Pneumonia may be caused by:

- Bacteria. Pneumococcus, a type of bacteria, causes pneumococcal pneumonia, the most common type of bacterial pneumonia.
- Viruses. Influenza (flu) virus is one of the most common causes of viral pneumonia.
- Fungi (rare).
- Parasites (rare).

How is it spread?

- When a person with pneumonia sneezes, coughs, talks, or laughs, germs can spread into the air.
- The germs can spread to people and surfaces up to 6 feet away.
- Germs can spread to your hands if you touch anything that has the germs on it.
- If you then touch your eyes, nose or mouth before cleaning your hands, the germs can get into your body and you might get pneumonia.
- Can occur after contact with germs in your community or during a stay in a healthcare facility.

Pneumonia is an infection of one or both lungs.
Who is at risk?
- Adults age 65 years or older.
- Persons with certain chronic illnesses or conditions including asthma, diabetes or heart disease.
- Persons with a weakened immune system.
- Smokers.
- Children younger than 5 years of age.

What are signs of pneumonia?
- Cough (sometimes with thick, creamy, or bloody mucus).
- Fever.
- Chills.
- Tiredness.
- Confusion.
- Rapid breathing or shortness of breath.
- Chest pain.
- Loss of appetite.
- Headache.
- Nausea and vomiting.

How do you know if you have pneumonia?
A health care provider can look for pneumonia by:
- Asking questions about your symptoms.
- Listening to your lungs.
- Taking a chest X-ray.
- Taking a blood or mucus sample.
More tests may be done if it gets worse or if you have other health problems.

How is it treated?
- **Bacterial pneumonia** is treated with antibiotics.
- **Viral pneumonia** can be treated with antiviral drugs.
Mild cases of pneumonia can be treated at home with medicine and rest. Most severe cases are treated in a hospital. In addition to medicine, oxygen and other methods may be used to support breathing and body functions.

What can happen if pneumonia gets worse?
- The lungs cannot send enough oxygen to the body.
- Pus pockets and fluid can form around the lung.
- Infection can spread to other areas of the body.
- In severe cases, pneumonia can cause death.

Pneumonia causes about 1 million hospitalizations and about 50,000 deaths a year.
If you have pneumonia:
› Always finish treatment.
› Clean your hands often with soap and water or alcohol hand rub.
› Cough or sneeze into a tissue or into your sleeve.
› Do not share eating or drinking utensils, hand towels or toothpaste.
› Do not smoke.
› Clean surfaces often such as:
  • Countertops.
  • Refrigerator and freezer handels.
  • Doorknobs.
  • Light switches.

How can you avoid pneumonia?
› Get vaccinated. Discuss pneumococcal vaccine options with your health care provider.
› Keep your hands clean with soap and water or alcohol hand rub.
› Limit or avoid contact with people who are sick.
› Keep healthy. Eat the right foods and get enough sleep.

For more information on cleaning hands see Clean Hands on page 99.

Learn more:
Centers for Disease Control and Prevention (CDC):
  Pneumonia Can Be Prevented - Vaccines Can Help
  www.cdc.gov/Features/Pneumonia/
  Pneumococcal Vaccination
  www.cdc.gov/vaccines/vpd-vac/pneumo/default.htm
  Podcasts at CDC: Preventing Pneumonia
  www2c.cdc.gov/podcasts/player.asp?f=268703

U.S. National Library of Medicine:
  Pneumonia