

NIOSH



Recommendations for Occupational Safety and Health

Compendium of Policy Documents and Statements



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control
National Institute for Occupational Safety and Health

CDC
CENTERS FOR DISEASE CONTROL

**NIOSH RECOMMENDATIONS FOR
OCCUPATIONAL SAFETY AND HEALTH**

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and Statements**

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National Institute for Occupational Safety and Health
Division of Standards Development and Technology Transfer
Cincinnati, Ohio

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DEFINITIONS OF ABBREVIATIONS AND TERMS

ATSDR	Agency for Toxic Substances and Disease Registry
Ca	agent recommended by NIOSH to be treated as a potential occupational carcinogen
CAS	Chemical Abstracts Service
CDC	Centers for Disease Control
Ceiling	The exposure that shall not be exceeded during any part of the workday. If instantaneous monitoring is not feasible, the ceiling shall be assessed as a 15-min TWA exposure (unless otherwise specified) that shall not be exceeded at any time during a workday.
CFR	Code of Federal Regulations
CIB	Current Intelligence Bulletin
CNS	central nervous system
CPSC	Consumer Product Safety Commission
dBA	decibels measured on the A scale (which approximates the response of the human ear)
DHEW	U.S. Department of Health, Education, and Welfare
DHHS	U.S. Department of Health and Human Services
EPA	U.S. Environmental Protection Agency
fibers/cc	fibers of contaminant per cubic centimeter of air
J/cm ²	joules per square centimeter
LOQ	limit of quantitation
μg	microgram
μm	micrometer
mg/m ³	milligrams of contaminant per cubic meter of air

mppcf	millions of particles per cubic foot of air
MSHA	Mine Safety and Health Administration
mW/cm ²	milliwatts per square centimeter
NEG	Nordic Expert Group for Documentation of Occupational Exposure Limits
NESHAP	National Emission Standards for Hazardous Air Pollutants
NIEHS	National Institute of Environmental Health Sciences
NIOSH	National Institute for Occupational Safety and Health
NIOH	National Institute of Occupational Health (Sweden)
nm	nanometer
No.	number
NTIS	National Technical Information Service
OSHA	Occupational Safety and Health Administration
PAHs	polycyclic aromatic hydrocarbons
PEL	permissible exposure limit (OSHA)
ppb	parts of contaminant per billion parts of air at 25°C and 1 atmosphere of pressure
ppm	parts of contaminant per million parts of air at 25°C and 1 atmosphere of pressure
REL	Recommended exposure limit. RELs are occupational exposure limits recommended by NIOSH as being protective of worker health and safety over a working lifetime. The REL is used in combination with engineering and work practice controls, exposure and medical monitoring, labeling, posting, worker training, and personal protective equipment. This limit is frequently expressed as a time-weighted average (TWA) exposure for up to 10 hr/day during a 40-hr workweek. The REL may also be expressed as (1) a short-term exposure limit (STEL) that should never be exceeded and is to be determined in a specified sampling time (usually 15 min), or (2) a ceiling limit that should never be exceeded even instantaneously unless specified over a given time period.
RTECS	Registry of Toxic Effects of Chemical Substances
Skin	The notation "skin" indicates that airborne or direct exposure by the cutaneous route (including mucous membranes and eyes) contributes to overall exposure.
STEL	Short-term exposure limit. Unless otherwise noted, the STEL is the 15-min TWA exposure that shall not be exceeded at any time during a workday.

TWA	Time-weighted average. Unless otherwise noted, TWA concentrations of a contaminant are for up to a 10-hr workday during a 40-hr workweek.
WL	working level
WLM	working level month

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