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| Resident First Name  Updated McGeer Criteria for Infection Surveillance Tool | | Resident Last Name | | | | Resident DOB | Resident Medical Record/ID Number | | | |
|  | |  | | | |  |  | | | |
| Resident Unit/ Room | | Date of Infection | | | | Date of Review | Name of Reviewer | | | |
|  | |  | | | |  |  | | | |
| Infection/Syndrome Reviewed | | | | | | | Surveillance Criteria Met | | | |
| □ Respiratory Tract Infection (RTI)  □ Urinary Tract Infection (UTI)  □ Skin/Soft Tissue, and Mucosal Infections (SSTI)  □ Gastrointestinal Tract Infection (GITI) | | | | | | | □ YES  □ NO | | | |
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| **Table 1. Constitutional Infection Criteria** | | | | | | | | | | |
| **Fever** | **Leukocytosis** | | | | **Altered Mental Status\*** | | | | **Acute Functional Decline** | |
| **One** of the following:  □ Single oral temp >37.8°C (>100°F)  □ Repeated oral temp >37.3°C (99°F)  or rectal temp >37.5°C (99.5°F)  □ Single temp >1.1°C (>2°F) over  baseline from any site (oral,  tympanic, axillary) | **One** of the following:  □ Elevated WBC  (>14,000 cells/mm3)  □ Left Shift on Differential  (>6% bands or ≥1,500 bands/mm3) | | | | **All** of the following:  □ Acute onset  □ Fluctuating Behavior  □ Inattention  □ Disorganized thinking/  altered level of consciousness | | | 3-point increase from baseline:  □ Activities of daily living, each scored from 0 – 4  (Independent to total dependence)  - Bed mobility - Toileting  - Transfer - Personal Hygiene  - Locomotion within LTCF - Eating  - Dressing | | |
| \*Altered Mental Status Assessment Method Criteria | | | | | | | | | | |
| Acute Onset | | | *New, rapid change from baseline* | | | | | | | |
| Fluctuating Behavior | | | *Behavior coming and going or changing in severity during the assessment* | | | | | | | |
| Inattention | | | *Difficulty focusing attention (e.g., unable to keep track of discussion or easily distracted)* | | | | | | | |
| Disorganized Thinking | | | *Incoherent (e.g., rambling conversation, unclear flow of ideas, unpredictable switches in subject/topic)* | | | | | | | |
| Altered Level of Consciousness | | | *Level of consciousness is different from baseline (e.g., hyperalert, sleepy, drowsy, difficult to arouse, nonresponsive)* | | | | | | | |
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| **Table 2. Respiratory Tract Infection (RTI) Surveillance Criteria** | | | | | | | | | | |
| **Syndrome** | | | | **Criteria** | | | | | | **Notes/Comments** |
| Common Cold or Pharyngitis | | | | At least **2** of the following must be met:  □ Runny nose or sneezing  □ Stuffy nose (e.g., congestion)  □ Sore throat or hoarseness or difficulty swallowing  □ Dry cough  □ Swollen or tender glands in the neck (cervical  lymphadenopathy) | | | | | | Fever may or may not be present during illness.  Symptoms must be new and not attributable to allergies. |
| Influenza-like Illness | | | | **Both** of the following must be met:  □ Fever  **AND**  □ At least **3** of the following:  Chills  New headache or eye pain  Myalgias or body aches  Malaise or loss of appetite  Sore throat  New or increased dry cough | | | | | | If criteria for influenza-like illness and another respiratory tract infection are met at the same time, only the influenza-like illness should be recorded.  Because of the increasing uncertainty regarding the beginning of influenza season, peak influenza activity, and the length of influenza season, “seasonality” is no longer considered criterion for defining influenza-like illness. |
| Pneumonia | | | | **All** of the following must be met:  □ Chest radiograph demonstrating pneumonia  ***OR*** the presence of a new infiltrate  **AND**  □ At least **1** of the following:  New or increased cough  New or increased sputum production  O2 saturation <94% on room air  ***OR*** >3% reduction from baseline  New or changed lung examination abnormalities  Pleuritic chest pain  Respiratory rate >25 breaths/min  **AND**  □ At least **1** of the constitutional criteria (Table 1) | | | | | | The presence of underlying conditions that could mimic the presentation of a respiratory infection (e.g., congestive heart failure or interstitial lung diseases) should be excluded by review of clinical records and an assessment of presenting signs and symptoms. |
| Lower Respiratory Tract Infections (Bronchitis or Tracheobronchitis) | | | | **All** of the following must be met:  □ Chest radiograph not performed  ***OR*** negative results for pneumonia or new infiltrate  **AND**  □ At least **2** of the following  New or increased cough  New or increased sputum production  O2 saturation <94% on room air  ***OR*** >3% reduction from baseline  New or changed lung examination abnormalities  Pleuritic chest pain  Respiratory rate >25 breaths/min  **AND**  □ At least **1** of the constitutional criteria (Table 1) | | | | | | The presence of underlying conditions that could mimic the presentation of a respiratory infection (e.g., congestive heart failure or interstitial lung diseases) should be excluded by review of clinical records and an assessment of presenting signs and symptoms. |
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| **Table 3. Urinary Tract Infections (UTI) Surveillance Criteria** | | | | | | | | | | |
| **Syndrome** | | | | **Criteria** | | | | | | **Notes/Comments** |
| UTI  (Without indwelling urinary catheter) | | | | **Both** of the following must be met:  □ At least **1** of the following:  Acute dysuria  Acute pain, swelling, or tenderness of the testes,  epididymis, or prostate  With fever/leukocytosis (**+** at least **1** of the following):  Acute costovertebral angle pain or tenderness  Suprapubic pain  Gross hematuria  New or marked increase in incontinence  New or marked increase in urgency  New or marked increase in frequency  Without fever/leukocytosis, (**+** at least **2** of the following):  Suprapubic pain  Gross hematuria  New or marked increase in incontinence  New or marked increase in urgency  New or marked increase in frequency  **AND**  □ **One** of the following microbiologic criteria:  - Voided urine sample:  At least 105 cfu/mL of ≤ 2 species of microorganisms  - In-and-out catheter sample:  At least 102 cfu/mL of any number of microorganisms | | | | | | UTI should be diagnosed when there are localizing genitourinary signs and symptoms and a positive urine culture result.  A diagnosis of UTI can be made without localizing symptoms if a blood culture isolate is growing the same organism as the urine culture and there is no alternate site of infection.  In the absence of a clear alternative source of infection, fever or rigors, and a positive urine culture result in the non-catheterized resident or acute confusion in the catheterized resident, will often be treated as UTI. However, evidence suggests that most of these episodes are likely **not** due to infection of a urinary source.  Urine specimens for culture should be processed as soon as possible, preferably within 1-2h. If specimen cannot be processed within 30 mins, it should be refrigerated and cultured within 24hrs. |
| UTI  (With indwelling urinary catheter) | | | | **Both** of the following must be met:  □ At least **1** of the following:  Fever, rigors, or new-onset hypotension  (With no alternate site of infection)  Acute change in mental status or acute functional decline  (With no alternate diagnosis and leukocytosis)  New-onset suprapubic pain or costovertebral angle pain  or tenderness  Purulent discharge from around the catheter entry point  Acute pain, swelling, or tenderness of the testes,  epididymis, or prostate  **AND**  □ Urinary catheter specimen with at least 105 cfu/mL of any  organism(s) | | | | | | Recent catheter trauma, catheter obstruction, or new-onset hematuria are useful localizing signs that are consistent with UTI but are not necessary for diagnosis.  Urinary catheter specimens for culture should be collected following replacement of the catheter (if current catheter has been in place for >14 days).  Urinary catheter specimens for cultures should not be collected from the urine collection bag. |
| Notes: Pyuria does not differentiate symptomatic UTI from asymptomatic bacteriuria. Absence of pyuria in diagnostic tests excludes symptomatic UTI in residents of long-term care facilities. | | | | | | | | | | |
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| **Table 4. Skin, Soft Tissue, and Mucosal Infection Surveillance (SSTI) Criteria** | | | | | | | | | | |
| **Syndrome** | | **Criteria** | | | | | | | **Notes/Comments** | |
| Cellulitis, Soft Tissue, or Wound Infection | | At least **1** of the following must be met:  □ Pus present at a wound, skin, or soft tissue site  □ New or increasing presence of at least **4** of the following signs or  symptoms:  Heat at the affected site  Redness at the affected site  Swelling at the affected site  Tenderness at the affected site  Serous drainage at the affected site  One constitutional criterion (Table 1) | | | | | | | Presence of organisms cultured from the surface (e.g., superficial swab sample) of a wound is not sufficient evidence that the wound is infected.  More than 1 resident with Streptococcal skin infection from the same serogroup (e.g., Group A, B, C, G) in a long-term care facility may indicate an outbreak | |
| Scabies | | **Both** of the following must be met:  □ A maculopapular and/or itching rash  **AND**  □ At least **1** of the following:  Physician diagnosis  Laboratory confirmed scraping or biopsy  Epidemiological link to a laboratory confirmed case of scabies | | | | | | | An epidemiological link to a case can be considered if there is evidence of geographic proximity in the facility, temporal relationship to the onset of symptoms, or evidence of common source or exposure (i.e., shared caregiver).  Care must be taken to rule out rashes due to skin irritation, allergic reactions, eczema, and other noninfectious skin conditions. | |
| Oral Candidiasis | | **Both** of the following must be met:  □ Presence of raised white patches on inflamed mucosa or plaques  on oral mucosa  **AND**  □ Diagnosis by a medical or dental provider | | | | | | | Mucocutaneous Candida infections are usually due to underlying clinical conditions such as poorly controlled diabetes or severe immunosuppression.  Although they are not transmissible infections in the healthcare setting, they can be a marker for increased antibiotic exposure. | |
| Fungal Skin Infections | | **Both** of the following must be met:  □ Characteristic rash or lesions  **AND**  □ Either medical provider diagnosis or laboratory confirmation | | | | | | | Dermatophytes have been known to cause occasional infections and rare outbreaks in the long-term care facility setting. | |
| Herpes Simplex (HSV) Infection | | **Both** of the following must be met:  □ A vesicular rash  **AND**  □ Either physician diagnosis or laboratory confirmation | | | | | | | Reactivation of herpes simplex (“cold sores”) is not considered a healthcare-associated infection.  Primary herpesvirus skin infections are very uncommon in a long-term care facility except in pediatric populations, where it should be considered healthcare associated. | |
| Varicella Zoster (VZV) Infection | | **Both** of the following must be met:  □ A vesicular rash  **AND**  □ Either physician diagnosis or laboratory confirmation | | | | | | | Reactivation of VZV (“Shingles”) is not considered a healthcare-associated infection.  Primary VZV infections (“Chickenpox”) are very uncommon in a long-term care facility except in pediatric populations, where it should be considered healthcare associated. | |
| Conjunctivitis | | At least **1** of the following must be met:  □ Pus appearing from 1 or both eyes, present for at least 24 hours.  □ New or increased conjunctival erythema, with or without itching  □ New or increased conjunctival pain, present for at least 24 hours | | | | | | | Conjunctivitis (‘pink eye”) symptoms should not be due to allergic reaction or trauma. | |
| Notes: For wound infections related to surgical procedures, long-term care facilities should use the CDC’s National Healthcare Safety Network (NHSN) Surgical Site Infection (SSI) criteria and report these infections back to the institution where the original surgery was performed. | | | | | | | | | | |
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| **Table 5. Gastrointestinal (GI) Tract Infection Surveillance Criteria** | | | | | | | | | | |
| **Syndrome** | | | | **Criteria** | | | | | | **Notes/Comments** |
| Gastroenteritis | | | | At least **1** of the following must be met:  □ Diarrhea (3 or more liquid or watery stools above what is  normal for a resident within a 24hr period)  □ Vomiting (2 or more episodes in a 24hr period)  □ **Both** of the following signs or symptoms  A stool specimen testing positive for a pathogen  (e.g., Salmonella, Shigella, E coli O157:H7, Campylobacter  species, rotavirus)  ***AND***  At least **1** of the following:  Nausea  Vomiting  Abdominal pain or tenderness  Diarrhea | | | | | | Care must be taken to exclude noninfectious cases of symptoms. For instance, new medications may cause diarrhea, nausea, or vomiting; initiations of new enteral feeding may be associated with diarrhea; and nausea or vomiting may be associated with gallbladder disease.  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, E coli O157:H7) |
| Norovirus Gastroenteritis | | | | **Both** of the following must be met:  □ At least **1** of the following:  Diarrhea (3 or more liquid or watery stools above what is  normal for the resident within a 24hr period.  Vomiting (2 or more episodes within a 24hr period)  **AND**  □ A stool specimen for which norovirus is positively detected by electron microscopy, enzyme immunoassay, or molecular diagnostic testing such as polymerase chain reaction (PCR) | | | | | | In the absence of laboratory confirmation, an outbreak (2 or more cases occurring in a long-term care facility) of acute gastroenteritis due to norovirus infection may be assumed to be present if all of the following Kaplan Criteria are present:  1. Vomiting in more than half of the affected persons  2. A mean/median incubation period of 24-48hrs  3. A mean/median duration of illness of 12-60hrs  4. No bacterial pathogen is identified in stool culture. |
| Clostridioides difficile Infection (CDI) | | | | **Both** of the following must be met:  □ *One* of the following:  Diarrhea (3 or more liquid or watery stools above what  is normal for the resident within a 24hr period)  ***OR***  Presence of toxic megacolon (abnormal dilatation of the  large bowel documented on radiograph)  **AND**  □ *One* of the following:  A stool sample yields a positive laboratory test result from  C difficile toxin A and/or B, or a toxin-producing C difficile  isolate is identified from a stool sample culture or by  molecular diagnostic test such as PCR  ***OR***  Pseudomembranous colitis is identified during endoscopic  Examination, surgery, or in histopathologic examination  of a biopsy specimen. | | | | | | A “primary episode” of CDI is defined as one that has occurred within any previous history of CDI or that has occurred >8 wks after the onset of a previous episode of CDI.  A “recurrent episode” of CDI is defined as an episode of CDI that occurs within 8 wks after the onset of a previous episode, provided that the symptoms from the previous episode have resolved.  Individuals previously infected with C difficile may continue to remain colonized even after symptoms resolve.  In the setting of an outbreak of GI infection, individuals could have positive test results for the presence of C difficile because of ongoing colonization and also be coinfected with another pathogen. It is important that other surveillance criteria be used to differentiate infections in this situation. |

Adapted from:

Stone, et al. Surveillance Definitions of Infections in Long-Term Care Facilities – Revisiting the McGeer Criteria; ICHE 2012