TABLE 18.1 Common Pulmonary Diseases—cont'd

Pulmonary Disease	Overview	Symptoms	Medications
Cystic fibrosis	Cystic fibrosis is a genetic disease that affects the respiratory and digestive systems. In the respiratory system, thick secretions are excreted into the lungs, and patients require vigilant respiratory care to keep the lungs clear and free from infection.	Patients have persistent productive cough, frequent infections in the lungs, wheezing, shortness of breath, failure to gain weight, salty-tasting skin, and GI difficulties.	Mucolytic medications assist in breaking up thick secretions, and antibiotics treat lung infections.
Tuberculosis	Tuberculosis (TB) is an infection caused by *Mycobacterium tuberculosis*, a gram-positive bacterium.	Patients have a persistent cough, night sweats, and weight loss.	The TB bacterium is gram-positive but frequently resists treatment with traditional antibiotics. Consequently, it is often treated with a combination of drugs. Treatment must continue for as long as 6 to 12 months.

GI, gastrointestinal.

Antitussives and Expectorants

Antitussives stop coughs by blocking the cough reflex. If a cough is dry and thus not productive, an antitussive may be prescribed to allow the patient to rest, especially at night. Some narcotic analgesics, such as codeine, are effective antitussives in low dosages.

When secretions are present, expectorants are used to increase the body's ability to clear the lungs and upper airway by thinning the secretions. Expectorants such as guaifenesin (Duratess, Mucinex, Robitussin) can also soothe respiratory tract mucous membranes. These medications are given by mouth as a syrup, tablet, or capsule.

Antibiotics

Many respiratory illnesses either are caused by or are accompanied by bacterial infections, and antibiotics are therefore prescribed to combat or prevent the infections as appropriate (see Chapter 17). Intravenous antibiotics may be administered for serious infections requiring hospitalization, such as pneumonia. The usual treatment for most other respiratory infections consists of oral antibiotics for a period of 10 to 14 days. Occasionally, a patient is given an injection of an antibiotic, followed by an oral medication course. This injection jump-starts the healing process without the need for IV infusions and hospitalization.

One bacterium in particular, *Mycobacterium tuberculosis,* causes the highly contagious TB infection. Tubercles remain in a patient's body for a lifetime and can become active in patients with compromised immune systems if the infection is not treated. For this reason, many patients with **latent tuberculosis (TB)** (infected with TB, but without the disease) who contract other immunologic disorders such as acquired immunodeficiency syndrome (AIDS) can die of TB. Pharmacological treatment of TB requires exact adherence to a regimen of several drugs over 6 to 12 months because TB heals very slowly. These medications can also be given to close companions of infected patients to prevent infection. The most common combination of drugs consists of INH (isoniazid) and Rifadin (rifampin), but usually a combination of up to four antibiotics is used. In addition, those patients with latent tuberculosis are treated with one antibiotic for 6 to 12 months to prevent them from developing the disease at some point later in life. Patients with latent TB are not contagious. Rifampin has a unique side effect of which patients must be made aware. Tears, urine, perspiration, and other body fluids will turn orange yellow. This can be scary for a patient who is unaware of this side effect (see A Closer Look: Tuberculosis Diagnosis).