

JUDGES' BENCHBOOK OF THE BLACK LUNG BENEFITS ACT



PREPARED BY THE U.S. DEPARTMENT OF LABOR
OFFICE OF ADMINISTRATIVE LAW JUDGES
WASHINGTON, DC

AUGUST 2001

Glossary of Medical Terms

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Abscissa - A line, or part of a line, drawn horizontally on a graph. Measures the distance per second on spirogram tracing.

Acute Bronchitis - A bronchitic attack with a short and more or less severe course. It is marked by fever, pain in the chest, especially on coughing, dyspnea, and cough.

Acute Cardiac Failure - A sudden inability of the heart to function properly.

Acute Respiratory Failure - A life-threatening complication when, more or less abruptly, alveolar ventilation becomes inadequate for the body's needs, even at rest.

Alveolus - Air sac of the lungs.

Anoxemia - Reduction of oxygen content of the blood below physiologic levels.

Atelectasis - Collapse of lung tissue caused by pressure from without, as from tumors.

Autopsy - An examination and dissection of a dead body to discover the cause of death, damage done by disease, and other pathologies.

Biopsy - The excision of a piece of living tissue for diagnostic examination.

Blood-Gas Analyzer - Apparatus used to analyze the gas content of the blood.

Bronchial Asthma - A recurring, intense dyspnea, particularly evident in the expiratory phase, due to an allergic reaction in the bronchioles from the absorption of some substance to which the patient is hypersensitive.

Bronchiectasis - A chronic dilatation of the bronchi or bronchioles marked by fetid breath and violent coughing, with the expectoration of mucous matter.

Bronchiole - One of the small subdivisions of the bronchial tree.

Bronchodilator - A device used to aid in breathing by dilating the bronchi.

Bronchus - One of the two main tubes carrying air to the lungs.

Calcification - Deposit of calcium salts in the tissues producing hard, inelastic nodules.

Cardiac Arrest - A cessation of heart function, with a disappearance of arterial blood pressure.

Cardiac Collapse - A complete failure of the heart to function.

Cardiac Decompensation - Lack of the lungs to supply adequate oxygen to the heart.

Cardiac Dilation - An enlargement of the heart beyond its normal dimensions.

Cardiac Insufficiency - Inability of the heart to perform its function properly.

Cardiorespiratory Failure - A sudden inability of the heart and lungs to perform their normal functions.

Cardiovascular Collapse - Failure of heart and blood vessels to function.

Chronic Bronchitis - A clinical disorder characterized by excessive mucus secretion in the bronchi and is manifested by chronic or recurrent productive cough (for a minimum, of 3 months per year and for at least two successive years).

Chronic Obstructive Airway Disease - Any long-standing disease, i.e., emphysema, bronchitis, asthma, which blocks the free flow of air through the passages.

Chronic Obstructive Pulmonary Disease (COPD) - A term which applies to those patients with chronic bronchitis, asthma, or emphysema who exhibit persistent obstruction of bronchial air flow.

Coal Workers' Pneumoconiosis - Also known as "black lung", is a chronic obstructive pulmonary disease caused by a fibrous reaction in the lungs to the inhalation of coal dust. Pneumoconiosis is a progressive disease with advances from "simple" to "complicated" through six classifications based on the size of the dust particles in the lungs.

Complicated Pneumoconiosis - The advanced stages of the disease known as coal workers' pneumoconiosis are called "complicated". Complicated pneumoconiosis is characterized by irregular nodular re-assess which gradually increase in size until massive lesions develop in the lungs. Complicated pneumoconiosis is classified as categories A, B, or C.

Congestive Heart Failure - Failure of heart to maintain an adequate output resulting in the diminished blood flow to tissues and congestion of pulmonary or systemic circulation.

Coronary Occlusion - Obstruction to the flow of blood through an artery of the heart as the result of spasm of the vessel or the presence of a thrombus.

Coronary Thrombosis - The formation of a clot in a coronary artery obstructing the flow of blood.

Cor Pulmonale - Right ventricular dilatation secondary to diseases of pulmonary arteries.

Cyanosis - Blueness of skin due to an inadequate supply of oxygen in the blood.

Diffusion - The exchange of oxygen and carbon dioxide across the alveolar membrane.

Dyspnea - Labored or difficult breathing. Common term -- shortness of breath.

Electrocardiogram (ECG) - The graphic representation of tracings showing the changes in electric potential produced by the contractions of the heart.

Embolic Pneumonia - Pneumonia due to embolism of a blood vessel or vessels of the lungs.

Embolus (Pl. Emboli) - Any foreign matter, as a blood clot or air bubble, carried in the blood stream.

Etiology - Study or theory of the causes of origins of diseases.

Expectoration - Act of coughing up and spitting out of material from the lungs, tracheas, or mouth.

Fibrosis - An abnormal increase and thickening of tissues.

Fluoroscopy - The act of using a piece of equipment (the fluoroscope) or of examining by means of a fluorescent screen, the shadows of bodies being examined by means of x-rays.

Forced Vital Capacity (FVC) - The vital capacity performed with expiration as forceful and rapid as possible.

Heart Seizure - A sudden cessation of the heart's action.

Hemoptysis - Expectoration of blood.

Hyperventilation - Abnormally prolonged, rapid and deep breathing.

ILO-UICC/Cincinnati Classification of Pneumoconiosis - The most widely used system for the classification and interpretation of x-rays for the disease pneumoconiosis. This classification scheme was originally devised by the International Labor Organization (ILO) in 1958 and refined by the International Union Against Cancer (UICQ) in 1964. The scheme identifies six categories of pneumoconiosis based on type, profusion, and extent of opacities in the lungs.

Infarct - An area of dying or dead tissue resulting from obstruction of the blood vessels normally supplying that organ.

Intermittent Positive Pressure Breathing (IPPB) - Use of a mechanical device which during inspiration delivers a volume of gas under pressure to the patient's tracheobronchial tree. Used to increase a patient's ventilation and decrease the effort involved in breathing.

Maximum Voluntary Ventilation (MVV) - Volume of air which a subject can breathe with voluntary maximal effort for a given time (10-15 sec., if possible, equated to 1 minute). Formerly called "maximum breathing capacity".

Medical Management - A concept for the treatment of pneumoconiosis involving the development of a therapeutic program for the miner including symptomatic treatment of secondary manifestations of the illness, proper diet, and physical therapy.

Miner's Asthma - A disease of the bronchial tubes of the lungs which is chronic in nature and marked by attacks of difficult breathing.

Myocardial Infarction - The function of dead tissue in the muscular tissue of the heart.

Mycotic Infection of the Lungs - A disease of the lungs caused by a fungus.

Nebulizer - A spray device used to assist in clearing bronchi and lungs.

Obstructive Ventilatory Impairment - Diminished ventilatory capacity due to increased airway resistance, which quickly leads to dyspnea from excessive work of breathing.

One-Second Forced Expiratory Volume (FEV₁) - Volume of air exhaled during the performance of a forced vital capacity in the first second.

Opacity - An accumulation of particles of dust in the lungs which is fundamental to the classification of pneumoconiosis by category. Opacities are considered "small" (up to 1 cm.) and "large" (1 cm. or greater) and the category of CWP is based on the type (small or large); profusion (number of opacities-density-per unit area); and extent (area of the lung field affected).

Ordinate - A line, or part of a line, drawn vertically on a graph. Usually measure volume.

Orthopnea - Inability to breathe except in an upright position.

Oxygen Therapy - A technique used in the treatment of chronic obstructive airway disease whereby a patient periodically inhales concentrated amounts of oxygen to make up for oxygen deficiencies due to a chronic respiratory disease.

Paroxysm - A sudden attack, or intensifications of the symptoms of a disease, usually recurring periodically -

Pathology - The branch of medicine that deals with the nature of disease, especially with the structural and functional changes caused by disease. The study of all the conditions processes, or results of a particular disease.

Perfusion - the process which supplies and distributes blood throughout the lung tissue.

Phthisis - Pulmonary tuberculosis.

Pleura - The two layered membranous sac enclosing the lungs.

Pneumonia - Inflammation of the lungs. It is attended with chill, followed by sudden temperature

elevation, dyspnea, rapid breathing, pain in the side, and cough, with bloodstained expectoration.

Pneumonitis - Inflammation of the lung.

Pneumothorax - An accumulation of air or gas in the pleural cavity, which may occur spontaneously or as a result of trauma, or a pathological process.

Artificial pneumothorax - The intentional introduction by artificial means of air into the pleural cavity for the purpose of immobilizing the lung in the treatment of pulmonary tuberculosis.

Progressive Massive Fibrosis (PMF) - A complication which occurs in the more advanced cases of pneumoconiosis characterized by widespread consolidation (lesions) of the large amounts of dust in the lungs and connective tissue. A typical chest X-ray shows rounded masses, often several centimeters in diameter, in one or both upper lobes. Most frequently develops from categories 2 or 3 simple pneumoconiosis.

Pulmonary Acidosis - An excess of CO₂ resulting in inadequate alveolar ventilation.

Pulmonary Edema - Excessive accumulation of fluid in the air vesicles and cellular tissue of the lung.

Pulmonary Embolism - Lodgement of a clot in a pulmonary artery cutting off circulation.

Pulmonary Emphysema - A chronic lung condition characterized by an abnormal “puffing up” of the alveoli of the lungs which prevents the normal expiration of air. Its most characteristic symptom is shortness of breath.

Pulmonary Fibrosis - A peculiar, progressive thickening of the alveolar walls, of undetermined etiology, leading to deficient aeration of the blood, with resulting dyspnea and cyanosis, and to cor pulmonale.

Pulmonary Function Tests - Tests performed to measure the degree of impairment of pulmonary function. They range from simple tests of ventilation to very sophisticated examinations requiring complicated equipment. The most frequently performed tests measure forced vital capacity (FVC), forced expiratory volume in one-second (FEV₁) and maximum voluntary ventilation (MVV).

Pulmonary Hemorrhage - Ruptured blood vessels in the lungs.

Pulmonary Hypertension - Increased pressure within the pulmonary circulation.

Pulmonary Infarction - Dead tissue in the lungs resulting from obstruction to the pulmonary artery by an embolism or thrombus.

Pulmonary Insufficiency - An abnormality of lung function demonstrable by objective physiologic techniques.

Rales - various types of sounds heard in bronchi at inspiration or expiration.

Respiratory Arrest - A stoppage of the function of breathing.

Restrictive Ventilatory Impairment - A general term that encompasses the conditions characterized by reduction of total lung capacity. Mini or no interference with transbronchial air flows.

Roentgenogram - X-ray picture.

Simple Pneumoconiosis - The early stages of the disease known as coal workers' pneumoconiosis are called "simple". Simple pneumoconiosis is identifiable by small aggregations of dust particles, 1 to 2 millimeters in diameter, in the region of the respiratory bronchial of the lungs and possibly a small amount of fibrosis. Simple pneumoconiosis is classified as categories 1, 2, or 3.

Spirometry - The measurement of lung capacity by means of an instrument for measuring the breathing capacity of the lungs.

Sputum - Matter ejected from the mouth; saliva mixed with mucus and other substances from the respiratory system.

Thrombus - A plug or clot in a blood vessel or in one of the cavities of the heart, formed by coagulation of the blood.

Ventilation - The progress by which air is moved in and out of the alveoli through the tracheobronchial tree.

Vital Capacity (VC) - The largest volume of air measure on complete expiration after the deepest inspiration without forced or rapid effort.

Typical Medical Abbreviations:

c.w.p.	coal workers' pneumoconiosis
c	with
s. o. b.	shortness of breath
c. o. p. d.	chronic obstructive pulmonary disease
a. s. h. d.	arteriosclerotic heart disease
c.a.d.	coronary artery disease
d.o.e.	dyspnea on exertion
WNL	within normal limits
^	increased
v	decreased
AP (diameter)	anterior-posterior (diameter)
Dx	diagnosis
Hx	history of
HBP:HPT	high blood pressure; hypertension
R: L	right/left