Pneumonia

Definition: Pneumonia is an infection of one or both of the lungs caused by bacteria, viruses, or fungi.

What Causes Pneumonia?
The human nose and upper airway naturally filter germs and particles from the air; however, germs sometimes find a way to enter the lungs and cause infections. This is more likely to occur if your immune system is weak due to injury or illness or if your natural airway has been bypassed by a tracheostomy tube. When these germs reach your lungs they become inflamed and infected and react by producing secretions, fluid and pus. A weakened cough or increased mucous collection in the lungs can also put you at a higher risk for pneumonia.

What are the symptoms?
Pneumonia can first feel like a cold or the flu, but will often result in symptoms like a high fever, shaking, chills, and a cough with increased sputum production. The sputum is usually discolored and sometimes bloody. Other symptoms include shortness of breath, rapid-shallow breathing, chest pain, headache, excessive fatigue, and/or loss of appetite.

Risk Factors:
- Spinal cord injury
- Illness/injury: you have a greater risk of getting pneumonia if your immune system is weak
- Tracheostomy/breathing tube: anything that bypasses the body’s natural airway
- Prolonged bed rest
- Increased mucus production and ineffective cough
- Surgery: you may not be able to cough strongly after surgery or you may be on bed rest
- Anything that prevents your lungs from fully expanding (atelectasis)
How is it diagnosed?
A physician will diagnose pneumonia by reviewing a patient’s symptoms, physical examination, chest x-ray, sputum culture, or a blood draw to check for infection.

Prevention:
- Wash hands frequently and avoid sick people
- Get your flu and pneumonia vaccines
- Mobilize out of bed whenever possible
- Deep breathing
- Strong, effective cough
- Suctioning when needed
- Stop smoking
- Repositioning while in bed
- Take your breathing treatments and medications when they are ordered and scheduled

Treatment:
Many treatments and medications are designed specifically to help and prevent pneumonia and may include:
- Antibiotics for bacterial infections
- Supplemental oxygen
- Plenty of fluids, and rest
- Respiratory treatments may also be administered including suction to remove infected secretions. Your physician and Respiratory Therapist will decide which options are best suited to meet your needs.