

Environmental Health Officer Deployment Resource Guide

Introduction

This updated Deployment Resource Guide provides information on common environmental health issues faced in disasters. It is organized into five sections, based upon the major roles that Environmental Health Officers (EHOs) take when deployed to disaster sites; General Environmental Health, Food Safety, Occupational Health/Industrial Hygiene, Hazardous Waste/Materials, and Safety Officer.

This information helps United States Public Health Service (USPHS) EHOs by providing essential emergency response resources. However, it is also an excellent resource for other environmental health professionals who may be called to respond to emergencies.

The Deployment Resource Guide is maintained by the EHO Professional Advisory Committee's Readiness Subcommittee. It is the goal of the Subcommittee to provide downloadable mobile electronic resources to officers before they reach a location that may be without communication networks (internet, cellular, etc.).

The information within this guide focuses on natural disasters, industrial accidents, and chemical spills because these are the most likely events to which officers would respond. It is a compilation of both technical guidance and community education tools. Based on your deployment role, we suggest you review the resources provided in this document, download/print resources as necessary for use during your deployment.

General Environmental Health Officer Information

- [Environmental Health Training in Emergency Response \(EHTER\)](#)
- Water-Related Issues
 - General Water Guidance
 - [Environmental Health in Disasters/Emergencies- Chapter 7: Water Supply – WHO \(PDF\)](#)
 - [Keep Food and Water Safe after a Natural Disaster or Power Outage CDC \(PDF\)](#)
 - [Food and Water in an Emergency – Red Cross \(PDF\)](#)
 - [Emergency Drinking Water Sources: Requirements for Using Emergency Sources Safely-Washington Department of Health](#)
 - [Safe Water Systems for the Developing World: A Handbook for Implementing Household-Based Water Treatment and Safe Storage Projects \(PDF\)](#)
 - Disinfection of Wells
 - [Drilled Well Disinfection – Indiana Department of Environmental Management \(PDF\)](#)
 - [Disinfecting of Drilled or Driven Wells Following an Emergency CDC](#)
 - [Disinfecting Bored or Dug Wells After an Emergency CDC](#)
 - [Cleaning and Disinfecting Boreholes in Emergencies – WHO \(PDF\)](#)
 - [Cleaning and Disinfecting Wells in Emergencies – WHO \(PDF\)](#)
 - [California Disaster Field Manual, Section 2-7 \[can be ordered from the California Association of Environmental Health Administrators\]](#)
 - Disinfection of Water Tanks and Mains
 - [California Disaster Field Manual, Section 2-9 to 20 \[can be ordered from the California Association of Environmental Health Administrators\]](#)
 - Disinfection of Water-Hauling Tanks
 - [Cleaning and Disinfecting Water Storage Tanks and Tankers – WHO \(PDF\)](#)
 - [Delivering Safe Water by Tanker – WHO \(PDF\)](#)
 - [California Disaster Field Manual, Section 2-10 \[can be ordered from the California Association of Environmental Health Administrators\]](#)
 - Disinfection of Water for Drinking
 - [Fact Sheet: Post-Disaster Water Treatment – Red Cross \(PDF\)](#)
 - [Disinfection of Water – Red Cross \(PDF\)](#)
 - [Safe Drinking Water – CDC \(PDF\)](#)
 - [Emergency Disinfection of Drinking Water – EPA \(PDF\)](#)
 - [Emergency Treatment of Drinking Water at Point-of-Use – WHO \(PDF\)](#)
 - [Solar Water Disinfection – WHO \(PDF\)](#)
 - [California Disaster Field Manual, Section 2-4 to 6 \[can be ordered from the California Association of Environmental Health Administrators\]](#)
 - [Safe Water Systems for the Developing World: A Handbook for Implementing Household-Based Water Treatment and Safe Storage Projects \(PDF\)](#)
 - Storage of Water
 - [Water Storage Before Disaster Strikes – Red Cross \(PDF\)](#)
 - [California Disaster Field Manual, Section 2-6 \[can be ordered from the California Association of Environmental Health Administrators\]](#)

- Water Disruption in Food Service Facilities
 - [Emergency Action Plans for Retail Food Establishments pgs. 17-29 Michigan \(PDF\) – English Version](#)
 - [Spanish Version](#)
 - [Chinese Version](#)
 - [Arabic Version](#)
- Shelters
 - [Minimum Standards in Water Supply, Sanitation, and Hygiene Promotion – The Sphere Project \(PDF\)](#)
 - [Guide to Sanitation in Shelters and Camps – PAHO](#)
- Water Purification Tablets
 - **Chlorine and Iodine** - These tablets are available from drug and sporting goods stores and should be used as stated in the instructions. When instructions are not available, use one tablet for each quart of water to be purified.
- Indoor Environment and Shelter Issues
 - General Indoor Environment and Shelter Guidance
 - [After a Flood: How to Restore Your Home - CIRIA \(PDF\)](#)
 - [Flood Cleanup-Avoiding Indoor Air Quality Problems - EPA \(PDF\)](#)
 - [NIOSH Interim Recommendations for the Cleaning and Remediation of Flood-Contaminated HVAC Systems: A Guide for Building Owners and Managers - CDC](#)
 - [Cleaning and Sanitizing With Bleach After an Emergency - CDC](#)
 - [California Disaster Field Manual, Cleaning and Disinfection-Section 6-B \[can be ordered from the California Association of Environmental Health Administrators\]](#)
 - Safety Issues
 - Returning Home After a Disaster: Be Healthy and Safe - CDC
 - [English](#)
 - [Spanish](#)
 - [Update: NIOSH Warns of Hazards of Flood Cleanup Work - NIOSH](#)
 - [Public Health Issues Related to Summertime Blackouts - CDC \(PDF\)](#)
 - After a Tornado - CDC
 - [English version](#)
 - [Spanish version](#)
 - [Electrical Safety and Generators - CDC](#)
 - [What You Need to Know When the Power Goes Out Unexpectedly - CDC](#)
 - Carbon Monoxide Issues
 - Pictogram: "Carbon Monoxide Hazard" - CDC (PDF)
 - [English version](#)
 - [Spanish version](#)
 - Pictogram: "Say No to CO!" - CDC (PDF)
 - [English version](#)
 - [Spanish version](#)
 - [Door Hangers: Two-sided "Say No to CO!" - CDC \(PDF\)](#)
 - [English version](#)
 - **Carbon Monoxide Poisoning Frequently Asked Questions - CDC - (PDF)**

- [Arabic version](#)
 - [English version](#)
 - [Chinese version](#)
 - [German version](#)
 - [Spanish version](#)
 - [French version](#)
 - [Hmong version](#)
 - [Haitian Creole version](#)
 - [Portuguese version](#)
 - [Vietnamese version](#)
- [Protecting Yourself From Carbon Monoxide After an Emergency - CDC](#)
- Mold Issues
 - **Mold: Prevention Strategies and Possible Health Effects in the Aftermath of Hurricanes Katrina and Rita**
 - [MMWR Recommendations and Reports - CDC](#)
 - [Report from the Mold Work Group - CDC](#)
 - [Homeowner's and Renter's Guide to Mold Cleanup After Disasters – CDC \(PDF\)](#)
 - [Getting Rid of Mold \(Poster\) - CDC \(PDF\)](#)
 - [Mold Prevention Strategies and Possible Health Effects in the Aftermath of Hurricanes and Major Floods– CDC](#)
 - [Flood Cleanup - Avoiding Indoor Air Quality Problems - EPA](#)
 - [A Brief Guide to Mold, Moisture, and Your Home - EPA \(PDF\)](#)
- Shelters
 - [Public Health Guidance Documents for Evacuation Shelters - Dallas County Health and Human Services \(PDF\)](#)
 - [Guide to Sanitation in Shelters and Camps - PAHO \(PDF\)](#)
 - **Humanitarian Charter and Minimum Standards in Disaster Response - The Sphere Project (PDF) [[Other languages available](#)]**
 - [Arabic](#)
 - [Braille](#) (English)
 - [Chinese](#) (Simplified)
 - [English](#)
 - [French](#)
 - [German](#)
 - [Italian](#)
 - [Japanese](#)
 - [Spanish](#)
 - [Guidelines for the Management of Acute Diarrhea - CDC](#)
 - [California Disaster Field Manual, Emergency Shelters-Section 6 \[can be ordered from the California Association of Environmental Health Administrators\]](#)
- **Sewage and Wastewater Related Issues**
 - **Septic Tanks Problems**
 - [Disaster Preparedness: Septic Tank Systems During Power Outages and Floods - King County, WA](#)

- Cleanup of Sewage Spills
 - [Disaster Preparedness Cleaning up a Sewage Spill - King County, WA](#)
 - [National Lime Association Fact Sheet: Using Lime to Stabilize Biosolids \(PDF\)](#)
 - [After a Hurricane or Flood: Cleanup of Flood Water - CDC](#)
- Sewage Problems in Food Service Establishments
 - [Emergency Action Plans for Retail Food Establishments, Michigan pg 22-29 \(PDF\)](#)
- Temporary Sewage Disposal
 - [Environmental Health in Disasters/Emergencies - Chapter 8 Sanitation - WHO \(PDF\)](#)
 - [California Disaster Field Manual, Chemical Toilets and Latrines-Section 4 \[can be ordered from the California Association of Environmental Health Administrators\]](#)
- General Sewage and Sanitation Guidance
 - [Environmental Health in Disasters/Emergencies - Chapter 8: Sanitation - WHO \(PDF\)](#)
 - [Emergency Sanitation Manual - Chapter 10: Wastewater Management \(PDF\)](#)
 - [Emergency Sanitation Manual - Chapter 6: Excreta Disposal \(PDF\)](#)
- Shelters
 - [Minimum Standards in Water Supply, Sanitation, and Hygiene Promotion - The Sphere Project \(PDF\)](#)
- Solid Waste/Household Related Issues
 - Disposal of Household Hazardous Waste
 - [Household Waste Disposal - EPA](#)
 - [Disposing of Debris Management Guide - FEMA \(PDF\)](#)
 - [Environmental Health in Disasters/Emergencies WHO - Chapter 8 Sanitation - WHO \(PDF\)](#)
 - [Cleaning Up After the Storm - Volusia County, Florida](#)
 - Medical Waste
 - [California Disaster Field Manual, Medical Waste-Section 9 \[can be ordered from the California Association of Environmental Health Administrators\]](#)
 - Solid Waste in Food Service
 - [Emergency Action Plans for Retail Food Establishments pg 14 - Michigan \(PDF\)](#)
 - Management of Dead Bodies after Disasters
 - [Management of Dead Bodies After Disasters: A Field Manual for First Responders - PAHO \(PDF\)](#)
 - Disposal of Water from Morgues
 - [Disposal of Liquid Waste from Autopsies in Tsunami - Affected Areas: Interim Guidance - CDC \(PDF\)](#)
 - Animal Carcass Disposal
 - [Animal Disposal After a Flood - CDC](#)
 - General Solid Waste Information
 - [Emergency Sanitation Manual Chapter 7: Solid Waste Management \(PDF\)](#)
 - [Disaster Debris Management- EPA](#)
 - [Planning for Disaster Debris - EPA \(PDF\)](#)
 - [Solid Waste Management in Emergencies - WHO \(PDF\)](#)

- **Vector-Related Issues**
 - **General Vector Control Guidance**
 - [Animal Disposal After a Flood - CDC](#)
 - [Flyer "Keep Animals Out" - CDC \(PDF\)](#)
 - [California Disaster Field Manual, Vector Control- Section 7 \[can be ordered from the California Association of Environmental Health Administrators\]](#)
 - [Preventing Dog Bites - CDC](#)
 - [Protecting Your Pets in an Emergency - CDC](#)
 - Flyer: "Stray Dogs in Hurricane Disaster Areas" - CDC (PDF)
 - [English](#)
 - [Spanish](#)
 - **Insect Issues**
 - [Aerial Application of Pesticides - US Air Force \(PDF\)](#)
 - [Guidance on the Eligibility of Vector Control - FEMA \(PDF\)](#)
 - [Public Health Confronts the Mosquito: Developing Sustainable State and Local Mosquito Control Programs - ASTHO \(PDF\)](#)
 - [Epidemic/Epizootic West Nile Virus in the United States: Guidelines for Surveillance, Prevention, and Control - CDC \(PDF\)](#)
 - [Vector Control in Disaster Situations - PAHO \(DOC\)](#)
 - [Insect Repellent Use and Safety - CDC \(PDF\)](#)
 - [Medical Problems and Treatment Considerations for the Red Imported Fire Ant - Texas A&M University \(PDF\)](#)
 - **Rodent Issues**
 - [Rodent Control After a Disaster - CDC](#)
 - [Rat-Bite Fever - CDC](#)
 - **Other Issues**
 - [How to Prevent or Respond to a Snake Bite - CDC](#)
 - [Flyer: "Are You Sure It's Only a Spider Bite?" - CDC \(PDF\)](#)
 - [NIOSH Interim Guidance on Health and Safety Hazards When Working With Displaced Domestic Animals - CDC](#)
 - [Personal Protective Measures Against Insects and Other Arthropods of Military Significance - AFPMB \(PDF\)](#)
 - **Shelter Issues**
 - [Interim Guidelines for Animal Health and Control of Disease Transmission in Pet Shelter - CDC](#)
 - [Animals in Public Evacuation Centers - CDC](#)
 - [Minimum Standards in Water Supply, Sanitation, and Hygiene Promotion - The Sphere Project \(PDF\)](#)
 - **Vector Control Options**
 - [Table: Protection Against Disease Vectors, Diseases, and Nuisance Pests pg. 165 - WHO \(PDF\)](#)
 - [California Disaster Field Manual, Pesticide Use- Section 7 \[can be ordered from the California Association of Environmental Health Administrators\]](#)

- **Collection of Samples**
 - [Methods for Trapping/Sampling Small Mammals for Virologic Testing - CDC \(PDF\)](#)
 - [Guidelines for Submitting Specimens to Special Pathogens Branch - CDC](#)
 - [Protocol for Postmortem Diagnosis of Rabies in Animals by Direct Fluorescent Antibody Testing - CDC \(PDF\)](#)
- **Common Vector-Borne Diseases**
 - [Compendium of Animal Rabies Prevention and Control, 2011 - CDC \(PDF\)](#)
 - [Rocky Mountain Spotted Fever - CDC](#)
 - [Lyme Disease: A Public Information Guide - CDC](#)
 - [Epidemic/Epizootic West Nile Virus - In the United States: Guidelines for Surveillance, Prevention, and Control - CDC \(PDF\)](#)
 - [HantaVirus Pulmonary Syndrome \(HPS\): What You Need to Know - CDC \(PDF\)](#)
 - [Plague Manual Chapter 6: Plague Surveillance - WHO \(PDF\)](#)

Hazardous Waste and Materials

- **Anticipation of Hazards**
 - [Hazardous Waste Operations and Emergency Response - OSHA](#)
 - [Emergency Preparedness Response Task Force: IH Deployment Checklist - AIHA \(DOC\)](#)
 - [Emergency Response to Terrorism Job Aid - FEMA \(PDF\)](#)
- **Recognition of Hazards**
 - **Chemical**
 - [Emergency Response Guidebook – DOT](#)
 - [ERG Spanish Version \(PDF\)](#)
 - [Hazardous Substances Database \(HSDB\) - NLM](#)
 - [NIOSH Chemical Agent Information - CDC](#)
 - [International Chemical Safety Cards \(ICSCs\): US National Version - CDC](#)
 - [Chemical Hazards Response Information System – USCG](#)
 - [Wireless Information System for Emergency Responders \(WISER\) - NIH](#)
 - [Household Products Database - HHS](#)
 - [EPA Chemical Fact Sheets](#)
 - [Toxicological Profile Information Sheets - ATSDR](#)
 - [Chemical Sampling Information \(CSI\) - OSHA](#)
 - [CBRN Defense links \(DOD\)](#)
 - **Biological**
 - [Anthrax eTool: Protecting the Worksite Against Terrorism - OSHA](#)
 - [Bioterrorism Agents Fact Sheets - CDC](#)
 - [Bioterrorism Emergency Preparedness & Response - CDC](#)
 - [Biological Agents - OSHA](#)
 - **Radiological**
 - [Guidance for Protective Action following a Radiological Terrorist Event - Health Physics Society \(PDF\)](#)
 - [Background Information \(PDF\)](#)
 - [The Army Radiation Safety Program Pamphlet 385–24 \(PDF\)](#)
 - [Radiation Clean up \(EPA\)](#)
 - [The Multi-Agency Radiation Surveys and Site Investigation Manual \(MARSSIM\) \(EPA\)](#)
- **Evaluation of Hazards**
 - [Threshold Limit Values and Biological Exposure Indices \(includes threshold limit values for chemical substances and for physical agents\) - American Conference of Governmental Industrial Hygienists \(issued annually\) - ACGIH](#)
 - [Permissible Exposure Limits, 1910 Subpart Z - Toxic and Hazardous Substances - OSHA](#)
 - [NIOSH Pocket Guide to Chemical Hazards - CDC \(PDF\)](#)
 - [Acute Exposure Guideline Levels \(AEGs\) - EPA](#)
 - [Screening Levels for Chemical Contaminants - DOE, EPA, ORNL](#)
- **Control and Decontamination Response**
 - [Interim Recommendations for the Selection and Use of Protective Clothing and Respirators Against Biological Agents – CDC](#)
 - [Hazardous Substances Database \(HSDB\) - NLM](#)

- [NIOSH Respiratory Protection Selection Logic 2004 - CDC \(PDF\)](#)
- [Managing Hazardous Materials Incidents \(MHMIs\) - ATSDR](#) - The MHMI series is a three volume set (with a video) comprised of recommendations for on-scene (pre-hospital), and hospital medical management of patients exposed during a hazardous materials incident.
- [Identifying Chemical Reactivity Hazards: Preliminary Screening Method - EPA \(PDF\)](#)
- [CBRN Matrix Chemical, Biological, Radiological and Nuclear \(CBRN\) PPE Selection Matrix - NIOSH/OSHA](#) - Personal Protective Equipment Selection Matrix for Emergency Responders

Occupational Health and Industrial Hygiene

- **Anticipation of Hazards**
 - DiNarti, S., editor. (1997). *The Occupational Environment: Its Evaluation and Control*. Fairfax, VA: AIHA Press.
 - Plog, B., Niland, J., & Quinlan, P., editors. (2001). *Fundamentals of Industrial Hygiene*, 5th ed. Chicago: National Safety Council.
 - [OSHA Hazard Evaluation for Hurricane Response](#)
 - [OSHA Job Hazard Analysis](#)
- **Recognition of Hazards**
 - **Identification**
 - Clayton, G. & Clayton, F., editors. (1991-1994). *Patty's Industrial Hygiene and Toxicology*. New York: John Wiley and Sons.
 - Hathaway, G., Proctor, N., and Hughes, J. (1996). *Proctor and Hughes' Chemical Hazards of the Workplace*. 4th edition. New York: Van Nostrand Reinhold.
 - Burgess, W. (1995). *Recognition of Health Hazards in Industry: A Review of Materials and Processes*, 2nd edition. New York: Wiley-Interscience.
 - Mager-Stellman, J., editor. (1997). *Encyclopedia of Occupational Health and Safety*, 4th edition. Four Volumes. Geneva: International Labour Office.
 - Othmer, K. & Kroschwitz, J., editor. (2005). *Kirk-Othmer Encyclopedia of Chemical Technology*, 5th edition. New York: John Wiley & Son.
 - [Emergency Response Guidebook - DOT \(PDF\)](#)
 - Drum, D. (2002). *Emergency Responders Guide to Chemical Reactivity and Compatibility*. New York: McGraw-Hill.
 - **Indoor Environmental Quality**
 - [Guidelines on Assessment and Remediation of Fungi in Indoor Environments - New York City \(PDF\)](#)
 - **Standards - ASHRAE**
 - [ASHRAE Standard 55-2004: Thermal Environmental Conditions for Human Occupancy \(ANSI approved\)](#)
 - [ASHRAE Standard 62.1-2004: Ventilation for Acceptable Indoor Air Quality](#)
 - **Indoor Air Quality - EPA**
 - [Mold Remediation in Schools and Commercial Buildings \(PDF\)](#)
 - [A Brief Guide to Mold, Moisture, and Your Home \(PDF\)](#)
 - [Building Air Quality: A Guide for Building Owners and Facility Managers \(PDF\)](#)
 - [Indoor Air Quality Tools for Schools Kit](#)
 - **Indoor Environmental Quality - NIOSH**
 - [Building Air Quality: A Guide for Building Owners and Facility Managers](#)
 - [NIOSH Indoor Environmental Quality Health Hazard Evaluations \(PDF\)](#)
 - [Questions and Answers on Stachybotrys chartarum and other molds - CDC \(PDF\)](#)
 - [Cleaning Up Mold After Hurricanes Katrina and Rita - Louisiana Department of Health & Hospitals \(PDF\)](#)

- [Indoor Air Quality - OSHA](#)
- Biological Hazards
 - [ACGIH. Bioaerosols: Assessment and Control. Cincinnati, OH: ACGIH, 1999](#)
 - [Biosafety in Microbiological and Biomedical Laboratories \(CDC\) \(PDF\)](#)
- Radiation
 - Shapiro, J. (2002). Radiation Protection: A Guide for Scientists and Physicians, 4th edition. Cambridge, MA: Harvard University Press.
 - [Health Physics Society - HPS](#)
 - [Guidance for Protective Action Following a Radiological Terrorist Event - Health Physics Society \(PDF\)](#)
 - [HPS Glossary for Radiation Terms \(PDF\)](#)
 - [Shielding of Gamma Radiation \(PDF\)](#)
 - [Ultraviolet Radiation and Public Health \(PDF\)](#)
- Thermal Stressors
 - [Extreme Heat: A Prevention Guide to Promote Your Personal Health and Safety - CDC \(PDF\)](#)
 - [NIOSH Health Hazard Evaluation on Heat Stress - CDC \(PDF\)](#)
- Noise
 - [Criteria for a Recommended Standard: Occupational Noise Exposures - CDC \(PDF\)](#)
- Chemical Hazards
 - [ACGIH. Threshold Limit Values Documentation, 7th edition. Cincinnati: ACGIH.](#)
- OSHA Fact Sheets and Quick Cards (PDFs)
 - [Procedures for Atmospheric Testing in Confined Spaces](#)
 - Asbestos Hazards
 - [English Fact Sheet](#)
 - [Spanish Fact Sheet](#)
 - [Protecting Workers from Asbestos Hazards](#)
 - [Carbon Monoxide Poisoning](#)
 - Chain Saws
 - [English Fact Sheet](#)
 - [Spanish Fact Sheet](#)
 - [English Quick Card](#)
 - [Spanish Quick Card](#)
 - Chipper Machine
 - [English Quick Card](#)
 - [Spanish Quick Card](#)
 - Cleanup Hazards
 - [English Fact Sheet](#)
 - Confined Spaces
 - [English Quick Card](#)
 - Construction Hazards
 - [English Quick Card](#)
 - [Spanish Quick Card](#)
 - Construction Personal Protective Equipment (PPE)
 - [English Quick Card](#)

- [Spanish Quick Card](#)
- Demolition
 - [English Fact Sheet](#)
 - [English Quick Card](#)
 - [Spanish Quick Card](#)
- [Downed Electrical Wires](#)
- Electrical Safety
 - [English Quick Card](#)
 - [Spanish Quick Card](#)
- [Fall Prevention](#)
- Fall Protection
 - [English Quick Card](#)
 - [Spanish Quick Card](#)
- Flood Cleanup
 - [English Fact Sheet](#)
- General Decontamination
 - [English Fact Sheet](#)
 - [English Quick Card](#)
 - [Spanish Quick Card](#)
- Hand Hygiene and Protective Gloves in Hurricane-Affected Areas
 - [English Fact Sheet](#)
 - [English Quick Card](#)
 - [Spanish Quick Card](#)
- Heat Stress
 - [English Fact Sheet](#)
 - [English Quick Card](#)
 - [Spanish Quick Card](#)
- [Handling Human Remains](#)
- Hydrogen Sulfide
 - [English Fact Sheet](#)
 - [English Quick Card](#)
 - [Spanish Quick Card](#)
- [Lead Hazards](#)
- Lead in Construction
 - [English Fact Sheet](#)
 - [English Quick Card](#)
 - [Spanish Quick Card](#)
- Mold
 - [English Quick Card](#)
 - [Spanish Quick Card](#)
- Portable Generator Safety
 - [English Fact Sheet](#)
 - [English Quick Card](#)
 - [Spanish Quick Card](#)
- Respirators
 - [English Quick Card](#)

- [Spanish Quick Card](#)
 - Silicosis
 - [English Quick Card](#)
 - [Spanish Quick Card](#)
 - Sun Protection
 - [English Pocket Card](#)
 - [Spanish Quick Card](#)
 - Tree Trimming and Removal
 - [English Quick Card](#)
 - [Spanish Quick Card](#)
 - Trenching and Excavation Safety
 - [English Quick Card](#)
 - [Spanish Quick Card](#)
 - Work Zone Traffic Safety
 - [English Quick Card](#)
 - [Spanish Quick Card](#)
- Evaluation of Hazards
 - Dinardi, S. (1995). Calculations Methods for Industrial Hygiene
 - Monitoring and sampling methods
 - [NIOSH Manual of Analytical Methods - CDC](#)
 - [Occupational Hazards in Hospitals, NIOSH](#)
 - Instruments/monitors
 - [ACGIH. Air Sampling Instruments Handbook, 9th edition. Cincinnati, OH: ACGIH, 2001](#)
 - [Occupational Noise Monitoring, NIOSH](#)
 - [Diesel Generators \(presentation\), NIOSH \(PDF\)](#)
 - OELs/Guidelines
 - [OSHA Permissible Exposure Limits, 1910 Subpart Z - Toxic and Hazardous Substances - OSHA](#)
 - [NIOSH Recommendations for Occupational Safety and Health: Compendium of Policy Documents and Statements - CDC \(PDF\)](#)
 - [NIOSH Pocket Guide to Chemical Hazards - CDC \(PDF\)](#)
 - [ACGIH. Threshold Limit Values and Biological Exposure Indices - ACGIH \(issued annually\)](#)
 - [AIHA Workplace Environmental Exposure Level \(WEELs\) Guides Fairfax, VA: AHIA Press; 1980-2002.](#)
 - [Essential Resources for Industrial Hygiene: A Compendium of Current Practice Standards and Guidelines](#)
- Control of Hazards
 - Prevention and Protection
 - Weeks, J., Levy, B., and Wagner, G. (1991). Preventing Occupational Disease and Injury, 2nd edition. Washington, DC: APHA.
 - [National Institute of Environmental Health Sciences \(NIEHS\) - National Clearinghouse for Worker Safety and Health Training](#)
 - [Safety Awareness for Responders to Hurricanes: Protecting Yourself While Helping Others - NIEHS \(PDF\)](#)

- [Worker Safety and Health Program, 10 C.F.R. 851](#)
 - Hurricane Resources
 - [English version \(PDF\)](#)
 - [Vietnamese version \(PDF\)](#)
 - [Spanish version \(PDF\)](#)
 - [Safety Awareness for Responders to Floods: Protecting Yourself While Helping Others - NIEHS \(PDF\)](#)
 - [Mold: Prevention Strategies and Possible Health Effects in the Aftermath of Hurricanes Katrina and Rita - CDC](#)
- Ventilation
 - [Industrial Ventilation: A Manual of Recommended Practice, 25th edition - ACGIH](#)
 - Bolton, F. & Johnson, D., editors. (1999). Engineering Reference Manual, 2nd Edition. AIHA Engineering Committee
- Personal Protective Equipment
 - [Schwobe, A., Costas, P., Jackson, J., Stull, J., & Weitzman, E., \(1987\). Guidelines for the Selection of Protective Clothing, 3rd edition. Cincinnati, OH: ACGIH.](#)
 - [International Safety Equipment Association – Trade Association for Safety Equipment Manufacturers](#)
 - [Recommendations for Chemical Protective Clothing: A Companion to the NIOSH Pocket Guide to Chemical Hazards](#)
 - [NIOSH Hazard Based Interim Guidelines: Protective Equipment for Workers in Hurricane Flood Response](#)
 - [NIOSH's PPE Research Laboratory Homepage](#)
 - [NIOSH Emergency Response Resources Topic Page](#)
- Respiratory Protection
 - [Respirator Selection Guide - 3M \(PDF\)](#)
 - [How to Use a Respirator - NYCOSH \(PDF\)](#)
 - OSHA
 - [Sampling and Analytical Methods](#)
 - [E-tool How to Select the Appropriate Respirator - OSHA](#)
 - [General Respiratory Protection Guidance for Employers and Worker - OSHA](#)
 - NIOSH
 - [Respirator Selection Logic 2004 - CDC \(PDF\)](#)
 - [Guide to Industrial Respiratory Protection - CDC \(PDF\)](#)
 - [Guide to the Selection and Use of Particulate Respirators Certified Under 42 CFR 84 – CDC](#)
 - [Suggested Respirator Cleaning and Sanitation Procedures - CDC \(DOC\)](#)
 - [Voluntary Program for Acceptance of Applications for the Testing and Evaluation of Full-face piece Air Purifying Respirators \(APR\) for Use Against Chemical, Biological, Radiological and Nuclear \(CBRN\) Agents - CDC](#)
 - [CBRN Respirator Standards Development - Self Contained Breathing Apparatus \(SCBA\) – CDC](#)

Additional Resources

- [National Response Plan \(PDF\)](#) - incorporates best practices and procedures from incident management disciplines—homeland security, emergency management, law enforcement, firefighting, public works, public health, responder and recovery worker health and safety, emergency medical services, and the private sector—and integrates them into a unified structure.
 - [Emergency Support Functions \(PDF\)](#)
 - [Designation of ESF Coordinator and Primary and Support Agencies \(PDF\)](#)
- [National Incident Management System - NIMS \(PDF\)](#)
- [The Federal Response to Hurricane Katrina: Lessons Learned \(PDF\)](#)
- **United States Department of Health and Human Resources**
 - [Pandemic Flu Plan - HHS \(PDF\)](#)
 - [Strategic Plan - HHS](#)
 - [Public Health Guidance for State and Local Partners HHS \(PDF\)](#)
- [Elements of Effective Bioterrorism Preparedness: A Planning Primer for Local Public Health Agencies - NACCHO \(PDF\)](#)
- [Emergency Preparedness and Response - CDC](#)
- [Emergency and Terrorism Preparedness and Response for Environmental Health Practitioners - CDC](#)
- [Health Library for Disasters - WHO/PAHO](#)
- [Field Operations Guide - USAID \(PDF\)](#)