



Emergency Room: Chronic Obstructive Pulmonary Disease: Incurable & Under-diagnosed, but Insurable in Early Stages...

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Chronic obstructive pulmonary disease (COPD) is progressive, mostly irreversible, and incurable. It is the fourth leading cause of death in the world today after heart disease, cancer, and stroke. According to the Centers for Disease Control (CDC), during 2000, 119,000 Americans died of the disease and approximately 10 million adults received diagnoses of COPD by a physician. The CDC estimates that another 24 million people have COPD, but are undiagnosed.

While COPD is incurable, it is also preventable. The American Lung Association (ALA) estimates that 80 to 90% of COPD cases are caused by cigarette, cigar, and pipe smoking, as well as second-hand smoke. Not smoking will prevent many cases of COPD from developing and quitting smoking will slow progression of the disease.

**World Health Organization
COPD Classification System**

| STAGE | DESCRIPTION |
|-------------|---|
| 0: At Risk | Lung function normal, chronic cough, increased sputum, continued exposure to risk factors |
| 1: Mild | FEV ₁ is greater than or equal to 50% of predicted normal lung function, minimal impact on health-related quality of life, chronic cough and increased sputum may progress |
| 2: Moderate | FEV ₁ lung function is 35 to 49% of predicted normal lung function, shortness of breath with exertion, there is a significant impact on health-related quality of life |
| 3: Severe | FEV ₁ lung function is less than 35% of predicted normal lung function, severe shortness of breath, impaired quality of life |

Table 1

So, what is COPD? COPD is a term used to describe a group of diseases of the respiratory system characterized by a gradual loss of lung function. The two most common forms of COPD are chronic bronchitis and emphysema and they frequently coexist. These diseases result in airway blockage in the lungs, scarring and destruction of lung tissue, and reduced lung function. Over time, the exertion required to fill and expel the lungs puts a strain on the heart and can create a condition called cor pulmonale. In this condition, forced to do more work, the right ventricle of the heart thickens and enlarges and the normal heart rhythm is disrupted. Common symptoms of COPD include chronic cough, increased sputum, wheezing, shortness of breath or difficulty breathing, and decreased pulmonary function tests.

Lung function is the ability of the lungs to move air into and out of the lungs. As COPD develops, the airways in the lungs thicken and narrow, lose their elasticity, and become coated with mucus. Underwriters look at the various risk factors, medical history, and lung volume measurements in an effort to stage the disease. One of the measurements of particular importance to the underwriter is the forced vital capacity (FVC) test. This measures the maximum volume of air that can be forcibly expelled after inhaling as deeply as possible. Another

important measurement is the FEV₁. This test measures the volume of air forcibly exhaled within 1 second. This test helps determine how narrow the air passages have become. When underwriting a case, the underwriter compares the results of several tests done at various intervals in order to determine the progression of the disease.

People can live for many years with COPD, however, quality of life and ability to earn a living deteriorates significantly during the course of the disease. According to a survey by the ALA, 51% of respondents indicate a limited ability to work, 70% cannot tolerate normal physical exertion, and 56% cannot complete household chores. Treatment of COPD ranges from oral and inhaled medications to home oxygen therapy. The goal of treatment for COPD is to prevent or control symptoms, retard progression of the disease, improve the ability to perform activities of daily living, as well as improve the general quality of life.

When underwriting for life insurance, mild to moderate COPD may result in a standard to Table 2 rating, especially if there are documented lifestyle changes that indicate significant mortality improvement. Prospects with COPD, who continue to smoke, use oxygen therapy, or who have difficulty performing normal physical exertion or activities of daily living may be uninsurable.

Long term care coverage will normally be declined if activities are restricted due to shortness of breath or if there is a history of oxygen use, hospitalization in the previous six months, congestive heart failure, prednisone use, or lung surgery.

COPD Risk Factors

| RISK FACTOR | DETAILS |
|---|--|
| Smoking | Current smoker or history of smoking |
| Age | Typically over age 40 |
| Gender | More men are affected, but women are catching up |
| Occupation & environment | Exposure to inhaled chemicals, asbestos, silica dust, and other pollutants |
| Indoor air pollution | Cooking, heating, and smoking |
| History of respiratory infections | Including chronic pneumonia, active tuberculosis, or recurrent fungal infections |
| Hereditary deficiency of alpha-1 anti-trypsin | A lung function enzyme |

Table 2