

Georgia Department of Public Health: GDPH IP Spring 2023 Training May 23, 2023





Welcome and Introductions







Meet the Team



Presenters:

Amy Ward, MS, BSN, RN, CIC, FAPIC Patient Safety Manager, Alliant Health Solutions

Donald Chitanda, MPH, CIC, LTC-CIP Infection Prevention Technical Advisor, Alliant Health Solutions

Paula St. Hill, MPH, A-IPC

Infection Prevention Technical Advisor, Alliant Health Solutions

Erica Umeakunne, MSN, MPH, APRN, CIC

Infection Prevention Specialist, Alliant Health Solutions



Amy Ward, MS, BSN, RN, CIC, FAPIC

Patient Safety Manager

Amy is a registered nurse with a diverse background in acute care nursing, microbiology, epidemiology and infection control. She is passionate about leading and mentoring new and future infection preventionists in their career paths and assisting them in reducing healthcare-associated infections across the continuum of care.

Amy enjoys spending time with her family and being outdoors camping, bicycling and running.

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Donald Chitanda, MPH, CIC, LTC-CIP

Infection Prevention Technical Advisor

Donald is a health professional with experience in public health epidemiology and infection prevention. Over the past several years, he worked as an infection preventionist at the hospital- and system-level, where he was part of a task force to ensure the safety of caregivers and patients during the ongoing COVID-19 pandemic. In addition, he was part of and led several projects to reduce hospital-acquired infections utilizing Lean Six Sigma methodologies. He is also trained in ensuring ongoing facility survey readiness for regulatory agencies such as the CMS and The Joint Commission.

Donald enjoys spending time with family and doing outdoor activities.

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Paula St. Hill, MPH, A-IPC

Infection Prevention Technical Advisor

Paula is a doctoral student with a diverse background in public health, infection prevention, epidemiology and microbiology. She has always enjoyed public health and identifying ways to improve health outcomes, specifically those related to healthcare-associated infections.

Paula enjoys spending time with her friends and family.



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Erica Umeakunne, MSN, MPH, APRN, CIC Infection Prevention Specialist

Erica Umeakunne is an adult-gerontology nurse practitioner and infection preventionist with experience in primary care, critical care, health care administration and public health.

She was previously the interim hospital epidemiology director for a large health care system in Atlanta and a nurse consultant in the Center for Disease Control and Prevention's (CDC) Division of Healthcare Quality Promotion. While at the CDC, she served as an infection prevention and control (IPC) subject matter expert for domestic and international IPC initiatives and emergency responses, including Ebola outbreaks and, most recently, the COVID-19 pandemic.

Erica enjoys reading, traveling, family time, and outdoor activities.

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Thank You to Our Partners

- Georgia Department of Public Health
- University of Georgia





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Objectives

- Provide an update on the state of the COVID-19 pandemic and the end of the Public Health Emergency
- Discuss updates related to long-term care facility (LTCF) reporting requirements
- Introduce enhanced barrier precautions and implications for LTCF infection prevention and control (IPC) programs
- Describe IPC process improvement activities and surveillance approaches
- Introduce the GADPH Infection Control Resource Box
- Share Alliant Health Solutions Resources to support IPC activities





State of the COVID-19 Pandemic: Moving Forward





Objectives

- Provide an update on COVID-19 epidemiology
- Review the updated COVID-19 vaccine recommendations
- Discuss the end of the public health emergency and relevant policies
- Highlight infection prevention and control (IPC) lessons learned and strategies to prevent COVID-19 and other infections in nursing facilities
- Share Alliant Health Solutions resources to support COVID-19 IPC activities





COVID-19 Cases and Deaths





Category change

1%

- 13%

- 14%

- 21%

0%

Wastewater COVID-19 Surveillance





Wastewater COVID-19 Surveillance



Current SARS-CoV-2 virus levels by site, Georgia

Current virus levels category		Num. sites	% sites	Category change in last 7 days
	New Site	3	14	0%
	0% to 19%	8	36	0%
	20% to 39%	11	50	0%
	40% to 59%	0	0	N/A**
	60% to 79%	0	0	N/A**
	80% to 100%	0	0	N/A**

Total sites with current data: 22

Total number of wastewater sampling sites: 26

How is the current SARS-CoV-2 level compared to past levels calculated?



HEALTH SOLUTIONS



Weighted and Nowcast Estimates in United States for 2-Week Periods in 1/22/2023 – 5/13/2023

Nowcast Estimates in United States for 4/30/2023 – 5/13/2023

Description of the set of the set





Public Health Emergency (PHE)

• Initially declared in January 2020

- Ended May 11, 2023
- Coverage, costs, and payment for COVID-19 testing, treatments and vaccines
- Medicaid coverage and federal match rates
- Telehealth (extended by the Consolidated Appropriations Act until the end of 2024)

National Emergency Declaration

- Issued in March 2020
- Ended May 11, 2023
- Private insurance coverage flexibilities

Emergency Declaration by Health & Human Services

- Initially declared in February 2020
- Allows EUA for medical interventions (vaccines, drugs)
- Stays in effect until terminated by the HHS Secretary; no current end date



COVID-19 Public Health Emergency (PHE): What is NOT Affected

Access to COVID-19 vaccinations and certain treatments, such as Paxlovid and Lagevrio

FDA's EUAs for COVID-19 products (including tests, vaccines, and treatments)

Major Medicare telehealth flexibilities

Medicaid telehealth flexibilities

Process for states to begin eligibility redeterminations for Medicaid

Access to opioid use disorder treatment



COVID-19 Public Health Emergency (PHE): What IS Affected

Certain Medicare and Medicaid waivers and broad flexibilities for health care providers

Coverage for free, over-the-counter COVID-19 testing

Reporting of COVID-19 laboratory results and (state) immunization data to CDC

FDA's ability to detect early shortages of critical devices related to COVID-19

Public Readiness and Emergency Preparedness (PREP) Act liability protections

Dispense of controlled substances via telemedicine without an in-person interaction

https://www.hhs.gov/about/news/2023/02/09/fact-sheet-covid-19-public-health-emergency-transition-roadmap.html



COVID-19 Emergency Response Transition: Implications for Infection Prevention and Control

COVID-19 Data

CDC NHSN COVID-19 Reporting

COVID-19 Vaccination Requirements

COVID-19 Infection Prevention & Control (IPC) Practices



CDC Data & Surveillance: Available Data

COVID-19 Hospital Admissions

COVID-19 deaths (data source change)

Emergency Department COVID-19 Visits (weekly)

COVID-19 test positivity (data source change)

) Wastewater & genomic surveillance

COVID-19 vaccine administration data (limited)

Percentage of COVID-19 associated deaths (NEW)



CDC Data Tracking Updates: Removed Data



National, county-level test positivity data



COVID-19 community levels (guided non-healthcare settings IPC practices)



National reporting weekly counts of COVID-19 cases and associated deaths



Transmission levels (guided healthcare facility IPC practices)



V-safe tracking system for health check-ins

https://www.cdc.gov/coronavirus/2019-ncov/your-health/end-of-phe.html https://www.cdc.gov/mmwr/volumes/72/wr/mm7219e1.htm?s_cid=mm7219e1_w



HEALTH SOLUTIONS



COVID-19 Emergency Response Updates: Vaccination Education & Access Requirements

- CMS implemented an interim final rule in May 2021 that required nursing homes to educate staff and residents on the risks and benefits of COVID-19 vaccination and to offer or assist in accessing COVID-19 vaccination for staff and residents.
 - As this rule did not include an applicability end date, these requirements will not end with the expiration of the PHE.
 - Nursing homes must continue to educate and offer COVID-19 vaccination to staff and residents beyond the end of the PHE as part of the Requirements of Participation through May 21, 2024, or until otherwise specified by CMS.



COVID-19 Emergency Response Updates: Vaccination Mandate for Health Care Personnel

- In November 2021, CMS implemented an interim final rule requiring staff, including volunteers, in most Medicare- and Medicaid-certified settings to complete the primary series of COVID-19 vaccination or be granted an approved exemption to work in or provide services on behalf of the certified setting.
- Federal vaccination mandate for healthcare personnel expired with the PHE on May 11, 2023.



COVID-19 Infection Prevention & Control Guidance Updates

- Updates
 - Admission testing in nursing homes
 - Facility-wide use of source control (masking)
 - Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic
- No updates
 - Interim Guidance for Managing Healthcare Personnel with SARS-CoV-2 Infection or Exposure
 - Strategies to Mitigate Healthcare Personnel Staffing Shortages



COVID-19 IPC Updates

Admission Screening	•Admission testing is at the discretion of the facility, no longer guided by Transmission Levels (previous metric)		
Source Control	 No longer guided by the Transmission Levels (previous metric) Healthcare facilities should identify local metrics that could reflect increasing community respiratory viral activity to determine when broader use of source control in the facility might be warranted 		
Staff Screening	 No change Screening testing of asymptomatic HCP is at the discretion of the health care facility. 		
Exposure/Close Contact	 No change Asymptomatic patients/residents with close contact with someone with SARS-CoV-2 infection should have a series of three viral tests for SARS-CoV-2 infection. 		
Outbreak Investigations	 No change A single new case of SARS-CoV-2 infection in any HCP or resident should be evaluated to determine if others in the facility could have been exposed. 		
	https://www.cdc.gov/corongvirus/2019-ncov/hcp/infection-control-recommendations.html		



COVID-19 IPC Practices Continue

Source control / Respiratory etiquette/ Hand hygiene

Personal protective equipment (PPE) use (N95 respirator or surgical mask, goggles, etc.)

Appropriate use of transmission-based precautions

Early screening, testing, isolation, and work restrictions

Environmental cleaning and disinfection

Process to promptly identify & isolate with SAR-CoV-2 infection

Appropriate vaccinations, therapeutics, and treatments



Infection Prevention and Control Practices

- Continue implementing IPC practices for infectious pathogens, including COVID-19 and other respiratory infections
 - <u>Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents</u>
 <u>in Health Care Settings</u>
 - o Appendix A
- Use personal protective equipment (PPE) appropriately
- <u>Standard precautions</u> always apply
 - Hand Hygiene
 - Source control/ Respiratory hygiene/cough etiquette
 - PPE use based on anticipated exposure to blood/body fluids
 - Safe injection practices
 - Cleaning and disinfection
 - o Safe linen handling
- Consult with your state or local public health authorities



CDC COVID-19 Infection Prevention and Control Guidance Updates

Interim IPC Recommendations for Healthcare Personnel

Interim Guidance for Managing Healthcare Personnel with Infection or Exposure

<u>Strategies to Mitigate Healthcare Personnel Staffing Shortages</u>



COVID-19 Transition: IPC Priorities & Lessons Learned







NHSN Reporting: What Now?

Mobile



Business





Ending of Public Health Emergency (PHE)

 2020 - CMS published an IFC (<u>CMS-5531-IFC</u>) requiring all LTC facilities to report COVID-19 information using the NHSN (42 CFR 483(g). This requirement was extended through a final rule (<u>CMS-1747-F</u>) and is set to terminate on December 31, 2024. This excludes requirements at § 483.80(g)(1)(viii).





orting

Ending of Public Health Emergency (PHE)

Title 42	/ Chapter IV / Subchapter G / Part 483 / Subpart B / § 483.80 Previous / Next / Top			
**	 (g) COVID-19 reporting. Until December 31, 2024, with the exception of the requirements in paragraph (g)(1) (viii) of this section, the facility must do all of the following: 			
	(1) Electronically report information about COVID-19 in a standardized format specified by the Secretary. To the extent as required by the Secretary, this report must include the following:			
	 Suspected and confirmed COVID-19 infections among residents and staff, including residents previously treated for COVID-19. 	COVID-19	Dashboard	
	 (ii) Total deaths and COVID-19 deaths among residents and staff. (iii) Personal protective equipment and hand hygiene supplies in the facility. 	Vaccination Summary	Pathway Data Rep	
\sim	 (iii) Percentic equipment and many hyperic supplies in the facility. (iv) Ventilator capacity and supplies in the facility. (v) Resident beds and census. (vi) Access to COVID-19 testing while the resident is in the facility. (vii) Staffing shortages. 			
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4	(viii) The COVID-19 vaccine status of residents and staff, including total numbers of residents and staff, numbers of residents and staff vaccinated, numbers of each dose of COVID-19 vaccine received, and COVID-19 vaccination adverse events.			
\square	(ix) Therapeutics administered to residents for treatment of COVID-19.			

https://www.cdc.gov/nhsn/pdfs/covid19/ltcf/covid19-mod-surv-path-508.pdf https://www.cdc.gov/nhsn/ltc/covid19/index.html https://leadingage.org/phe-will-end-may-11-what-this-means-for-nursing-homes/



National Healthcare Safety Network (NHSN) Updates: COVID-19 Surveillance Pathways For Data Reporting

The COVID-19 Module Surveillance Pathways will undergo updates in response to the end of the Public Health Emergency, including:

- Reducing vaccination elements to include only up-to-date status for residents with a positive COVID-19 test
- Removal of influenza and staffing and supply shortages data fields
- Removal of deaths in the Staff and Personnel Impact Pathway
- Removal of the therapeutics pathway
- Addition of a new data field, hospitalizations, in the Resident Impact and Facility Capacity Pathway to assess relevant outcome data on residents with a positive COVID-19 test



Vaccination Status Reporting

CMS issued an IFC (<u>CMS-3414-IFC</u>) requiring facilities to report the COVID-19 vaccination status of residents and staff through NHSN (§483.80(g)(1)(viii). Through a subsequent rulemaking on November 9, 2021, at <u>CMS-1747-F</u>, the requirement for reporting the COVID-19 vaccine status of residents and staff through NHSN is permanent and will continue indefinitely unless additional regulatory action is taken.

	COVID-19	Dashboard	
	Vaccination Summary	Pathway Data Reporting	
	Import/Export	POC Test Result Reporting	
	Surveys •	COVID-19 Vaccination - HCP	
_	Analysis	COVID-19 Vaccination - Residents	
	Users •	Person-Level COVID-19 Vaccination For - HCP	
	Facility •	Person-Level COVID-19 Vaccination Form	
	Group	- Residents	


Changes to Emergency Use Authorization (EUA) regarding COVID-19 Vaccines

- On April 18, 2023, the Food and Drug Administration (FDA) <u>announced</u> changes to its EUA regarding COVID-19 vaccines. Following this announcement, CDC simplified COVID-19 vaccine recommendations.
- For weekly reporting purposes, the changes above do not impact the reporting definitions for the current quarter (data reported for Q2 2023, weeks from March 27-June 25, 2023).



What This Means for Weekly Reporting

 Facilities should continue to report anyone who previously received a primary vaccine series (between December 2020 and April 18, 2023) in questions 2.1 and 2.2.

C	COVID-19 Vaccine: HCP COVID-19 Vaccine: Residents						
(Resident COVID-19 Cumulative Vaccination Summary for Long-Term Care Facilities						
	Date Created:	50070	*Vaccination type		Facility CCN #		
	*Week of Data Collectio	n: 05/08/2023 - 05	Vaccination type.	d.	Facility CCN#.		
	Cumulative Vaccination Coverage						
	Note: Facilities submit Weekly COVID-19 Vaccination Cumulative Summary data by completing the questions on this form. As of March 28th, 2022 facilities also have the option to enter data using the event- level COVID-19 vaccination form and select the "view reporting summary and submit" button? to submit these data. Using the event-level form is recommended to ensure that individuals who are up to date with COVID-19 vaccination are categorized appropriately according to their vaccination dates. Learn more here: link to QRG						
	1. * Number of residents staying in this facility for at least 1 day during the week of data collection						
	2. * Cumulative number of residents in Question #1 who have received primary series COVID-19 vaccine(s) at this facility or elsewhere since December 2020:						
	2.1 * Only 1 dose of a two-dose Primary COVID-19 vaccine series						
	2.2 * Any completed Primary COVID-19 vaccine series						



What This Means for Weekly Reporting

• For the duration of Q2, do not report anyone who was previously unvaccinated and received a single bivalent dose in questions 2.1 or 2.2. Instead, report these individuals in question 3.3.

COVID-19 Vaccine: HCP COVID-19 Vaccine: Residents						
Resident COVID-19 Cu	Resident COVID-19 Cumulative Vaccination Summary for Long-Term Care Facilities					
Date Created:						
*Facility ID:	59979	*Vaccination type:	COVID19	Facility CCN #:		
*Week of Data Collect	ion: 05/08/2023 - 05/14/2023	*Date Last Modified	d:			
			Cumulative Vac	cination Coverage		
Note: Facilities submit level COVID-19 vaccine	Note: Facilities submit Weekly COVID-19 Vaccination Cumulative Summary data by completing the questions on this form. As of March 28th, 2022 facilities also have the option to enter data using the event- level COVID-19 vaccination form and select the "view reporting summary and submit" button? to submit these data. Using the event-level form is recommended to ensure that individuals who are up to date with COVID-19 vaccination are categorized appropriately according to their vaccination dates. Learn more here: link to QRG					
1. * Number of resider	1. * Number of residents staying in this facility for at least 1 day during the week of data collection					
2. * <u>Cumulative</u> numbe	r of residents in Question #1 who h	ave received primary seri	ies COVID-19 vaccii	ne(s) at this facility or elsewhere since December 2020:		
2.1 * Only 1 dose of	2.1 * Only 1 dose of a two-dose Primary COVID-19 vaccine series					
2.2 * Any completed	2.2 * Any completed Primary COVID-19 vaccine series					
3. * <u>Cumulative</u> numb	3. * Cumulative number of residents in Question #1 with other conditions:					
3.1 * Medical contra	3.1 * Medical contraindication to COVID-19 vaccine					
3.2 * Offered but de	clined COVID-19 vaccine					
3.3 * Unknown COV	ID-19 vaccination status					



What This Means for Weekly Reporting

 Continue to report data to the Resident Impact and Facility Capacity pathway for the vaccination status section based on the definitions provided for Q2 2023.

Resident Impact and Facility Capacity Staff and Personnel Impact Therapeutics						
Date Created:						
If the count is zero, a "0" must entered as the response. A blank response is	f the count is zero, a "0" must entered as the response. A blank response is equivalent to missing data. NON-count questions should be answered one calendar day during the reporting week.					
250 ALL BEDS						
CURRENT CENSUS: Total number of beds	that are occupied on the reporting calendar day					
Resident Impact for COVID-19 (SARS-CoV-2)	admitted from another facility who were previously disensed with COVID-19 and continue to require transmission-based					
precautions. <u>Excludes</u> recovered residents.	ith a newly positive SARS-CoV-2 viral test result (for example, a positive SARS-CoV-2 antigen test and/or SARS-CoV-2 NAAT (PCR).					
Note: Do not include residents who have a positive S Only include residents newly positive since the most recer	Note: Do not include residents who have a positive SARS-CoV-2 antigen test, but a negative SARS-CoV-2 NAAT (PCR). Only include residents newly positive since the most recent date data were collected for NHSN reporting.					
∠ Vaccination Status of Residents with a Newly Confirmed SARS-Co	oV-2 Viral Test Result					
	Not Vaccinated: Include residents who have not been vaccinated with a COVID-19 vaccine OR residents whose first dose was administered 13 days or less before the specimen collection date					
PRIMARY SERIES:	Partial Vaccination: Include residents who have received Only 1-dose of a two-dose primary vaccine series.					
CoV-2 viral test result identified above.	Complete Primary Vaccination Series: Include residents who have received Dose 1 and `Dose 2 of a two-dose primary vaccine series OR 1 Dose of the Janssen COVID-19 Vaccine.					
	"second dose received 14 days or more before the specimen collection date; otherwise, count as only dose 1.					
Additional or Booster Vaccination: Include newly positive residents who have received any additional dose(s booster dose(s) of COVID-19 vaccine (any manufacturer) AND						
ADDITIONAL OR BOOSTER DOSES	14 days or more have passed before the specimen collection date.					
primary series.						
Residents who received at least one or more booster dose of COVID-19 vaccine: Based on the number of residents with a newly positive SARS-CoV-2 viral test result identified above.						



YES

YES

Current Up-To-Date Definition





Examples

Example of reporting data	Is this individual considered	Where to document when
for the week of April 17	up to date with COVID-19	reporting for weeks in Quarter 2
through April 23, 2023	vaccines <u>for Quarter 2 2023</u> ?	2023
Mary completed her primary COVID-19 vaccine series in May 2021, an original monovalent booster in October 2021, and an updated (bivalent) booster dose on November 3 <u>2022</u> .	Yes. Mary is considered up to date <u>for weeks during quarter</u> <u>2 of 2023</u> since she received the most recent booster dose recommendation (a bivalent booster dose).	 Primary Vaccine Series 2.2 Any completed Primary COVID- 19 vaccine series Boosters 4. Cumulative number of residents who have received any booster(s) or additional dose(s). If Mary is a resident of a long-term care facility also report to: 4.2 Cumulative number of residents in Question #4 who received two or more booster doses of COVID-19 vaccine Up to Date 5. Cumulative number of individuals in question #2 who are up to date with COVID-19 vaccines



Examples

Example of reporting data	Is this individual considered	Where to document for when
for the week of April 17-	up to date for COVID-19	reporting for weeks in Quarter 2
April 23, 2023	vaccines for Quarter 2 2023?	2023
Tom completed his primary vaccine series on February 1 <u>2021</u> and a booster dose October 2021 but has not received an updated (bivalent) booster dose.	No. Tom is not considered up to date with COVID-19 vaccines <u>for weeks during quarter 2 of</u> <u>2023</u> since he did not receive the most recent recommended booster dose. Do not count in question 5 (Cumulative number of individuals in question #2 who are up to date with COVID-19 vaccines).	 Primary Vaccine Series 2.2 Any completed Primary COVID- 19 vaccine series Boosters 4. Cumulative number of residents who have received any booster(s) or additional dose(s). If Tom is a resident of a long-term care facility also report to: 4.1 Cumulative number of residents in Question #4 who have received only one booster dose of COVID-19 vaccine since August 2021



Examples

Example of reporting data	Is this individual considered up	Where to document for when
for the week of April 17-	to date for COVID-19 vaccines	reporting for weeks in Quarter 2
April 23, 2023	for Quarter 2 2023?	2023
Jerry never completed an	No –Jerry is not considered up	Individuals with other conditions
original primary series but	to date when reporting to	
received a bivalent dose	NHSN for weeks during	3.3 Unknown COVID-19 vaccination
on 4/20/2023	Quarter 2 of 2023.	status
	With the new FDA	
	recommendations, Jerry has	
	received the necessary vaccines	
	to be considered up to date	
	beginning in Quarter 3 2023.	
	However, reporting to NHSN	
	will be completed according to	
	Quarter 2 2023 definitions for	
	the duration of the reporting	
	quarter.	
	Do not count in questions 2.1	
	or 2.2 (Only 1 dose of a two-	
	dose Primary COVID-19 vaccine	
	series or Any completed	
	Primary COVID-19 vaccine	
	series), question 4 (Cumulative	
	number of individuals with	
	complete primary series	
	vaccine in Question #2 who	
	have received any booster(s) or	
	additional dose(s) of COVID-19	
	vaccine since August 2021) or	
	question 5 (Cumulative number	
	of individuals in question #2	
	who are up to date with COVID-	
	19 vaccines).	



Upcoming NHSN Webinars tentatively scheduled:

June 1, 2023

June 7, 2023



Contact <u>NHSN@cdc.gov</u> for more information







Enhanced Barrier Precautions





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Objectives

- Explain antimicrobial resistance and how it occurs
- Describe the burden of multidrug-resistant organisms (MDROs)
- Describe challenges to preventing MDRO transmission in nursing homes
- Define Standard Precautions, Enhanced Barrier Precautions, and Contact Precautions
- Identify which residents and activities meet the criteria for Enhanced Barrier Precautions
- Discuss best practices for implementing Enhanced Barrier Precautions



Antimicrobial Resistance: A Growing Concern

- Antimicrobial resistance happens when germs like bacteria and fungi develop the ability to defeat the drugs designed to kill them; this means the germs are not killed and continue to grow
- Antimicrobial resistance is an urgent global public health threat, associated with nearly five million deaths in 2019
- In the U.S., nearly three million antimicrobial-resistant infections occur each year
 - More than 35,000 die as a result





Antimicrobial Resistance

Bacteria and fungi do not have to be resistant to every antibiotic or antifungal to be dangerous. Resistance to even one antibiotic can mean serious problems. For example:

- Antimicrobial-resistant infections that require the use of second- and third-line treatments can harm patients by causing serious side effects, such as organ failure and prolonged care and recovery, sometimes for months
- Many medical advances are dependent on the ability to fight infections using antibiotics, including joint replacements, organ transplants, cancer therapy, and the treatment of chronic diseases like diabetes, asthma, and rheumatoid arthritis
- In some cases, these infections have no treatment options

If antibiotics and antifungals lose their effectiveness, we lose the ability to treat infections and control these public health threats.



Multi-drug Resistant Organisms (MDROs)

 Multidrug-resistant organisms (MDROs) are continuing to develop and spread in health care settings throughout the United States. Because of this, efforts to prevent MDRO transmission are still needed. In the past, MDROs were identified after lab confirmation. However, research has found that these organisms can spread long before detection.





Burden of MDROs in Nursing Homes

Facility Type	Documented MDRO	Actual MDRO
Nursing Homes	17%	58%
(n = 14)	<u>†</u> †††††	<u>ŤŤŤŤŤŤŤŤŤ</u> Ť
Ventilator-Capable Nursing	20%	76%
Homes (n = 4)	<u>†</u> ††††††	ŤŤŤŤŤŤŤŤŤ

McKinnell, J. A., Singh, R. D., Miller, L. G., Kleinman, K., Gussin, G. M., He, J., Saavedra, R., Dutciuc, T. D., Estevez, M., Chang, J. S., Heim, L., Yamaguchi, S., Custodio, H., Gohil, S. K., Park, S. I., Tam, S. P., Robinson, P., Tjoa, T., Nguyen, J. P., . . . Huang, S. S. (2019). The SHIELD Orange County Project: Multidrug-resistant Organism Prevalence in 21 Nursing Homes and Long-term Acute Care Facilities in Southern California. *Clinical Infectious Diseases*, 69(9), 1566–1573. <u>https://doi.org/10.1093/cid/ciz119</u>



No Known MDRO



Risk Factors for the Development and Colonization of MDROs in Nursing Homes

- Indwelling medical devices (e.g., urinary catheter, PEG tube, tracheostomy/vents, central line)
- Presence of wounds or decubitus ulcers
- Antibiotic use in the prior three months, particularly fluoroquinolones
- Recent hospitalization
- Comorbid medical conditions
- Increased functional dependence
- Prolonged length of stay (increases opportunities for spread)
 - Residing in an LTCF/NH



Challenges with the Detection of MDROs

- Clinical cultures underestimate true prevalence of MDROs
- Most centers are not performing active surveillance to identify asymptomatic, colonized residents
 - Contribute to the reservoir for transmission
- Inadequate communication about individual MDRO history or risk factors between healthcare facilities during care transitions





Characteristics of Novel/Targeted MDROs in Health Care





MDRO Prevention: Novel and Core Strategies



https://emergency.cdc.gov/coca/ppt/Enhanced-Barrier-Precautions-for-MDRO-Final.pdf-

https://www.cdc.gov/infectioncontrol/guidelines/mdro/index.html#:~:text=Use%20Standard%20Precautions%20for%20patients,and%20ostomy%20tubes%20and%20bags.



Personal Protective Equipment (PPE) & Precautions

Standard Precautions



Transmission-Based Precautions







Standard Precautions

Standard Precautions are used for all patient care. They're based on a risk assessment and make use of common or basic knowledge practices and personal protective equipment use that protect health care providers from infection and prevent the spread of infection from patient to patient. Standard precautions include:

- Hand hygiene
- Use of personal protective equipment (e.g., gloves, masks, eyewear)
- Respiratory hygiene/cough etiquette
- Sharps safety (engineering and work practice controls)
- Safe injection practices (i.e., an aseptic technique for parenteral medications)
- Sterile instruments and devices
- Clean and disinfect environmental surfaces



Transmission-Based Precautions

 Transmission-Based Precautions are the second tier of basic infection control and are to be used in addition to Standard Precautions for patients who may be infected or colonized with certain infectious agents for which additional precautions are needed to prevent infection transmission.





Contact Precautions for MDROs

- Perform hand hygiene
- Gown and gloves upon room entry
- Dedicated equipment
- Private room
- Room restriction





Enhanced Barrier Precautions (EBP)

- Enhanced Barrier Precautions expand the use of PPE and refer to the use of gowns and gloves during high-contact resident care activities that provide opportunities for the transfer of MDROs to staff hands and clothing.
- MDROs may be indirectly transferred from resident to resident during these high-contact care activities. Nursing home residents with wounds and indwelling medical devices are at especially high risk of both acquisition of and colonization with MDROs.
- The use of gown and gloves for high-contact resident care activities is indicated when Contact Precautions do not otherwise apply for nursing home residents with wounds and/or indwelling medical devices regardless of MDRO colonization and for residents with MDRO infection or colonization.



Enhanced Barrier Precautions

Examples of high-contact resident care activities requiring gown and glove use for Enhanced Barrier Precautions include:

- Dressing
- Bathing/showering
- Transferring
- Providing hygiene
- Changing linens
- Changing briefs or assisting with toileting
- Device care or use: central line, urinary catheter, feeding tube, tracheostomy/ventilator
- Wound care: any skin opening requiring a dressing

In general, gowns and gloves would not be required for resident care activities other than those listed above unless otherwise necessary for adherence to Standard Precautions.



Resistant Gram-Negative Bacteria (RGNB) Transmission to Gowns and Gloves of HCW During Care of Colonized Residents

- Highest Risk:
 - Showering
 - Hygiene
 - Toileting
 - Wound dressing changes
- Lowest Risk:
 - Assist feeding
 - Giving meds
 - Glucose monitoring

Blanco et al. Infect Control Hosp Epidemiol (2018), 39, 1425-1430





EBP Implementation

Enhanced Barrier Precautions should be used for all residents with any of the following:

- Infection or colonization with a novel or targeted MDRO (as of July 2019) defined as:
 - Pan-resistant organisms
 - Carbapenemase-producing Enterobacteriaceae
 - Carbapenemase-producing Pseudomonas spp
 - Carbapenemase-producing Acinetobacter baumannii
 - Candida auris
- Wounds and/or indwelling medical devices (e.g., central line, urinary catheter, feeding tube, tracheostomy/ventilator) regardless of MDRO colonization status residing in an at-risk area
- When Contact Precautions do not apply



Contact Precautions Implementation

- For all residents infected or colonized with a novel or targeted multidrug-resistant organism in specific situations:
 - Presence of acute diarrhea, draining wounds or other sites of secretions or excretions that are unable to be kept covered or contained
 - On units or in facilities where ongoing transmission is documented or suspected
- For infections (e.g., C. difficile, norovirus, scabies) and other conditions where Contact Precautions are recommended
 - See <u>Appendix A Type and Duration of Precautions Recommended for Selected</u> <u>Infections and Conditions of the CDC Guideline for Isolation Precautions</u>



Implementation of Both EBP and Contact Precautions

When implementing Contact Precautions or Enhanced Barrier Precautions, it is critical to ensure that staff has an awareness of the facility's expectations about hand hygiene and gown/glove use, initial and refresher training and access to appropriate supplies. To accomplish this:

- Post clear signage on the door or wall outside of the resident room indicating the type of Precautions and required PPE (e.g., gown and gloves).
- For Enhanced Barrier Precautions, signage should also clearly indicate the high-contact resident care activities that require the use of a gown and gloves.
- Make PPE, including gowns and gloves, available immediately outside of the resident's room.
- Ensure access to alcohol-based hand rub in every resident room (ideally both inside and outside of the room).
- Position a trash can inside the resident's room and near the exit for discarding PPE after removal, prior to the exit of the room or before providing care for another resident in the same room.
- Incorporate periodic monitoring and assessment of adherence to determine the need for additional training and education.
- Provide education to residents and visitors.



Summary of PPE Use and Room Restriction When Caring for Residents in Nursing Homes

Precautions	Applies to	PPE used for these situations	Required PPE	Room restriction
Standard Precautions	All residents	 Any potential exposure to: Blood Body fluids Mucous membranes Non-intact skin Potentially contaminated environmental surfaces or equipment 	Depending on anticipated exposure: gloves, gown, facemask or eye protection (Change PPE before caring for another resident)	None
Enhanced Barrier Precautions	 All residents with any of the following: Infection or colonization with an MDRO when Contact Precautions do not otherwise apply Wounds and/or indwelling medical devices (e.g., central line, urinary catheter, feeding tube, tracheostomy/ventilator) regardless of MDRO colonization status 	During high-contact resident care activities: Dressing Bathing/showering Transferring Providing hygiene Changing linens Changing briefs or assisting with toileting Device care or use: central line, urinary catheter, feeding tube, tracheostomy/ventilator Wound care: any skin opening requiring a dressing	Gloves and gown prior to the high- contact care activity (Change PPE before caring for another resident) (Face protection may also be needed if performing activity with risk of splash or spray)	None
Contact Precautions	 All residents infected or colonized with a MDRO <i>in any of the following situations</i>: Presence of acute diarrhea, draining wounds or other sites of secretions or excretions that are unable to be covered or contained For a limited time period, as determined in consultation with public health authorities, on units or in facilities during the investigation of a suspected or confirmed MDRO outbreak When otherwise directed by public health authorities All residents who have another infection (e.g., <i>C. difficile</i>, norovirus, scabies) or condition for which Contact Precautions is recommended in Appendix A (Type and Duration of Precautions) of the CDC Guideline for Isolation Precautions. 	Any room entry	Gloves and gown (Don before room entry, doff before room exit; change before caring for another resident) (Face protection may also be needed if performing activity with risk of splash or spray)	Yes, except for medically necessary care



Enhanced Barrier Precautions vs. Contact Precautions

Enhanced Barrier Precautions Applies to:	Contact Precautions Applies to:	
 All residents with any of the following: Infection or colonization with a novel or targeted MDRO when Contact Precautions do not apply Wounds and/or indwelling medical devices (e.g., central line, urinary catheter, feeding tube, tracheostomy/ventilator) regardless of MDRO colonization status 	 All residents infected or colonized with a novel or targeted multidrug-resistant in specific situations: Presence of acute diarrhea, draining wounds or other sites of secretions or excretions that are unable to be covered or contained On units or in facilities where ongoing transmission is documented or suspected 	
Facilities may consider applying Enhanced Barrier Precautions to residents infected or colonized with other epidemiologically-important MDROs based on facility policy	For infections (e.g., C. difficile, norovirus, scabies) and other conditions where Contact Precautions are recommended	



Enhanced Barrier Precautions vs. Contact Precautions (continued)

Enhanced Barrier Precautions	Contact Precautions
PPE used for these situations:	PPE used for these situations:
 During high-contact resident care activities: Dressing Bathing/showering Transferring Providing hygiene Changing linens Changing briefs or assisting with toileting Device care or use: central line, urinary catheter, feeding tube, tracheostomy/ ventilator Wound care: any skin opening requiring a dressing 	Any room entry



Enhanced Barrier Precautions vs. Contact Precautions (continued)

Enhanced Barrier Precautions Applies to:	Contact Precautions Applies to:
• Gloves and gown prior to the high- contact care activity	Gloves and gown
 Note: Does <u>not</u> require single-room Does <u>not</u> require restrictions of movement/participation within facility policy 	 Note: Includes consideration for single room or cohorting Includes restriction of movement and participation in group activities within the facility





Hand Hygiene









Hand Hygiene Data




Hand Hygiene Data







Fishbone Diagram Worksheet

Fishbone Diagram Worksheet (allianthealth.org)



• Whiteboard to fill in with audience call outs ?



Group Discussion

- Who is responsible for collecting this data?
- What questions do you have about the data?
- How can this data be visualized in a way that will lead to improvement?
- What are some issues/concerns with this data?
- How do you address this?





Findings From Environment of Care Audits

Units A & B were pooling their observations through July (same nurse manager)

Multiple ABHR dispensers empty

Dispensers not widely available

Dispensers are automatic and too much product is dispensed

Staff report product is "sticky"





Hand Hygiene Data







What Are the Next Steps?

- Units A & B were pooling their observations through July (same nurse manager)
- Multiple ABHR dispensers empty
- Dispensers not widely available
- Dispensers are automatic, and too much product is dispensed
- Staff report that product is "sticky"









Group Discussion

- What changed?
- Do you have any questions about this data?

HEALTH SOLUTIONS

- Is there anything to celebrate?
- Are there any red flags?

internet

Information Technology

Surveillance and Data Analysis

Mobile



Business



Objectives

- Highlight the importance of surveillance as a tool to inform the facility infection prevention & control (IPC) program
- Describe outcome measures and performance measures in the context of surveillance
- Provide examples of how surveillance can inform IPC risks and interventions
- Demo the Healthcare-associated Infections (HAI) surveillance & Dashboard Tool
- Share tools and resources for IPC surveillance and quality improvement initiatives

Surveillance

- IPs must understand the purpose, methods and definitions of surveillance
- Your "pulse" on the facility
- Must be consistent with regulations, state requirements and evidence-based practice
- Findings should be shared with frontline staff and leadership at the IP or QAPI committee



What Is Surveillance?

- Surveillance is a system that allows for identification, reporting, investigation and control of infectious or communicable diseases and applies to staff, residents, volunteers, visitors or others in the facility.
- It is a necessary component of an effective IP program and the pulse of your facility.



Public Health Surveillance System

HEALTH SOLUTIONS





Public Health Surveillance System & LTCFs

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Facility infection prevention and control (IPC) surveillance activities are helpful in informing local, state and national efforts to prevent and control infectious diseases.

- True
- False





Facility infection prevention and control (IPC) surveillance activities are helpful in informing local, state, and national efforts to prevent and control infectious diseases.

- True
- False



Surveillance

"...the ongoing, systematic collection, analysis, and interpretation of health-related data essential to planning, implementation, and evaluation of public health practice." — Field Epidemiology

Active surveillance

- Actively looking for the infection or condition
- Ensures more complete reporting
- Used for specific epidemiologic investigations

Passive surveillance

- Infection found during routine, ongoing data collection
- Often limited by incomplete data or report quality







Infection Preventionist Role

- Infection prevention is a specialty and requires specific training and competencies
- Application of scientific principles and methods for data collection and analysis
- Surveillance according to approved definitions and methodologies
- Reports and presents to appropriate committees (Infection Prevention, Antimicrobial Stewardship, QAPI)
- Investigates outbreaks and implement prevention efforts
- Reports outbreaks of communicable diseases to local health jurisdictions as needed in consultation with administration and medical director
- Plans and conducts educational programs for staff and residents
- Develops and reviews policies and procedures, monitors for adherence and supports staff and resident safety
- Ensures compliance with local, state and federal standards and regulations for infection prevention



CMS Infection Prevention Standards

- Infection prevention and control program (IPCP) must include, at a minimum:
 - A system for reporting, identifying, reporting, investigating, and controlling infections and communicable diseases
 - All residents, staff, volunteers, visitors, and other individuals providing services
 - Written standards, policies, and procedures
 - System for surveillance
 - Reporting process
 - Standard and transmission-based precautions
 - Isolation appropriateness
 - Circumstances under which the facility must prohibit employees with a communicable disease or skin lesion
 - Hand hygiene procedures



IPC Program Binder





Surveillance Plan

- Annual infection prevention plans should include a surveillance section describing:
 - Surveillance method (total/targeted/combination)
 - Populations (patient, resident, staff, those with specific risk factors, etc.)
 - Events monitored (UTI, C. diff, etc.)
 - Other high-risk events, such as TST conversions, C. auris, CRE, etc.
 - Regular evaluation to ensure it meets organizational goals and objectives and to ensure methodologies are current
 - Efforts to select event types with standardized and nationally recognized benchmarking data
 - NHSN for HAI data or McGeer Criteria



Surveillance Methods

- Electronic
- House-wide or comprehensive surveillance
- Outbreak surveillance
- Outcome surveillance
- Process surveillance
- Targeted surveillance



Data Collection

- Concurrent versus retrospective
- Data source examples
- Medical records
- Lab reports
- List of admissions with diagnoses
- Patient day reports/census data by unit
- Isolation precautions report/list
- Incident reports
- Observations
- Procedure or activity logs



Surveillance Definitions

- Essential component of an effective infection prevention program
- Defined in the APIC text as "a comprehensive method for measuring outcomes and related processes of care, analyzing the data, and providing information to members of the health care team to assist in improving those outcomes"
- Should be based on sound epidemiological and statistical principles
- When properly collected, surveillance data can be used to improve the quality of care and outcomes
- No matter which criteria are used, it is important that the definitions are accepted by the facility physicians and infection prevention and applied consistently to ensure standardized surveillance is done over time (NHSN versus McGeer criteria)



Clinical Diagnoses & Surveillance Definitions

- Clinical Diagnoses
 - Patient or resident specific
 - ALL available diagnostic data considered in a clinical diagnosis, including additional clinical, epidemiological and laboratory data not used for surveillance
 - May be made even when a surveillance definition may not be met
- Surveillance Definitions
 - Designed to study and identify trends in a population
 - Allows confidence in the aggregation
 and analysis of data





The facility IP notes identified a single case of COVID-19 illness in a resident on 5/4/2023. The IP initiates an outbreak investigation, per CDC guidance. Testing is initiated for all residents and staff working in Hall A, where the first (index) case was identified.

This is an example of ______ surveillance.

- A. Active
- B. Passive
- C. This is not an example of surveillance
- D. I do not know





The facility IP notes identified a single case of COVID-19 illness in a resident on 5/4/2023. The IP initiates an outbreak investigation, per CDC guidance. Testing is initiated for all residents and staff working in Hall A, where the first (index) case was identified.

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- D. I do not know

	five surveillance
• A C	ctively looking for the infection or ondition
• E	nsures more complete reporting

 Used for specific epidemiologic investigations

• • •

Passive surveillance

- Infection found during routine, ongoing data collection
- Often limited by incomplete data or report quality



At the end of each week and month, the facility IP reviews all laboratory results for multi-drug resistant organisms, healthcare-associated infections (urinary tract infections, gastrointestinal infections, respiratory infections, wound infections, or bloodstream infections), and any other reportable infections.

This is an example of ______ surveillance.

- Active
- Passive
- This is not an example of surveillance.
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- This is not an example of surveillance
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Active surveillance

- Actively looking for the infection or condition
- Ensures more complete reporting
- Used for specific epidemiologic investigations

Passive surveillance

- Infection found during routine, ongoing data collection
- Often limited by incomplete data or report quality



Why Is Surveillance Important?

- Standardized process to measure and evaluate an outcome
- Helpful tool to identify both risks & potential problems
- Use of surveillance definitions
 - Essential to ensure the same thing is counted
 - To enable meaningful comparison with others
 - To correctly interpret changes over time
 - To identify factors associated with HAIs
 - Identify factors associated with an infection or outbreak
 - To inform infection prevention efforts and targeted interventions



Outcome Surveillance

- CMS Quality Metrics
- Resident care experience/satisfaction
- Healthcare-associated infection surveillance
 - Urinary Tract Infections
 - COVID-19 Infections
 - Multi-drug resistant organisms (MDROs)

Process Surveillance

- Hand hygiene compliance
- Foley catheter care/bundle compliance
- Ventilator-associated pneumonia (VAP) Bundle compliance
- Transmission-based precautions (TBP) compliance
- Cleaning & disinfection



Surveillance in Nursing Homes

National Healthcare Safety Network (NHSN): Patient Safety Module

- Centers for Disease Control & Prevention (CDC)
- Long-term Care Facility (LTCF) Component
- Multi-drug resistant organisms (MDROs) & Clostridioides difficile Infection (CDI)
- Urinary tract infections (UTIs)
- Flu vaccination
- Prevention process measures (hand hygiene, PPE use)
- COVID-19 data reporting

McGeer Criteria

- Evidence-based, standardized guidance for infection surveillance activities in long-term care facilities (LTCF)
- Designed to define and identify infections for surveillance purposes
- Represented syndromes capture a variety of clinically relevant infections that occur in the LTCF population

Stone, N. D., Ashraf, M. S., Calder, J., Crnich, C. J., Crossley, K., Drinka, P. J., Gould, C. V., Juthani-Mehta, M., Lautenbach, E., Loeb, M., Maccannell, T., Malani, P. N., Mody, L., Mylotte, J. M., Nicolle, L. E., Roghmann, M. C., Schweon, S. J., Simor, A. E., Smith, P. W., Stevenson, K. B., ... Society for Healthcare Epidemiology Long-Term Care Special Interest Group (2012). Surveillance definitions of infections in long-term care facilities: revisiting the McGeer criteria. *Infection control and hospital epidemiology*, 33(10), 965–977. https://doi.org/10.1086/667743



Revised McGeer Criteria

Definitions for Constitutional Criteria in Residents of LTCFs

Urinary Tract Infections

Skin, Soft Tissues, and Mucosal Infections

Respiratory Infections

Gastrointestinal Infections



Revised McGeer Criteria: Constitutional Criteria

- Fever
- Changes in white blood cell counts
- Cognitive changes
- Functional decline

Stone, N. D., Ashraf, M. S., Calder, J., Crnich, C. J., Crossley, K., Drinka, P. J., Gould, C. V., Juthani-Mehta, M., Lautenbach, E., Loeb, M., Maccannell, T., Malani, P. N., Mody, L., Mylotte, J. M., Nicolle, L. E., Roghmann, M. C., Schweon, S. J., Simor, A. E., Smith, P. W., Stevenson, K. B., ... Society for Healthcare Epidemiology Long-Term Care Special Interest Group (2012). Surveillance definitions of infections in long-term care facilities: revisiting the McGeer criteria. *Infection control and hospital epidemiology*, 33(10), 965–977. https://doi.org/10.1086/667743


Revised McGeer Criteria: Urinary Tract Infections

- Catheter-associated urinary tract infections

 Indwelling urinary catheters
- UTIs without indwelling catheters

Stone, N. D., Ashraf, M. S., Calder, J., Crnich, C. J., Crossley, K., Drinka, P. J., Gould, C. V., Juthani-Mehta, M., Lautenbach, E., Loeb, M., Maccannell, T., Malani, P. N., Mody, L., Mylotte, J. M., Nicolle, L. E., Roghmann, M. C., Schweon, S. J., Simor, A. E., Smith, P. W., Stevenson, K. B., ... Society for Healthcare Epidemiology Long-Term Care Special Interest Group (2012). Surveillance definitions of infections in long-term care facilities: revisiting the McGeer criteria. *Infection control and hospital epidemiology*, 33(10), 965–977. https://doi.org/10.1086/667743



Revised McGeer Criteria: Skin, Soft Tissue, and Mucosal Infections

- Cellulitis, soft tissue, or wound infection
- Scabies
- Fungal oral or perioral and skin infections
- Herpesvirus skin infections
- Conjunctivitis

Stone, N. D., Ashraf, M. S., Calder, J., Crnich, C. J., Crossley, K., Drinka, P. J., Gould, C. V., Juthani-Mehta, M., Lautenbach, E., Loeb, M., Maccannell, T., Malani, P. N., Mody, L., Mylotte, J. M., Nicolle, L. E., Roghmann, M. C., Schweon, S. J., Simor, A. E., Smith, P. W., Stevenson, K. B., ... Society for Healthcare Epidemiology Long-Term Care Special Interest Group (2012). Surveillance definitions of infections in long-term care facilities: revisiting the McGeer criteria. *Infection control and hospital epidemiology*, 33(10), 965–977. <u>https://doi.org/10.1086/667743</u>



Revised McGeer Criteria: Respiratory Infections

- Common cold syndrome or pharyngitis
- Influenza-like illness
- Pneumonia
- Lower respiratory tract
 - Bronchitis
 - Tracheobronchitis
- COVID infection

Stone, N. D., Ashraf, M. S., Calder, J., Crnich, C. J., Crossley, K., Drinka, P. J., Gould, C. V., Juthani-Mehta, M., Lautenbach, E., Loeb, M., Maccannell, T., Malani, P. N., Mody, L., Mylotte, J. M., Nicolle, L. E., Roghmann, M. C., Schweon, S. J., Simor, A. E., Smith, P. W., Stevenson, K. B., ... Society for Healthcare Epidemiology Long-Term Care Special Interest Group (2012). Surveillance definitions of infections in long-term care facilities: revisiting the McGeer criteria. *Infection control and hospital epidemiology*, 33(10), 965–977. <u>https://doi.org/10.1086/667743</u>



Revised McGeer Criteria: Gastrointestinal (GI) Tract Infections

- Gastroenteritis
- Norovirus gastroenteritis
- Clostridium difficile infection

Stone, N. D., Ashraf, M. S., Calder, J., Crnich, C. J., Crossley, K., Drinka, P. J., Gould, C. V., Juthani-Mehta, M., Lautenbach, E., Loeb, M., Maccannell, T., Malani, P. N., Mody, L., Mylotte, J. M., Nicolle, L. E., Roghmann, M. C., Schweon, S. J., Simor, A. E., Smith, P. W., Stevenson, K. B., ... Society for Healthcare Epidemiology Long-Term Care Special Interest Group (2012). Surveillance definitions of infections in long-term care facilities: revisiting the McGeer criteria. *Infection control and hospital epidemiology*, 33(10), 965–977. <u>https://doi.org/10.1086/667743</u>



<u>Resource</u>

atient Name	:	MRN:						
ate of Infect	tion:	Date of Review:	Reviewed by:					
TI: 🗆 evaluated	🗆 criteria met	RTI: □ evaluated □ criteria met	SSTI: evaluated criteria met	GITI: □ evaluated □ criteria met				
		Table 1. Constitutional Cr	iteria for Infection					
Single oral ter Repeated oral epeated rectal ngle temp >1.1 fro	Fever mp >37.8 °C (100 °F), OR temp >37.2 °C (99 °F), OR temp >37.5 °C (99.5 °F), OR L °C (2 °F) from baseline m any site	Leukocytosis >14,000 WBC / mm³, OR >6% band, OR ≥1,500 bands / mm³	Acute Mental Status Change Acute onset, AND Fluctuating course, AND Inattention, AND Either disorganized thinking, OR pltered level of consciousness	Acute Functional Decline 3-point increase in baseline ADL score according to the following items: 1. Bed mobility 2. Transfer 3. Locomotion within LTCF 4. Dressing 5. Toilet use 6. Personal hygiene 7. Eating [Each scored from 0 (independent) to 4 (total dependence)]				
Syndrome UTI without indwelling catheter	Must fulfill both 1 AND 1. At least one of the f Acute dysuria or epididymis, or pr Fever or leukocyt Acute costo	Criteria 2. iollowing sign or symptom pain, swelling, or tenderness of testes, ostate tosis, and ≥ 1 of the following: voertebral angle pain or tenderness	Solventance Definitions Selected Comments* The following 2 comments apply to both UTI with or without catheter UTI can be diagnosed without localizing symptoms if a blood isola the same as the organism isolated from urine and there is no alternate site of infection In the absence of a clear alternate source of infection, fever or rig with a positive urine culture result in the non-catheterized reside					
	Suprapubic Gross hema New or mai New or mai If no fever or leul Suprapubic Gross hema New or mai New or mai	pain sturia rked increase in incontinence rked increase in urgency kocytosis, then ≥ 2 of the following: pain sturia rked increase in incontinence rked increase in urgency rked increase in frequency	acute confusion in the cathe UTI. However, evidence sug likely not due to infection of	terized resident will often be treated as gests that most of these episodes are f a urinary source.				
	□ 2. At least one of the f □ ≥ 10 ⁵ cfu/mL of n	ollowing microbiologic criteria o more than 2 species of organisms in a voide	Urine specimens for culture preferably within 1-2 h	should be processed as soon as possible,				





As part of our IP Plan and Risk Assessment, we conduct targeted surveillance for UTIs and *C diff* infections.

Mrs. Smith was transferred to our facility on 5/4/2023. She has a history of congestive heart failure, diabetes type II, high blood pressure, and a recent multi-drug resistant *Pseudomonas aeruginosa* decubitus infection. The staff has been using enhanced barrier precautions since Mrs. Smith's return from the hospital. However, the night shift nurse reports that Mrs. Smith has had three loose stools within the last eight hours, accompanied by abdominal pain and fever.

Based on this report and the acute changes noted, staff should transition and implement contact precautions.

A. True B. False





Mrs. Smith was transferred to our facility on 4/4/2023. She has a history of congestive heart failure, diabetes type II, high blood pressure, and a recent multi-drug resistant *Pseudomonas aeruginosa* decubitus infection. The staff has been using enhanced barrier precautions since Mrs. Smith's return from the hospital. However, the night shift nurse reports that Mrs. Smith has had three loose stools within the last eight hours, accompanied by abdominal pain and fever.

Based on this report and the acute changes noted, staff should transition and implement contact precautions.

A. True

B. False

- Presence of acute diarrhea
- Clinical evaluation indicated to rule out C. diff infection
- ✓ Contact precautions are INDICATED





As part of our IP Plan and Risk Assessment, we conduct targeted surveillance for UTIs and C diff infections.

Mrs. Smith was transferred to our facility on 5/4/2023. She has a history of congestive heart failure, diabetes type II, high blood pressure, and a recent multi-drug resistant *Pseudomonas aeruginosa* decubitus infection. The staff has been using enhanced barrier precautions since Mrs. Smith's return from the hospital. However, on 5/19/2023, the night shift nurse reported that Mrs. Smith had had three loose stools within the last eight hours, accompanied by abdominal pain and fever (highest temperature 101.7 °F).

Staff immediately initiated Contact Precautions and sent stool specimens for C diff testing. The C. diff PCR test returned positive. Does this meet the McGeer surveillance criteria for a healthcare-associated C. diff infection?

A. Yes B. No





As part of our IP Plan and Risk Assessment, we conduct targeted surveillance for UTIs and C diff infections.

Mrs. Smith was transferred to our facility on 5/4/2023. She has a history of congestive heart failure, diabetes type II, high blood pressure, and a recent multi-drug resistant *Pseudomonas aeruginosa* decubitus infection. The staff has been using enhanced barrier precautions since Mrs. Smith's return from the hospital. However, on 5/19/2023, the night shift nurse reported that Mrs. Smith had had three loose stools within the last eight hours, accompanied by abdominal pain and fever (highest temperature 101.7 °F).

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A. YesB. No





	Table 5. Gastrointestinal Tract Infection (
Syndrome	Criteria	Selected Comments*
Gastroenteritis	 Must fulfill at least 1 criteria. Diarrhea: ≥ 3 liquid or watery stools above what is normal for the resident within 24 h Vomiting: ≥ 2 episodes in 24 h Both of the following sign or symptom Stool specimen positive for a pathogen (e.g., Salmonella, Shigella, E coli O157:H7, Campylobacter species, rotavirus) At least one of the following criteria Nausea Vomiting Abdominal pain or tenderness Diarrhea 	 Exclude non-infectious causes of symptoms such as new medications causing diarrhea, nausea, or vomiting or diarrhea resulting from initiation of new enteral feeding Presence of new GI symptoms in a single resident may prompt enhanced surveillance for additional cases In the presence of an outbreak, stool specimens should be sent to confirm the presence of norovirus or other pathogens (e.g., rotavirus <i>E coli</i> O157:H7)
Norovirus gastroenteritis	 Must fulfill both 1 AND 2. □ 1. At least one of the following criteria □ Diarrhea: ≥ 3 liquid or watery stools above what is normal for the resident within 24 h □ Vomiting: ≥ 2 episodes in 24 h □ 2. A stool specimen positive for norovirus detected by electron microscopy, enzyme immunoassay, or molecular diagnostic testing 	 In the absence of lab confirmation, a norovirus gastroenteritis outbreak (≥ 2 cases in a LTCF) may be assumed if all of the Kaplan Criteria are present Vomiting in >50% of affected persons A mean or median incubation period of 24-48 h A mean or median duration of illness of 12-60 h, and No bacterial pathogen is identified in stool culture
<i>Clostridium</i> <i>difficile</i> infection	 Must fulfill 1 AND 2. 1. At least one of the following criteria Diarrhea: ≥ 3 liquid or watery stools above what is normal for the resident within 24 h Presence of toxic megacolon (radiologic finding of abnormal large bowel dilatation) 2. At least one of the following diagnostic criteria Stool sample positive for <i>C difficile</i> toxin A or B, or detection of toxin-producing <i>C difficile</i> by culture or PCR in stool sample Pseudomembranous colitis identified in endoscopic exam, surgery, or histopathologic exam of biopsy specimen 	 Individual previously infected with <i>C difficile</i> may continue to be colonized even after symptoms resolve In the setting of an outbreak of GI infection, individuals could be <i>C difficile</i> toxin positive because of ongoing colonization and also be co-infected with another pathogen. Other surveillance criteria should be used to differentiate between infections in this scenario
	🗆 GITI criteria met	GITI criteria <u>NOT</u> met

✓ Diarrhea ✓ Detection of toxinproducing C diff by PCR in stool sample

* Refer to original article (Stone ND, et al. Infect Control Hosp Epidemiol 2012;33:965-77) for full comments



HAI Surveillance and Dashboard



				F	Y2023 (Jai	n-Dec 2023)				1					
acility-wide RTIs	January	February	March	April	May	June	July	August	September	October	Novembe	December	FYTD			
otal Respiratory Tract Infections (RTIs)				1										0		Facility-wide Respiratory Tract Infections (RTIs)
esident Days														0	1.00	
late (per 1000 resident days)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0.90	
															0.00	
															0.80	
				F	Y2023 (Jai	n-Dec 2023)				1				0.70	
lorth Wing RTIs	January	February	March	April	May	June	July	August	September	October	Novembe	December	FYTD		0.60	
otal Respiratory Tract Infections (RTIs)				1										0		
esident Days				1							1			0	0.50	
late (per 1000 resident days)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0.40	
											1					
															0.30	
				F	Y2023 (Jai	n-Dec 2023)				1				0.20	
outh Wing RTIs	January	February	March	April	May	June	July	August	September	October	Novembe	December	FYTD		0.10	
otal Respiratory Tract Infections (RTIs)											1			0	0.10	
esident Days											1			0	0.00	
late (per 1000 resident days)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			January February March April May June July August September October November December
																Rate (per 1000 resident days) Linear (Rate (per 1000 resident days))

AHS HAI Surveillance & Dashboard Tool

- Track and visualize healthcareassociated infections (HAIs)
 - Respiratory tract infections
 - Urinary tract infections
 - o Gastrointestinal tract infections
 - o Skin and soft tissue infections
 - Multi-drug resistant organisms (MDRO)
 - Track hand Hygiene Compliance
 - Facility-wide

•

- Healthcare personnel type
- Unit or area specific
- Modifiable spreadsheet (with automated formulas) designed to support nursing facility infection prevention and control (IPC) surveillance
 - o Line lists
 - o Data tables
 - o Graphs



Outcome Surveillance: HAI Data

FY2023 (Jan-Dec 2022)													
Facility-wide HAIs	January	February	March	April	May	June	July	August	September	October	November	December	FYTD
Total infections (RTIs, UTIs, GIs, SSTIs)	1	2	3	4	5	6	10	15	12	6	3	1	68
Resident Days	1000	1250	950	1150	1300	1400	1250	900	1100	1225	1300	1000	13825
HAI Rate (per 1000 resident days)	1.00	1.60	3.16	3.48	3.85	4.29	8.00	16.67	10.91	4.90	2.31	1.00	4.92
Mean (Average) Rate (per 1000 resident days) from previous year	3	3	3	3	3	3	3	3	3	3	3	3	3





Outcome Surveillance: HAI Data





HAI Dashboard: Surveillance Terms & Descriptions

Surveillance Term 🖓	Definition	Reference 🗸
Current Location	The resident's designated or assigned area while receiving care at the facility	
FY	Fiscal Year	
Gastrointestal (GI) tract infection	Includes infection definitions for (A) gastroenteritis, (B) norovirus gastroenteritis, and (C) C. difficile infection	McGeer Criteria (Link)
HAI Dasboard	Provides a high-level summary overview of the selcted infections in the facility through graphs and tables	
HAI Rate (per 1000 resident days)	(Number of healthcare-associated infections ÷ total residents days for the specified time period) × 1000	
Hand Hygiene (HH) compliance	(Total number of compliant HH observations performed/number of opportunities to HH perform) x 100	
	Healthcare-associated infections (HAIs) are infections people get while they are receiving health care for another	
	condition. HAIs can happen in any health care facility, including hospitals, ambulatory surgical centers, end-stage renal	https://www.hhs.gov/oidp/topics/health-care-
Healthcare-associated infections (HAI)	disease facilities, and long-term care facilities. Bacteria, fungi, viruses, or other, less common pathogens can cause HAIs.	associated-infections/index.html
	A drainage tube that is inserted into the urinary bladder through the urethra, is left in place, and is connected to a	https://www.cdc.gov/nhsn/pdfs/ltc/ltcf-manual-
Indwelling urinary catheter	collection system; also called a Foley catheter. Straight in-and-out catheters are not considered as indwelling urinary	<u>508.pdf</u>
	The indwelling urinary catheter utilization ratio is calculated by dividing the number of urinary catheter days by the	
	number of patient days. This ratio is useful for the purposes of	https://www.cdc.gov/nhsn/pdfs/ltc/ltcf-manual
Indwelling urinary catheter utilization ratio	tracking indwelling urinary catheter use over shorter periods of time and for internal trend analyses	<u>508.pdf</u>
	Provides a visual representation of the direction of your healthcare-associated infections, specifically if it is increasing or	
Linear (Trendline)	decreasing at a steady rate.	
Mean	Average number of infections from the previous year (calculation: sum of all infections ÷ 12)	
	Microorganisms, predominantly bacteria, that are resistant to one or more classes of antimicrobial agents. Examples	
	include Methicillin-resistant Staphylococcus aureus (MRSA), Vancomycin-resistant Enterococci (VRE), certain gram	
	negative bacteria, including those producing extended spectrum beta-lactamases (ESBLs) and others that are resistant to	https://www.cdc.gov/infectioncontrol/guideline
Multi-drug resistant organism (MDRO)	multiple classes of antimicrobial agents.	s/mdro/background.html
Rate (per 1000 resident days)	(Number of the specified infection + total residents days for the specified time period) × 1000	
	A daily count of the number of residents in a long-term care facility location during a time period. To calculate resident	
	days, for each day of the month, at the same time each day, record the number of residents. At the end of the month,	https://www.cdc.gov/nhsn/pdfs/ltc/ltcf-manual
Resident days	add the total daily counts.	<u>508.pdf</u>
Instructions Glossary IAI Dash	nboard (Example) 🛛 HAI Dashboard 🛛 RTT Surveillance 🔤 RTT Linelist 🖉 UTT Surveillance 🕀 🚦 🗖 🗖 🖬 🖬	

AHS HAI Surveillance & Dashboard Tool



IPC Surveillance: Resources & Training

- <u>https://quality.allianthealth.org/topic/infection-control/</u>
 - HAI Surveillance
 - HAI Dashboard & Surveillance Tool
 - <u>Revised McGeer Criteria Surveillance Checklist Tool</u>
 - HAI Dashboard & Surveillance Tool Instructional Video
- <u>https://www.cdc.gov/hai/prevent/tap.html</u>
- https://www.cdc.gov/infectioncontrol/training/strive.html#anchor_1561121533
- <u>https://www.cdc.gov/infectioncontrol/index.html</u>
- <u>https://www.cdc.gov/longtermcare/training.html</u>







IP Resource Box Data

Mobile



Business





Resource Boxes Are on the Way!

- CDC Grant
- Partnership with UGA and Alliant
- Resource Needs Recognized via DPH HAI Team ICARs







Infection Prevention Toolkit

- All Assisted Living Facilities and Personal Care Homes with 25 or more beds will receive one box.
- Resource boxes contain the following:
 - APIC Long-term Care Text
 - Quick Reference for Microbes
 - Glo Germ Kits
 - Resources and Tools





Respiratory Protection Program

- UGA will lead a respiratory protection program training for 2,200 Georgia LTCFs.
 - 368 SNFs
 - 295 assisted living facilities
 - 155 personal care homes with 25 or more beds,
 - 280 hospice facilities
 - 1,095 community living arrangements





Questions?





Alliant Health Solutions Resources

Statution QUIN-QLO Outling throaten betward: Back my provider to the particular of the particular	ALLIANT Autor transmission HEALTH SOLUTIONS Autor provide a function action Health Solution Solut							
DEEL SALLIANT DE UNIVERSITY OF GEORGIA	Infection Control Resources							
GA STR₹KE & SUPPORT TEAM Join us for the Georgia Department of Public Health Strike (& Support) Team Office Hours. These sessions will consist of a regularly scheduled monthly webinar for skilled nursing facilities (SNFs) as well as SNF medical directors. Office hours are your opportunity to come and learn, share, vent and more! Each month we will have updates on infection prevention, clinical protocols and ideas for new tools and resources. This is your chance is to access subject matter experts on infection control and clinical practice in long term care. Come prepared to pose your questions to subject matter experts and learn from your peers about their best practices and their barriers.	Sepsis Catheter Associated Urinary Tract Infection (CAUTI) Hand Hygiene HOIC Sepsis Gap Assessment and Action Steps Handwash the FROG Way – Badges – English HOIC Sepsis: Spot the Signs Magnet CAUTI Gap Assessment Tool Handwash the FROG Way – Badges – English HOIC Sepsis: Provider Engagement Urinary Catheter Quick Observation Tool Handwash the FROG Way – Badges – English AQ Sepsis-ZoneTool CDC-HICPAC Guideline for Prevention of CAUTI 2009 Handwash the FROG Way – Poster – English Recognition and Management of Severe Sepsis and Septic Shock AHRQ Toolkit for Reducing CAUTI In Hospitals Frequently Asked Questions – Alcohol Based Hand Rub							
Strike & Support Team Office Hours	SHOW MORE SHOW MORE NHSN Clostridioides Difficile Infection (C. difficile) Antibiotic Stewardship Joining the Alliant Health Solutions NHSN Group C.difficile Training Antibiotic Stewardship Basics Instructions for Submitting C. difficile Data into NHSN Nursing Home Training Sessions Introduction A Field Guide to Antibiotic Stewardship In Outpatient 5-Step Enrollment for Long-term Care Facilities Nursing Home C.difficile Infection Physician Commitment Letter CDC's National Healthcare Safety Network (NHSN) Be Antibiotics Aware Taking Your Antibiotics							
Office Hours for SNF and MD's: • Click here to register – November 18, 2022 at 11 a.m. ET • Click here to register – December 16, 2022 at 11 a.m. ET Office Hours for Non-SNF: • Click here to register – November 18, 2022 at 1 p.m. ET • Click here to register – December 16, 2022 at 1 p.m. ET • Click here to register – December 16, 2022 at 1 p.m. ET Bite Sized Learning:	Training COVID-19 Options for Infection Control Training In Nursing Homes Elyer Invest in Trust (AHRQ Resource for CNA COVID-19 Vaccines) Nursing Home Staff and Visitor Screening Toolkit – PDE Nursing Home Staff and Visitor Screening Toolkit – Excel							

https://quality.allianthealth.org/topic/georgia-department-of-public-health/

https://quality.allianthealth.org/topic/infection-control/



Thank You for Your Time! Contact the AHS Patient Safety Team <u>Patientsafety@allianthealth.org</u>



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Save the Date

SNF and Medical Directors Office Hours: June 23, 2023 | 11 a.m. ET

ALF and PCH May 26, 2023 | 11 a.m. ET June 30, 2023 | 11 a.m. ET



- Georgia Department of Public Health
- University of Georgia





UNIVERSITY OF GEORGIA

Making Health Care Better





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