Top 9 ways to reduce the risk of pneumonia if you or a loved one is hospitalized

What is pneumonia?

Pneumonia is an infection of the lungs. A variety of organisms, including bacteria, viruses and fungi, can cause pneumonia. Certain people are more likely to get sick with pneumonia including adults 65 years of age or older; children younger than 5 years of age; people who have medical conditions like diabetes, heart disease, or asthma; and people who smoke cigarettes.

Being in the hospital can place a patient at a higher risk of developing pneumonia because of procedures that disrupt normal breathing, like needing a "breathing tube" (also known as an endotracheal tube), inactivity, or taking certain medications.

What steps can I take with my healthcare team to prevent pneumonia when I'm in the hospital?

1. **Clean your hands – and make sure that your healthcare providers do the same.** Keeping your hands clean is the number one way to prevent the spread of infection. Clean your hands after using the bathroom; after sneezing, blowing your nose, or coughing; before eating; when visiting someone who is sick; or whenever your hands are dirty. This applies to visitors too.

   Healthcare providers should clean their hands before and after contact with a patient who has a breathing tube, and before and after contact with any respiratory device that is used on the patient, whether or not gloves are worn. In fact, healthcare providers should clean their hands before and after touching a patient, before a procedure, after being exposed to a patient's fluids, and after touching a patient's surroundings, whether or not the patient has a breathing tube.

2. **To tube or not to tube?** Ask what measures will be put in place to reduce your chances of needing a breathing tube, or to reduce the time you need to have one in place. Insertion of a breathing tube and being placed on a ventilator increase the chance of developing pneumonia. If you are having surgery, ask the anesthesiologist if it can be done with a regional or spinal anesthesia. Family members or advocates should ask healthcare providers to check on the patient's ability to breathe on their own every day so that the breathing tube can come out as quickly as possible. If a patient is unable to ask any of these questions, a friend or family member should ask on the patient's behalf.

3. **Wear the right things.** Healthcare providers should wear gowns, gloves, masks, or face shields when performing certain tasks like suctioning the patient's secretions and inserting a breathing tube, and change them after they are soiled with respiratory secretions. Protective coverings keep germs from moving from healthcare providers to patients.

4. **Take a deep breath and get moving!** If you have been given a breathing exercise using an "incentive spirometer" (a device with plastic balls and tubes), do the exercises as often as your healthcare provider asks you to. When healthcare providers urge you to get up and walk around, it's not just your muscles they want to work. Taking deep breaths and moving around as much as you can also help reduce your chances of acquiring pneumonia.

5. **Raise the head of the bed.** Ask healthcare providers whether the head of your hospital bed should be elevated at an angle of 30-45 degrees to reduce the chances you will breathe in secretions or have something "go down the wrong pipe." If a patient is unable to ask about the angle of the bed, a friend or family member should ask on the patient's behalf.

6. **Take a "sedation vacation."** Family members should ask the healthcare team if their loved one is able to have their sedation medications stopped to see if they will be alert enough to begin the process of removing the breathing tube.

7. **Get a shot.** If you or your loved one is at high risk for pneumococcal disease, get vaccinated before your hospital stay. Pneumococcal disease is an infection caused by Streptococcus pneumoniae bacteria, sometimes referred to as pneumococcus. Pneumococcus can cause many types of illnesses, including pneumonia, blood infections, ear infections, and meningitis. The pneumococcal vaccine is recommended for all adults 65 years and older and for anyone who is 2 years and older at high risk for disease, including smokers, those with chronic illnesses or conditions that weaken the immune system, or who live in a nursing home or other long-term care facility. Other vaccines that can help prevent diseases that cause pneumonia are *Haemophilus influenzae* type b vaccine (Hib), pertussis, varicella, measles, and influenza.

8. **Keep your mouth clean.** Good oral care is important to help prevent pneumonia. Family members or patients should ask the care team how often they will clean the inside of the patient's mouth. The inside of the patient's mouth should be cleaned on a regular basis with a toothbrush or antiseptic rinse.

9. **Stop smoking.** Smoking increases your risk for pneumonia and other health conditions. If you are a smoker, consider stopping.