

Glossary

GLOSSARYAbbreviations, Alphabetical, Numerical, Signal, and Other Coding of
Records in the Medical Department

- C - Referred to a Consultant or Specialist Physician
- H - Home
- HO - Sent to the Hospital
- LW - Light or Special Work
- N - Normal
- ND - Nerve Deafness
- NIL or NIHL - Nerve-Induced Hearing Loss
- NO - Nonoccupational
- O - Sent to the office of the Company physician
- OD - Occupational discharge (Occupational cases not requiring additional visits or further examination or treatment by the physician.)
- OOW - Out of Work
- OP - Otologic Problem (Conductive deafness, Otosclerosis, chronic ear infection or perforation, Meniere's Disease, etc.)
- OR - Occupational Return (Occupational cases requiring additional visits for observation and/or treatment.)
- Pby - Presbycusis
- RD - Released for Restricted Duty
- PR - Permanent Restrictions
- RW - Return to Work (Released or Returned to Regular Work)
- S - Special or Emergency
- TR - Temporary Restrictions
- Unk. - Unknown - Etiology, etc.

COMMON ABBREVIATIONSA

A - Aortic Second Sound
 AC - Air Conduction
 ACTH - Adrenocorticotrophic Hormone
 AD - Right Ear
 ADP - Adenosine Diphosphate
 amb - Ambient
 Aqua - Water
 AS - Left Ear
 AV - Atrioventricular, Arteriovenous

B

B - Bacillus
 BAL - Dimercaprol
 BAS - Basophils
 BBT - Basal Body Temperature
 b.i.d. - Twice A Day
 B F.P. - Biologically False Positive
 BIL - Bilateral
 Bin - Binaural
 BMR - Basal Metabolic Rate
 B.P. - Blood Pressure
 BUN - Blood Urea Nitrogen

C

CBC - Complete Blood Count
 CBS - Chronic Brain Syndrome
 cc - Cubic Centimeter
 cel - Celsius
 cg. - Centigram
 CHD - Coronary Heart Disease
 ChE - Cholinesterase
 CHF - Congestive Heart Failure
 CI - Color Index
 cl. - Centiliter
 cm. - Centimeter
 cm² - Square Centimeter
 cm³ - Cubic Centimeter
 C.N.S. - Central Nervous System
 conc. - Concentration, Concentrated
 C.O.P.D. - Chronic Obstructive Pulmonary Disease
 CPC - Clinicopathological Conference
 CPH - Certificate of Public Health
 cps - Cycles Per Second
 CSF - Cerebrospinal Fluid
 cu. ft., ft³ - Cubic Foot

C

cu. in. - Cubic Inch
CV - Cardiovascular
C.V.A. - Cerebrovascular Accident, Costovertebral Angle
CVS - Cardiovascular System

D

dB - Decibel
D & C - Dilatation and Curettage
D.M. - Diabetes Mellitus
D.O. - Doctor of Osteopathy
D.O.A. - Dead on Arrival
D.P.H. - Diploma in Public Health
DPT - Diphtheria - Pertussis - Tetanus (Vaccine)
dr. - Dram
Dr. P.H. - Doctor of Public Health
D V.M. - Doctor of Veterinary Medicine

E

ECG - Electrocardiogram
EDTA - Edetate
EEG - Electroencephalogram
E.E.N.T. - Eyes - Ears - Nose - Throat
EKG - Electrocardiogram
EKY - Electrokymogram
EMG - Electromyogram
EOS - Eosinophils
E.S.P. - Extrasensory Perception
E.S.R. - Erythrocyte Sedimentation Rate
E.S.T. - Electroshock Therapy
EtOH - Ethyl Alcohol
Etiol. - Etiology

F

F - Fahrenheit
F.D. - Fatal Dose
Fe - Iron
Fl. - Fluid
fl. oz. - Fluid Ounce
FRC - Functional Residual Capacity
FSH - Follicle Stimulating Hormone
ft. - Foot

F

F.U.O. - Fever of Unknown Origin
 FVC - Forced Vital Capacity
 FEV₁ - Force Expiratory Volume at One Second

G

G. - Gram
 gm - Gram
 G.I. - Gastrointestinal
 G.P. - General Practitioner
 gr. - Grain
 gtt. - Drops
 G.U. - Genitourinary

H

Hb - Hemoglobin
 HCT - Hematocrit
 H.D. - Hearing Distance
 HF - High Frequency Loss
 Hgb - Hemoglobin
 Hg - Mercury
 H₂O - Water
 H.P. - House Physician
 h.s. - At Bedtime
 ht. - Height
 Hz - Hertz

I

in. - Inch
 IC - Inspiratory Capacity
 ID - Intradermal
 I.H. - Infectious Hepatitis
 I.M. - Intramuscular(ly)
 I.P. - Intraperitoneally
 IPPB - Intermittent Positive Pressure Breathing
 IRV - Inspiratory Reserve Volume
 I.S. - Intercostal Space
 IUD - Intrauterine Contraception Device
 I.V. - Intravenously
 I.V.T. - Intravenous Transfusion

K

K⁺ - Potassium
 Kg - Kilogram
 Km - Kilometer
 kl - Kiloliter
 kj - Knee Jerk

L

L - Liter(s) and Lambert(s)
 lb. - Pound
 L & A - Light and Accommodation
 LDH - Lactic Dehydrogenase
 LH - Luteinizing Hormone
 lig. - Ligament
 liq. - Liquid
 L.L.L. - Lower Left Leg
 L.P.N. - Licensed Practical Nurse
 L.U.L. - Left Upper Lobe
 LVH - Left Ventricular Hypertrophy
 LYMPH - Lymphocytes

M

m, M - Meter(s)
 M.A.C. - Maximum Allowable Concentration
 max - Maximum
 M.B. - Bachelor of Medicine
 MCHC - Mean Corpuscular Hemoglobin Concentration
 MCH - Mean Corpuscular Hemoglobin
 MCV - Mean Corpuscular Volume
 M.E.D. - Minimal Effective Dose
 m Eq. - Milliequivalent
 meg. - Milliequivalent
 mg. - Milligram
 ml. - Milliliter
 m.m. - Millimeter
 M.M. - Mucous Membranes
 mM. - Millimole
 mm (Hg) - Millimeters of Mercury
 Mpp cf - Million Particles Per Cubic Foot
 Mx - Medex

N

NA - Not Applicable
Na⁺ - Sodium
N.A.D. - No Appreciable Disease
ng - Nanogram (10⁻⁹ gm)
NIHL - Nerve Induced Hearing Loss
nm - Nanometer
noct - At Night
N.P. - Nurse Procedure, Nurse Practitioner

O

O - Oxygen
OB - Obstetrics
OPD - Outpatient Department
O.R. - Operating Room
O.S. - Left Eye
OTC - Over the Counter
oz. - Ounce

P

P₂ - Pulmonic Second Sound
P.A. - Physician's Assistant
Pb - Lead
p.c. - After Meals
PCG - Phonocardiogram
PCV - Packed Cell Volume
P.F. - Pulmonary Function Test
P.M.I. - Point of Maximum Impulse
PMN - Polymorhonuclear Neutrophil Leukocytes
PO - By Mouth, Orally
Po₂ - Partial Pressure of Oxygen
ppb - Parts per Billion
P.P.D. - Purified Protein Derivative (or Tuberculin)
ppm - Parts per Million
ppt. - Precipitate
Pr. - Presbyopia
p.r.n. - As needed, as directed
PROG - Prognosis

Q

q.d. - Every day
 q.h. - Every hour
 q.i.d. - Four times a day
 q.l. - As much as desired
 q.n.s. - Quantity not sufficient
 q.q.h. - Every 4 hours
 q.s. - Quantity Sufficient

R

R - Symbol for Roentgen
 +R - Symbol for Rinne's Test Positive
 -R - Symbol for Rinne's Test Negative
 Rx - Symbol for Take
 RBC - Red Blood Cell
 Rem - Roentgen Equivalent Man
 Rh - Symbol for Rhesus Factor
 R.L.L. - Right Lower Lobe
 R.N. - Registered Nurse
 R.Q. - Respiratory Quotient
 R.U.L. - Right Upper Lobe
 R.V. - Residual Volume
 R.V.H. - Right Ventricular Hypertrophy

S

S.D. - Standard Deviation; Skin Dose
 sec - Second
 SGOT - Serum Glutamic - Oxaloacetic Transaminase
 SGPT - Serum Glutamic - Pyruvic Transaminase
 SH - Serum Hepatitis
 Sig. - Let it be labeled
 Sig. n. pro. - Label with proper name.
 SLE - Systemic Lupus Erythematosus
 Sol. - Solution
 Solv. - Solvent
 SQ - Subcutaneous
 S.R. - Sedimentation Rate
 ss. - One Half
 STH - Somatotrophic Hormone (Growth)
 STP - Standard Temperature & Pressure
 S.T.S. - Serologic Test for Syphilis
 SUBCUT - Subcutaneous
 SYM. - Symptoms

T

T - Temperature
TA - Toxin - Antitoxin
T & A - Tonsilectomy and Adenoidectomy
T.B. - Tuberculosis
temp. - Temperature
t.i.d. - Three times a day
TLC - Total Lung Capacity

U

U/A - Urinalysis
ug - Microgram
U.S.P. - United States Pharmacopeia

V

VA - Visual Acuity
V.C. - Vital Capacity
V.D. - Venereal Disease
V.D.H. - Valvular Disease of the Heart
V.F. - Vocal Fremitus
V.R. - Vocal Resonance
V.W. - Vessel Wall

W

WBC - White Blood Cell
wt. - weight

COMMON ABBREVIATIONS FOR ORGANIZATIONS

AAGP - American Academy of General Practice
AAIN - American Association of Industrial Nurses
AAMA - American Association of Medical Assistants
AAOM - American Academy of Occupational Medicine
ACGIH - American Conference of Governmental Industrial Hygiene
ACOG - American College of Obstetricians and Gynecologists
ACR - American College of Radiology
ACS - American Chemical Society
AIHA - American Industrial Hygiene Association
AMA - American Medical Association
ANA - American Nurses Association, American Neurological Association
ANSI - American National Standards Institute
AOMA - American Occupational Medical Association
APHA - American Public Health Association
APTA - American Physical Therapy Association
ART - Accredited Record Technicians
ASCI - American Society of Clinical Investigation
ASCLT - American Society of Clinical Laboratory Technicians
BMA - British Medical Association
CIIT - Chemical Industry Institute of Technology
CMA - Chemical Manufacturers Association
DOT - Department of Transportation
EPA - Environmental Protection Agency
FACP - Fellow of the American College of Physicians
FACS - Fellow of the American College of Surgeons
FOAMA - Fellow of the American Occupational Medical Association

COMMON ABBREVIATIONS FOR ORGANIZATIONS (Cont'd.)

FAPHA - Fellow of the American Public Health Association
FDA - Food and Drug Administration
ICN - International Council of Nurses
ICS - International College of Surgeons
IHF - Industrial Health Foundation of America
ISO - International Standards Organization
NAS - NRC - National Academy of Sciences - National Research Council
NBS - National Bureau of Standards
NCI - National Cancer Institute
NFOEHR - National Foundation for Occupational and Environmental Health Research
NFFPA - National Fire Protection Association
NIEHS - National Institute of Environmental Health Sciences
NIH - National Institutes of Health
NIOSH - National Institute for Occupational Safety and Health
NTIS - National Technical Information Services
ORC - Organization Resources Counselors
OSHA - Occupational Safety and Health Act (Administration)
SOT - Society of Toxicology
TSCA - Toxic Substances and Control Act (Administration)
UL - Underwriter's Laboratory
U.S. Bureau of Labor Standards
U.S. Bureau of Mines
U.S. Public Health Services
WHO - World Health Organization

GLOSSARY OF TERMS

A

Adsorption - The condensation of gases, liquids, or dissolved substances on the surface of solids.

Aerobe - Microorganisms that require air (oxygen) for growth.

Aerosols - Liquid droplets or solid particles dispersed in air that are of fine enough particle size (0.01 to 100 microns) to remain so dispersed for a period of time.

Air Monitoring - The continuous sampling for and measuring of pollutants in the atmosphere.

Acoustics - Science of sound; branch of physics.

Acoustic Nerve - VIII cranial nerve made up of two branches. The cochlear branch conducts neural signals from the internal ear (cochlea) to the brain.

Acoustic Trauma - An injury to the ear caused by a sudden and intense acoustic stimulus, that results in some degree of temporary or permanent hearing loss.

Air-Bone Gap - The difference in decibels between the hearing threshold levels for air condition and for bone conduction.

Albumin - A protein material found in animal and vegetable tissues.

Allergy - An abnormal response of a hypersensitive person to chemical and physical stimuli. Allergic manifestations of major importance occurring in about 10 percent of the population.

Alveoli - Tiny air sacs of the lungs formed by a dilation at the end of a bronchiole; through the thin walls of the alveoli, the blood supply brings oxygen in and gives up its carbon dioxide in the process of respiration.

Ambient Noise - The all encompassing noise associated with a given environment, being usually a composite of sounds from many sources near and far.

Anaerobe - Microorganisms that grow without oxygen (air).

Anaphylaxis - Hypersensitivity resulting from sensitization following prior contact with a protein or chemical.

Anesthesia - Loss of sensation; in particular, the temporary loss of feeling induced by certain chemical agents.

A

Anthracosis - A disease of the lungs caused by prolonged inhalation of dust that contain particles of carbon.

Antibody - Any of the body globulins that combine specifically with antigens and neutralize toxins, agglutinate bacteria or cells, and precipitate soluble antigens.

Antigen - A substance that, when introduced into the body, stimulates the production of antibodies.

Antiseptic - A substance that prevents or inhibits the growth of microorganisms; a substance used to kill microorganisms on animate surfaces such as skin.

Aplastic Anemia - A condition in which the bone marrow fails to produce an adequate number of red blood cells.

Asbestos - A hydrated magnesium silicate in fibrous form. The fibers are believed to be the more hazardous component of asbestos dust.

Asbestosis - A disease of the lungs caused by the inhalation of fine airborne fibers of asbestos.

Atrophy - Arrested development or wasting away of cells or tissue.

Attenuate - To make softer or reduce.

Audible Range - The frequency range over which normal ears hear - approximately 20 Hz through 20,000 Hz. Above the range 20,000 Hz, the term ultrasonic is used. Below 20 Hz, the term subsonic is used.

Audiogram - A record of hearing loss or hearing level measured at different frequencies - usually 500 to 8000 Hz. The audiogram may be presented graphically or numerically. Hearing level is shown as a function of frequency.

Audiometer - A signal generator or instrument for measuring objectively the sensitivity of hearing in decibels referred to audiometric zero. Pure tone audiometers are standard instruments for industrial use.

Audiometric Technician - A person who is trained and qualified to administer audiometric examinations.

Auditory Fatigue - The temporary increase in the threshold of audibility resulting from a previous auditory stimulus.

B

Background Noise - The total of all sources of interference in a system used for the production, detection, measurement, or recording of a signal, independent of the presence of the signal.

Bactericide - Any agent that destroys bacteria.

Bacteriostatic - Preventing the growth of bacteria without killing them.

Basal Metabolism - A measure of the amount of energy required by the body at rest.

Bel - A unit of sound level when the base of the logarithm is 10.

Benign - Not malignant. A benign tumor is one which is not metastasized.

Binaural - Pertains to both ears.

Biologic Agents - Cause of occupational disease; may be classified into four groups: viral, bacterial, fungal, and parasitic.

Bone Conduction Test - A special test conducted by placing an oscillator on the mastoid process to determine the nerve-carrying capacity of the cochlea and eighth cranial (auditory) nerve.

Bone Marrow - A soft tissue which constitutes the central filling of many bones and serves as a producer of blood corpuscles.

C

Calender - An assembly of rollers for producing a desired finish on paper, rubber, artificial leather, plastic, etc.

Calibrate - To check for uniformity or accuracy. It may be done biologically, electronically, acoustically, mechanically, etc.

Carcinogenic - Producing cancer.

Carcinoma - Malignant tumors derived from epithelial tissues; that is, the outer skin, the membranes lining the body cavities, and certain glands.

Chelating agent or Chelate - (Derived from Greek word Kelos for claw.) Any compound which will inactivate a metallic ion with the formation of an inner ring structure in the molecule, the metal ion becoming a member of the ring. The original ion, thus chelated, is effectively out of action.

C

Chemical Burns - Similar to those caused by heat. After emergency first aid, their treatment is the same as that for thermal burns.

Chronic - Persistent, prolonged, repeated.

Colony - A macroscopically visible growth of microorganisms on a solid culture medium.

Coma - Unconsciousness from which a patient can be aroused only with great effort and proper medical treatment.

Communicable - Refers to a disease whose causative agent is readily transferred from one person to another.

Conduction Deafness - An impairment of hearing due to the failure of vibrations to be transmitted to the cochlea. This type of deafness can often be corrected medically or surgically.

Conductive Hearing Loss - Type of hearing loss; not caused by noise exposure, but due to any disorder in the middle ear or external ear that prevents the sound from reaching the inner ear.

Conjunctivitis - Inflammation of the delicate mucous membranes (conjunctiva) that line the eyelids and cover the front of the eyeball.

Contact Dermatitis - Dermatitis caused by a primary irritant.

Contaminant - A harmful, irritating, or nuisance material that is foreign to the normal atmosphere.

Continuous Noise - Sound that has little variation in on-time.

D

dB(A) - Sound level in decibels read on the A-scale of a sound-level meter. The A scale discriminates against very low frequencies (as does the human ear) and is, therefore, better for measuring general sound levels.

dB(C) - Sound level in decibels read on a C-scale of a sound-level meter. The C scale discriminates very little against very low frequencies.

Deafness - Auditory defect.

Decibel - One-tenth of a bel. - based on a logarithmic scale.

D

Decibel (dB) - A unit used to express the ratio of two amounts of electric or acoustic signal power. The decibel is equal to 10 times the logarithm of the signal power ratio.

Derma - The corium or true skin.

Dermatitis - Inflammation of the skin from any cause. There are two general types of skin reaction: Primary irritation dermatitis and sensitization dermatitis. (See irritant and sensitizer.)

Dermatosis - A broader term than dermatitis; it includes any cutaneous abnormality, thus encompassing folliculitis, acne, pigmentary changes, and nodules and tumors.

Diplacusis - An otological condition in which sounds are distorted.

Disease - A departure from a state of health, usually recognized by a sequence of signs and symptoms.

Disinfectant - An agent that frees from infection by killing the vegetative cells of microorganisms.

Disinfection - The destruction and removal of pathogenic organisms, especially by means of chemical substances.

Diuretic - Anything that promotes excretion of urine.

Dizziness - Vertigo; the sensation that one is whirling around.

Dose - A term used interchangeably with "dosage" to express the amount of energy or substance absorbed in a unit volume or an organ or individual. Dose rate is the dose delivered per unit of time (See also roentgen, rad, rem, rep.)

Dosimeter - An instrument worn or used by an individual to measure the accumulation of noise over a day in percentage to the allowable daily noise dose.

Dusts - Solid particles generated by handling, crushing, grinding, rapid impact, detonation, and decrepitation of organic or inorganic materials such as rock, ore, metal, coal, wood, and grain. Dusts do not tend to flocculate except under electrostatic forces; they do not diffuse in air, but settle under the influence of gravity.

Dyspnea - Shortness of breath, difficult or labored breathing.

E

Ear - The entire hearing apparatus, consisting of three parts, external ear, the middle ear or tympanic cavity, and the inner ear or labyrinth. Sometimes the pinna is called the ear.

Ear defenders - Plugs or muff designed to keep noxious noise from the ear to preserve hearing acuity.

Emphysema - A lung disease in which the walls of the air sacs (alveoli) have been stretched too thin and broken down.

Endemic - Of local nature, such as a disease that is restricted to one area of the country.

Endocrine - Secreting without the means of a duct or tube. The term is applied to certain glands which produce secretions that enter the blood stream of the lymph directly and are then carried to the particular gland or tissue whose function they regulate.

Endotoxin - A toxin excreted by a microorganism into the surrounding medium.

Enteric - Pertaining to the intestines.

Enterotoxin - A toxin specific for cells of the intestine; gives rise to symptoms of food poisoning.

Enzymes - Delicate chemical substances, mostly proteins, that enter into and bring about chemical reactions in living organisms.

Epidemiology - Medical science concerned with defining and explaining the interrelationships of the host, agent, and environment in causing diseases.

Etiology - The study or knowledge of the causes of diseases.

F

Follicles - A small anatomical cavity or deep, narrowed-mouthed depression; a small lymph node.

Folliculitis - Typical case is caused by industrial oils plugging hair follicles, or by poor personal hygiene.

Fume - Gas-like emanation containing minute solid particles arising from the heating of a solid body such as lead, in distinction to a gas or vapor. This physical change is often accompanied by a chemical reaction, such as oxidation. Fumes flocculate and sometimes coalesce. Odorous gases and vapors should not be called fumes.

F

Fume Fever - Metal fume fever is an acute condition caused by a brief high exposure to the freshly generated fumes of metals, such as zinc or magnesium, or their oxides.

Frequency - (CPS, Pitch, Hertz) - The number of cycles that occur per unit of time.

G

Genes - The ultimate biological units of heredity.

Genetic Effects - Mutations or other changes which are produced by irradiation or other things affecting the germ plasm.

Germ - A microorganism; a microbe usually thought of as a pathogenic organism.

Germicide - An agent capable of killing germs.

Gingivitis - Inflammation of the gums.

Glands - Any body organ that manufactures some liquid product that is secreted from its cells.

Globulin - General name for a group of complex organic compounds belonging to the proteins and related to the albumins.

Gonads - The male (testes) and female (ovaries) sex glands.

Granuloma - A mass or nodule of chronically-inflamed tissue with granulations; usually associated with an infective process.

H

Hearing Conservation - The prevention or minimizing of noise-induced deafness through the use of hearing protection devices and the control of noise through engineering methods.

Hearing Level - Formerly called "hearing loss," is the deviation in decibels of an individual's threshold from the zero reference of the audiometer.

Hearing Threshold Level (HTL) - Hearing level at which a tone is heard in a specified number of trials.

Hematology - Study of the blood and the blood-forming organs.

H

Hematuria - Blood in the urine.

Hemoglobin - The red coloring matter of the blood which carries the oxygen.

Hemolysis - Breakdown of red blood cells with liberation of hemoglobin.

Hemorrhage - Bleeding; especially, profuse bleeding as from a ruptured or cut blood vessel (artery or vein).

Hepatitis - Inflammation of the liver.

Hertz - The frequency measured in cycles per second. 1 cps = 1 Hz.

Hormones - Chemicals substances secreted by the endocrine glands, exerting influence over practically all body activities.

Host - The plant or animal harboring another as a parasite or as an infectious agent.

Hypnotic - Anything that induces sleep, or that produces the effects ascribed to hypnotism.

I

Iatrogenic - Caused by the doctor.

Idiopathic - Disease that originates in itself or without known cause.

Idiosyncrasy - A special susceptibility to a particular substance introduced into the body.

Immune - Resistant to disease.

Immunity - The power of the body to resist successfully infection and the effects of toxins. This resistance comes through the possession by the body of certain "fighting substances," called antibodies. To immunize is to confer immunity. Immunization is the process of acquiring or conferring immunity.

Infection - Entrance into the body or its tissues of disease-causing organisms and the causation of damage to the body as a whole or to tissues or organs. It also refers to the entrance.

Infestation - Invasion of the body surface by parasites. See infection.

Inflammation - The reaction of body tissue to injury, whether by infection or trauma. The inflamed area is red, swollen, hot and usually painful.

I

Inhibition - Prevention of growth or multiplication of microorganisms.

Innocuous - Harmless.

Interstitial - (a) Pertaining to the small spaces between cells or structures; (b) occupying the interstices of a tissue or organ; (c) designating connective tissue occupying spaces between the functional units of an organ or a structure.

Intoxication - Means either drunkenness or poisoning.

Intraperitoneal - Inside the membrane that lines the interior wall of the abdomen.

Intravenous - Into or inside the vein.

Irritant - A primary irritant is one that has been found to produce an irritating effect at the area of the skin contact. Although they affect everyone, they do not produce the same degree of irritation.

Ischemia - Loss of blood supply to a particular part of the body.

JK

Keloid - Abnormal scar formation produced as a result of skin damage.

Keratin - Sulfur-containing fibrous proteins that form the chemical basis for epidermis tissues; found in nails, hair feathers.

Keratitis - Inflammation of the cornea with tiny lesions.

L

Latent Period - The time which elapses between exposure and the first manifestation of damage.

LD₅₀ - The dose which is required to produce death in 50 percent of the exposed species. Death is usually reckoned as occurring within the first 30 days.

L

Lead - Lead fumes and lead compounds cause poisoning after prolonged exposure. Most important means of entry into body is inhalation. Skin absorption is of significance only from such organic compounds as lead tetraethyl.

Lead Poisoning - Lead compounds can produce poisoning when they are swallowed or breathed. Inorganic lead compounds commonly cause symptoms of lead colic and lead anemia. Organic lead compounds can attack the nervous system.

Lethal - Capable of causing death.

Leukocyte - White blood cell.

Leukocytosis - An abnormal increase in the number of white blood cells.

Leukopenia - A serious reduction in the number of white blood cells.

Localized - Restricted to one spot or area in the body and not spread all through it--contrast with systemic.

Loudness - The intensive attribute of an auditory sensation, in terms of which sounds may be ordered on a scale extending from soft to loud. Loudness depends primarily upon the sound pressure of the stimulus, but it also depends upon the frequency and wave form of the stimulus.

Loudness Level - A sound, in phons, is numerically equal to the median sound pressure level, in decibels, relative to 0.0002 microbar, of a free progressive wave of frequency 1000 Hz presented to listeners facing the source, which in a number of trials is judged by the listeners to be equally loud.

Lymph - A pale, coagulable fluid that consists of a liquid portion resembling blood plasma and containing white blood cells.

Lymph Node - Small oval bodies having a gland-like structure and scattered widely throughout the body in the course of the vessels which carry the lymph. Also known as lymphatic nodes, lymph glands, and lymphatic glands.

Lysis - The distribution or breaking up of cells by either internal or external means.

M

Malignant - As applied to a tumor, cancerous and capable of undergoing metastasis.

M

- Masking - The stimulation of one ear of a subject by controlled noise to prevent his hearing with that ear the tone or signal given to the other ear. This procedure is used where there is at least 15 to 20 dB difference in the hearing level of the two ears.
- Membrane - A thin, pliable layer or sheet of animal tissue that serves to cover a surface, line the interior of a cavity or organ, or divide a space.
- Meniere's Disease - The combination of deafness, tinnitus, and vertigo.
- Metabolism - Describes the physical and chemical changes that are constantly taking place in the billions of cells that make up the living body.
- Metastasis - Spread of malignancy from the site of primary cancer to secondary sites due to transfer through the lymphatic or blood system.
- Mitosis - Nuclear cell division in which resulting nuclei have the same number and kinds of chromosomes as the original cell.
- Monaural Hearing - Refers to hearing with one ear only.
- Monitor - To observe closely to determine whether an area is safe for workers.
- Mucous Membranes - Lining of the hollow organs of the body, notably the nose, mouth, stomach, intestines, bronchial tubes, and urinary tract.

N

- Narcosis - Stupor or unconsciousness produced by chemical substances.
- Narcotics - Chemical agents that put a person to sleep, completely or partially.
- Necrosis - Destruction of body tissue.
- Neoplasm - A cellular outgrowth which is characterized by rapid cell multiplication. It may be benign (semicontrolled and restricted) or malignant.
- Nephritis - Inflammation in the kidneys.
- Neural Loss - Hearing loss; see sensorineural.
- Neuritis - Inflammation of a nerve.

N

Neurodermatitis - A chronic skin ailment of uncertain origin, possibly neurotic.

Nodule - A small mass of rounded or irregularly-shaped cells or tissue; a small node.

Noise - Any unwarranted sound.

Noise-Induced Hearing Loss - The terminology used to refer to the slowly progressive inner ear hearing loss that results from exposure to continuous noise over a long period of time as contrasted to acoustic trauma or physical injury to the ear.

Nucleus - The inner core of the atom. It consists of neutrons and protons tightly locked together.

Nuisance Dust - Generally innocuous dust, not recognized as the direct cause of a serious pathological condition.

Nutrient - A substance that can be used for food.

O

Octave - The interval between two sounds having a basic frequency ratio of two.

Ophthalmologist - A physician who specializes in the structure, function, and diseases of the eye.

Organ - An organized collection of tissues that have a special and recognized function.

Organ of Corti - An aggregation of nerve cells lying on the basilar membrane that pick up vibrations and convert them to electrical energy, which is sent to the brain and interpreted as sound. It is the "heart" of the hearing mechanism.

Organic Disease - Disease in which some change in the structure of body tissue could either be visualized or positively inferred from indirect evidence.

Organism - A living thing, as a human being, an animal, germ, plant, etc., especially one consisting of several parts, each specializing in a particular function.

Orifice - The opening that serves as an entrance and/or outlet of a body cavity or organ, especially the opening of a canal or a passage.

O

Osmosis - The passage of fluid through a semipermeable membrane as a result of osmotic pressure.

Osseous - Pertaining to the bone.

Ossicle - A small bone, any member of a chain of three bones from the outer membrane of the tympanum (eardrum) to the membrane covering the oval window of the inner ear.

Otitis Media - An inflammation and infection of the middle ear.

Otologist - A physician who has specialized in surgery and diseases of the ear.

Otosclerosis - Hardening of the ear caused by a growth of bony tissue about the foot plate of the straps.

Otoscope - An instrument used to view the ear canal and tympanum.

P

Palpitation - Rapid heartbeat of which a person is acutely aware.

Papilloma - A small growth or tumor of the skin or mucous membrane. Warts and polyps are papillomas.

Parasite - An organism that derives its nourishment from a living plant or animal host. Does not necessarily cause disease.

Parenchyma - The essential or functional elements of a bodily organ, the working tissue.

Pathogen - Any microorganism capable of causing disease.

Pathogenesis - Describes how a disease takes hold on the body, spreads, and what it does to the body.

Pathological - Abnormal or diseased.

Pathology - The study of disease processes.

Permanent Threshold Shift - (PTS) - A permanent increase in the threshold of audibility for an ear at a specified frequency above a previously established reference level.

Presbycusis - Natural loss of hearing sensitivity especially at high frequencies that results from the physiological changes that occur with age.

P

Pure Tone - A sound wave, the instantaneous sound pressure of which is a simple sinusoidal function of the time, characterized by its singleness of pitch.

Q

R

Random Noise - A sound or electrical wave whose instantaneous amplitudes occur, as a function of time, according to a normal (Gaussian) distribution curve. Random noise is an oscillation whose instantaneous magnitude is not specified for any given instant of time. The instantaneous magnitudes of a random noise are specified only by probability functions giving the fraction of the total time that the magnitude, or some sequence of the magnitudes, lies within a specific range.

Recruitment - An abnormal increase in loudness compared to the actual increase in intensity.

Respirator - A device designed to protect the wearer from inhalation of harmful atmospheres.

Respiratory System - Consists of (in descending order)--the nose, mouth, nasal passages, nasal pharynx, pharynx, larynx, trachea, bronchi, bronchioles, air sacs (alveoli) of the lungs, and muscles of respiration.

Retina - Light sensitive inner surface of eye which receives and transmits the image formed by the lens.

Rhinitis - Inflammation of the mucous membrane lining in the nasal passages.

Rinne Test - A diagnostic bone conduction test with a tuning fork used to distinguish between conductive and S/N hearing losses.

S

Saprophyte - An organism living on dead organic matter.

Sarcoma - Malignant tumors which arise in connective tissue.

Sclera - The outer coat of the eyeball.

Sebaceous Glands - Of, related to, or being fatty material.

S

Seborrhea - An oily skin condition caused by an excess output of sebum from the sebaceous glands of the skin.

Sensitizer - There are a few chemicals that are both irritants and "sensitizers." At first, exposure may or may not cause irritation. After extended or repeated exposure, some individuals develop an allergic type of skin irritation call sensitization dermatitis.

Sensory-Neural Deafness - (S/N) - The impairment of hearing that occurs when there is damage to the cochlea or the cochlear nerve.

Septicemia - Blood poisoning.

Serum - (a) The clear fluid that separates from the blood when blood clots. (b) Blood serum containing antibodies.

Shock - Primarily, the rapid fall in blood pressure following injury, operation, or the administration of anesthesia.

Silicosis - A disease of the lungs caused by the inhalation of silica dust.

Simple Tone (Pure Tone) - (a) A simple tone is a sound wave, the instantaneous sound pressure of which is a simple sinusoidal function of the time; (b) a simple tone is a sound sensation characterized by its singleness of pitch.

Sound Level Meter - An instrument which measures the intensity of sound.

Sound Pressure - Fluctuations in air pressure caused by a vibrating body.

Symptom - Any bit of evidence from a patient that is sick; the subjective feelings of the patient.

Syndrome - A collection, constellation, or concurrence of signs and symptoms, usually of disease.

Synergism - Cooperative action of substances whose total effect is greater than the sum of their separate effects.

Systemic - Spread throughout the body, affecting all body systems and organs, not localized in one spot or area.

T

Temporary Threshold Shift (TTS) - The hearing loss suffered as the result of noise exposure, all or part of which is recovered during an arbitrary period of time when one is removed from the noise. It accounts for the necessity of checking hearing acuity at least 16-hours after a noise exposure.

Tenosynovitis - Inflammation of the connective tissue sheath of a tendon.

Threshold - The level where the first effects occur; also the point at which a person just begins to notice the tone is becoming audible.

Time-Weighted Average Exposure - An average, over a given (working) period of a person's exposure, as determined by sampling at given times during the period.

Tinnitus - An otological condition in which sound is perceived without any external auditory stimulation. It may be a whistling, ringing, roaring, buzzing, etc.

Tissue - A large dose of similar cells, bound together and dedicated to the performance of a particular function. For example, the skin is a tissue functioning as a protective covering for the body. An organ is composed of several kinds of tissue, and in this respect it differs from a tissue like a machine differs from its parts.

Tolerance - (a) The ability of the living organism to resist the usually anticipated stress. (b) Also, the limits of permissible inaccuracy in the fabrication of an article above and below its design specifications.

Toxemia - Poisoning by way of the blood stream.

Toxic Dust - Dust that may be harmful to the respiratory system or to other parts of the body through passing from the respiratory tract into the blood stream.

Toxin - A poisonous substance that is produced by the metabolism of a living organism.

Toxicity - A relative property of a chemical agent and refers to a harmful effect on some biologic mechanism and the condition under which this effect occurs.

Transducer - A device that changes one form of energy to another.

Trauma - An injury or wound brought about by an outside force.

Tremor - Involuntary shaking, trembling, or quivering.

T

Tumor - A swelling or growth of useless cells and tissues anywhere in the body.

Tuberculosis - A contagious disease caused by infection with the germ *Mycobacterium tuberculosis*. It usually affects the lung, but bone, lymph glands, and other tissues may be affected.

Tympanic Cavity - Another name for the chamber of the middle ear.

U

Ulcer - The destruction of skin or mucous membrane, with or without infection or pain.

Ultrasonics - The technology of sound at frequencies above the audible range.

Urticaria - Hives.

V

Ventilation - One of the principle methods to control health hazards, may be defined as "causing fresh air to circulate to replace foul air simultaneously removed."

Vertigo - Dizziness; more exactly, the sensation that the environment is revolving around you.

Vesicle - A small blister on the skin.

Viable - Living.

Vibration - An oscillation wherein the quantity as a parameter that defines the motion of a mechanical system.

Virulence - The capacity of a microorganism to produce disease.

Virulent - Extremely poisonous or venomous; capable of overcoming bodily defensive mechanisms.

Virus - A class of very small germs or infecting agents which cause many diseases. They are capable of multiplying on in the living cells of some organism.

Viscera - Internal organs of the abdomen.

W

Wart - A characteristic growth on the skin, appearing most frequently on the fingers; generally regarded as a result of a virus infection.
Synonym: verruca.

Wave - A complete cycle from a positive to negative pressure.

Weber Test - A diagnostic bone conduction test with a tuning fork used to distinguish between conductive and S/N hearing losses.

White Noise - A noise whose spectrum density (or spectrum level) is substantially independent of frequency over a specified range.

X

Y

Z

ABBREVIATIONS AND DEFINITIONS OF EXPOSURE CRITERIA

PEL - Permissible Exposure Limit (OSHA)

Term used by the Occupational Safety and Health Administration to define various types of permissible exposure criteria for toxic substances listed in Subpart Z of 29 CFR 1910 (e.g., TWA, C, CC, AL as defined below).

TLV^R - Threshold Limit Value (ACGIH)

Registered term used by the American Conference of Governmental Industrial Hygienists to define various types of recommended exposure criteria for toxic substances and harmful physical agents (e.g., TWA, C, STEL as defined below). TLV's^R are published annually by the ACGIH as: TLV's^R Threshold Limit Values For Chemical Substances and Physical Agents in the Workroom Environment.

TWA - Time-Weighted Average (OSHA and ACGIH)

The time-weighted average concentration for a normal 8-hour workday, or 40-hour workweek, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect.

For example, if two samples had 0.38 mg/m³ for a 3.5 hour exposure and 0.2 mg/m³ for a 3.75 hour exposure, the 8-hour average would be:

$$TWA = \frac{(0.38)(3.5) + (0.2)(3.75)}{8} = 0.26 \text{ mg/m}^3$$

C - Ceiling Value (OSHA; Ceiling (ACGIH)

The concentration that should not be exceeded, even instantaneously.

CC - Ceiling Concentration (OSHA)

Certain toxic substances (Table Z-2, 29 CFR 1910.1000) have been assigned an "acceptable ceiling concentration." An employee's exposure to a material listed in Table Z-2 shall not exceed, at any time during an 8-hour shift, the acceptable ceiling concentration limit given for the material in the table, except for a time period, and up to a concentration not exceeding the maximum duration and concentration allowed in the column "acceptable maximum peak above the acceptable ceiling concentration for an 8-hour shift."

AL - Action Level (OSHA)

Defined as one-half (1/2) of the permissible 8-hour time-weighted average concentration (1/2 PEL-TWA).

T-15 - 15-Minute Sample (Tenneco Chemicals)

Concentration of a given chemical substance as determined by a continuous 15-minute sample. Such concentrations may be used for comparison with C, CC, and STEL.

STEL - Short Term Exposure Limit (ACGIH)

The maximal concentration to which workers can be exposed for a period up to 15 minutes continuously without suffering from
1) irritation, 2) chronic or irreversible tissue change, or
3) narcosis of sufficient degree to increase accident proneness, impair self-rescue, or materially reduce work efficiency, provided that the daily TLV-TWA also is not exceeded. The STEL ceiling, not to be exceeded at any time during the 15-minute excursion period. STEL's are based on one or more of the following criteria:

- (1) Adopted TLV's including those with a "C" or "ceiling" limit.
- (2) TWA-TLV Excursion Factors listed in Appendix D.
- (3) Pennsylvania Short-Term Limits for Exposure to Airborne Contaminants (Pennsylvania Department of Health, Chapter 4; Art. 432, Rev. January 25, 1968).
- (4) OSHA Occupational Safety and Health Standards, Federal Register Vol. 36, No. 29, 1971. The TWA-STEL should not be used as engineering design criterion or considered as an emergency exposure level (EEL).