



GROUP A *STREPTOCOCCUS* CONTROL IN LONG-TERM CARE FACILITIES

INTRODUCTION

Group A *Streptococcus* (GAS) is a species of bacteria (*Streptococcus pyogenes*) that causes many types of infections, most commonly strep throat, scarlet fever, and skin infections such as impetigo or wound infections. Rarely, these bacteria enter the blood, muscle, or other parts of the body where bacteria are not usually present. When bacteria enter these areas, severe, life-threatening infections (“invasive disease”) such as pneumonia, bloodstream infections/sepsis, and necrotizing fasciitis can occur.

Residents of long-term care facilities (LTCFs) are at increased risk of serious, invasive GAS infections due to several factors, including advanced age and underlying medical conditions. Additionally, GAS outbreaks have been documented in LTCFs across the United States. Because of the potential for serious health consequences of GAS infections among LTCF residents, even single cases of invasive GAS disease in a LTCF should prompt the initiation of additional investigation and control measures to quickly identify cases and contain any potential spread of the bacteria.

This toolkit is intended to serve as a guide for LTCFs responding to cases and outbreaks of GAS. It includes additional information about GAS, risk factors for GAS infections and outbreaks in LTCFs, and recommended control measures. For additional questions related to GAS investigation and control, please contact the Indiana State Department of Health (ISDH) Epidemiology Resource Center at 317-233-7125.

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BACKGROUND

GROUP A *STREPTOCOCCUS*: COLONIZATION AND INFECTION

Group A *Streptococcus* (GAS) is a species of bacteria (*Streptococcus pyogenes*) that may cause many different types of infections. Some people may also carry the bacteria in their throat or on their skin, but do not have symptoms of infection. This is known as colonization. Other sites where people may be colonized with GAS bacteria include the vagina, rectum, or wounds.

Infections occur when the bacteria overcome the body's natural defenses and cause illness. Some of the most common types of GAS infections include noninvasive illnesses such as strep throat (streptococcal pharyngitis), scarlet fever, wound infections, and skin infections such as impetigo.

Rarely, the bacteria enter a site in the body (such as the blood or muscle) where they are not usually present. When bacteria enter these sites, severe, life-threatening infections ("invasive disease") such as bloodstream infections, sepsis, pneumonia, necrotizing fasciitis, or streptococcal toxic shock syndrome (STSS) can occur.

GAS TRANSMISSION

GAS bacteria are typically spread person-to-person by respiratory droplets or direct contact with skin or wounds that are colonized or infected. The bacteria may also spread through contact with contaminated equipment or medications such as creams or ointments shared between residents, although this is rare.

People with GAS are most contagious when they have an active infection; however, colonized individuals can also spread the bacteria. In general, people with GAS infections are no longer contagious after they have completed 24 hours of appropriate antibiotic therapy, although individuals with wound infections or with wounds colonized with GAS bacteria should be considered potentially contagious even after this time, as wounds may continue to harbor GAS even after an infection resolves. To completely treat infections, however, it is important that individuals complete the full course of prescribed antibiotics.

GAS CASES AND OUTBREAKS IN LONG-TERM CARE FACILITIES

Residents of LTCFs are at increased risk for serious, invasive GAS infections due to advanced age, underlying chronic medical conditions, or breaks in the skin such as wounds or indwelling devices. In recent years, outbreaks of GAS have been detected and documented in LTCFs around the U.S. When outbreaks occur, they may involve both residents and staff, may include cases of both invasive and non-invasive infections, and may persist for several months. Factors that have been shown to contribute to GAS outbreaks in LTCFs include:

- Inadequate infection control practices, including lapses in proper hand hygiene and wound care practices;
- Frequent, direct contact between residents and staff (e.g., for wound care) when proper infection control practices are not in place; and

- Employees working while sick (“presenteeism”).

REPORTING GAS CASES AND OUTBREAKS

Per the [Indiana Communicable Disease Rule](#) (410 IAC 1-2.5), physicians, hospitals, and laboratories are required to report cases of invasive GAS disease within 72 hours of case identification to either the local health department or ISDH. For reporting purposes, cases of invasive GAS disease are those with GAS detected in any [normally sterile body site](#) or cases of streptococcal toxic shock syndrome (STSS) or necrotizing fasciitis with GAS detected in sterile or non-sterile sites such as wounds. Individual case reports can be submitted to ISDH by fax at 317-234-2812 using the Confidential Report of Communicable Diseases Form available at <https://www.in.gov/isdh/25366.htm>.

Additionally, LTCFs should report any suspected outbreaks of GAS (including both invasive and non-invasive infections) to the local health department or the ISDH Epidemiology Resource Center at 317-233-7125. Suspected outbreaks should also be reported to the ISDH Long-Term Care Division according to routine protocols and reporting requirements.

INVESTIGATION AND CONTROL MEASURES

Because of the potential for outbreaks and serious infections among residents, any cases of invasive GAS disease in LTCFs should prompt both an investigation and additional control measures. These include:

- Active surveillance for additional cases;
- Education for staff on GAS prevention, including how to recognize and report signs and symptoms of GAS among residents and themselves;
- Ensuring strong adherence to proper infection control practices, including:
 - Proper hand hygiene
 - Appropriate transmission-based precautions
 - Proper wound care practices, especially when handling supplies and topical treatments used for more than one resident
 - Proper cleaning and disinfection practices for shared equipment and environmental surfaces; and
- Appropriate management of potentially infected residents, staff, and visitors.

Depending on the number of cases, resident population, and transmission risks, additional measures, such as screening for GAS colonization or cohorting residents and staff, may also be recommended on a case-by-case basis.

The following sections discuss each of these control measures in greater detail.

ACTIVE SURVEILLANCE FOR ADDITIONAL CASES

When a case of invasive GAS disease is identified in a LTCF, the facility should implement active surveillance to identify additional invasive and non-invasive cases among both residents and staff. This is to ensure prompt detection of and response to potential outbreaks of GAS.

Active surveillance activities include:

- Review infection control logs and employee absence records to identify any potential cases of GAS disease (invasive or non-invasive) occurring within the previous 4 months of the most recent case. This will help characterize the extent of the outbreak better and might yield important information on possible ways to control spread.
- Remain vigilant for additional GAS infections among residents or staff for 4 months after the most recent GAS case is identified. (See “Staff Management” and “Resident Management” below for additional details.)
- Maintain a line list of all cases among both residents and staff. A template is provided in Appendix B.
- Report any newly identified cases to the local health department and/or the ISDH Epidemiology Resource Center. Cases may be reported by phone to ISDH at 317-233-7125 or by fax to 317-234-2812 using the Confidential Report of Communicable Diseases Form available at <https://www.in.gov/isdh/25366.htm>. Please also submit relevant clinical records (e.g., clinical notes, lab results) with the case report or upon request.
- Maintain thorough records of staffing patterns, resident room histories, wound care, and other potential exposures to assist with investigation of future cases.

STAFF EDUCATION

When an invasive GAS case or outbreak is identified, staff should be educated about GAS symptoms, transmission, and prevention measures. This can be in the form of a staff in-service or other format deemed appropriate for the facility. Staff education should include:

- Information about GAS symptoms and transmission
- Instructions to self-monitor for signs or symptoms of GAS infection (e.g., sore throat, fever, or skin infections), to report any suspected or confirmed infections to the facility’s designated staff, and to not work while ill
 - Facility sick leave policies should be reviewed to ensure they are supportive and non-punitive.
- Education on monitoring residents for possible signs of GAS infection
- Education on proper infection control, including proper hand hygiene, transmission-based precautions, and wound care.

A GAS quick reference guide for LTCF staff is attached in Appendix A, which may assist in disseminating appropriate information about GAS to staff. ISDH is also able to assist with providing staff education upon request.

INFECTION CONTROL

Strong infection control practices are crucial to contain the spread of GAS bacteria in LTCFs. This includes proper hand hygiene, transmission-based precautions, wound care, environmental cleaning, and regular assessment of infection control practices.

Hand Hygiene

- Ensure staff are routinely educated about proper hand hygiene.
- Hand hygiene should be performed:
 - Immediately before touching a resident, regardless of whether gloves are worn
 - Before performing an aseptic task or handling invasive medical devices
 - Before moving from work on a soiled body site to a clean body site on the same resident
 - After touching a resident or the resident's immediate environment
 - After contact with blood, body fluids, or contaminated surfaces
 - Immediately after glove removal
- Audit staff hand hygiene practices and provide feedback to staff on their performance. The attached hand hygiene observation form (Appendix E) may be helpful in performing audits.
- Ensure that alcohol-based hand sanitizer is available inside and outside all resident rooms. Promoting preferential use of alcohol-based hand sanitizer in most clinical situations (unless hands are visibly soiled) can improve adherence to hand hygiene.

Transmission-based Precautions

In addition to standard precautions, residents with GAS infections should be placed under the following transmission-based precautions, depending on the type of infection.

- **Droplet precautions** (face and eye protection such as facemask and goggles or face shield) are recommended for residents with pharyngitis, pneumonia, major wounds, and invasive or suspected invasive infections (e.g., sepsis).
- **Contact precautions** (gown and gloves) are recommended for residents with draining wounds that cannot be effectively covered or contained.
- During GAS outbreaks, both droplet and contact precautions should be followed for any wound care activities, regardless of the resident's infection status.

Precautions should be maintained until at least 24 hours of appropriate antibiotic therapy is completed. For residents with draining wounds that cannot be completely covered or contained, precautions should be maintained until wounds stop draining. Facilities should also ensure convenient staff access to personal protective equipment (PPE). Additional information about transmission-based precautions may be accessed on the CDC's [website](#).

Wound Care

Infected or colonized wounds can be sources of GAS transmission if appropriate precautions are not followed. Residents may become infected if the bacteria enter through these breaks in the skin, such as through direct contact from an infected or colonized healthcare worker. Additionally, healthcare workers may become colonized or infected with GAS by caring for residents with infected or colonized wounds without appropriate precautions. Improper wound

care has been identified as a risk factor for transmission in multiple GAS outbreaks. It is therefore very important for facilities to:

- Ensure staff are educated on proper wound care practices.
- Maintain proper storage, handling, and transport of medications and supplies.
- Ensure proper cleaning and disinfection of reusable equipment and other items (including conducting audits, where applicable).
- Ensure proper disposal of used materials.
- Perform audits of wound care practices and provide feedback to staff on adherence.
- Perform regular audits of skin breakdown or wounds on all residents.

The attached wound care observation checklist (Appendix D) contains additional, specific wound care recommendations and may be used as a resource for performing audits of wound care practices.

Environmental Cleaning

Facilities should adhere to proper, routine cleaning and disinfection protocols. Audits of environmental cleaning practices should be considered, regardless of whether these duties are performed by in-house staff or contracted agencies. When audits are conducted, feedback should be provided to staff on their performance.

Infection Control Assessment

Upon request, ISDH may assist LTCFs in completing an assessment of current infection control policies and practices. These assessments are educational (not regulatory) visits that generally include discussions with facility infection prevention personnel, review of the facility's policies and procedures, and direct observations. They also provide an opportunity for the facility to identify current strengths and weaknesses in infection prevention and discuss best practices with ISDH infection prevention staff. Facilities interested in an infection control assessment visit should contact the ISDH Epidemiology Resource Center at 317-233-7125. Facilities may also refer to CDC's [infection control assessment tools](#) to conduct internal audits and quality improvement.

RESIDENT MANAGEMENT

In order to quickly identify and respond to any new cases of GAS infection during GAS outbreaks, facilities should:

- Evaluate residents daily for potential signs or symptoms of GAS infection (fever; sore throat; new skin lesions; or wounds that are red, warm, or indurated). Monitoring should be maintained for four months after the last diagnosed GAS case. This period would be extended for an additional four months if new GAS cases are identified.
- Implement appropriate transmission-based precautions for suspected cases of GAS until GAS infection is ruled out or until residents are properly treated.

- Maintain a low threshold for obtaining wound cultures. Cultures should be obtained on residents with wounds who develop a fever or are showing early signs of a potential wound infection (e.g., new redness, swelling, heat, pain, drainage, induration, etc.).

STAFF MANAGEMENT

In previously documented GAS outbreaks in LTCFs, staff who worked while ill have contributed to the spread of GAS within their facilities. When a case of invasive GAS or a GAS outbreak is identified within a LTCF, the facility should take steps to identify potential cases among their staff. This may include:

- Reviewing the facility's employee sick leave log to identify staff with potential GAS infection within the months preceding the most recent case. This will help characterize the extent of the outbreak and might yield important information on possible ways to control spread.
- Conducting a survey of staff for any self-reported symptoms (e.g., sore throat, fever, evidence of skin infection) or diagnosis of GAS infection.
- Maintaining thorough sick leave records to identify and document any future cases among staff.

In order to prevent staff or resident exposures to ill staff, facilities should also take the following actions.

- Enact supportive sick leave policies (e.g., ensure staff are not penalized if they miss work due to illness).
- Educate staff on signs and symptoms of GAS infection.
- Encourage staff to self-monitor for symptoms of GAS infections (e.g., sore throat, fever, skin lesions).
- Staff who develop symptoms should be evaluated by a healthcare provider and should report the potential infection to appropriate infection prevention personnel within their facility.
- Staff should not work while ill. If diagnosed with a GAS infection, staff must remain excluded from work until they have completed at least 24 hours of appropriate antibiotic therapy, although they should be sure to complete the full course of prescribed antibiotics.

VISITOR MANAGEMENT

Family and friends who visit LTCF residents while ill can potentially be sources of GAS infection. To minimize the risk of exposure, LTCFs should routinely post signage about not visiting while ill and taking appropriate precautions to prevent the spread of infections (e.g., proper hand hygiene, cough etiquette, etc.). Long-term care facilities experiencing GAS outbreaks should ask visitors to avoid visiting the facility if they are showing signs or symptoms of GAS infection.

SCREENING FOR GAS COLONIZATION

When invasive GAS cases or outbreaks are identified in LTCFs, screening to identify and treat residents and staff colonized with GAS bacteria may be helpful in controlling transmission. The decision to screen should be made in consultation with public health authorities and is based on a number of factors, including the number of cases, patterns of transmission, and risk of severe disease among residents and staff.

If screening is implemented, a range of screening options may be considered depending on the specific situation. In situations where only single cases or very limited transmission has been observed, facilities may choose to limit screening to close contacts of recent cases (e.g., roommates, staff who provided direct care, or close social contacts). If a broader approach is needed, the facility may choose to expand screening to residents and staff in specific units or the entire facility. Facilities considering screening should consult public health authorities to discuss the appropriate scope of screening activities.

If screening is undertaken, the following specimens should be collected:

- **Staff:** Screening should include an oropharyngeal (OP) swab and any uncovered areas of dermatitis or skin breakdown. Staff who routinely provide wound care should also consider having a vaginal and rectal swab completed, as these can be sites of group A strep carriage.
- **Residents:** Screening should include an OP swab; swabs of any skin breakdown, lesions, or wounds; and swabs of any indwelling catheter or other medical device sites.

Any positive isolates should be retained and submitted to the ISDH Laboratories for further strain characterization. A template line list for recording screening results is available in Appendix C.

Residents and staff who are found to be positive for GAS should be provided appropriate antibiotics to eliminate carriage of the bacteria. Antibiotics should be provided at the discretion of a healthcare provider. Potential regimens recommended for GAS carriage elimination are published [here](#).

PUBLICATIONS AND RESOURCES

Publications

1. Ahmed SS, Diebold KE, Brandvold JM, et al. [The role of wound care in 2 group A streptococcal outbreaks in a Chicago skilled nursing facility, 2015-2016](#). *Open Forum Infect Dis*. 2018; 5(7): ofy145.
2. Centers for Disease Control and Prevention (CDC). [Invasive group A *Streptococcus* in a skilled nursing facility—Pennsylvania, 2009–2010](#). *MMWR*. 2011; 60(42): 1445–9.
3. Dooling KL, Crist MB, Nguyen DB, et al. [Investigation of a prolonged group A streptococcal outbreak among residents of a skilled nursing facility, Georgia, 2009–2012](#). *Clin Infect Dis*. 2013; 57(11): 1562–7.

4. Jordan HT, Richards CL Jr., Burton DC, Thigpen MC, Van Beneden CA. [Group A streptococcal disease in long-term care facilities: descriptive epidemiology and potential control measures](#). *Clin Infect Dis*. 2007; 45(6):742-52.
5. Kobayashi M, Lyman MM, Francois Watkins LK, et al. [A cluster of group A streptococcal infections in a skilled nursing facility—the potential role of healthcare worker presenteeism](#). *J Am Geriatr Soc*. 2016; 64(12): e279–84.
6. Nanduri SA, Metcalf BJ, Arwady MA, et al. [A prolonged and large outbreak of invasive group A streptococcal disease within a nursing home: repeated intra-facility transmission of a single strain](#). *J Clin Microbiol*. 2019; 25(2): 248.e1–7.
7. Prevention of Invasive Group A Streptococcal Infections Workshop Participants. [Prevention of invasive group A streptococcal disease among household contacts of case patients and among postpartum and postsurgical patients: recommendations from the Centers for Disease Control and Prevention](#). *Clin Infect Dis*. 2002; 35(8): 950-9.
8. Smith A, Li A, Tolomeo O, Tyrrell GJ, Jamieson F, Fisman D. [Mass antibiotic treatment for group A *Streptococcus* outbreaks in two long-term care facilities](#). *Emerg Infect Dis*. 2003; 9(10): 1260–5.

Resources

1. CDC. Group A Streptococcal (GAS) Disease. Available at: <https://www.cdc.gov/groupastrep/index.html>. Accessed 18 February 2020.
2. CDC. Hand Hygiene in Healthcare Settings. Available at: <https://www.cdc.gov/HandHygiene/index.html>. Accessed 18 February 2020.
3. CDC. Infection Control Assessment Tools. Available at: <https://www.cdc.gov/hai/prevent/infection-control-assessment-tools.html>. Accessed 18 February 2020.
4. CDC. Isolation Precautions. Available at: <https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html>. Accessed 18 February 2020.
5. CDC. Nursing Homes and Assisted Living (Long-term Care Facilities [LTCFs]). Available at: <https://www.cdc.gov/longtermcare/index.html>. Accessed 18 February 2020.
6. CDC. Transmission-Based Precautions. Available at: <https://www.cdc.gov/infectioncontrol/basics/transmission-based-precautions.html>. Accessed 18 February 2020.

APPENDICES

- A. GAS Quick Reference Guide for LTCF Staff
- B. GAS Case Line List
- C. GAS Screening Line List
- D. Wound Care Observation Checklist for Infection Control
- E. Hand Hygiene Observation Worksheet
- F. Environmental Checklist for Monitoring Terminal Cleaning (CDC)



Group A *Streptococcus* (GAS): Quick Guide for Long-term Care Facility Staff

What is group A *Streptococcus*?

Group A *Streptococcus* (GAS) is a species of bacteria that causes many types of infections, most commonly strep throat, scarlet fever, and skin infections such as impetigo or wound infections. Rarely, these bacteria enter the blood, muscle, or other parts of the body where bacteria are not usually present. When bacteria enter these areas, severe, life-threatening infections (“invasive disease”) such as pneumonia, sepsis, and necrotizing fasciitis can occur.

Some people have GAS bacteria present on their skin or in their throats but are not sick. These people are known as “carriers” of the bacteria.

How is GAS spread?

GAS bacteria are spread person-to-person, through respiratory droplets or direct contact with the skin or wounds of someone infected with or carrying the GAS bacteria. People are most contagious when they have an active infection, such as strep throat or a wound infection, but anyone infected with or carrying GAS may spread the bacteria to others.

What risks contribute to GAS outbreaks in long-term care facilities?

Outbreaks of GAS can occur in long-term care facilities among both residents and staff. Residents in long-term care facilities are at increased risk for serious GAS infections due to advanced age, presence of underlying medical conditions (such as diabetes or lung disease), or skin breakdown such as open wounds.

What can I do to help prevent GAS infections in my facility?

Maintaining good infection control practices is the best way to prevent GAS bacteria from spreading in long-term care facilities. You can take the following steps to prevent spread of the bacteria:

- **Monitor yourself for signs and symptoms of GAS infection**, such as sore throat, fever, or skin infections.
- **Report any suspected signs and symptoms of GAS infection** to your facility’s designated staff (e.g., director of nursing, infection preventionist, administrator, employee health), **and** visit your healthcare provider to evaluate your signs and symptoms of GAS infection.
- **Don’t work while you are sick.** People with GAS infections are considered contagious and should stay home until they have completed at least 24 hours of appropriate antibiotic treatment. Talk to your healthcare provider and your facility’s designated staff about when you can return to work.
- **Ask friends and family of residents to avoid visiting if they have a sore throat, fever, or other potential symptoms of GAS infection.**
- **Maintain frequent, proper hand hygiene** using alcohol-based hand sanitizer or soap and water.

What can I do to help prevent GAS infections in my facility? (Continued)

- **Follow appropriate transmission-based precautions:**
 - Standard precautions should be followed for all residents.
 - Droplet precautions (use of face and eye protection such as goggles and a facemask or face shield) should be followed for residents with strep throat, wound infection, or suspected invasive disease such as pneumonia or sepsis.
 - Contact precautions (use of gown and gloves) should be followed for residents with open, draining wounds that cannot be covered.
- **Use appropriate personal protective equipment (PPE)** such as gloves, gowns, masks, and eye protection when caring for residents that require these precautions.
- **Follow appropriate wound care practices** as outlined by your facility.
- **Monitor residents for signs and symptoms of GAS infection**, such as fever; sore throat; or wounds that are red, warm, or indurated. Report any suspected infections to appropriate staff or supervisors, including staff responsible for infection prevention, within your facility.

Where can I find more information about GAS infections?

Additional information about GAS is available at the links below:

- Indiana State Department of Health (ISDH) website:
 - <https://www.in.gov/isdh/20209.htm>
- Centers for Disease Control and Prevention (CDC) website:
 - <https://www.cdc.gov/groupastrep/index.html>

ISDH Long-term Care Facility Group A *Streptococcus* (GAS) Case Line List

Name (Last, First)	DOB ¹	Sex (M/F)	Age	Room #	Unit	Resident or Staff	Wound Care (Y/N) ²	Infection type(s) ³	Symptom Onset Date	Hospit- alized? (Y/N)	Died (Y/N)	GAS Isolated (Y/N)	Culture Site(s) ⁴	Culture Date(s) ⁵

¹ DOB = Date of birth

² For residents, indicate "Y" if they received wound care. For staff, indicate "Y" if they performed wound care.

³ Examples may include wound infection, bloodstream infection/sepsis, skin/soft tissue infection (e.g., cellulitis, impetigo), strep throat, pneumonia, necrotizing fasciitis, streptococcal toxic shock syndrome (STSS), or other infection types. Please include ALL infections, both invasive (i.e., from a normally sterile body site) and non-invasive.

⁴ List all sites from which a positive GAS culture was obtained.

⁵ List the specimen collection dates for all GAS-positive cultures.

Long-term Care Facility Group A *Streptococcus* (GAS) Screening Line List

Name (Last, First)	Age	Sex (M/F)	Resident or Staff	Room #	Unit(s) ¹	Wound Care (Y/N) ²	Occupation (staff only)	Symptoms of GAS infection? (Y/N) ³	Close contact with a GAS case? (Y/N) ⁴	Date Cultured	Culture Site(s) ⁵	GAS Isolated (Y/N)	Positive Culture Sites	Treated (Y/N) ⁶

¹ For residents, specify the unit(s) in which resident lives. For staff, indicate the unit(s) in which they work. If staff are not limited to a particular unit or units, write "All."
² For residents, indicate "Y" if they received wound care. For staff, indicate "Y" if they performed wound care.
³ Indicate "Y" if this person experienced any recent symptoms of possible GAS infection (e.g., fever, sore throat, skin/wound infection, etc.).
⁴ Close contact includes providing direct patient care, sharing a room with, or being a sexual or close social contact of a person with a confirmed GAS infection.
⁵ Sites recommended to culture include: throat, any wounds or skin breakdown, and any indwelling catheter sites.
⁶ Was this person treated with appropriate antibiotics after a positive culture was obtained?



Indiana State
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Wound Care Observation Checklist for Infection Control

The following represent best practices for infection control during wound dressing changes, assessment and care. To evaluate wound practice, observe wound care procedures from start to finish, marking whether practices were appropriate (yes) or not (no) or not observed (n/a). Make notes of all deviations from best practices (areas for improvement).

Practices	Yes	No	N/A	Notes
1. All supplies gathered before dressing change <ul style="list-style-type: none"> Supplies were handled in a way to prevent contamination Supplies are dedicated to and labeled for one individual Multi-dose medications are used appropriately¹ 				
2. Hand hygiene performed properly before preparing clean field ²				
3. Clean field prepared <ul style="list-style-type: none"> Surface cleaned with antiseptic wipes following manufacturer guidelines Surface barrier applied (e.g. Chux pad) Supplies placed on surface barrier in aseptic manner 				
4. Hand hygiene performed properly before starting the procedure				
5. Clean gloves and PPE donned according to Standard or Contact precautions <ul style="list-style-type: none"> Consider use of surgical mask for all wound care 				
6. Barrier positioned under wound				
7. Old dressing removed and discarded immediately				
8. Dirty gloves removed and discarded ³				
9. Hand hygiene performed properly before accessing clean supplies ³				
10. Clean gloves donned				
11. Wound cleaned using aseptic non-touch technique ⁴				
12. Wound treatment completed using aseptic non-touch technique ⁴				
13. Dirty supplies discarded in trash receptacle				
14. Gloves removed and hand hygiene performed properly after dressing change is complete				
15. Reusable equipment cleaned and/or disinfected appropriately ⁵				
16. Wound cart is clean and utilized appropriately ⁶				



Indiana State Department of Health

1. Multi-dose wound care medications (e.g. ointments, creams) should be dedicated to a single resident whenever possible or a small amount of medication should be aliquoted into a clean container for single-resident use; Medications should be stored properly in a centralized location and never enter a patient treatment area or room.
2. Proper hand hygiene is that which occurs at the right time, uses the right method, and uses correct technique and duration. Follow the CDC Guideline for Hand Hygiene in Healthcare Settings available at <https://www.cdc.gov/mmwr/PDF/rr/rr5116.pdf>. Some notes to consider:
 - Alcohol-based hand rub (ABHR) is the preferred method of hand hygiene in healthcare settings and should always be used, except:
 - When hands are visibly soiled;
 - After known or suspected exposure to *Clostridium difficile* if your facility is experiencing an outbreak or higher endemic rates;
 - After known or suspected exposure to patients with infectious diarrhea during norovirus outbreaks;
 - Before eating; and
 - After using the restroom.
 - When using ABHR, cover all surfaces of your hands and rub hands until they feel dry
 - When washing your hands with soap and water, rub hands together vigorously for at least 15 seconds covering all hand surfaces. Rinse hands with water, use disposable towels to dry, and turn off the faucet with towel.
3. Gloves should be changed and hand hygiene performed when moving from dirty to clean wound care activities (e.g. after removal of soiled dressings, before handling clean supplies). Debridement or irrigation should be performed in a way that minimizes cross- contamination of surrounding surfaces from aerosolized irrigation solution.
4. Aseptic non-touch technique refers to a procedure that aims to prevent the transmission of microorganisms to the wound. Clean gloves should not directly come in contact with the wound bed. If the wound requires direct palpation, sterile gloves should be worn. Sterile applicators should be used to apply medications. Dressings should be handled in an aseptic manner so that the dressing surface applied to the wound is never touched by staff hands or other surfaces.
5. In addition to reusable medical equipment, any surface in the patient/resident's immediate care area contaminated during a dressing change should be cleaned and disinfected. Any visible blood or body fluid should be removed first with a wet, soapy cloth then disinfected with an EPA-registered disinfectant per manufacturer instructions and facility policy. Surfaces/equipment should be visibly saturated with solution and allowed to dry for proper disinfection before reuse.
6. Wound care supply cart should never enter the patient/resident's immediate care area nor be accessed while wearing gloves or without performing hand hygiene first. These are important to preventing cross-contamination of clean supplies and reiterates the importance of collecting all supplies prior to beginning wound care.

Note: Not all 5 moments of hand hygiene will occur with each patient encounter. Only necessary to record the opportunities for hand hygiene observed.

Hand Hygiene Observations

Insert Hospital Name

Circle **YES** if hand hygiene is performed using soap & water or alcohol hand rub.

#1 Upon entry to the room before touching the patient or the environment.

#2 Before clean/aseptic procedure.

#3 After body fluid exposure risk.

#4 After touching a patient when leaving patient zone.

#5 After touching patient surroundings when leaving patient zone

	Person Observed					#1	#2	#3	#4	#5	Comments
						X if yes 0 if no	X if yes 0 if no	X if yes 0 if no	X if yes 0 if no	X if yes 0 if no	
1	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	
2	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	
3	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	
4	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	
5	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	
6	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	
7	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	
8	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	
9	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	
10	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	
11	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	
12	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	
13	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	
14	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	
15	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	
16	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	
17	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	
18	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	
19	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	
20	MD	RN	HCA	RT	Other	Entry	Before Clean	After Dirty	Patient or exit	Surfaces or exit	

Instructions: Position yourself so that you can observe the activity on the unit/depart but not cause obstruction. Limit observation to 10 to 20 minutes. Observed opportunities are based on the WHO 5 Moments. Do not record random moments of hand hygiene outside the patient zone. After completing observations give feedback to employee and manager.

Other observations noted: Barriers to hand hygiene such as lack of soap, alcohol hand rub or paper towel. Hand hygiene and dress code non-compliance such as artificial nails, chipped nail polish, finger nails past finger tips, jewelry per dept code. Incorrect hand hygiene technique such as <15 seconds, water only, turning off faucet with bare hands.

Date: _____ Unit/Dept: _____ Shift: Day Evening Nights

Observer: _____ (Your name is confidential)

CDC Environmental Checklist for Monitoring Terminal Cleaning¹

Date:	
Unit:	
Room Number:	
Initials of ES staff (optional):²	

Evaluate the following priority sites for each patient room:

High-touch Room Surfaces ³	Cleaned	Not Cleaned	Not Present in Room
Bed rails / controls			
Tray table			
IV pole (grab area)			
Call box / button			
Telephone			
Bedside table handle			
Chair			
Room sink			
Room light switch			
Room inner door knob			
Bathroom inner door knob / plate			
Bathroom light switch			
Bathroom handrails by toilet			
Bathroom sink			
Toilet seat			
Toilet flush handle			
Toilet bedpan cleaner			

Evaluate the following additional sites if these equipment are present in the room:

High-touch Room Surfaces ³	Cleaned	Not Cleaned	Not Present in Room
IV pump control			
Multi-module monitor controls			
Multi-module monitor touch screen			
Multi-module monitor cables			
Ventilator control panel			

Mark the monitoring method used:

- Direct observation Fluorescent gel
 Swab cultures ATP system Agar slide cultures

¹Selection of detergents and disinfectants should be according to institutional policies and procedures

²Hospitals may choose to include identifiers of individual environmental services staff for feedback purposes.

³Sites most frequently contaminated and touched by patients and/or healthcare workers

