away contaminated trash is where		
	the waste happened, biohazard waste may be placed in regular trashcan with liner, then replace the liner and take used liner to the		
	appropriately container or area based on contents and facility's		
	policy and procedures		
•	The facility you work at will have policies and procedures on the		
	determination and disposal of contaminated supplies		
TE	ACHING TIP #12: Types of Waste Bags		
Sh	ow regular trash bags and biohazard waste bags.		
(S-	13) Handling Linen That is Soiled		
•	Soiled linen should be handled as little as possible and bagged or		
	placed in a container		

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 Linen heavily contaminated with blood or other body fluids should be bagged and transported in a manner to prevent leakage Wear gloves when changing, carrying, and discarding soiled linen Roll linen up during linen change so that dirty side is inside Carry soiled linen away from clothes Do not shake linen Your facility should have policies and procedures on the handling of soiled linen 	
(S-14) Recall	
 CDC is the nation's health protection agency; an agency of the federal government that is in charge of the control and prevention of disease in our country Works to protect the public by helping keep them healthy and safe by education Developed a two-tiered or two level way to prevent and control infections in health care – Standard Precautions and Transmission-Based (Isolation) Precautions 	
(S-15) Transmission-Based Precautions	
 Second level to prevent and control infections Measures practiced in addition to standard precautions that are based on the confirmed or suspected presence of a specific communicable disease, and the mode(s) of transmission of that disease Specific tasks and measures that care workers must do when caring for residents who are infected or may be infected with specific types of infections Three types of Transmission-Based Precautions Contact Precautions Airborne Precautions 	
 (S-16) Contact Precautions Purpose – prevent spread of harmful germs spread by direct contact PPE – follow Standard Precautions, plus wear gloves, when touching resident or resident's immediate environment and gown if substantial contact anticipated Examples – Methicillin-Resistant Staphylococcus Aureus (MRSA) infection (is the bacteria known for causing skin infections in addition to many other types of infections) and Norovirus (is a virus that causes diarrhea and vomiting) 	

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	7) Droplet Precautions		
	Purpose – prevent spread of harmful germs that travel by droplets in the air Droplets O Usually do not go farther than three feet, but could travel		
	farther Spread when an infected resident coughs, sings, sneezes, or		
	laughs		
	PPE – follow Standard Precautions, plus wear a mask especially for close contact and gloves		
•	Examples – influenza, meningitis, and whooping cough		
(S-1	8) Airborne Precautions		
	Purpose – prevent spread of harmful germs that travel in the air at a distance		
•	Harmful germs		
	o Float around for a while		
	O Can be carried by moisture, air currents and dust		
	 Difficult to manage; requires special air handling Contact local health department 		
	PPE – Standard Precautions, plus wear a N95 mask or greater,		
	depending on specific disease		
	Examples – tuberculosis (or TB), chicken pox, measles		
(S-1	9) Outbreak		
	Defined – more illness in more residents than what is expected or what is normal for the facility		
	Is considered a healthcare associated infection (recall definition – an infection that a resident gets while staying or living in a health care setting that he did not have before he was admitted)		
	Examples O Respiratory illness (such as influenza) which could include coughing, sneezing, fever O Gastrointestinal illness (such as Norovirus) which could include		
	nausea, vomiting, and diarrhea Other illnesses such as scabies		
	An outbreak could also be just one confirmed case of a serious infection, such as tuberculosis (TB)		
(S-2	(S-20) Outbreak		
	Local health department is notified as soon as an outbreak is suspected		
	Health department personnel will be able to help guide and provide information to help decide if outbreak is present and what should be done to help control the outbreak		

Section 4 - Breaking the Chain of Infection in the Adult Care Home The sooner the health department is notified, the better!!! Outbreaks are dangerous, especially for people 65 years and older (S-21) Influenza ("the flu") Description o A contagious respiratory illness caused by the influenza virus Outbreaks are not uncommon in adult care homes Symptoms include fever, cough, sore throat, runny or stuffy nose, muscle or body aches, headache, and feeling tired; influenza can look different in the elderly and people with many medical conditions Spread by droplets, during coughs and sneezes People 65 years and older are at greater risk of serious complications and death from flu compared with young, healthy adults 90 percent of flu-related deaths and more than half of flurelated hospitalizations each year occur in people 65 years and o Is because human immune defenses become weaker with age; can be a serious disease for people 65 and older. Healthy adults may be able to infect others 1 day before showing flu symptoms and then 5 to 7 days after becoming sick Certain steps should be taken to prevent influenza infections ALL residents and staff should get yearly flu vaccinations Yearly flu vaccination is first and most important step in protecting against flu Encourage EVERYONE (employees, residents, and visitors) to practice good hand hygiene and to cover their mouth and nose when coughing or sneezing Post signs and posters where will be seen by all visitors o Make sure employees, residents, and visitors have easy access to soap and water or alcohol-based hand sanitizers Monitor and manage sick employees o Employees with fever and respiratory symptoms (such as cough or sore throat) should not come to work until fever has been gone for at least 24 hours without use of fever-reducing medicines like Tylenol or ibuprofen Follow Standard Precautions and Transmission-Based Precautions, as previously described Control of outbreaks o Call local health department to report all suspected outbreaks in an adult care home o A single confirmed case of influenza positive is considered an outbreak, if any other residents have flu like illness/symptoms o An outbreak could also be a sudden increase in the number of

residents with fever and respiratory symptoms (such as cough

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or sore throat)

 Local Health Department might recommend widespread use of antiviral medications, confining ill residents to their rooms until they are no longer sick, restricting visitors, stopping group activities or other measures

(S-22) Norovirus

- Description
 - o Is a very contagious gastrointestinal illness
 - o Outbreaks are common in adult care homes
 - Most people call the Norovirus the stomach flu, viral gastroenteritis, and food poisoning
- Symptoms include vomiting and diarrhea
- Norovirus is spread through vomitus and diarrhea
- Most people get well in 1 to 2 days, but are contagious until at least
 3 days after vomiting and diarrhea have stopped
- Dehydration can be a problem and the elderly must replace fluids, when able; sometimes intravenous fluids are needed
- No vaccination available or specific drug available to get rid of the harmful germ
- Prevention
 - Follow hand-hygiene guidelines, and carefully wash hands with soap and water after contact with residents with diarrhea or vomiting; alcohol-based hand rubs are not as effective against Norovirus
 - Use gloves and gowns when in contact with or caring for residents with diarrhea or vomiting
 - Routinely clean and disinfect high touch patient surfaces and equipment with an Environmental Protection Agency-approved product with a label claim for Norovirus, per adult care home policy/procedures and product directions for use
 - o Remove and wash contaminated clothing or linens
 - Employees who have symptoms consistent with Norovirus should be excluded from work until at least 2 days after symptoms have resolved
- Control of Outbreaks
 - o Call local health department as soon as outbreak is suspected
 - Norovirus outbreaks can be difficult to control; local health department might recommend that you confine ill residents to their rooms, restrict visitors, stop group activities, or take other measures
 - Staff members with vomiting or diarrhea should not come to work until at least 2 days after symptoms have resolved

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- Control of Outbreaks
 - Noroviruses are difficult to kill; special cleaning and disinfection needed to help control an outbreak
 - Immediately clean and disinfect contaminated surfaces by using a bleach-based household cleaner as directed on the product label, or solution made by adding 5 to 25 tablespoons of household bleach to 1 gallon water – always follow adult care home policy/procedures
 - o Immediately remove and wash clothing or linen that may be contaminated with vomit or stool; handle soiled items carefully and do not shake to avoid spreading virus; wash with detergent at maximum washing machine cycle length and then machine dried