

**Your Role in Infection Prevention  
The Chain of Infection  
Hand Hygiene**

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**Paraprofessionals  
Training**

# Leader's Guide – Before You Begin




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This training session includes videos that require internet access to access and play videos and access resources.

# Leader's Guide – Opening The Session

Visuals	Outline & Script	Time
<div data-bbox="87 388 448 596" data-label="Image"> </div> <p data-bbox="87 633 448 935">In this slide deck, notes for the instructors are given in brackets [ ]. These notes shouldn't be read aloud, but instead provide background information and context for the instructor's benefit.</p> <div data-bbox="87 996 448 1205" data-label="Image"> </div>	<ul data-bbox="496 372 919 556" style="list-style-type: none"> <li>• Introduction</li> <li>• Welcome</li> <li>• Set expectations</li> <li>• Go through 6 month overview</li> <li>• Logistics/FAQ</li> </ul> <p data-bbox="496 981 1143 1051">Let's take a look at what you can expect to get out of this training session.</p> <ul data-bbox="496 1097 1172 1779" style="list-style-type: none"> <li>• Describe the different roles (advocate, educator, surveillance, immunization) in infection prevention and how they work together.</li> <li>• Discuss their role (CNA, housekeeping, dietary, therapy) in infection prevention and the impact on residents and staff.</li> <li>• Believe that infection prevention is everyone's responsibility</li> <li>• Define the chain of infection and how to break the chain of infection.</li> <li>• Discuss how their actions can sustain or break the chain of infection.</li> <li>• Describe <b>why</b> it is appropriate to perform hand hygiene.</li> <li>• Describe <b>when</b> it is appropriate to perform hand hygiene.</li> <li>• Demonstrate the appropriate way to perform hand hygiene.</li> </ul>	<p data-bbox="1210 372 1300 401">15 min</p> <p data-bbox="1210 446 1310 504">11:00 - 11:15 AM</p>

Visuals & Notes	Script & Notes	Time Estimate
<p data-bbox="92 388 461 595"></p> <p data-bbox="92 653 451 730"><b>This slide's script continues to next page.</b></p> 	<p data-bbox="511 401 1158 1083">Each of us—residents, families, and healthcare personnel—has an important role to play in keeping residents safe from infection. First and foremost, know the basics of infection prevention. Do your part—and hand hygiene is key! Whether you're in a healthcare facility or in the community, there are things healthcare professionals, residents, and family members can do to stay safe from infections. The Association for Professionals in Infection Control and Epidemiology or <u>APIC</u> is a go to source that is here to help with you and your facility with resources to help keep residents safe. Infection Preventionists are now a part of every Long Term Care facility as the Centers for Medicare and Medicaid Services has mandated that every Long Term Care Facility have an Infection Preventionist (IP) trained by the end of 2019.</p> <p data-bbox="511 1126 1158 1309">[Ask the learners who are infection preventionists in their building? They may or may not name one nurse or the DON. Then ask if they consider themselves as a infection prevention care giver?]</p> <p data-bbox="511 1354 1139 1425">Yes, everyone is part of the infection prevention team in our facility.</p> 	



Visuals & Notes	Script & Notes	Time Estimate
 <p>The infographic features a central figure of a person in a white coat and mask, surrounded by icons representing different infection prevention tasks: hand hygiene, standard precautions, environmental cleaning, and patient education. Text boxes around the figure describe the roles of various healthcare workers in infection prevention.</p>	<p>You are a vital part of infection prevention and can assist in being the residents advocate, or person who champions infection prevention with using standard precautions and hand hygiene as recommended by evidence based practices. (We will discuss this later in the training ) You are an infection preventionist when you assist in education to the resident on staying hydrated, staying mobile, performing daily bathing, peri care, oral care, and the list goes on. Every thing that you do whether it is being a nursing assistant, dietary worker, or environmental services worker impacts the resident’s general healthy state and is part of infection prevention.</p> <p>Another key way to keep the resident safe is by not coming to work when you ill or incubating the flu or a cold. IF you get ill at work, use of a face mask, and respiratory cough etiquette (cover your cough) and performing hand hygiene after you touch your nose or mouth is vital to prevent the spread of infections. You are most contagious when you have a fever, which is usually a few days before your illness is full blown. Residents can get the flu from you and it can quickly turn into bronchitis or pneumonia that can lead to death. You also can prevent infections of residents by getting vaccinated for seasonal influenza and pneumonia, should your age warrant this prevention.</p>	

## Visuals & Notes

### The many roles of the Infection Preventionist

Coordinate Infection Program and Risk Assessment

Reduce HAIs to Target Zero

Communicator/Collaborator

Educator/Leader

Policy Development

Resident Advocate for Wellness

Liaison to Public Health

Emergency Preparedness



Advocate Vaccination Program

Assure Hand Hygiene available and do audits for compliance

Assure Environmental Hygiene

Infection Surveillance

Promote Resident Privacy of Health Information

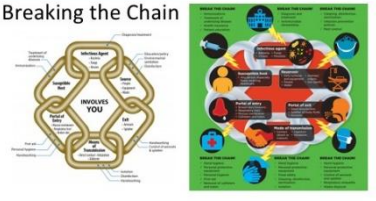
Critical Thinking

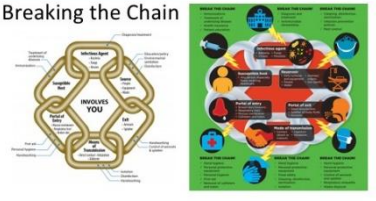
Data Management


## Script & Notes


[You may read this slide to share what the role of the IP in the building is responsible for championing. First and foremost, the IP is responsible for the Infection Control Program in the building. He or she can not be the eyes and ears for the entire building with so many multiple roles. They depend on communication from you and your team to assure that residents have safe quality centered care.]

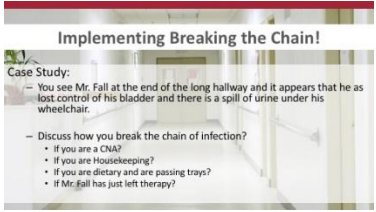
## Time Estimate




Visuals & Notes	Script & Notes	Time Estimate
<p data-bbox="97 394 272 421">Breaking the Chain</p>  <p data-bbox="111 658 425 765">Download the <a href="#">Break the Chain of Infection</a> infographic.</p>	<p data-bbox="508 401 843 428">What is the role of the IP?</p> <p data-bbox="508 479 1150 929">There are many different germs and infections inside and outside of the healthcare setting. Despite the variety of viruses and bacteria, germs spread from person to person through a common series of events. Therefore, to prevent germs from infecting more people, we must break the chain of infection. No matter the germ, there are six points at which the chain can be broken and a germ can be stopped from infecting another person. The six links include: the infectious agent, reservoir, portal of exit, mode of transmission, portal of entry, and susceptible host.</p> <p data-bbox="508 938 1086 1006"><b>Infectious agent</b> is the pathogen (germ) that causes diseases</p> <p data-bbox="508 1016 1139 1161"><b>Reservoir</b> includes places in the environment where the pathogen lives (this includes people, animals and insects, medical equipment, and soil and water)</p> <p data-bbox="508 1170 1093 1315"><b>Portal of exit</b> is the way the infectious agent leaves the reservoir (through open wounds, aerosols, and splatter of body fluids including coughing, sneezing, and saliva)</p>	

Visuals & Notes	Script & Notes	Time Estimate
<p data-bbox="97 394 272 417">Breaking the Chain</p>  <p data-bbox="111 658 425 765">Download the <a href="#">Break the Chain of Infection</a> infographic.</p> <p data-bbox="111 1116 439 1300">Download the <a href="#">Learn 10 Ways To Protect Patients</a> infographic. (Resource links are located below the image on the page)</p>	<p data-bbox="508 401 1158 508"><b>Mode of transmission</b> is the way the infectious agent can be passed on (through direct or indirect contact, ingestion, or inhalation)</p> <p data-bbox="508 517 1158 658"><b>Portal of entry</b> is the way the infectious agent can enter a new host (through broken skin, the respiratory tract, mucous membranes, and catheters and tubes)</p> <p data-bbox="508 707 1150 1348"><b>Susceptible host</b> can be <i>any</i> person (the most vulnerable of whom are receiving healthcare, are immunocompromised, or have invasive medical devices including lines, devices, and airways) The way to stop germs from spreading is by interrupting this chain at any link. Break the chain by cleaning your hands frequently, staying up to date on your vaccines (including the flu shot), covering coughs and sneezes and staying home when sick, following the rules for standard and contact isolation, using personal protective equipment the right way, cleaning and disinfecting the environment, sterilizing medical instruments and equipment, following safe injection practices, and using antibiotics wisely to prevent antibiotic resistance. <a href="#">Learn 10 ways to protect patients.</a></p>	

Visuals & Notes	Script & Notes	Time Estimate
 A blue hand is shown breaking a metal chain. The hand is positioned in the center, with the chain links on either side. The hand is breaking the chain, and the links are shown in a state of being pulled apart. The background is white.	<p>As a paraprofessional, your role in breaking the chain of infection is vital. You may spend more time with the resident than any other professional staff. Whether you are cleaning the resident's room, cooking or helping them in the dining room, or getting them ready for the day or night time routine, YOU are the MOST important HCW in this puzzle!!! You interact with the resident multiple times per day!!</p> <p>Let's recap~</p> <p>[Ask the team to give examples of what they do in their role to break the chain of infection. Keep the slide open for them to use for helping come up with their examples]</p> <p>[Repeat] What YOU do is the MOST important part of the puzzle for breaking the chain of infection.</p>	

Visuals & Notes	Script & Notes	Time Estimate
 <p>The Chain of Infection</p>	<p>Remember, as health care professionals we can not provide health care services without some exposure to potentially infectious materials, but we can prevent the transmission in many cases. Health care workers can prevent infection by breaking the chain.</p> <p>The caregiver must follow certain principles and procedures to prevent the infection and control its spread.</p> <p>As an important part of the infection prevention team you can do this by using IP strategies to break that Chain of Infection.</p> <p>BE THE LIGHT IN THE CHAIN ABOVE!</p>	

Visuals & Notes	Script & Notes	Time Estimate
 <p><b>Implementing Breaking the Chain!</b></p> <p>Case Study:</p> <ul style="list-style-type: none"><li>- You see Mr. Fall at the end of the long hallway and it appears that he has lost control of his bladder and there is a spill of urine under his wheelchair.</li><li>- Discuss how you break the chain of infection?<ul style="list-style-type: none"><li>• If you are a CNA?</li><li>• If you are Housekeeping?</li><li>• If you are dietary and are passing trays?</li><li>• If Mr. Fall has just left therapy?</li></ul></li></ul>	<p>[Facilitate open discussion on use of standard precautions, proper PPE, cleaning and disinfection practices, and hand hygiene in assisting Mr. Fall.</p> <p>Discuss their role (CNA, housekeeping, dietary, therapy) in infection prevention and the impact on residents and staff.]</p>	

Visuals & Notes	Script & Notes	Time Estimate
 <p><b>AMERICANS' HAND HYGIENE HABITS</b></p> <p>71% use soap and water 58% use hand sanitizer 28% use both 33% use neither 39% use more than one method</p> <p><b>This slide's script continues to next page.</b></p> 	<p>Lets take a look at Hand Hygiene across the board in our society.</p> <p>[Discuss this slide and read the bubbles]</p> <p>Hand hygiene has been the cornerstone of infection prevention for over 150 years. Hands of health care workers (HCWs) have been implicated in infection transmission in all health care settings.</p> <p>Despite efforts to increase hand hygiene practices, compliance remains poor. Smith, Carson, and Loeb reported a hand hygiene compliance rate of 14.7% in one nursing home observational study.</p> <p>The Centers for Medicare and Medicaid Services (CMS) conducts annual inspections of skilled nursing facilities. From 2000-2009 almost 9% of all nursing homes in the United States received a deficiency citation for hand hygiene during their annual inspection. Most hand hygiene deficiencies (66.3%) were cited at a level "D", which was an infraction that had the potential for more than minimal harm and was infrequently observed. Do these rates alarm you?</p> 	



**Visuals & Notes**

**Script & Notes**


**Time Estimate**




Did you know that healthcare workers perform hand hygiene only 40-50% of the times they should in an 8 hour shift in acute care hospitals??? Also, as the shift goes on, it drops quickly to below 40%.


Does this stop the chain of infection? Does this keep residents and healthcare workers safe?

Maybe you are asking “What Is Hand Hygiene”?  
**Hand hygiene refers to the act of cleansing hands with water or liquids and includes the use of water, soaps, antiseptics, or other substances, including alcohol-based hand rubs.**

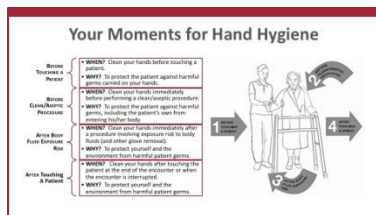
Visuals & Notes	Script & Notes	Time Estimate
	<p>You are a very important part of the resident's clinical team. Together our hands are a healing instrument. They can also be deadly. Did you know that 80% of all infectious diseases are transmitted by touch? We should continue to strive for improvements in hand hygiene areas of healthcare to protect our residents and be healing. <b>Evidence shows that hand hygiene (HH) continues to be the single most important strategy in preventing health care associated infections (HAIs) . Healthcare-associated infections and antibiotic-resistant organisms are two major drivers of the need for widely adopted and effective hand hygiene programs.</b></p> <p><b>Although HH is not the only infection prevention strategy in your role to break the chain of infection for the resident, it is the cornerstone for ALL care giving that goes on daily in your role for the residents care.</b> Whether you are preparing food for the resident or assisting in feeding, cleaning the resident's room or changing linens, assisting in bedtime routines or taking the resident in a wheelchair down the hallway to therapy, every step of the way there are multiple HH opportunities to keep the resident free from the risk of infections.</p>	

Visuals & Notes	Script & Notes	Time Estimate
<p data-bbox="115 397 436 426"><b>Infection Prevention Speaking Up!</b></p> <ul data-bbox="151 438 404 457" style="list-style-type: none"> <li>• <i>Does Hand Hygiene Really Matter?</i></li> </ul>  <p data-bbox="154 515 391 529">6 minute Institute for Health Partnering to Heal Video</p> <p data-bbox="154 533 398 548"><a href="http://health.gov/hcq/trainings/partnering-to-heal/index.html">http://health.gov/hcq/trainings/partnering-to-heal/index.html</a></p> <p data-bbox="354 581 368 595">11</p> <p data-bbox="142 670 382 697">Link to access video</p> <p data-bbox="87 701 439 794"><a href="http://health.gov/hcq/trainings/partnering-to-heal/index.html">http://health.gov/hcq/trainings/partnering-to-heal/index.html</a></p>	<p data-bbox="505 397 1119 697">The Center for Disease Control estimates that each year nearly 2 million patients/residents in the United States get an infection in healthcare facilities, and about 100,000 of these patients/residents die as a result of their infection. <b>40 % of these infections could be prevented if we just performed hand hygiene BEFORE we touch the patient/resident!</b></p> <p data-bbox="505 743 1133 850">This 6 minute video is valuable to show you how just one action by many healthcare workers could have made the difference in one life!</p> <p data-bbox="505 896 1093 966">[Watch 6 min video and discuss barriers to performing HH appropriately in your facility!]</p>	

Visuals & Notes	Script & Notes	Time Estimate
<div data-bbox="92 388 462 596" data-label="Image"> <p>Why is it appropriate to perform hand hygiene?</p> <p>Good hand hygiene keeps residents from developing infections.</p> </div>	<p>Healthcare-associated infections and antibiotic-resistant organisms are two major drivers of the need for widely adopted and effective hand hygiene programs.</p> <p>The CDC writes that care providers must <u>clean their hands after eating</u> and after having direct contact with a resident's skin or bodily fluids. Additionally, they must practice good hand hygiene after operating medical equipment, removing gloves and using the restroom. Good hand hygiene keeps residents from developing infections, illnesses and suffering from other complications.</p> <p>This is especially vital if older residents are dealing with suppressed immune systems due to an ongoing illness, which makes them more susceptible to developing an infection.</p> <p>Even if you are wearing gloves, you must perform hand hygiene EVERY time you remove gloves. Multiple studies have shown that gloves alone do not protect the healthcare worker 100%.</p> <p>The hand print is from a health care worker who did not perform HH after working for just a few hours of their shift. Let's break the chain and educate our residents to perform hand hygiene with us when we deliver care.</p>	

Visuals & Notes	Script & Notes	Time Estimate
 <p>The image contains two posters. The left poster is titled "Be someone who has Healing Hands" and features a hand holding a small globe with two silhouettes of people. The right poster is titled "What Have YOU Touched Today?" and shows a hand with various icons representing different surfaces and objects touched throughout the day. Below the icons, it says "Scrub Those Germs Away!"</p>	<p>[Discuss with the team how many high touch surfaces they touch daily and if they now think of this differently after this training?]</p> <p>If we consider all the things we touch and then consider that the resident most of the time has a weaker immune system than we do, how can this adversely affect them? Does performing HH frequently and at minimum, Foam or Gel in the room and Foam or Gel out of the room, make more sense to break the chain of infection?</p>	

## Visuals & Notes



**This slide's script continues to next page.**



## Script & Notes

There have been many hand hygiene guidelines published in the past 20 years. Most are evidence based and include a rating of strength of the recommendation based on the science available at the time they were written.

Along with the advancements in scientific understanding of hand hygiene programs, governmental and professional organizations have developed guidelines to address hand hygiene and its use in infection prevention programs. Two organizations are most often recognized in the United States as authorities for hand hygiene guidelines: World Health Organization (WHO), Centers for Disease Control and Prevention (CDC)



## Time Estimate

## Visuals & Notes



[Link to WHO handout](#)


## Script & Notes

## Time Estimate

**This is the WHO 4 Moments for Residential Care:**  
When to perform hand hygiene with ABHR unless hands are visibly soiled then perform Hand Washing with soap and water!


1. Before Touching the Resident- FOAM or GEL In when entering the room every time!
2. Before Clean/Aseptic procedures- Activities of Daily living – bathing, bedding down, assisting with dentures, brushing teeth.
3. After body fluid exposure risk- Toileting, changing briefs, peri care.
4. After touching the resident or the resident's environment- FOAM or GEL OUT of the room every time!


[Hand out the WHO How, When, Why handout [https://www.who.int/gpsc/5may/Hand\\_Hygiene\\_Why\\_How\\_and\\_When\\_Brochure.pdf](https://www.who.int/gpsc/5may/Hand_Hygiene_Why_How_and_When_Brochure.pdf)  
Review in groups the recommendations on the slide as noted.]


Visuals & Notes	Script & Notes	Time Estimate
 <p>The diagram illustrates the WHO 5 Moments for hand hygiene. It features a central figure of a person in a white coat, with five numbered arrows pointing to different stages: 1. Before touching a resident, 2. Before a clean or aseptic procedure, 3. After body fluid exposure, 4. After leaving the resident's room, and 5. After leaving the room. A green dashed line indicates the 'zone' around the resident. Text on the slide includes: 'Your 5 moments for hand hygiene at the point of care', 'It's all about the "zone"', and 'Regardless of whether gloves are used or not!'. A legend shows a green dashed line labeled '—indicates zone—'.</p>	<p><b>[Activity Suggestion]</b>  Ask the group to recite the Five Moments before showing the slide</p> <ol style="list-style-type: none"> <li>1. Upon entry into the resident zone/room, before touching the resident</li> <li>2. Before clean or aseptic procedures (i.e. removing or applying a dressing, giving a medication, inserting an invasive device, examining a body cavity)</li> <li>3. After body fluid exposure</li> <li>4. Upon exit of resident zone, but not the room—some of the time it is the room!</li> <li>5. Upon exit from resident room</li> </ol> <p>Remember that GLOVES DO NOT take the place of Hand Hygiene</p>	

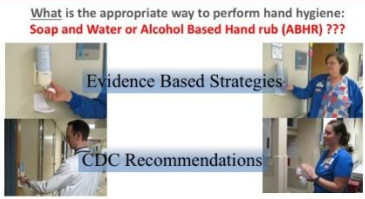







Visuals & Notes	Script & Notes	Time Estimate
	<p>It does not matter if you are in the resident's room or in the hallway in a wheelchair, the 5 moments for hand hygiene apply in all health care settings.</p> <ul style="list-style-type: none"><li>• Before touching a resident</li><li>• Before clean / aseptic procedure</li><li>• After body fluid exposure risk</li><li>• After touching a resident</li><li>• After touching resident surroundings</li></ul> <p>Remember: You should also perform HH before and after removing gloves</p>	


Visuals & Notes	Script & Notes	Time Estimate
 <p><b>Perform Hand Hygiene = Glove Hygiene</b> <b>Change Gloves!</b></p> <p><small>Never go from dirty to clean sites without removing gloves and performing HIG Change gloves + hand hygiene + don clean gloves when going from one body site to another</small></p> <ul style="list-style-type: none"><li>- two different wounds at two different body sites</li><li>- between oral and wound care</li><li>- between oral care and catheter care</li><li>- assisting in toileting and then assisting in ADLs</li></ul>	<p><b>[Activity Suggestion]</b></p> <ul style="list-style-type: none"><li>• Have a discussion before or after reviewing this slide to build on the list.</li><li>• Ask what prevents us from making these glove changes?</li><li>• What can we do to get better at this?</li></ul>	


Visuals & Notes	Script & Notes	Time Estimate
<p data-bbox="149 396 411 415">What should I use to clean my hands?</p>  <p data-bbox="264 421 392 463"><b>Evidence Based Strategies</b></p> <ul data-bbox="107 511 456 589" style="list-style-type: none"> <li>• Preferred method of hygiene is ABHR</li> <li>• Use HW if hands feel tacky after multiple uses of hand sanitizer use soap and water</li> </ul> <p data-bbox="107 540 257 579"><b>CDC Recommendations</b></p> <ul data-bbox="307 511 456 589" style="list-style-type: none"> <li>• Use Handwashing when: <ul style="list-style-type: none"> <li>• Hands are visibly soiled</li> <li>• For contact aseptic precautions</li> <li>• After using the restroom</li> <li>• Before and after eating</li> <li>• After coughing or sneezing</li> <li>• All other times use ABHR</li> </ul> </li> </ul>	<p data-bbox="506 396 1185 511"><b>CDC primary recommendation is use of ABHRs such as foam/gels to remove 99.9% of transient organisms.</b></p> <p data-bbox="506 517 1178 811">ABHRs recommended as being the primary product of choice to kill and remove 99.9% of transient organisms. It is a quick kill, so it is important to use them multiple times throughout your delivery of resident care. ABHR is the most effective product for reducing the number of pathogens on hands. ABHR is less irritating to skin than soap and water.</p> <p data-bbox="506 859 1185 1120">It is important to use soap and water for hand washing at certain times that most directly correlate to risk for transmission; during times when your hands are visibly soiled or could be soiled and when you can transmit these pathogens to the environment or to your own mucous membranes such as your nose and mouth.</p> <p data-bbox="506 1168 1170 1313"><b>Hand washing is recommended when hands are visibly soiled or after caring for residents toileting needs, after caring for C. Diff residents, before eating, and after using restroom for personal use.</b></p>	

Visuals & Notes	Script & Notes	Time Estimate
	<p>General rule of thumb, use these 5 moments to use soap and water!</p> <ol style="list-style-type: none"> <li>1. At the beginning of your shift and just prior to going home each day.</li> <li>2. When hands are visibly dirty or contaminated with material or are visibly soiled with blood or other body fluids use antimicrobial soaps instead of alcohol rubs.</li> <li>3. Before and after eating- for you and your resident.</li> <li>4. Before personal hygiene and after using restroom or caring for any residents toileting needs – ALWAYS with C Diff or Diarrhea of residents.</li> <li>5. After sneezing, coughing or blowing your nose and touching your T zone, face or hair- for you and your resident.</li> </ol>	


Visuals & Notes	Script & Notes	Time Estimate
<div data-bbox="92 388 462 596" data-label="Image"> </div> <p data-bbox="87 625 462 736"><b>There are active links for this slide and the following slide</b></p> <p data-bbox="87 780 462 852"><b><u>Everything you need to know about UTIs</u></b></p> <p data-bbox="87 977 462 1049"><b>This slide's script continues to next page.</b></p> 	<p data-bbox="494 401 1150 473">Let's talk about a case study before we review why your fingernails matter.</p> <p data-bbox="494 517 1165 658"><i>My grandfather is 91 years old and has a urinary tract infection. Is this a much more serious infection due to his age? Could it cause a brain dysfunction of some sort?</i></p> <p data-bbox="494 707 1150 890"><u>Urinary tract infections</u> are very common in the elderly. Some of the risk factors for UTIs include living in a nursing home, Foley catheter use (a tube passed into the bladder), bowel incontinence, dehydration, and lack of physical activity.</p> <p data-bbox="494 938 1150 1161">Go with me here as we look at common organisms that cause UTIs. E. coli is a common organism that you encounter daily when assisting the elderly with their toileting and perineal care. Hand Hygiene is critical and the first line of defense for stopping the spread of these organisms.</p> <p data-bbox="494 1209 1150 1354">The threat posed to an elderly person by any given UTI varies widely — some are very mild, while others can be life threatening . Yes, UTIs can cause Sepsis in the elderly.</p> <p data-bbox="494 1402 1093 1470">You raise the question of whether your grandfather's UTI is causing brain dysfunction?</p> 	


Visuals & Notes	Script & Notes	Time Estimate
<div data-bbox="94 388 462 596" data-label="Complex-Block"> <p><b>Fingernails Matter</b> Infection Transmission &amp; Artificial Nails</p>  <p>Research tells us . . .</p> <ul style="list-style-type: none"> <li>Colony count of bacteria/ fungi is greater than on native nails</li> <li>More likely to harbor gram-negative pathogens on finger tips than with native nails, before and after hand washing</li> <li>Study of microflora on the hands of 30 health care workers (Hodderwick et al. 2000) <ul style="list-style-type: none"> <li>Gram neg. bacilli with artificial nails: 47% vs. native nails: 17%</li> <li>Yeast with artificial nails 50% vs. native nails 13%</li> </ul> </li> </ul> </div> <p data-bbox="87 625 462 736"><b>There are active links for this slide and the previous slide</b></p> <p data-bbox="87 780 329 813"><b><u>What is Sepsis?</u></b></p>	<p data-bbox="494 401 1153 585">Confusion in the elderly is often attributed to UTIs, although without high fever or <u>sepsis</u> (meaning the infection has moved into the bloodstream), urinary tract infections typically don't cause serious brain dysfunction.</p> <p data-bbox="494 629 1158 739">However, infections in general can deplete an older individual, especially someone as old as your grandfather, of energy and quality of life.</p> <p data-bbox="494 784 1158 967">Bottom line, wouldn't you want to be able to provide best evidence care by sanitizing your hands properly and protect yourself and your family by removing all E. coli pathogens from your hands and fingernails???</p>	

Visuals & Notes	Script & Notes	Time Estimate
<div data-bbox="92 386 464 598" data-label="Complex-Block"> <p><b>The Do's and Don'ts of fingernails</b></p>  <ul style="list-style-type: none"> <li>• Artificial fingernails, gel nails or extenders should not be worn.</li> <li>• Natural nails should not be longer than 0.635 cm or ¼ inch long.</li> <li>• Nail polish should be removed when chipped.</li> <li>• Avoid wearing hand jewelry.</li> </ul> </div>	<p data-bbox="485 396 1078 511">Germs can live under artificial fingernails both before and after using an alcohol-based hand sanitizer and hand washing</p> <p data-bbox="485 550 1156 850">It is recommended that healthcare providers do not wear artificial fingernails or extensions (check your facility policy) including gel nail polish and nail art. These enhancements can not be removed during working hours when they become chipped and therefore are not recommended. IF you can not remove it easily in the break room with nail polish remover then you should not wear it at work.</p> <p data-bbox="485 898 1106 966">Keep natural nail tips less than ¼ inch long (CDC guidelines).</p> <p data-bbox="485 1014 1135 1236">Some studies have shown that skin underneath rings contains more germs than comparable areas of skin on fingers without rings (check your facility policy). If worn, remember to remove them and perform hand washing when hands are visibly soiled.</p>	

Visuals & Notes	Script & Notes	Time Estimate
<div data-bbox="92 401 462 614" style="border: 1px solid red; padding: 5px;"> <p><b>Evidence Supporting the Claim</b></p>  <p><b>Outbreak of pseudomonas infection in a Neonatal Intensive Care Unit</b></p> <ul style="list-style-type: none"> <li>• Casualty – 40 patients were affected, 16 died</li> <li>• Cause – Growth found in fingernails of staff</li> </ul> <p><b>Haemodialysis related Bacteraemia</b></p> <ul style="list-style-type: none"> <li>• Casualty – 5 haemodialysis patients found to have bacteraemic sepsis</li> <li>• Cause – Growth of <i>Serratia Marcescens</i> found in the long fingernails of HCW involved. HCW admitted to not washing their hands and having long nails during detaching lid from heparin vial.</li> </ul> </div>	<p>The evidence based outbreaks noted on this slide are real. They can happen in your facility and to any health care worker. To protect both you and your resident, following hand hygiene guidelines that include nail care can prevent you from harboring pathogens on your hands that can affect your health and the residents.</p> <p>There has been transmission linked to poor hand washing (fear of damaging the nail/polish) also documented in the literature reviews.</p> <p>There are also more glove tears, which increase the risk of transmission of pathogens across this crucial barrier.</p> <p>Remember, hand hygiene also includes nail care, and nail enhancements, gels, acrylics, polish - it is recommended to not have artificial nails, acrylics, and nail polish. If worn, they should not be chipped (usually happens within 4 days). Keeping nails short, ¼ in or less is the CDC recommendation to prevent puncture of gloves.</p> <p>HH also includes keeping your hands free from irritation of frequent sanitation and washing with soaps that can harm the outer layer of your skin. Keep your hands safe by using lotions and not using too cold or too hot water, which can strip your hands of natural protective oils.</p>	



Visuals & Notes	Script & Notes	Time Estimate
<div data-bbox="92 388 461 596"> <p><b>What's the Harm?</b></p>  <p>What's the harm with long nails, artificial nails or nail paint varnish?</p> <ul style="list-style-type: none"> <li>• Inhibits good hand hygiene</li> <li>• May reduce your grip or speed while doing various manipulations</li> <li>• May tear or puncture gloves</li> <li>• May interfere with putting on gloves</li> <li>• Can become caught in bedding, dressings and even machinery</li> <li>• Long nails and artificial nails are a breeding ground for various disease-causing micro organisms and fungi</li> </ul> </div>	<p><b>Research tells us . . .</b></p> <p>Colony count of bacteria/ fungi is greater than on native nails</p> <p>More likely to harbor gram-negative pathogens on finger tips than with native nails, before and after hand washing</p> <p>Study of microflora on the hands of 30 health care workers (Hedderwick et al. 2000)</p> <p style="padding-left: 40px;">Gm neg <i>bacilli</i> with artificial nails 47% vs. native nails 17%</p> <p style="padding-left: 40px;">Yeast with artificial nails 50%</p>	

Visuals & Notes	Script & Notes	Time Estimate
 <p><b>How to Hand Wash</b></p> <p><b>How to wash and dry hands with liquid soap and water</b></p> <p><b>(If possible, leave the training room and demonstrate this practice)</b></p>	<ol style="list-style-type: none"><li>1. Turn on water and adjust temp to warm.</li><li>2. Apply enough soap to cover all hand surfaces</li><li>3. Follow same hand hygiene rubbing techniques as when using hand rub, then rinse with warm water.</li><li>4. Dry thoroughly with paper towel</li><li>5. Use towel to turn off faucet</li></ol> <p><b>Your hands are now safe! Or as I like to say “Healing Hands”!</b></p>	

### Visuals & Notes

### Script & Notes

### Time Estimate

#### Sing Happy Birthday twice!

#### Six steps to clean hands

Washing your hands properly takes about as long as singing "Happy Birthday" twice. Using the six steps below:



1. Rub hands palm to palm.



2. Rub back of left hand with right hand and vice versa.



3. Rub palm to palm with fingers interlaced.



4. Rub wrist to wrist.




5. Rub thumb in a circular motion.





6. Rub fingertips in a circular motion.

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Visuals & Notes	Script & Notes	Time Estimate
<div data-bbox="82 388 461 600" data-label="Image"> </div> <p data-bbox="97 639 421 865"><b>(Have gel or foam in the training room and demonstrate this along with the learners doing it in front of each other-make it fun!)</b></p>	<p data-bbox="489 440 1129 587"><b>CDC recommends that ABHR is still the best for removing transient organisms – 99.9% quick kill. Alcohol content &gt; 60% containing a “persistent antiseptic” should be used.</b></p> <p data-bbox="489 629 765 664"><b>[Activity Suggestion]</b></p> <ul data-bbox="496 668 1172 890" style="list-style-type: none"> <li>• Before sharing the details around hand rub/hand washing process, have participants work in teams to detail what they believe the process is and then use the slides as part of the debrief to recap and reframe any missing or erroneous information.</li> </ul>	

Visuals & Notes	Script & Notes	Time Estimate
<p data-bbox="211 397 344 417"><b>How to Hand Rub</b></p>  <p data-bbox="118 426 444 459">5. Place the backs of your fingers to your opposing palms with fingers interlocked and rub against your palms in a side to side motion.</p> <p data-bbox="118 465 444 498">6. Clasp your right palm around your left thumb and rub in a rotating motion, then clean your right thumb using your left hand. You can use this same technique to wash around your wrists.</p> <p data-bbox="118 504 444 556">7. Lastly, clean your nail tips. Clasp your fingers of one hand and position them in the palm of your opposite hand. Rub your fingertips backward and forward in a rotational motion against the surface of your palm. Now, switch hands and perform the same cleansing technique.</p> <p data-bbox="118 562 444 591">Once your hands are dry you are ready to go about your day with clean hands!</p>	<ol data-bbox="508 397 1150 1271" style="list-style-type: none"><li>1. Apply a palm-full of the product in a cupped hand, covering all surfaces of your palm.</li><li>2. Rub hands palm to palm in a circular motion.</li><li>3. Place your right palm over the back of your left hand, interlace your fingers and rub back and forth, then switch hands and perform the same motion.</li><li>4. Put your palms together, interlace your fingers and rub together in an up and down motion to clean in-between your fingers.</li><li>5. Place the backs of your fingers to your opposing palms with fingers interlocked and rub against your palms in a side to side motion.</li><li>6. Clasp your right palm around your left thumb and rub in a rotating motion, then clean your right thumb using your left hand. *You can use this same technique to wash around your wrists.</li><li>7. Lastly, clean your nail tips. Clasp your fingers of one hand and position them in the palm of your opposite hand. Rub your fingertips backward and forward in a rotational motion against the surface of your palm. Now, switch hands and perform the same cleansing technique.</li></ol> <p data-bbox="508 1315 1083 1387">Once your hands are dry you are ready to go about your day with clean hands!</p>	

Visuals & Notes	Script & Notes	Time Estimate
<p data-bbox="101 397 261 421">Serious Business</p>  <p>The infographic shows two hands with purple and red shaded areas indicating high-risk zones for contamination. The left hand is labeled 'BACK OF HAND' and the right hand is labeled 'PALM OF HAND'. A legend indicates 'Back Heavily soiled' and 'Palm Heavily soiled'. The text 'Hand hygiene zones' is repeated at the bottom of the image.</p>	<p data-bbox="486 397 1136 508">Remember to look at evidence when performing hand hygiene and remember the thumbs, tips and fronts of hands!</p>	

Visuals & Notes	Script & Notes	Time Estimate
<div data-bbox="94 388 461 596" style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;"><b>Resident Hand Hygiene Education</b></p> <p>Tell residents not to be afraid to ask anyone...</p>  <p>Did you wash your hands?</p> <ul style="list-style-type: none"> <li>• Hands can be contaminated or colonized by potentially harmful bacteria</li> <li>• Residents can develop an infection from their own flora</li> <li>• Educate residents on good hand hygiene</li> <li>• Demonstrate and observe technique</li> <li>• Remind when to wash hands</li> <li>• Best Practice is to Perform HH before resident care when they can see you. Sends message to them that staff hands are clean!</li> </ul> </div>	<p>To keep residents safe, we must remember to assist them to perform hand hygiene. Some facilities have packaged HH wipes, while others may not. You can always offer a soap and water wash cloth for bed ridden residents who are not able to use the sink for hand hygiene before meals, after the restroom and when hands are visibly soiled. Remember to ask them, most will want to perform hand hygiene for their wellness.</p> <p><b>[Activity Suggestion]</b></p> <ul style="list-style-type: none"> <li>• Ask participants to share suggestions they have used for resident education.</li> </ul>	

### Visuals & Notes

#### Visitor Hand Hygiene Education



- Hands can be contaminated or colonized by potentially harmful bacteria
- Can transmit infectious bacteria to resident and contaminate the environment
- Instruct visitors to wash hands before eating, after using restroom, and after cough or sneezing.
  - It's part of the resident's care in keeping them and their environment safe.

### Script & Notes

Visitors are a key part of every residents well being both mentally and physically. They assist the care team to keep the resident safe, or they can cause the residents illness if not informed about how their actions can promote infection risk. Visitors are an integral part of the care team, and if we empower them, they can be the best defense to break the chain of infection.

**[Activity Suggestion-**Ask participants to share suggestions they have used for visitor education, Discuss Respiratory Cough Etiquette- mask, tissue, HH gel stations at entrances to building and also in hallway upon entry to room!]

### Time Estimate



Visuals & Notes	Script & Notes	Time Estimate
	Any questions?	