#### Background

*Streptococcus pneumoniae* infections cause many clinical syndromes, depending on the site of infection (e.g., acute otitis media, pneumonia, bacteremia, or meningitis).

#### Clinical criteria for case classification

Not applicable.

#### Laboratory criteria for case classification

**Confirmatory:**
- Isolation of *S. pneumoniae* from a normally sterile site (e.g., blood, cerebrospinal fluid, joint fluid, pleural fluid, pericardial fluid)
- **And for resistant isolates:** intermediate- or high-level resistance of the *S. pneumoniae* isolate to at least one antimicrobial agent currently approved for use in treating pneumococcal infection.

**Presumptive:**
Identification of *S. pneumoniae* from a normally sterile body site by a culture-independent diagnostic test.

#### Epidemiological criteria for case classification

Not applicable.

#### Case classification

**Confirmed:**
A person with confirmatory laboratory criteria.

**Probable:**
A person with presumptive laboratory criteria.

#### Criteria to distinguish a new case from previous reports

A new case should be created when a positive laboratory result is received on a specimen collected more than 30 days after the most recently collected positive specimen associated with a previously reported case in the same individual.

#### Comments

Report both resistant and non-resistant isolates. *S. pneumoniae* invasive diseases cases in people ≥6 years old are only reportable for laboratories participating in electronic laboratory reporting (ELR). Cases in people ≥6 years old will be automatically created and reported in Merlin based on ELR results.
people ≥6 years old, case reports received from health care providers or via paper laboratory results do not need to be investigated or entered into Merlin; however, county health departments can choose to enter and report these cases.

All cases in children <6 years old are reportable for all laboratories and health care providers. All cases in children <6 years old need to be investigated and reported, regardless of the method through which the case reports were received. **Extended data in Merlin is only required for those cases in people <6 years old.**

Resistance defined by Clinical and Laboratory Standards Institute (CLSI) approved methods and CLSI-approved interpretive minimum inhibitory concentration (MIC) standards (µg/mL) for *S. pneumoniae*. CLSI recommends that all invasive *S. pneumoniae* isolates found to be “possibly resistant” to beta-lactams (i.e., an oxacillin zone size of <20 mm) by oxacillin screening should undergo further susceptibility testing by using a quantitative MIC method acceptable for penicillin, extended-spectrum cephalosporins, and other drugs as clinically indicated.