



## Mucolytics

### Mucus-lighters

Mucolytics, such as acetylcysteine (Mucomyst), work to reduce the viscosity of tenacious secretions by increasing respiratory tract fluid and breaking up mucus.

## Expectorants

### Expelling-ants in mucus

Expectorants, such as guaifenesin, work to decrease surface tension and allows for mucus to be expelled by increasing the amount or hydration of secretions. The expectorant can also ease a cough, if one is present.

## Considerations

## Pneumococcal Vaccine

### Nude-cock Syringe

The pneumococcal vaccine (Pneumovax, Prevnar-13) is a vaccine against the bacterium *Streptococcus pneumoniae*, the organism responsible for around 23% of all fatal pneumonic cases. Pneumovax targets 23-different pneumococcal serotypes and is recommended for older adults 65 years and older and individuals at specific risk for developing pneumonia. Prevnar protects against 13-different pneumococcal serotypes and is approved for use in adults aged 50 years and over. Further, annual influenza and other vaccinations (e.g. COVID-19, MMR) are recommended for high-risk and general populations to comprehensively protect the transmission of disease to those at greatest risk.

## Sepsis

### Sepsis-snake

Sepsis can result from an infection anywhere in the body, including pneumonia. Be sure to monitor for signs of sepsis which include a fever ( $\geq 38$  degrees C), tachycardia ( $\geq 90$  bpm), tachypnea ( $\geq 20$  breaths), and abnormal white blood cells ( $\geq 12,000$  or  $\leq 4,000$  cells/mL).

## Acute Respiratory Failure (ARF)

### Acute-angle Dead Lungs

Acute respiratory failure is one of the top causes of mortality in patients with severe pneumonia. It occurs as a result of inadequate oxygen passing from the lungs into the blood. Signs and symptoms may include shortness of breath, rapid breathing, air hunger, cyanosis, or confusion.

## Prevention Education

### Prevention Educator

Prevention education targets behavior and populations at risk for infection or complications associated with pneumonia. Populations and population caregivers requiring education and support include older adults living in community settings, individuals who are immunocompromised, and children under the age of 5 years. Primary prevention includes emphasizing healthy lifestyle choices like smoking cessation, infection control (e.g. "hand hygiene"), social distancing and barriers (e.g. "face mask") to decrease viral transmission of disease, and proper nutrition, sleep and activity.