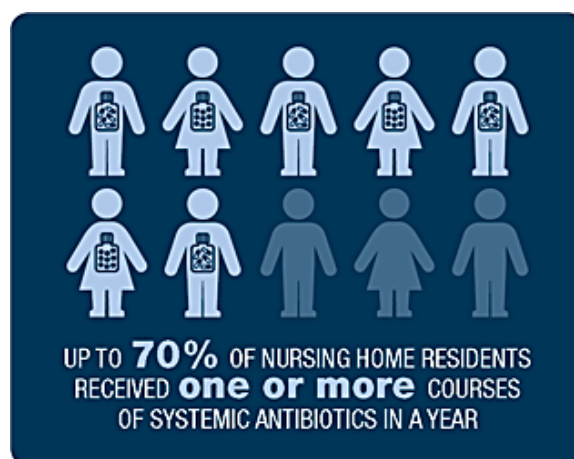


*Available in TIP Toolkit, Page 137

Infection Definitions Pocket Card

Pocket cards with the minimum criteria to initiate antibiotics¹ and the revised McGeer's infection surveillance definitions² for catheter-associated urinary tract infection (CAUTI), pneumonia, skin and soft tissue infection, and the constitutional criteria for long-term care residents were created to raise awareness of infection criteria among healthcare personnel. Pocket cards with the revised McGeer infection surveillance definitions are shown below. Print the cards double-sided, cut along the horizontal line, and fold along the vertical line to create two pocket cards. You can distribute these cards to nurses and nurse aides as a useful guide when assessing residents for presence of potential infection. These cards will be also useful for physicians and other care providers to evaluate residents for the presence of signs and symptoms before prescribing antibiotics.



CDC. The Core Elements of Antibiotic Stewardship for Nursing Homes. Atlanta, GA:US Department of Health and Human Services, CDC; 2015. Available at: <http://www.cdc.gov/longtermcare/index.html>

1. Loeb M, Bentley DW, Bradley S, et al. Development of minimum criteria for the initiation of antibiotics in residents of long-term-care facilities: results of a consensus conference. *Infect Control Hosp Epidemiol* 2001;22(2):120-124.

2. Stone ND, Ashraf MS, Calder J, et al. Surveillance definitions of infections in long-term care facilities: revisiting the McGeer criteria. *Infect Control Hosp Epidemiol* 2012; 33:965–77.

Respiratory Tract Infection Pneumonia

Criteria for defining Pneumonia in long-term care residents:

- Interpretation of chest radiograph as demonstrating pneumonia or new infiltrate

AND

One or more of the following:

- New or increased cough
- New or increased sputum production
- O₂ saturation <94% on room air or a reduction in O₂ saturation of 3% from baseline
- New or changed lung examination abnormalities
- Pleuritic chest pain
- Respiratory rate >25 breaths/min

AND

One or more of the following:

- Fever*
- Increased white blood cell count*
- New onset confusion (acute change in mental status) from baseline
- New onset change in functional status from baseline

Catheter-associated Urinary Tract Infection (CAUTI)

Criteria for defining CAUTI in long-term care residents:

One or more of the following:

- Fever*
- Rigors (shaking chills)
- New onset hypotension
- New onset confusion/functional decline AND increased white blood cell count*
- New costovertebral angle pain or tenderness
- New or increased suprapubic pain or tenderness
- Acute pain, tenderness, or swelling of the testes, epididymis, or prostate
- Pus around the catheter site

AND

Any of the following:

If catheter removed in last 2 calendar days:

- Voided urine culture positive with no more than 2 species of microorganisms, at least 1 of which is bacteria of $\geq 100,000$ colony forming units (CFU)/ml
- In/Out catheter urine culture positive with any number of microorganisms, at least 1 of which is bacteria of ≥ 100 colony forming units (CFU)/ml

If catheter in place:

- Indwelling catheter urine culture positive with any number of microorganisms, at least 1 of which is bacteria of $\geq 100,000$ colony forming units (CFU)/ml

Respiratory Tract Infection Pneumonia

Criteria for defining Pneumonia in long-term care residents:

- Interpretation of chest radiograph as demonstrating pneumonia or new infiltrate

AND

One or more of the following:

- New or increased cough
- New or increased sputum production
- O₂ saturation <94% on room air or a reduction in O₂ saturation of 3% from baseline
- New or changed lung examination abnormalities
- Pleuritic chest pain
- Respiratory rate >25 breaths/min

AND

One or more of the following:

- Fever*
- Increased white blood cell count*
- New onset confusion (acute change in mental status) from baseline
- New onset change in functional status from baseline

Catheter-associated Urinary Tract Infection (CAUTI)

Criteria for defining CAUTI in long-term care residents:

One or more of the following:

- Fever*
- Rigors (shaking chills)
- New onset hypotension
- New onset confusion/functional decline AND increased white blood cell count*
- New costovertebral angle pain or tenderness
- New or increased suprapubic pain or tenderness
- Acute pain, tenderness, or swelling of the testes, epididymis, or prostate
- Pus around the catheter site

AND

Any of the following:

If catheter removed in last 2 calendar days:

- Voided urine culture positive for $\geq 100,000$ colony forming units (CFU)/ml of no more than 2 species of microorganisms
- In/Out catheter urine culture positive for ≥ 100 colony forming units (CFU)/ml of any number of microorganisms

If catheter in place:

- Indwelling catheter urine culture positive with any number of microorganisms, at least 1 of which is bacteria of $\geq 100,000$ colony forming units (CFU)/ml

Skin and Soft Tissue Infection (SSTI)

Criteria for defining SSTI in long-term care residents:

- Pus present at a wound, skin, or soft tissue site.

OR

Four or more of the following:

- Heat at the affected site
- Redness at the affected site
- Swelling at the affected site
- Tenderness or pain at the affected site
- Serous drainage at the affected site
- One or more** of the following:
 - Fever*
 - Increased white blood cell count*
 - New onset confusion (acute change in mental status) from baseline
 - New onset change in functional status from baseline

*Constitutional Criteria for Long-term Care Residents

Fever

Must have one of the following:

- Single oral temperature >100°F (37.8°C)
- Repeated oral temperature >99°F (37.2°C) **OR** rectal temperature >99.5°F (37.5°C)
- Single temperature >2°F (1.1°C) over baseline from any site (oral, tympanic, axillary)
- + Presence of fever, even if due to another cause, should still be counted as part of meeting an infection definition

Increased White Blood Cell Count (Leukocytosis)

Must have one of the following:

- >14,000 white blood cells (leukocytes)/mm³
- Increase in immature white blood cells (Left Shift) with >6% bands or >1,500 bands/mm³

Acute Change in Mental Status

All components must be present:

- Acute onset (a new change)
- Fluctuating course (behavior change coming and going, or changing in severity)
- Inattention (difficulty focusing attention)
- Disorganized thinking (thinking is incoherent or hard to follow)

OR

Altered level of consciousness (change is different from baseline, may be sleepy, lethargic, difficult to arouse)

Acute Functional Decline

- New 3 point increase in Total activities of daily living (ADL) score from baseline (range: 0-28)

Each ADL scored from 0 (independent) to 4 (totally dependent), including: bed mobility, transfer, locomotion within facility, dressing, toilet use, personal hygiene, and eating

Skin and Soft Tissue Infection (SSTI)

Criteria for defining SSTI in long-term care residents:

- Pus present at a wound, skin, or soft tissue site.

OR

Four or more of the following:

- Heat at the affected site
- Redness at the affected site
- Swelling at the affected site
- Tenderness or pain at the affected site
- Serous drainage at the affected site
- One or more** of the following:
 - Fever*
 - Increased white blood cell count*
 - New onset confusion (acute change in mental status) from baseline
 - New onset change in functional status from baseline

*Constitutional Criteria for Long-term Care Residents

Fever

Must have one of the following:

- Single oral temperature >100°F (37.8°C)
- Repeated oral temperature >99°F (37.2°C) **OR** rectal temperature >99.5°F (37.5°C)
- Single temperature >2°F (1.1°C) over baseline from any site (oral, tympanic, axillary)
- + Presence of fever, even if due to another cause, should still be counted as part of meeting an infection definition

Increased White Blood Cell Count (Leukocytosis)

Must have one of the following:

- >14,000 white blood cells (leukocytes)/mm³
- Increase in immature white blood cells (Left Shift) with >6% bands or >1,500 bands/mm³

Acute Change in Mental Status

All components must be present:

- Acute onset (a new change)
- Fluctuating course (behavior change coming and going, or changing in severity)
- Inattention (difficulty focusing attention)
- Disorganized thinking (thinking is incoherent or hard to follow)

OR

Altered level of consciousness (change is different from baseline, may be sleepy, lethargic, difficult to arouse)

Acute Functional Decline

- New 3 point increase in Total activities of daily living (ADL) score from baseline (range: 0-28)

Each ADL scored from 0 (independent) to 4 (totally dependent), including: bed mobility, transfer, locomotion within facility, dressing, toilet use, personal hygiene, and eating