

Loeb Minimum Criteria for Initiation of Antibiotics

Skin and Soft-Tissue Infections

Minimum criteria for initiation antibiotic therapy for a suspected skin or soft-tissue infection in a resident of a facility includes either:

1. New or increasing purulent drainage at a wound, skin, or soft-tissue site; OR
2. At least two of the following:
 - a. Fever
 - a. Temperature > 37.9°C (100°F) or
 - b. Increase of 1.5°C (2.4°F) from baseline temperature
 - b. Redness or tenderness or warmth
 - c. Swelling that was new or increasing at the affected site

Respiratory Infections

If the residents is febrile with a temperature > 38.9°C (102 degrees F), minimum criteria for initiating antibiotics for a suspected lower respiratory infection include at least one of the following:

- a. Respiratory rate >25 breaths per minute, OR
- b. Productive cough

If the resident has a temperature greater than > 37.9°C (100° F) but under or equal to 38.9°C (102°F) minimum criteria for initiating antibiotics include:

1. The presence of a cough, AND
2. At least one of the following:
 - a. Pulse > 100 beats/min
 - b. Delirium
 - c. Shaking chills
 - d. Respiratory rate > 25 breaths per minute

For afebrile residents who have chronic obstructive pulmonary disease and age > 65 years old, presence of a new or increasing cough with purulent sputum meets minimum criteria for antibiotic use.

For afebrile residents who do not have chronic obstructive pulmonary disease (COPD) and are >65, minimum criteria for initiating antibiotics include:

1. A new cough with purulent sputum production, AND
2. Respiratory rate over or equal to 25 or
3. Delirium

Urinary Tract Infections:

Without indwelling urinary catheters:

1. Acute dysuria or
2. Fever (> 37.9°C [100°F]) and at least one of the following:
3. New or worsening urgency
4. Frequency
5. Suprapubic pain
6. Gross hematuria
7. Costovertebral angle tenderness
8. Urinary incontinence

With chronic indwelling urinary catheter:

1. At least one of the following:
2. Fever > 37.9°C (100°F)
3. New costovertebral angle tenderness
4. Shaking chills
5. New onset delirium

Fever without obvious focus of infection:

1. Fever (37.9°C [100°F] and at least one of the following:
2. New onset of delirium
3. Shaking chills.

Source: Loeb et al, "Development of Minimum Criteria for the Initiation of Antibiotics in Residents of Long-Term-Care Facilities: Results of a Consensus Conference." *Infection Control and Hospital Epidemiology*. (2001) 22(2): 120-124.

Rhee, A.M, & Stone, N.D. (2014) Antimicrobial Stewardship in Long-term Care Facilities. *Infect Dis Clin N Am*, 28, 237-246.