

Nursing Home Patient Safety Series: Reducing Facility-Associated Infections and Hospitalizations Related to UTI, Sepsis, Pneumonia and COVID-19



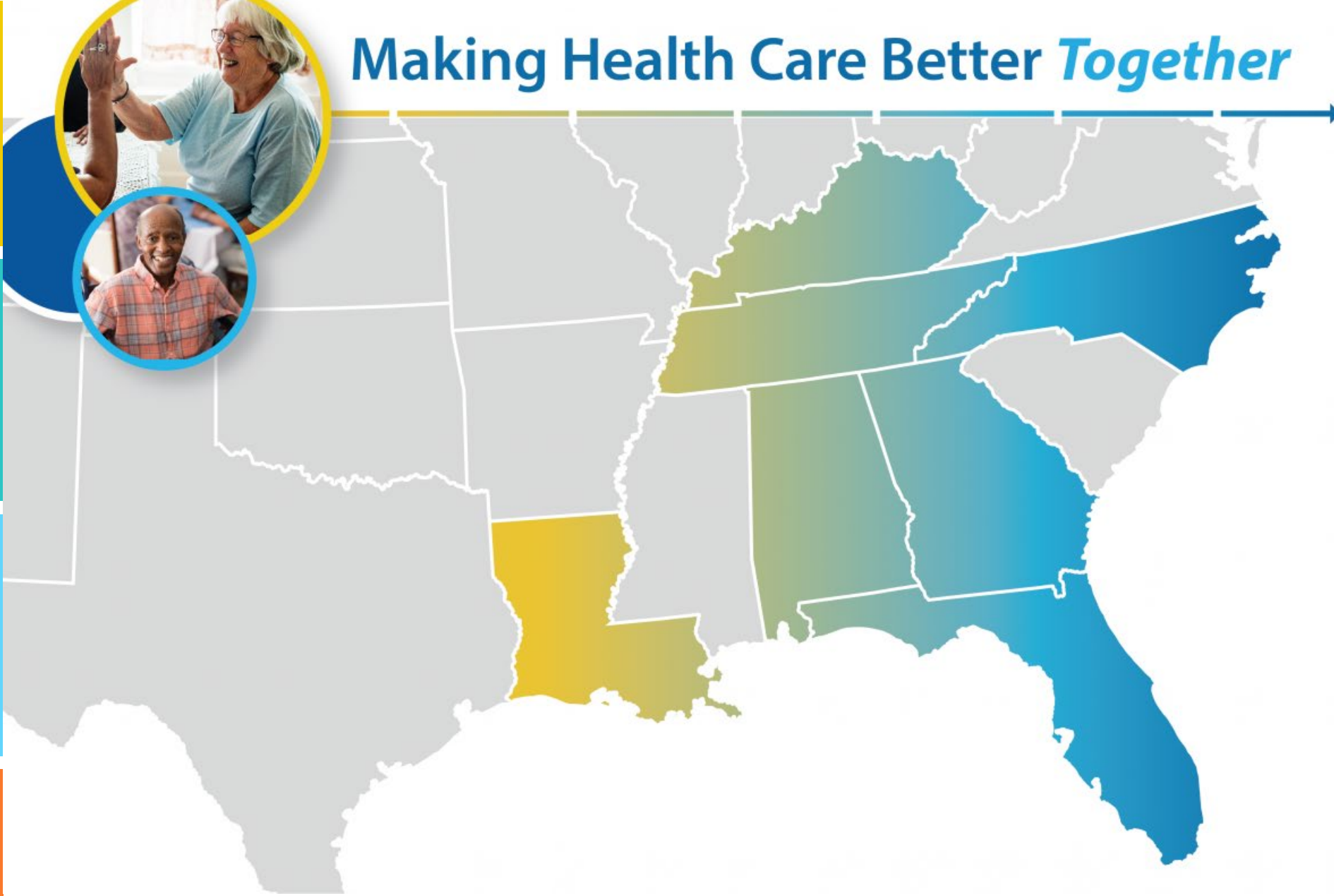
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 **ALLIANT**
HEALTH SOLUTIONS

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Making Health Care Better *Together*



About Alliant Health Solutions

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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 previously served as the interim hospital epidemiology director for a large health care system in Atlanta and as 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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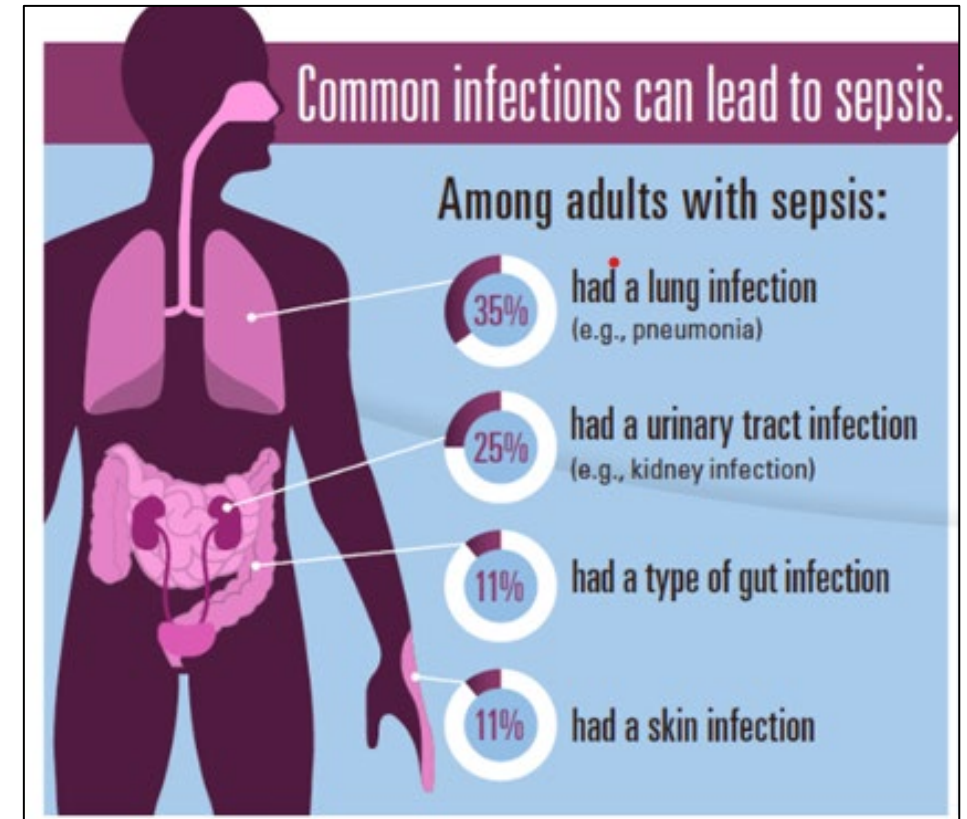


Objectives

- Summarize infection prevention interventions to reduce the burden of sepsis, urinary tract infections (UTIs), pneumonia, and COVID-19 in nursing homes
- Emphasize strategies to reduce COVID-19 infections and complications in nursing home residents
- Share Alliant Health Solutions quality improvement resources to support infection prevention and control (IPC) activities

Sepsis Facts

- At least **1.7 million** adults in America develop sepsis
- At least **350,000** adults who develop sepsis die during their hospitalization or are discharged to hospice
- **1 in 3** people who dies in a hospital had sepsis during that hospitalization
- Sepsis, or the infection causing sepsis, starts before a patient goes to the hospital in nearly **87%** of cases
- Risk factors:
 - Adults 65 or older
 - People with weakened immune systems
 - People with chronic medical conditions, such as diabetes, lung disease, cancer, and kidney disease
 - People with recent severe illness or hospitalization, including due to severe COVID-19
 - People who survived sepsis
 - Children younger than one



Sepsis: Nursing Homes

- Nursing home residents are seven-fold more likely to have a severe sepsis diagnosis compared to non-nursing home residents (Ginde et al., 2013)
- Nursing home residents with severe sepsis, compared to non-nursing home residents, had significantly higher rates of ICU admission (40% vs. 21%), hospital LOS (median 7 vs. 5 days) and in-hospital mortality (37% vs. 15%) (Ginde et al., 2013)
- NHs need better systems to monitor residents' changing status and present that information to medical providers in real-time through rapid medical response programs or telemetry (Sloane et al., 2018).
 - Documentation of 1 or more vital signs was absent in 26% - 34% of cases
 - Data points were missing from the record
 - 65% of cases met the criteria for sepsis

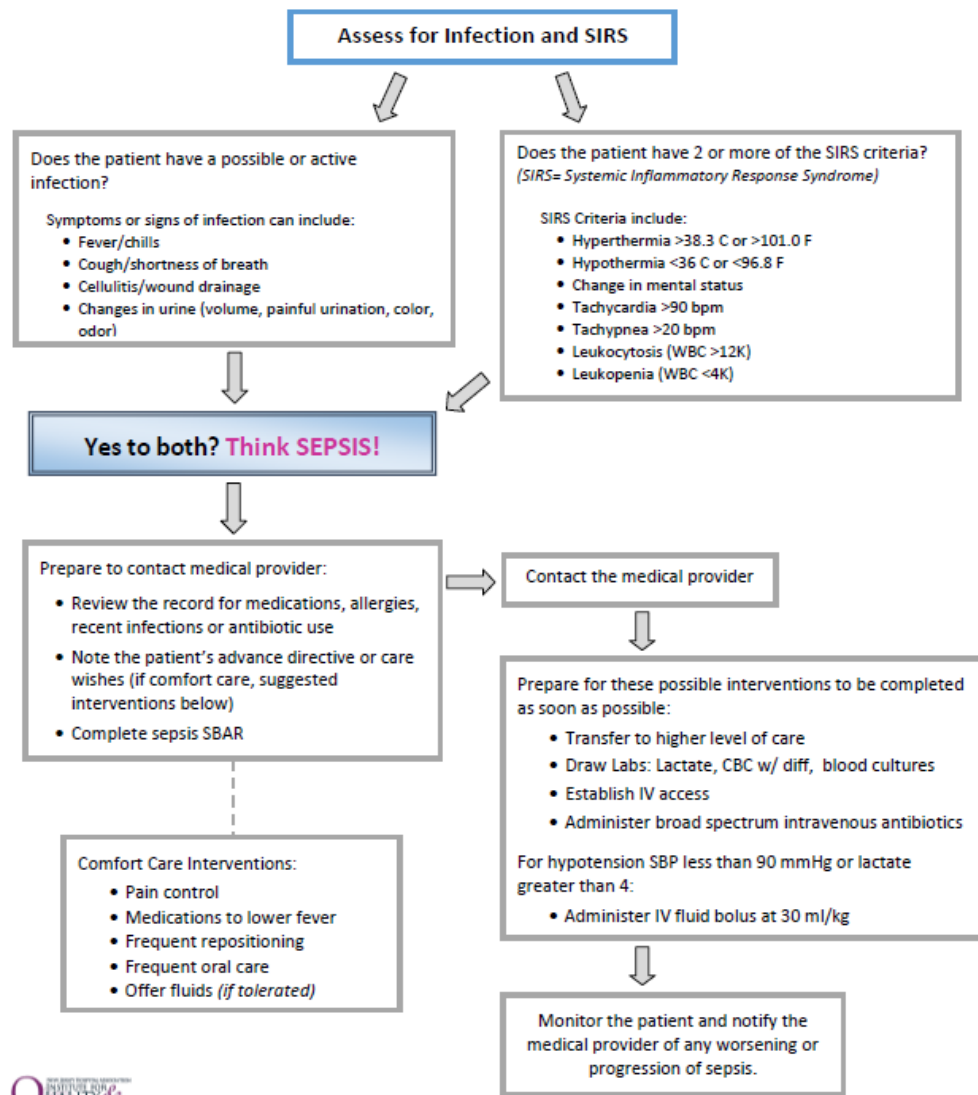
Ginde, A. A., Moss, M., Shapiro, N. I., & Schwartz, R. S. (2013). Impact of older age and nursing home residence on clinical outcomes of US emergency department visits for severe sepsis. *Journal of critical care*, 28(5), 606-611.

Sloane, P. D., Ward, K., Weber, D. J., Kistler, C. E., Brown, B., Davis, K., & Zimmerman, S. (2018). Can sepsis be detected in the nursing home prior to the need for hospital transfer?. *Journal of the American Medical Directors Association*, 19(6), 492-496.

Prevent Sepsis and Improve Early Recognition



SEPSIS EARLY IDENTIFICATION AND TREATMENT PATHWAY



SBAR FOR SEPSIS

S
(describe the situation)

- My name is _____ and I am calling from _____.
- I need to speak to you about patient Mr. or Mrs. _____.
- This patient is showing signs and symptoms of infection and sepsis.

B
(provide background)

- The patient was admitted on _____ (date) with the diagnosis of _____ (original condition).
- The patient now is showing these signs of a possible infection _____ (describe the signs and potential source of infection).
- This started on _____ (date).
- The patient is allergic to _____.
- The patient's advance care directive is _____.

A
(describe the key assessment findings)

- My assessment of the situation is that the patient may be experiencing a new or worsening of his/her infection. Here are my assessment findings:
- The current vital signs:
- BP _____ HR _____ RR _____
- Temp _____ SPO2 _____ (on room air or supplemental O2)
- The patient has voided _____ times in the last 8 hours
- Mental status is (changed or unchanged) from baseline _____
- Other physical assessment findings that are related to possible infection or sepsis (lung sounds, wound assessments, etc): _____

R
(recommendation)

- I am concerned this patient has sepsis. I recommend that you see the patient as soon as possible and that we order a serum lactate, blood cultures and a basic metabolic panel. Do you agree?
- If the patient is hypotensive: Should I start an IV and give a fluid bolus?
- The physician should confirm, clarify and request additional information and then work with the nurse to take appropriate action with this patient.

Before Calling the Physician / NP / PA/other Healthcare Professional:

Evaluate the patient and complete this form

Check vital signs- be alert for the early sepsis warning signs

Review the patient record: recent hospitalization, lab values, medications, and progress notes

Note any allergies

Be aware of the patient's advance care wishes

Early Sepsis Warning Signs

Report any of these Findings:

Temp >38.3 C (101.0 F)
Temp <36.0 C (96.8 F)
Heart rate >90 bpm
Respiratory rate >20 bpm

White Blood Cell Count
>12,000 μ L-1 or
<4,000 μ L-1

Altered mental status

SPO2 <90%

Decreased urine output

From recently drawn labs (within 24 hours):
Creatinine >2.0 mg/dl
(176.8 mmol/L)
Bilirubin >2 mg/dl
(34.2 mmol/L)
Platelet count <100,000 μ L
Lactate >2 mmol/L
(18.0 mg/dl)
Coagulopathy (INR >1.5 or aPTT >60 secs)



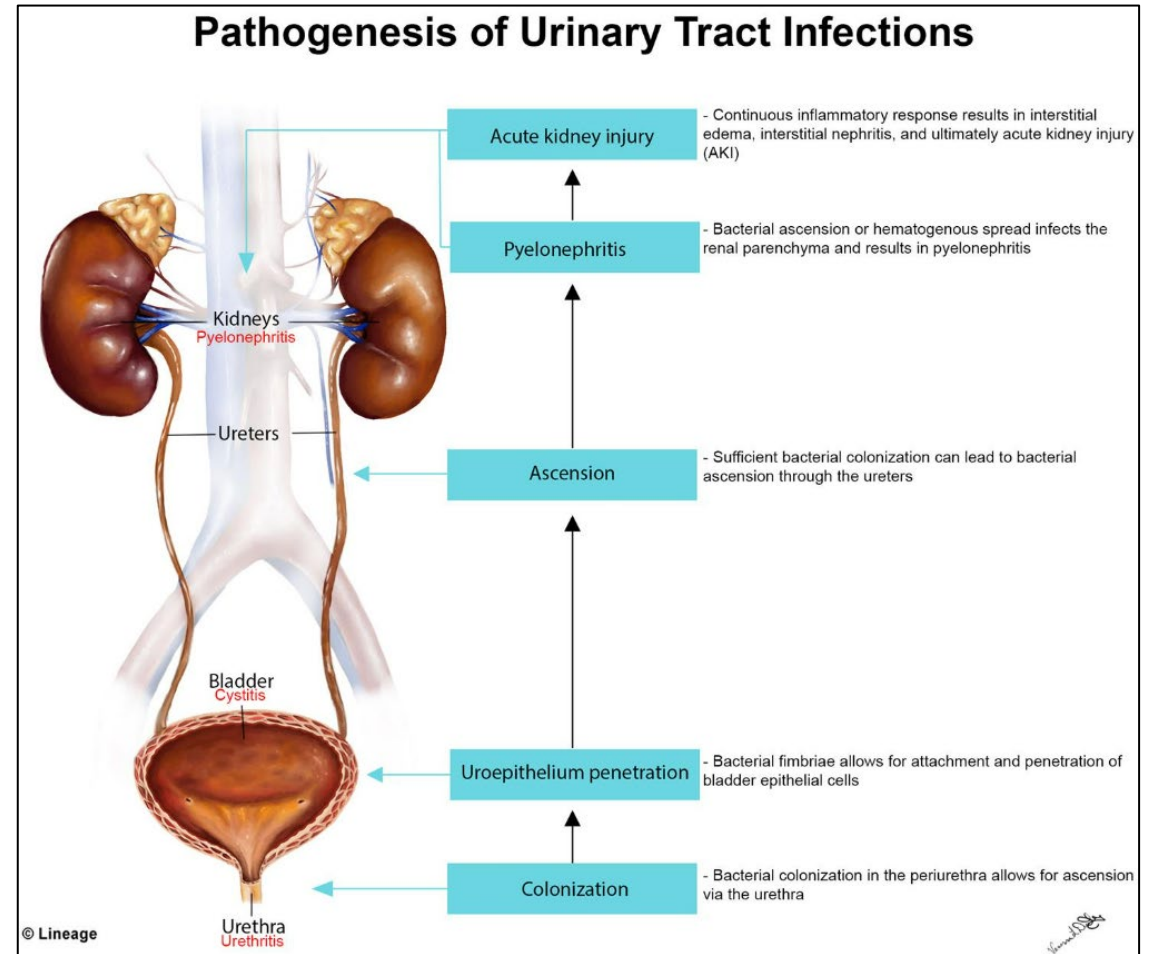
Sepsis Gap Assessment and Action Steps

- Gap analysis tool used to assess the difference between actual practice and expected performance
 - Organizational commitment and leadership support
 - Dedicated sepsis resources/sepsis coordinator
 - Early identification/screening/risk
 - Bundle Implementation
 - Measurement/continuous improvement

Sepsis Gap Assessment and Action Steps				
A gap analysis is a tool used to assess the difference between actual practice and expected performance. It is useful to compare best practice guidelines against your currently accepted practices. It is important to assess practice through observation and audit rather than relying on if a policy is in place, as practice can vary from policy.				
COMPONENTS	YES	NO	NA	COMMENTS/ACTION STEPS
Organizational Commitment and Leadership Support				
Do you have a sepsis program? Describe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does your sepsis program have leadership support including CEO, Medical Staff, Nursing, Clinical Staff, Governing Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is medical staff, nursing staff and clinical leadership actively involved in sepsis prevention and management?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Managing sepsis is aligned with hospital's quality, safety, or organizational goals (strategic plan)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Multidisciplinary team in place and regular meetings (providers, nursing, quality, care management, etc.) from various care areas, ED, ICU, Med Surg, Perinatal, Peds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Team reports to Medical Staff, Quality and Infection Control Committees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sepsis data is shared with staff? What data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sepsis data is shared with patients/families?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Dedicated Sepsis Resource/Sepsis Coordinator				
Dedicated Sepsis Resource in place (identify who)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
FTE allocation/ time commitment to sepsis role including data abstraction, reporting, communication coordination - define	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other role responsibilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Early Identification/Screening/Risk				
Early alert or warning system/process in place or describe triggers for sepsis screening:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• ED (assessed/screened in triage)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• ICU	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• Inpatient Units (Med Surg)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• Perinatal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• Pediatrics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Urinary Tract Infections (UTIs)

- Most common sites of healthcare-associated infections
 - Accounts for up to 20% of infections reported by long-term care facilities (LTCFs)
- Risk factors for developing bacteriuria and UTI:
 - Age-related changes to the genitourinary tract
 - Comorbid conditions resulting in neurogenic bladder
 - Instrumentation required to manage bladder voiding
- Complications:
 - Cystitis
 - Pyelonephritis
 - Bacteremia
 - Septic shock
 - Declined resident function and mobility
 - Acute care hospitalizations
 - Increased mortality



<https://u.osu.edu/utieducation/pathophysiology-of-uti/>

Interventions for Residents (Regardless of Urinary Catheter Status)

Hand hygiene

Treatment of atrophic vaginitis as UTI prophylaxis

Interventions to improve management of urinary incontinence

Implementation of effective IPC program

Interventions to Reduce Unnecessary Indwelling Urinary Catheter Placement

Education regarding hazards of urinary catheters

Education and/or policies regarding appropriate indications for indwelling catheters

Requiring physician order with appropriate indication prior to indwelling catheter placement

Requiring documentation of who inserted catheters with indication for placement

Education and supplies for alternatives to indwelling catheters

Urinary retention protocols for intermittent straight catheterization (ICS) and/or bladder scan

Interventions To Improve Catheter Insertion Technique

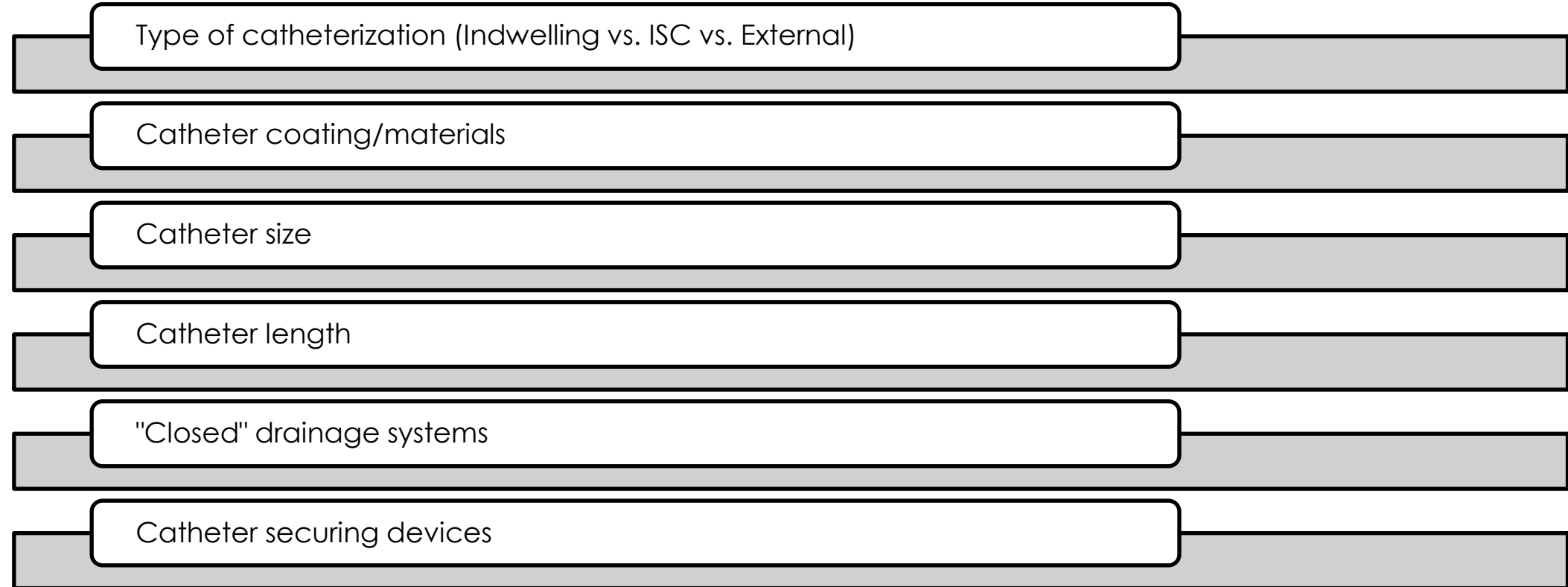
Education for aseptic insertion of indwelling catheters

Hands-on training/competency assessments regarding aseptic indwelling catheter insertion

Options regarding intermittent catheterization

Standardizing catheter placement supplies/kit

Improving Choices Regarding Catheter Types



Maintenance/Care of Residents With Catheters

Hand hygiene

Use of appropriate Personal Protective Equipment (PPE) during catheter/bag care

Keeping drainage bag below bladder

Avoid equipment sharing between catheterized patients

*Spatial separation of catheterized patients**

*Bacterial interference interventions**


Prompting Removal of Unnecessary Catheters

Trial removal of indwelling catheters present on admission

Urinary catheter reminders for staff

Urinary catheter stop-orders

Communication Checklist: Suspected UTIs

 Communication Checklist: Signs and Symptoms Associated with Suspected Urinary Tract Infections (UTIs)	
This tool can: <ul style="list-style-type: none"> Provide a framework for change in condition communication when signs and symptoms of UTIs are identified. Prepare for change in communication conversations. Be modified to include facility specific prompts or UTI prevention strategies. 	
SBAR Prompts	Notes
Altered mental status: mental status is different than baseline	Baseline: Current signs/symptoms: Date or hour changes first identified:
Current vital signs	Temp: _____ Route: _____ Baseline Temp: _____ B/P: _____ Pulse: _____ RR: _____
Patient has documented goals of care related to antibiotic use	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, describe:
Patient has a diagnosis of advanced dementia and is unable to report or validate symptoms	Yes <input type="checkbox"/> No <input type="checkbox"/>
Observation of signs or symptoms of distress (e.g., agitation, new refusal of care or number of staff needed to provide care)	Briefly describe signs or symptoms: Frequency signs or symptoms are observed: Date or hour symptoms first observed:
Patient has started new medications within the past seven days	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, Name of Medication: _____ dose: _____ date started: _____ Name of Medication: _____ dose: _____ date started: _____ Name of Medication: _____ dose: _____ date started: _____
Change in eating or drinking patterns or level of assistance from the patient's norm (e.g., was eating independently with a set-up, but now requiring encouragement or spoon-feeding)	Briefly describe change:
Clinical signs/symptoms	Check all that apply: <input type="checkbox"/> Painful urination (dysuria) <input type="checkbox"/> Lower abdominal (suprapubic) pain or tenderness <input type="checkbox"/> Low back pain (costovertebral angle pain) or tenderness <input type="checkbox"/> Visible blood in urine <input type="checkbox"/> New or worsening urinary urgency, frequency or incontinence

Continued on next page

Patient has history of urinary symptoms and urinary tract infections	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, Date of most recent episode: _____ Number of episodes in last x months: _____ What did the prior culture grow? _____ What did the susceptibilities show? _____
Patient has history of MDROs	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, Date of most recent treatment: _____ Organism: _____
Patient is currently receiving dialysis	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, type: <input type="checkbox"/> Hemodialysis <input type="checkbox"/> Peritoneal Does the patient have any urine output? Yes <input type="checkbox"/> No <input type="checkbox"/>
Patient has an indwelling catheter? How often changed? Diagnoses? Due for change?	Yes <input type="checkbox"/> No <input type="checkbox"/> Diagnosis for indwelling catheter: _____ Date of most recent catheter change: _____
Request initiation of facility hydration protocol (e.g., encourage _____ fluids x _____ HRS and monitor for a change. Send a urine specimen if change in baseline temp over 2.0 degrees or change in urine)	
Request order to send urine specimen via straight catheterization or clean catch	
If antibiotic ordered, request a review of antibiotic order when microbiology specimen results are ready (e.g., three days from order date)	

Resources:

AHRQ Suspected UTI SBAR Toolkit :
<https://www.ahrq.gov/nhguides/toolkits/determine-whether-to-treat/toolkit1-suspected-uti-sbar.html>

Interact® 4.5 Symptoms of UTI Care Path:
<https://pathway-interact.com/tools/>

SBAR Tool: Guidelines + Worksheet:
http://forms.ihl.org/tools/sbar-toolkit?utm_referrer=http%3A%2F%2Fwww.ihl.org%2F

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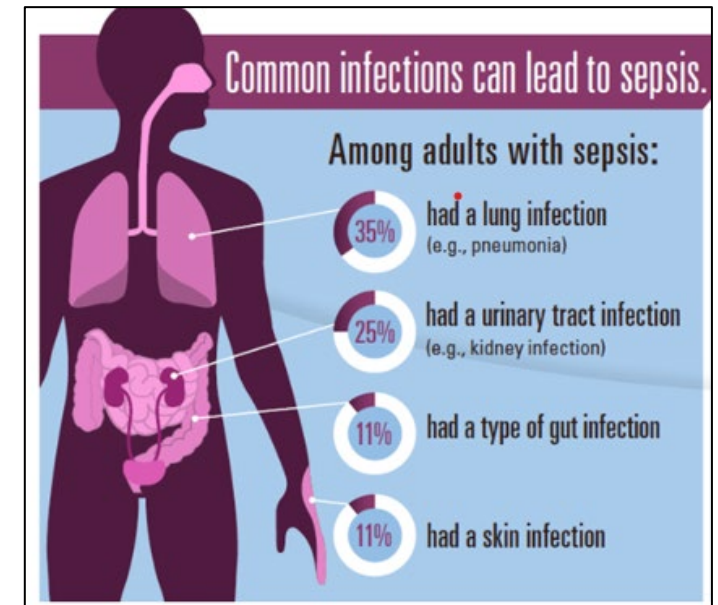
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- Provides a framework for change in condition communication when signs/symptoms of UTI identified
- Helps nursing home staff and prescribing clinicians communicate about suspected UTIs and facilitates appropriate antibiotic prescribing
- [Agency for Healthcare Research & Quality \(AHRQ Toolkit\)](https://quality.allianthealth.org/wp-content/uploads/2021/10/Communication-Checklist-Signs-and-Symptoms-Associated-with-Suspected-Urinary-Tract-Infections-UTIs.pdf) includes:
 - Suspected UTI SBAR form
 - A clinician letter
 - Not All "Infections" Need Antibiotics*
 - Urinalysis and UTIs: Improving Care

<https://quality.allianthealth.org/wp-content/uploads/2021/10/Communication-Checklist-Signs-and-Symptoms-Associated-with-Suspected-Urinary-Tract-Infections-UTIs.pdf>

Pneumonia: Impact

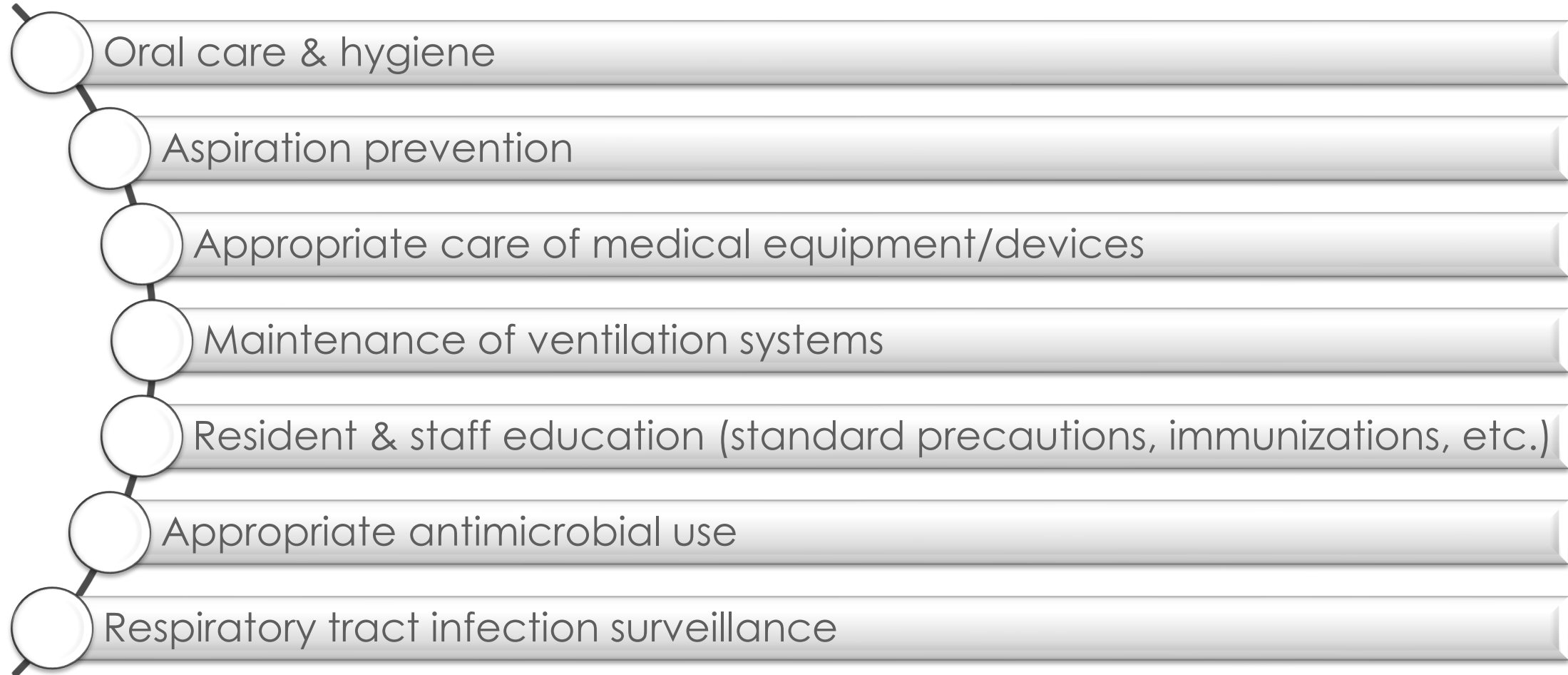
- 1.5 million visits to emergency departments with pneumonia as the primary diagnosis
- 47,601 pneumonia-related deaths
 - 14.4 deaths per 100,000 population
- Major cause of morbidity and mortality in nursing home residents ([Mills et al., 2009](#))
 - 30-day mortality rates ranging from 10 to 30 percent
- Clinical implications
 - Sepsis
 - Exacerbation of existing comorbidities
 - Potential exposure to antibiotic-resistant pathogens
 - Chronic lung disease
 - Cardiovascular sequelae
 - Hospitalization
 - Death
- Huge burden on the health care system
 - VAP hospital costs range from ~\$19,000 - \$80,000 ([AHRQ, 2017](#))
 - CAP hospitalization expenditures averaged \$33,380 ([Weycker et al., 2020](#))
 - \$4568 during the 30-day period thereafter
 - Long-term phase, all-cause expenditures averaged \$83,463 for CAP patients versus \$51,017 (95% CI \$49,553–\$52,491) for comparison patients



Pneumonia Prevention: Recommended Immunizations



Pneumonia Prevention: IPC Interventions

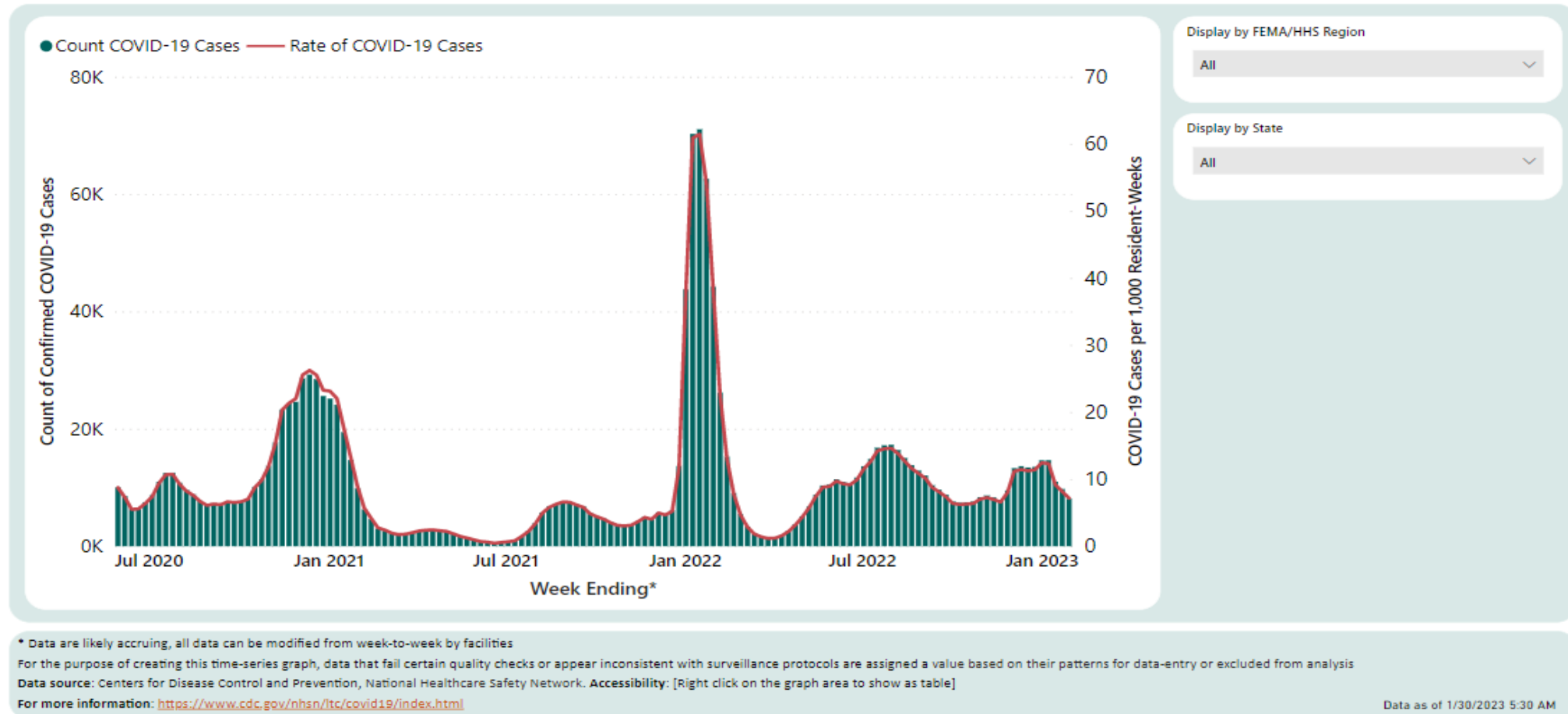


<https://www.cdc.gov/pneumonia/prevention.html>

Confirmed COVID-19 Cases among Staff and Rate per 1,000 Resident-Weeks in Nursing Homes, by Week—United States



Confirmed COVID-19 Cases among Staff and Rate per 1,000 Resident-Weeks in Nursing Homes, by Week — United States

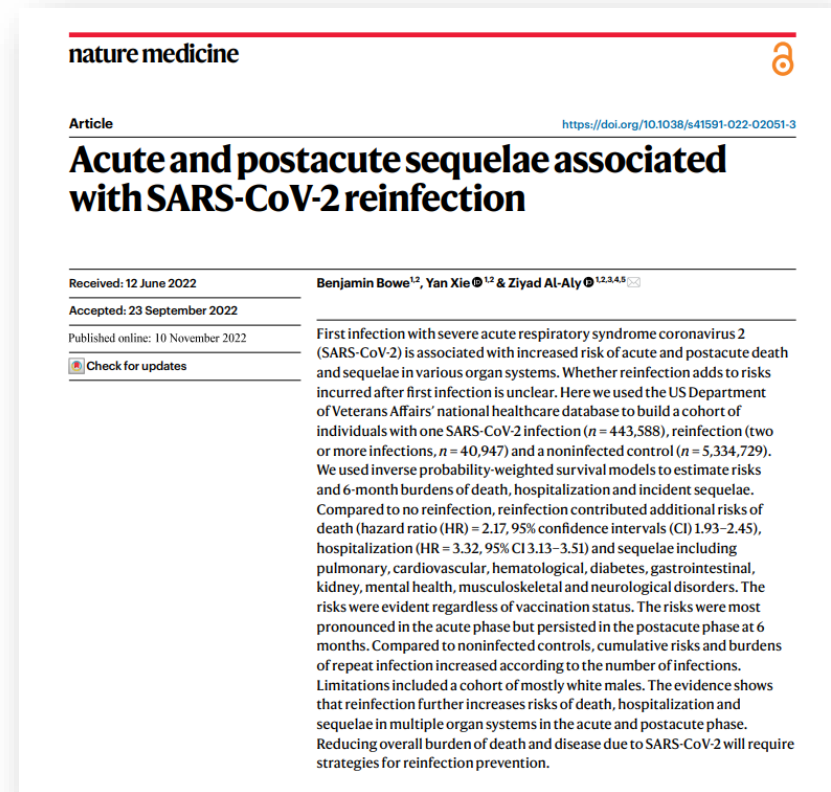


https://www.cdc.gov/nhsn/covid19/ltc-report-overview.html#anchor_1594393306

Repeat COVID-19 Infections Increase Risk of Organ Failure, Death: Researchers Recommend Masks, Vaccines, Vigilance To Prevent Reinfection

“The evidence shows reinfection further increases risks of death, hospitalization and sequelae in multiple organ systems in the acute and post-acute phase. Reducing overall burden of death and disease due to SARS-CoV-2 will require strategies for reinfection prevention.”

<https://www.eurekalert.org/news-releases/970714>



Bowe, B., Xie, Y. & Al-Aly, Z. Acute and post-acute sequelae associated with SARS-CoV-2 reinfection. *Nat Med* (2022). <https://doi.org/10.1038/s41591-022-02051-3>

CDC COVID-19 Infection Prevention and Control Guidance Resources



[Interim IPC Recommendations for Healthcare Personnel](#)

[Interim Guidance for Managing Healthcare Personnel with Infection or Exposure](#)

[Strategies to Mitigate Healthcare Personnel Staffing Shortages](#)



COVID-19 Infection Prevention Practices DECISION TOOL

This resource is intended to assist in making COVID-19 infection prevention and control (IPC)-related decisions in your facility. The highest level of recommended IPC practices are listed below and reflects the current Centers for Disease Control and Prevention (CDC) [guidance](#) as of this publication. Facilities are encouraged to use their discretion and any additional information from local/state health departments and regulatory entities when considering COVID-19 IPC implementation. Also, facilities are encouraged to stay up-to-date on current COVID-19 guidance from the CDC and Centers for Medicare and Medicaid Services (CMS).

When modifying IPC policies to reflect local community transmission, please consider the following:

1. **CDC Transmission Levels** - This metric (also known as community transmission) is used to guide select IPC practices in health care settings to allow for earlier intervention before there is a strain on the health care system and to protect the individuals receiving care in these settings. Use the county transmission level (high, substantial, moderate or low) to determine the level of SARS-CoV-2 infections in your community and the risk to your facility. Implement the recommended practices listed below based on your local transmission level.
2. **Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic** - This guidance applies to all U.S. health care settings, including nursing homes and home health. Also, note that vaccination status no longer informs COVID-19-specific IPC interventions (i.e., source control, testing, post-exposure recommendations)
3. **Your Facility Data** - Consider the status of the IPC program and the impact of current interventions, like hand hygiene compliance rates, cleaning and disinfection practices, vaccination rates (COVID-19, Influenza, Pneumococcal), safe cohorting plans, emergency/outbreak plans, etc. If the facility has a history of a COVID-19 outbreak, consider how previous outbreaks developed and were controlled. If an outbreak occurs, the highest levels of precautions should be immediately implemented until the outbreak is controlled and transmission rates in the county fall.
4. **Your Facility COVID-19 Plan updates/changes** - Document decisions made, including supporting data and information discussed in considerations 1. and 2. above, using the Situation, Background, Assessment and Recommendation (SBAR) format (See page 3), including date and responsible parties.

TRANSMISSION LEVEL

RECOMMENDED PRACTICES:

HIGH

- Universal source control using NIOSH Approved N-95 or higher respirator in all areas of the facility where resident encounters could occur
- Eye protection in all areas where resident encounters could occur
- Optimize indoor air quality by limiting crowding in communal spaces, and consulting with facility engineers to improve ventilation
- Perform SARS-CoV-2 Testing for suspected cases and close contacts
- Consider screening testing to identify asymptomatic infections
- Establish process to identify and manage individuals with suspected or confirmed SARS-CoV-2 Infection
- Encourage everyone to practice infection prevention behaviors (i.e. hand hygiene, respiratory etiquette/cover your cough, avoiding sick people, reporting symptoms) and to remain up to date with all vaccine doses
- Maintain infection prevention and control practices (i.e. hand hygiene, cleaning and disinfection, standard precautions)
- Implement facility wide screening testing if newly identified COVID-19 case in resident or staff

SUBSTANTIAL

- Universal source control recommended for those who have had recent exposure to COVID-19, respiratory-infection symptoms (i.e. cough, runny nose, congestion, sore throat), reside or work in an area with active outbreak or based on personal preference
- Establish process to identify and manage individuals with suspected or confirmed SARS-CoV-2 Infection
- Consider screening testing to identify asymptomatic infections
- Encourage everyone to practice infection prevention behaviors (i.e. hand hygiene, respiratory etiquette/cover your cough, avoiding sick people, reporting symptoms) and to remain up to date with all vaccine doses
- Establish process to identify and manage individuals with suspected or confirmed SARS-CoV-2 Infection
- Optimize indoor air quality by limiting crowding in communal spaces, and consulting with facility engineers to improve ventilation
- Maintain infection prevention and control practices (i.e. hand hygiene, cleaning and disinfection, standard precautions)
- Implement facility wide screening testing if newly identified COVID-19 case in resident or staff

MODERATE

- Encourage everyone to practice infection prevention behaviors (i.e. hand hygiene, respiratory etiquette/cover your cough, avoiding sick people, reporting symptoms) and to remain up to date with all vaccine doses
- Establish process to identify and manage individuals with suspected or confirmed SARS-CoV-2 Infection
- Universal source control recommended for those who have had recent exposure to COVID-19, respiratory-infection symptoms (i.e. cough, runny nose, congestion, sore throat), reside or work in an area with active outbreak, or based on personal preference
- Optimize indoor air quality by limiting crowding in communal spaces, and consulting with facility engineers to improve ventilation
- Maintain infection prevention and control practices (i.e. hand hygiene, cleaning and disinfection, standard precautions)
- Implement facility wide screening testing if newly identified COVID-19 case in resident or staff

LOW

- Encourage everyone to practice infection prevention behaviors (i.e. hand hygiene, respiratory etiquette/cover your cough, avoiding sick people, reporting symptoms) and to remain up to date with all vaccine doses
- Establish process to identify and manage individuals with suspected or confirmed SARS-CoV-2 Infection
- Universal source control recommended for those who have had recent exposure to COVID-19, respiratory-infection symptoms (i.e. cough, runny nose, congestion, sore throat), reside or work in an area with active outbreak, or based on personal preference
- Optimize indoor air quality by limiting crowding in communal spaces, and consulting with facility engineers to improve ventilation
- Maintain infection prevention and control practices (i.e. hand hygiene, cleaning and disinfection, standard precautions)
- Implement facility wide screening testing if newly identified COVID-19 case in resident or staff



SBAR Template		Date: _____
Team Members: _____		
S	Situation: <ul style="list-style-type: none"> Reviewing COVID IPC strategies New COVID-19 case identified (outbreak) Updating COVID-19 IPC policy Increase or decrease in community transmission levels Increase or decrease in facility influenza-like illness (ILI) cases 	
B	Background: (Things to consider – community transmission levels, vaccination rates, cases of influenza-like illness, outbreak status, etc.) <ul style="list-style-type: none"> CDC Transmission Level is currently _____ Newly COVID-19 case identified on _____ Number of residents with influenza-like illness (ILI): _____ Number of staff with influenza-like illness (ILI): _____ Current Vaccination rates: _____ Last known COVID outbreak: _____ 	
A	Assessment: <ul style="list-style-type: none"> Current compliance with IPC practices (HH rates, cleaning/disinfection, transmission-based precautions, etc) Number of suspected cases (COVID-19, influenza-like illness, RSV, etc.): _____ Number of contacts/exposed residents or staff: _____ 	

R	Recommendation: (Practices to adjust: screening testing, personal protective equipment (PPE) requirements, cohorting, visitation, admissions testing, clinical symptom monitoring, etc.) In addition to the recommendations provided in the COVID-19 Infection Prevention Practices Decision Tool consider the following: <ul style="list-style-type: none"> Update visitation policy Cohort residents Communicate with state/local public health authorities
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REFERENCES:

- [Interim Final Rule \(IFC\), CMS-3401-IFC, Additional Policy and Regulatory Revisions in Response to the COVID-19 Public Health Emergency related to Long-Term Care \(LTC\) Facility Testing Requirements](#)
- [Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 \(COVID-19\) Pandemic](#)

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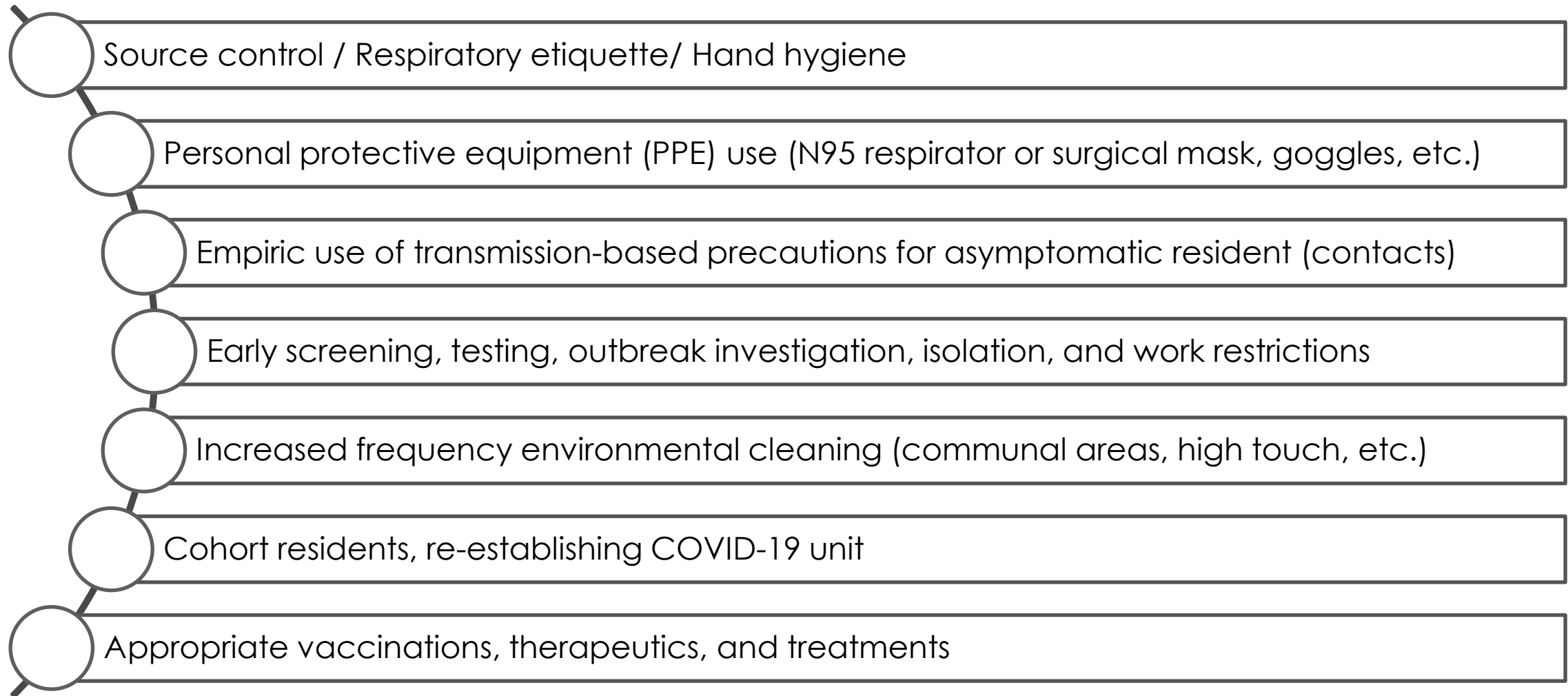



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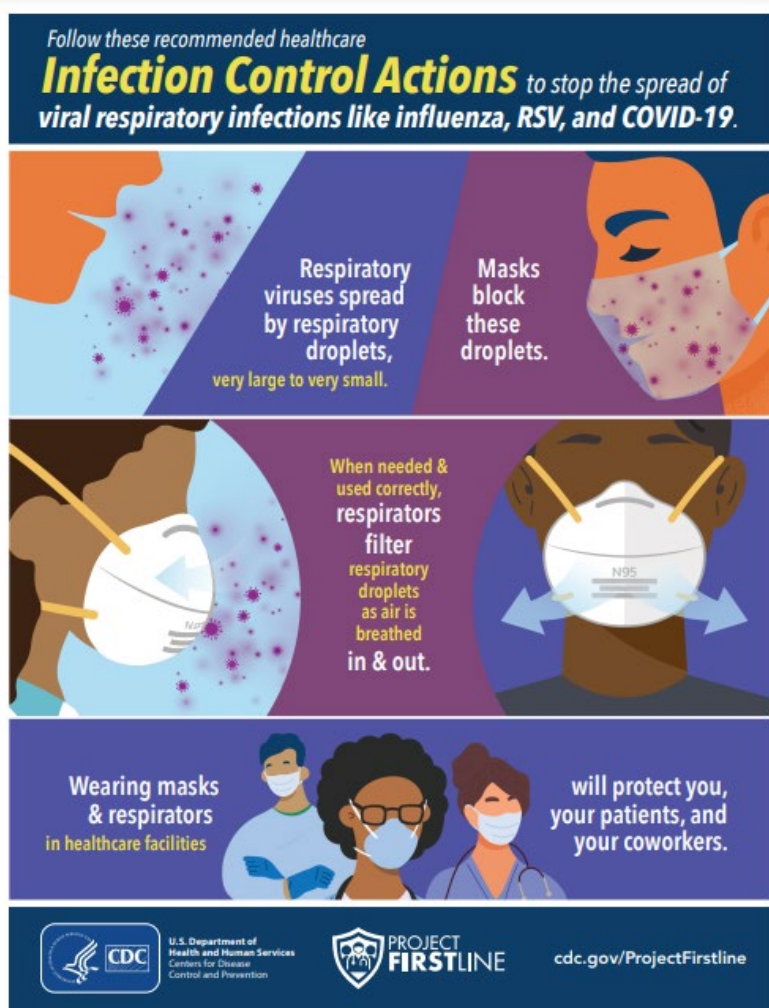
COVID-19 Facility Outbreak Factors

- Virus & variant specific characteristics
- Infection prevention & control practices
- Circulating respiratory pathogens
- Pandemic fatigue
- Personal protective equipment (PPE) fatigue
- Staffing & resources shortages

COVID-19 Outbreak IPC Practices



COVID-19 Lessons Learned: Respiratory Viruses



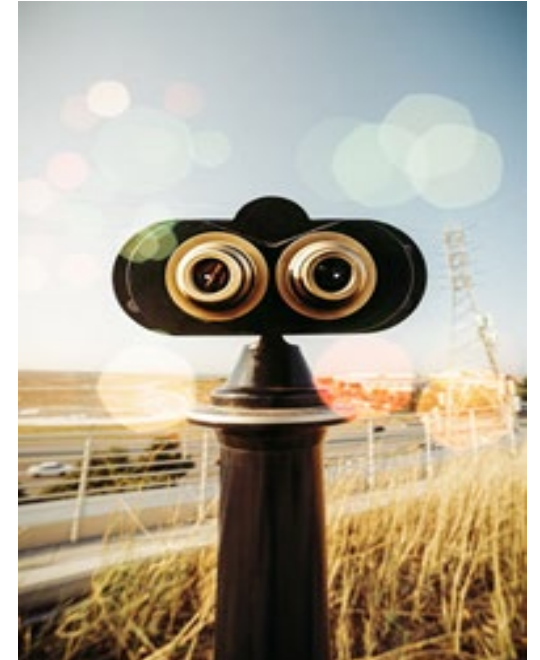
- Up to date with vaccinations
- Understanding your data (resident risk, facility risk, community levels)
- IPC strategies (hand hygiene, respiratory etiquette, source control, cleaning/disinfection)
- Early intervention: screening, testing, and treatments
- Prompt isolation & investigation of close contacts
- Communication & collaboration
- Emergency/Outbreak planning

<https://www.cdc.gov/infectioncontrol/projectfirstline/index.html>

IPC Surveillance

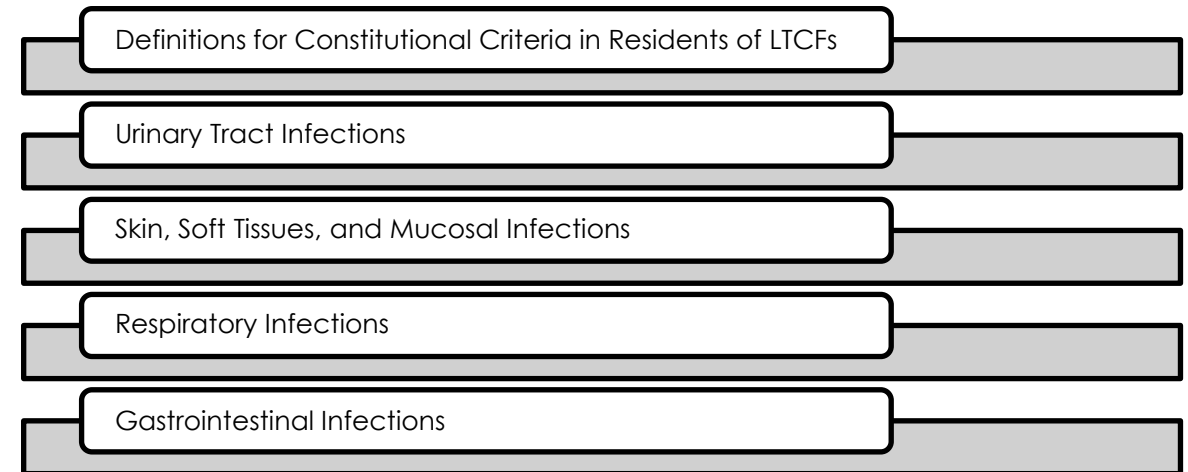
“..the ongoing, systematic collection, analysis, and interpretation of health-related data essential to planning, implementation, and evaluation of public health practice.” — Field Epidemiology

- Active surveillance
 - Actively looking for the infection or condition
 - Ensures a 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
- Surveillance definitions
 - Ensure the same thing is counted
 - Enable meaningful comparison with others
 - Ensure correctly interpret changes over time
 - Identify factors associated with an infection or outbreak
 - Inform infection prevention efforts and targeted interventions

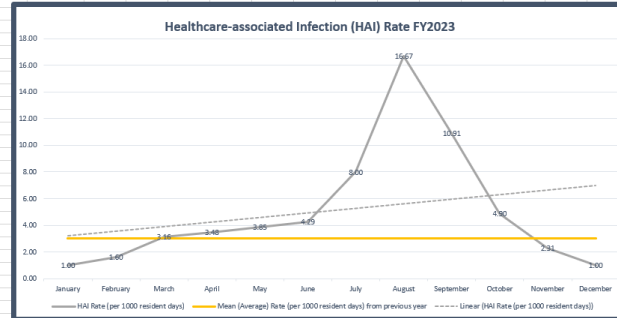
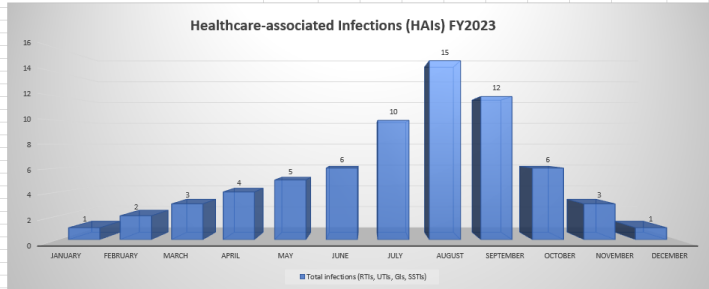
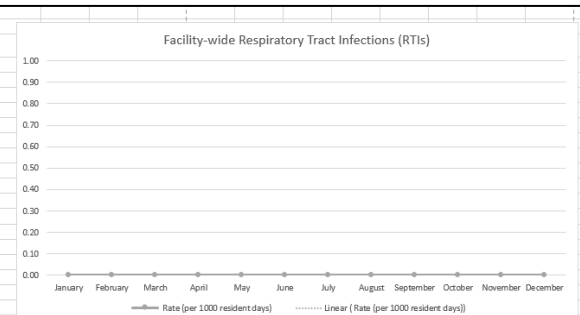


McGeer Criteria

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



Healthcare-Associated Infections (HAI) Surveillance & Dashboard

[illegible][illegible][illegible]

- [AHS HAI Surveillance & Dashboard Tool](#)
 - Modifiable spreadsheet (with automated formulas) designed to support nursing facility infection prevention and control (IPC) surveillance
 - Line lists
 - Data tables
 - Graphs
 - Track & visualize healthcare-associated infections (HAIs)
 - Respiratory tract infections
 - Urinary tract infections
 - Gastrointestinal tract infections
 - Skin and soft tissue infections
 - Multi-drug resistant organisms (MDRO)

Infection Control Resources

Sepsis

[HQIC Sepsis Gap Assessment and Action Steps](#)
[HQIC Sepsis: Spot the Signs Magnet](#)
[HQIC Sepsis Provider Engagement](#)
[AQ Sepsis-ZoneTool](#)
[Recognition and Management of Severe Sepsis and Septic Shock](#)

[SHOW MORE](#)

Catheter Associated Urinary Tract Infection (CAUTI)

[CAUTI Gap Assessment Tool](#)
[Urinary Catheter Quick Observation Tool](#)
[CDC-HICPAC Guideline for Prevention of CAUTI 2009](#)
[AHRQ Toolkit for Reducing CAUTI in Hospitals](#)
[CDC TAP CAUTI Implementation Guide](#)

[SHOW MORE](#)

Hand Hygiene

[Handwash the FROG Way – Badges – English](#)
[Handwash the FROG Way – Badges – Spanish](#)
[Handwash the FROG Way – Poster – English](#)
[Handwash the FROG Way – Poster – Spanish](#)
[Frequently Asked Questions – Alcohol Based Hand Rub](#)

NHSN

[Joining the Alliant Health Solutions NHSN Group](#)
[Instructions for Submitting C. difficile Data into NHSN](#)
[5-Step Enrollment for Long-term Care Facilities](#)
[CDC's National Healthcare Safety Network \(NHSN\)](#)
[NHSN Enrollment/ LAN Event Presentation](#)

Clostridioides Difficile Infection (C. difficile)

[Session Two: Clostridioides difficile – Treatment Update and Antibiotic Stewardship Interventions](#)
[C.difficile Training](#)
[Nursing Home Training Sessions Introduction](#)
[Nursing Home C.difficile Infection](#)

Antibiotic Stewardship

[Antibiotic Stewardship Basics](#)
[A Field Guide to Antibiotic Stewardship in Outpatient Settings](#)
[Physician Commitment Letter](#)
[Be Antibiotics Aware](#)
[Taking Your Antibiotics](#)

[SHOW MORE](#)

Training

[Options for Infection Control Training in Nursing Homes Flyer](#)

COVID-19

[Invest in Trust \(AHRQ Resource for CNA COVID-19 Vaccines\)](#)
[Nursing Home Staff and Visitor Screening Toolkit – PDF](#)
[Nursing Home Staff and Visitor Screening Toolkit – Excel](#)
[COVID-19 Self Management Zone Tool](#)
[COVID-19 Self Management Zone Tool – Spanish](#)
[Personal Protective Equipment \(PPE\) Burn Rate Calculator](#)
[Toolkit on State Actions to Mitigate COVID-19 Prevalence in Nursing Homes](#)

HAI Surveillance

[AHS HAI Surveillance & Dashboard Tool](#)

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

Questions?



Nursing Home and Partnership for Community Health: CMS 12th SOW GOALS



OPIOID UTILIZATION AND MISUSE

Promote opioid
best practices
•
Reduce opioid
adverse drug events
in all settings



PATIENT SAFETY

Reduce hospitalizations
due to c. diff
•
Reduce adverse
drug events
•
Reduce facility
acquired infections



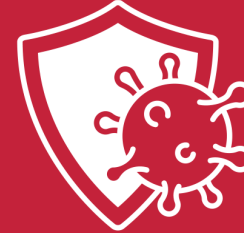
CHRONIC DISEASE SELF- MANAGEMENT

Increase instances of
adequately diagnosed
and controlled
hypertension
•
Increase use of cardiac
rehabilitation programs
•
Reduce instances of
uncontrolled diabetes
•
Identify patients at high-
risk for kidney disease
and improve outcomes



CARE COORDINATION

Convene community
coalitions
•
Reduce avoidable
readmissions,
admissions to hospitals
and preventable
emergency department
visits
•
Identify and promote
optimal care for super
utilizers



COVID-19

Support nursing
homes by establishing
a safe visitor policy
and cohort plan
•
Provide virtual events
to support infection
control and prevention
•
Support nursing
homes and
community coalitions
with emergency
preparedness plans



IMMUNIZATION

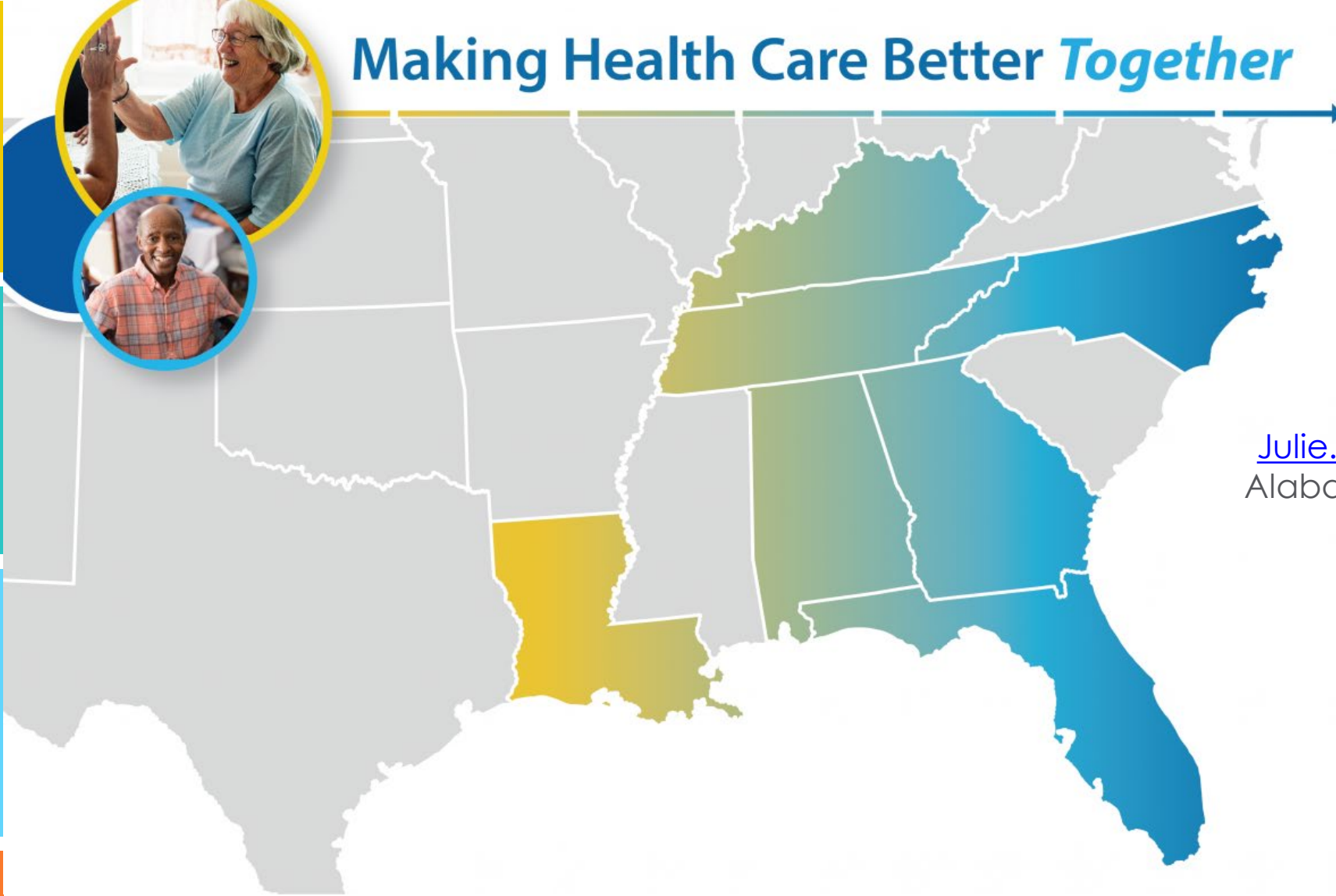
Increase influenza,
pneumococcal,
and COVID-19
vaccination rates



TRAINING

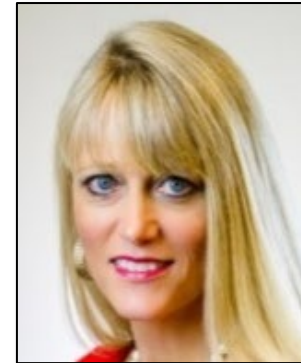
Encourage completion
of infection control and
prevention trainings by
front line clinical and
management staff

Making Health Care Better *Together*



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Making Health Care Better *Together*



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