# ABBREVIATIONS AND ACRONYMS

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<table>
<thead>
<tr>
<th>Abbreviation</th>
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<tbody>
<tr>
<td>ACOEM</td>
<td>American College of Occupational and Environmental Medicine</td>
</tr>
<tr>
<td>AEGL</td>
<td>Acute Exposure Guideline Level</td>
</tr>
<tr>
<td>AFCITA</td>
<td>Air Force Complete Immunization Tracking Application</td>
</tr>
<tr>
<td>AFHSC</td>
<td>Armed Forces Health Surveillance Center</td>
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<tr>
<td>AHLTA</td>
<td>Armed Forces Health Longitudinal Technology Application</td>
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<tr>
<td>AHR</td>
<td>airway hyperresponsiveness</td>
</tr>
<tr>
<td>AIT</td>
<td>allergy immunotherapy</td>
</tr>
<tr>
<td>AOR</td>
<td>adjusted odds ratio</td>
</tr>
<tr>
<td>ATP</td>
<td>adenosine triphosphate</td>
</tr>
<tr>
<td>ATS</td>
<td>American Thoracic Society</td>
</tr>
<tr>
<td>A-VO₂̄</td>
<td>arterial-venous oxygen difference</td>
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## B

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<th>Abbreviation</th>
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<tbody>
<tr>
<td>BAL</td>
<td>bronchoalveolar lavage</td>
</tr>
<tr>
<td>BALF</td>
<td>bronchoalveolar lavage fluid</td>
</tr>
<tr>
<td>BAMC</td>
<td>Brooke Army Medical Center</td>
</tr>
<tr>
<td>BASE</td>
<td>Building Assessment Survey and Evaluation</td>
</tr>
<tr>
<td>BC</td>
<td>bradycardia</td>
</tr>
<tr>
<td>BMI</td>
<td>body mass index</td>
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<tr>
<td>BPT</td>
<td>bronchoprovocation testing</td>
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<th>Abbreviation</th>
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<tbody>
<tr>
<td>CATI</td>
<td>computer-assisted telephone interview</td>
</tr>
<tr>
<td>CB</td>
<td>constrictive bronchiolitis</td>
</tr>
<tr>
<td>CBPR</td>
<td>community-based participatory research</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td>CENTCOM AOR</td>
<td>Central Command Area of Responsibility</td>
</tr>
<tr>
<td>CERC</td>
<td>Clinical Evaluation of Respiratory Conditions</td>
</tr>
<tr>
<td>CHAMPS</td>
<td>Career History Archival Medical and Personnel System</td>
</tr>
<tr>
<td>CI</td>
<td>confidence interval</td>
</tr>
<tr>
<td>CIA</td>
<td>Central Intelligence Agency</td>
</tr>
<tr>
<td>CL</td>
<td>confidence limit</td>
</tr>
<tr>
<td>CLa</td>
<td>absolute confidence limit</td>
</tr>
<tr>
<td>CLr</td>
<td>relative confidence limit</td>
</tr>
<tr>
<td>CO</td>
<td>cardiac output</td>
</tr>
<tr>
<td>CONUS</td>
<td>continental United States</td>
</tr>
<tr>
<td>COP</td>
<td>cryptogenic organizing pneumonia</td>
</tr>
<tr>
<td>COPD</td>
<td>chronic obstructive pulmonary disease</td>
</tr>
<tr>
<td>COT</td>
<td>Committee on Toxicology</td>
</tr>
<tr>
<td>CPET</td>
<td>cardiopulmonary exercise testing</td>
</tr>
<tr>
<td>CPRS</td>
<td>Computerized Patient Record System</td>
</tr>
<tr>
<td>CT</td>
<td>computed tomography</td>
</tr>
<tr>
<td>CTR-EMED</td>
<td>Combat Trauma Registry Expeditionary Medical Encounter Database</td>
</tr>
<tr>
<td>CXR</td>
<td>chest X-ray</td>
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<th>Abbreviation</th>
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<tbody>
<tr>
<td>DA</td>
<td>Department of the Army</td>
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<tr>
<td>DARE</td>
<td>Deployment Airborne Respiratory Exposure</td>
</tr>
<tr>
<td>DAV</td>
<td>Disabled American Veteran</td>
</tr>
<tr>
<td>DD</td>
<td>Department of Defense</td>
</tr>
<tr>
<td>DEERS</td>
<td>Defense Enrollment Eligibility Reporting System</td>
</tr>
<tr>
<td>DHB</td>
<td>Defense Health Board</td>
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<tr>
<td>Dis</td>
<td>disease</td>
</tr>
<tr>
<td>DLCO</td>
<td>diffusing capacity of the lung for carbon monoxide</td>
</tr>
<tr>
<td>DLCO/VA</td>
<td>diffusing capacity of the lung for carbon monoxide corrected for alveolar volume</td>
</tr>
<tr>
<td>DLD</td>
<td>Division of Lung Disease</td>
</tr>
<tr>
<td>DMDC</td>
<td>Defense Manpower Data Center</td>
</tr>
<tr>
<td>DMSS</td>
<td>Defense Medical Surveillance System</td>
</tr>
<tr>
<td>DNA</td>
<td>deoxyribonucleic acid</td>
</tr>
<tr>
<td>DoD</td>
<td>US Department of Defense</td>
</tr>
<tr>
<td>DoDSR</td>
<td>Department of Defense Serum Repository</td>
</tr>
<tr>
<td>DOEHRS</td>
<td>Defense Occupational and Environmental Health Readiness System</td>
</tr>
<tr>
<td>DU</td>
<td>depleted uranium</td>
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<tr>
<td>DVA</td>
<td>US Department of Veterans Affairs</td>
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## E

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<tbody>
<tr>
<td>EDHA</td>
<td>Electronic Deployment Health Assessment</td>
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<tr>
<td>EIB</td>
<td>exercise-induced bronchospasm</td>
</tr>
<tr>
<td>Endo</td>
<td>endocrine</td>
</tr>
<tr>
<td>EPMS</td>
<td>enhanced particulate matter sampling/surveillance</td>
</tr>
<tr>
<td>EPMSp</td>
<td>Enhanced Particulate Matter Survey Program</td>
</tr>
<tr>
<td>ERS</td>
<td>European Respiratory Society</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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## F

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<tbody>
<tr>
<td>FEV₁/FEV₁</td>
<td>forced expiratory volume in 1 second</td>
</tr>
<tr>
<td>FMEF</td>
<td>forced midexpiratory flow</td>
</tr>
<tr>
<td>FOB</td>
<td>fiberoptic bronchoscopy</td>
</tr>
<tr>
<td>FOH</td>
<td>Federal Occupational Health</td>
</tr>
<tr>
<td>FRC</td>
<td>forced residual capacity</td>
</tr>
<tr>
<td>FVC</td>
<td>forced vital capacity</td>
</tr>
<tr>
<td>FVL</td>
<td>flow volume loop</td>
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## G

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<th>Abbreviation</th>
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<tbody>
<tr>
<td>G6PD</td>
<td>glucose-6-phosphate dehydrogenase</td>
</tr>
<tr>
<td>GenISIS</td>
<td>Genomic Information System for Integrated Sciences</td>
</tr>
<tr>
<td>GMP</td>
<td>Genomics Medicine Program</td>
</tr>
<tr>
<td>GMPAC</td>
<td>Genomics Medicine Program Advisory Committee</td>
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## H

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<tbody>
<tr>
<td>H₂S</td>
<td>hydrogen sulfide</td>
</tr>
<tr>
<td>HEAR</td>
<td>Health Enrollment Assessment Review</td>
</tr>
<tr>
<td>HIPAA</td>
<td>Health Insurance Portability and Accountability Act</td>
</tr>
<tr>
<td>'H-NMR</td>
<td>proton nuclear magnetic resonance</td>
</tr>
<tr>
<td>HRCT</td>
<td>high-resolution computed tomography</td>
</tr>
<tr>
<td>HVAC</td>
<td>heating, ventilation, and air conditioning</td>
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<tbody>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>ICD</td>
<td>International Classification of Diseases</td>
</tr>
<tr>
<td>ICD-9</td>
<td>International Classification of Diseases, Ninth Revision</td>
</tr>
<tr>
<td>ICD-9-CM</td>
<td>International Classification of Diseases, Ninth Revision, Clinical Modification</td>
</tr>
<tr>
<td>ID</td>
<td>identification</td>
</tr>
<tr>
<td>IEHR</td>
<td>integrated electronic health record</td>
</tr>
<tr>
<td>IgE</td>
<td>immunoglobulin E</td>
</tr>
<tr>
<td>ILD</td>
<td>interstitial lung disease</td>
</tr>
<tr>
<td>ILER</td>
<td>individual longitudinal exposure record</td>
</tr>
<tr>
<td>IMCA</td>
<td>indicators for monitoring COPD and asthma</td>
</tr>
<tr>
<td>IOM</td>
<td>Institute of Medicine</td>
</tr>
<tr>
<td>IR</td>
<td>incidence rate</td>
</tr>
<tr>
<td>IRR</td>
<td>incidence/incident rate ratio</td>
</tr>
<tr>
<td>IUATLD</td>
<td>International Union Against Tuberculosis and Lung Disease</td>
</tr>
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## J

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<tbody>
<tr>
<td>JBB</td>
<td>Joint Base Balad/Joint Air Base Balad</td>
</tr>
<tr>
<td>JMeWS</td>
<td>Joint Medical Workstation</td>
</tr>
<tr>
<td>JPMWG</td>
<td>Joint Particulate Matter Work Group</td>
</tr>
<tr>
<td>JTTR</td>
<td>Joint Theater Trauma Registry</td>
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</table>
Airborne Hazards Related to Deployment

Kt: kiloton

LLD: limit of longitudinal decline
LLDa: absolute limit of longitudinal decline
LLDr: relative limit of longitudinal decline
LLN: lower limit of normal

Max HR: maximal heart rate
MCS: Millennium Cohort Study
MCT: methacholine challenge test
MEDPROS: Medical Protection System
MEGs: Military Exposure Guidelines
MEP: maximum expiratory pressure
MESL: Military Exposure Surveillance Library
Metab: metabolism
MHS: Military Health System
MIP: maximum inspiratory pressure
MOMRP: Military Operational Medicine Research Program
MOS-SF12: Medical Outcomes Study-Short Form 12
MRC: Medical Research Council
MRMC: US Army Medical Research and Materiel Command
MS: musculoskeletal
MTF: military treatment facility
MVP: Million Veteran Program

NAMRU-D: Naval Medicine Research Unit-Dayton
NCHS: National Center for Health Statistics
NewGen: National Health Study for a New Generation of US Veterans
NHANES: National Health and Nutrition Examination Survey
NHANES III: Third National Health and Nutrition Examination Survey
NHLBI: National Heart, Lung, and Blood Institute
NHRC: Naval Health Research Center
NIEHS: National Institute of Environmental Health Sciences
NIOSH: National Institute for Occupational Safety and Health
NMCRB-17: Naval Mobile Construction Battalion SEVENTEEN
NRC: National Research Council
Nutrit: nutrition

OEF: Operation Enduring Freedom
OIF: Operation Iraqi Freedom
OND: Operation New Dawn
ORD: Office of Research and Development
OSHA: Occupational Safety and Health Administration

PACT: Patient Aligned Care Team
PAH: polycyclic aromatic hydrocarbon
PBD: postbronchodilator
PCL: Posttraumatic Stress Disorder Check List
PCL-M: PTSD Check List-Military
PDF: Portable Document Format
PDHA: Post-Deployment Health Assessment/Pre-Deployment Health Assessment
PDHRA: Post-Deployment Health Reassessment
PDTX: Pharmacy Data Transaction System
PFT: pulmonary function test/testing
PHQ-9: Patient Health Questionnaire-9
PIMR: preventive Health Assessment and Individual Medical Readiness
PM: particulate matter
PM_{10}: particulate matter with an aerodynamic diameter less than or equal to 10 µm; particulate matter level 10
PM_{2.5}: particulate matter with an aerodynamic diameter less than 2.5 µm; particulate matter level 2.5
PPV: positive predictive value
pred: predicted
Proj: projected
PTSD: posttraumatic stress disorder
PVNTMED: preventive medicine

QG: quality grade

RADS: reactive airways dysfunction syndrome
REF: reference value
Regr: regression
Rep: repeatability
Resp: respiratory
Rev: revised
RNA: ribonucleic acid
RR: respiratory rate
RV: residual volume

NADIR: Standard Ambulatory Data Record
SD: standard deviation
SE: standard error
Seabee: member of the US Navy Construction Battalion (CB); the term “Seabee” is derived from “CB”
SIDIR: Standard Inpatient Data Record
SO_{2}: sulfur dioxide
Sp: absolute within-person variation
SPIROLA: Spirometry Longitudinal Data Analysis (software)
SPOD/E: Shuaiba Port of Debarkation/Embarkation
Sr: relative within-person variation
SSIC: Standard Subject Identification Codes
STAMPEDE: Study of Active-Duty Military for Pulmonary Disease Related to Environmental Dust (or Deployment) Exposure
Sw: within-person variation
SWA: southwest Asia
Swr: relative within-person variation
Sys: system

TAIHOD: Total Army Injury and Health Outcomes Database
TBLB: transbronchial lung biopsy
TC: tachycardia
TCDD: 2,3,7,8-tetrachlorodibenzo-p-dioxin
TED: TRICARE Encounter Data
TEFSC: Toxic Embedded Fragment Surveillance Center
TGV: thoracic gas volume (performed by plethysmography)
TIC/TIM: toxic industrial chemical/toxic industrial material
TLC: total lung capacity
TO: toxic organic

95% UCL: 95% upper confidence limit
US: United States
USAPHC: US Army Public Health Command
USCENTCOM: US Central Command
USEPA: US Environmental Protection Agency
USPM: US urban particulate matter
Abbreviations and Acronyms

V
VA: US Department of Veterans Affairs/Veterans Affairs
VAD IR/VADIR: VA/DoD Identity Repository
VAMC: Veterans Affairs Medical Center
VATS: video-assisted thoracoscopic surgery
VC: vital capacity
VCD: vocal cord dysfunction
$\text{VCO}_2$: carbon dioxide production
$\text{VE}$: minute ventilation
VF: ventricular fibrillation
VHA: Veterans Health Administration
$\text{VO}_2$: oxygen uptake/oxygen consumption
$\text{VO}_{2\text{max}}$: maximal oxygen consumption
VOC: volatile organic compound

W
WG: working group
WHO: World Health Organization
WRIISC: War Related Illness and Injury Study Center
WTC: World Trade Center

Y
y: year
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