



Nursing Home Antimicrobial Stewardship Guide Determine Whether To Treat

Toolkit 3. Minimum Criteria for Common Infections Toolkit

Tool 1. Sample Policy

[NAME OF NURSING HOME]

Protocol for Three Common Infections

[DATE]

Between 25 percent and 75 percent of antibiotic prescriptions in nursing homes do not meet clinical guidelines for prescribing. Unnecessary antibiotics can result in side effects and drug-resistant bacteria. Unnecessary prescribing practices by prescribing clinicians and overuse of newer, broad-spectrum antibiotics when either no antibiotic or a narrow-spectrum drug would suffice are large contributors to this problem. The Minimum Criteria for Common Infections toolkit (“Minimum Criteria toolkit”) aims to reduce unnecessary prescribing for the three infections where antibiotics are most frequently prescribed in nursing homes: (1) urinary tract infections (UTIs), (2) lower respiratory tract infections, and (3) skin and soft tissue infections.

To improve appropriate antibiotic use for the residents at [NAME OF NURSING HOME], the minimum criteria for three common infections will be implemented on [DATE].

The minimum criteria are shown below. [NAME OF NURSING HOME] will be using [INDICATE WHICH TOOL(S) THE NURSING HOME WILL USE, I.E., THE FAXES, THE LETTER, THE WEB APP, OR THE TRAINING]



Minimum Criteria for Initiating Antibiotics for a Urinary Tract Infection

For residents without an indwelling catheter, initiate antibiotics if the resident meets criteria of one of three situations:

1. Acute dysuria alone

OR

2. Fever of 100°F (37.9°C) or two repeated temperatures of 99°F (37°C) **AND** at least **one** of the following:

New or worsening:

- Urgency, or
- Frequency, or
- Suprapubic pain, or
- Gross hematuria, or
- Costovertebral angle tenderness, or
- Urinary incontinence

OR

3. No fever, then **two** or more of the following:

- Urgency, or
- Frequency, or
- Suprapubic pain, or
- Gross hematuria, or
- Urinary incontinence

For residents with a chronic indwelling catheter, initiate antibiotics if one or more of the following criteria are met:

- Fever of 100°F (37.9°C) or two repeated temperatures of 99°F (37°C), or
- New or worsening costovertebral tenderness, or
- New onset suprapubic pain, or
- New or worsening delirium (sudden onset of confusion, disorientation, dramatic change in mental status), or
- New or worsening rigors (shaking chills) with or without identified cause, or
- New or worsening hypotension (e.g., significant change from baseline BP or a systolic BP <90)

Notes:

1. Urine cultures should not be performed on a scheduled basis (e.g., monthly).
2. Urine cultures should **not** be used to identify UTIs in the absence of symptoms.

3. Smelly or cloudy urine is **not** a symptom of a UTI.
4. Residents with an intermittent catheter or a condom catheter should be evaluated as if they are not catheterized.
5. Urine cultures should be used to identify the most appropriate antibiotic. For residents with acute dysuria, it may be appropriate to initiate empirical antibiotic therapy; but for all other symptoms, wait for a urine culture.
6. For residents that regularly run a lower temperature, use a temperature of 2°F (1°C) above the baseline as a definition of a fever.

If none of the minimum criteria are met, consider initiating the following:

- Encourage _____ ounces of liquid intake _____ daily until urine is light yellow in color.
- Record fluid intake every _____ hours for _____ hours.
- Assess vital signs, including temp, every _____ hours for _____ hours.
- Request notification if symptoms worsen or if unresolved in _____ hours.

Minimum Criteria for Initiating Antibiotics for a Skin and Soft Tissue Infection

Initiate antibiotics if the following criteria are met:

- New or increasing purulent drainage at a wound, skin, or soft-tissue site

OR

- At least **two** of the following:
 - Fever (temperature > 100°F [37.9°C] or two repeated temperatures of 99°F [37°C]), or
 - Redness, or
 - Tenderness, or
 - Warmth, or
 - Swelling that is new or increasing at the affected site

Notes:

1. For residents that regularly run a lower temperature, use a temperature of 2°F (1°C) above the baseline as a definition of a fever.
2. Herpes zoster is a virus and therefore does not require antibiotics but appropriate antivirals.
3. Odor is not a standalone criterion for treatment with antibiotics
4. Deeper infections such as bursitis may present with similar signs/symptoms.
5. Underlying osteomyelitis should be considered when managing a resident with an infected diabetic or decubitus ulcer.
6. Thromboembolic disease should be considered when a resident presents with an erythematous or swollen leg.
7. These criteria do not apply to residents with burns.
8. Gout can at times be mistaken for cellulitis or vice versa.

If none of the minimum criteria are met, consider initiating the following:

- Assess vital signs, including temp, every _____ hours for _____ hours; and/or
- Notify Physician/NP/PA if symptoms worsen or if unresolved in _____ hours.

Regardless of whether the minimum criteria are met or not, consider initiating the following:

- For discomfort or prior to cleaning/dressing changes, consider using acetaminophen or other pain relievers as needed.

Minimum Criteria for Initiating Antibiotics for a Lower Respiratory Tract Infection

If a resident has a fever of >102°F (38.9°C), initiate antibiotics if one of the following criteria are met:

- Respiratory rate >25 breaths per minute, or
- Productive cough

If a resident has a fever of 100°F (37.9°C) but less than 102°F (38.9°C), initiate antibiotics if the following criteria are met:

- Cough **AND** at least 1 of the following:
 - Pulse >100, or
 - Delirium (sudden onset of confusion, disorientation, dramatic change in mental status), or
 - Rigors (shaking chills), or
 - Respiratory rate >25

Delirium is defined as a disturbance of consciousness with reduced ability to focus, shift, or sustain attention; change in cognition (such as memory deficit, disorientation) or development of a perceptual disturbance not better accounted for by dementia; and development of symptoms over a short period of time, with a tendency to fluctuate during the day.

If a resident is afebrile with COPD, and classified as high-risk because of age >65, initiate antibiotics if the following criterion is met:

- New or increased cough with purulent sputum production

If a resident is afebrile without COPD, and classified as high-risk because of age >65, initiate antibiotics if the following criteria are met:

- New or increased cough with purulent sputum production **AND** at least 1 of the following:
 - Respiratory rate >25, or
 - Delirium (sudden onset of confusion, disorientation, dramatic change in mental status)

If none of the minimum criteria are met, consider initiating the following:

- Assess vital signs, including temp, every _____ hours for _____ hours.
- Notify Physician/NP/PA if symptoms worsen or if unresolved in _____ hours.

Regardless of whether the minimum criteria are met or not, avoid antihistamines (especially Benadryl) and consider initiating the following:

- For cough, consider using a cough suppressant.
- For discomfort, consider using acetaminophen or other pain reliever.
- Consider using a heating pad or hot water bottle on the chest at bedtime for ____ minutes, although caution is advised.
- Raise upper body (use multiple pillows) to sleep/rest.
- Encourage ____ ounces of fluid by mouth or G-tube for ____ days or until urine is light yellow in color.
- Encourage salt water gargles.
- Record fluid intake for ____ days.
- Initiate intravenous fluid hydration and/or initiate hypodermoclysis.

As necessary, request a chest X-Ray.

[NAME AND TITLE OF AUTHORIZING OFFICER]

[DATE]

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