

OUTDOOR AIR POLLUTION

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TO HUMANS

LIST OF ABBREVIATIONS

AAQS	ambient air quality standards
ACS	American Cancer Society
AhR	aryl hydrocarbon receptor
AHSMOG	Adventist Health Study on Smog
AMs	alveolar macrophages
AOD	aerosol optical depth
B[a]P	benzo[a]pyrene
BALF	bronchoalveolar lavage fluid
BC	black carbon
BMI	body mass index
BPDE	benzo[a]pyrene diol epoxide
bw	body weight
CA	chromosomal aberration
CAPs	concentrated ambient particles
CEPI	Comprehensive Environmental Pollution Index
CI	confidence interval
CNS	central nervous system
CO	carbon monoxide
CO ₂	carbon dioxide
COPD	chronic obstructive pulmonary disease
CPCB	Central Pollution Control Board
CPS-II	Cancer Prevention Study II
CRP	C-reactive protein
DB[a,h]A	dibenz[a,h]anthracene
DCFH	2',7'-dichlorodihydrofluorescein
DCM	dichloromethane
DFI	DNA fragmentation index
DFO	deferoxamine
dG	deoxyguanosine
DIPN	<i>N</i> -nitrosodiisopropanolamine
DMPO	5,5-dimethyl-1-pyrroline- <i>N</i> -oxide
DMSO	dimethyl sulfoxide
DMTU	dimethylthiourea
DTT	dithiothreitol

EBC	exhaled breath condensate
EC	elemental carbon
ECD	electrochemical detection
EDTA	ethylenediaminetetraacetic acid
EEA	European Environment Agency
ELISA	enzyme-linked immunosorbent assay
EMEP	European Monitoring and Evaluation Programme
ENDOIII	endonuclease III
EOC	equivalent organic carbon
EOM	extractable organic matter
EPIC	European Prospective Investigation into Cancer and Nutrition
ESR	electron spin resonance
ESTR	expanded simple tandem repeat
FeNO	fractional exhaled nitrogen oxide
FISH	fluorescence in situ hybridization
FPG	formamidopyrimidine DNA glycosylase
GEM	gaseous elemental mercury
GFFs	glass-fibre filters
GIS	geographic information system
GSTM1	glutathione S-transferase M1
HAPs	hazardous air pollutants
HEPA	high-efficiency particulate air
Hg-P	particulate mercury
HPLC	high-performance liquid chromatography
Hprt	hypoxanthine–guanine phosphoribosyl transferase
HR	hazard ratio
ICD	International Classification of Diseases
IL	interleukin
IMF	induced mutant fraction
IQR	interquartile range
IRR	incidence rate ratio
LC	liquid chromatography
LC ₅₀	median lethal concentration
M ₁ dG	malondialdehyde–deoxyguanosine
MDA	malondialdehyde
MN	micronuclei
MS	mass spectrometry
MSA	Metropolitan Statistical Area
MSATs	mobile source air toxics
NAAQS	National Ambient Air Quality Standards
NAMP	National Air Quality Monitoring Programme
NAPS	National Air Pollution Surveillance
NAT2	N-acetyltransferase 2
NATA	National-Scale Air Toxics Assessment
NDEA	N-nitrosodiethylamine
NDPA	N-nitrosodipentylamine
NESHAPs	National Emissions Standards for Hazardous Air Pollutants
NHAPS	National Human Activity Pattern Survey
NMHC	non-methane hydrocarbons
NO	nitrogen oxide

NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NR	nitroreductase
OAT	<i>O</i> -acetyltransferase
OC	organic carbon
1-OHP	1-hydroxypyrene
OR	odds ratio
8-oxodG	8-oxo-7,8-dihydro-2'-deoxyguanosine
PACs	polycyclic aromatic compounds
PAHs	polycyclic aromatic hydrocarbons
PBMCs	peripheral blood mononuclear cells
PBS	phosphate-buffered saline
PCBs	polychlorinated biphenyls
PCEs	polychromatic erythrocytes
PEC	pulmonary endocrine cell
PGF ₂	prostaglandin E2
PM	particulate matter
PM ₁₀	particulate matter with particles of aerodynamic diameter < 10 µm
PM ₁₅	particulate matter with particles of aerodynamic diameter < 15 µm
PM _{2.5}	particulate matter with particles of aerodynamic diameter < 2.5 µm
PMNs	polymorphonuclear leukocytes
PNC	particle number concentration
POPs	persistent organic pollutants
PUF	polyurethane foam
RGM	reactive gaseous mercury
ROFA	residual oil fly ash
ROS	reactive oxygen species
RR	relative risk
SCEs	sister chromatid exchanges
SCSA	sperm chromatin structure assay
SEER	Surveillance, Epidemiology, and End Results
SIR	standardized incidence ratio
SLF	surrogate lung fluid
SMR	standardized mortality ratio
SO ₂	sulfur dioxide
SO _x	sulfur oxides
SPM	suspended particulate matter
S-PMA	<i>S</i> -phenyl mercapturic acid
SRM	standard reference mixture
SVOCs	semivolatile organic compounds
<i>t,t</i> -MA	<i>trans,trans</i> -muconic acid
TA98NR	TA98 strains deficient in nitroreductase
TBARS	thiobarbituric acid reactive substances
TEQ	toxic equivalence quotient
TIS	traffic intensity score
TK	thymidine kinase
TLC	thin-layer chromatography
TNF	tumour necrosis factor
TPA	12-O-tetradecanoylphorbol-13-acetate
TSP	total suspended particles

UFP

ultrafine particles

US EPA

United States Environmental Protection Agency

VOCs

volatile organic compounds

WHO

World Health Organization