Residents with pneumonia typically have productive cough, dyspnea, and malaise. Some, but not all, will have fever. They may also experience pleuritic chest pain and anorexia. Signs of pneumonia on physical exam may include tachypnea, tachycardia, fever or hypothermia, low oxygen levels, and delirium. Respiratory exam may reveal focal crackles.

**What organisms typically cause pneumonia?**

*Streptococcus pneumoniae* is the most common cause of community acquired pneumonia. Other common causes include *C pneumoniae*, and *Mycoplasma pneumoniae*. Viruses, including influenza A and B as well as respiratory syncytial virus can also cause pneumonia. Rarely, extremely ill or immunocompromised residents may have pneumonia caused by a fungus. This generally warrants hospitalization initially and the treatment course can be long.

**What is the best treatment for pneumonia?**

For most nursing home residents, pneumonia treatment options include amoxicillin-clavulanate or a cephalosporin plus a macrolide or doxycycline, or monotherapy with a respiratory fluoroquinolone (levofloxacin or moxifloxacin). Duration of treatment is typically 5 days but sometimes a longer treatment may be warranted. See the OPTIMISTIC pneumonia pathway for more information.

**When should a resident with pneumonia be hospitalized?**

In general, residents with persistent tachypnea, worsening hypoxia, sepsis, altered mental status or failure to improve with standard treatment should be considered for hospitalization if it is within their goals of care. Prognostic models can be helpful in addition to clinical judgment when deciding which residents should be hospitalized. The pneumonia severity index (PSI) and the CURB-65 are two tools that may aide in decisions regarding mortality and hospitalization.

**Should I obtain blood cultures in residents with pneumonia?**

It is not recommended that residents being treated for pneumonia have routine blood cultures done as part of their evaluation.

**When should I test for influenza?**

Influenza testing should be done when influenza viruses are circulating in the community.