

Merlin disease code: 04800 *Streptococcus pneumoniae* Invasive Disease

[Paper case report form](#)

Merlin extended data required for cases <6 years

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. For 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 ($\mu\text{g/mL}$) 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.