



# Health and Safety During a Response:

## Overview

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The specific hazards that you will encounter during your deployment will depend on the nature of the response (e.g., natural disaster, vs. animal disease outbreak, vs. terrorism event) as well as the location, time of the year and weather conditions.

### Physical Hazards and Prevention

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#### **Animal Encounters**

- Injuries - Kick, crush, bite, scratch
- Zoonoses
- Aggressive dogs
- Prevention
  - Remain alert
  - Use proper restraint and handling
  - Avoid, if possible

#### **Musculoskeletal**

- Strains, sprains, ergonomic injury
  - Awkward postures
  - Highly repetitive motions
  - High hand force
  - Heavy, frequent, or awkward lifting
- Prevention: Proper Lifting Technique
  - Assess object
  - Get assistance if needed
  - Bend at knees, grasp object firmly
  - Lift using legs, keep back straight and upright
  - Keep object within your power zone
  - Pivot, if turning – do not twist

#### **Slips, Trips and Falls**

- Hazards include uneven, wet or icy surfaces and wearing of Personal Protective Equipment (PPE)
- Prevention
  - Use caution when walking or wearing PPE
  - Watch for hoses, cables, and ropes
  - Mark holes, slippery surfaces, other hazards
  - Maintain adequate lighting

#### **Sharps**

- Needle sticks and cuts can be common
  - Dispose of needles after use, avoid recapping
  - Use rigid, stable disposal containers
  - Account for all sharps after use and before clean-up

#### **Fatigue**

- Extended or unusual work shifts can be expected and can contribute to physical and mental fatigue, as well as increase the risk for operational errors, accidents and injuries
- Signs of fatigue
  - Sleepiness, decreased alertness or motivation
  - Irritability
  - Giddiness
  - Headaches and decreased appetite
- Prevention
  - Rest or time off

### Environmental Hazards and Prevention

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#### **Extreme Heat**

- Sunburn, dehydration
- Heat cramps, heat exhaustion or heat stroke are possible in extreme heat situations, especially when wearing PPE.
- Prevention
  - Wear sunscreen (SPF 15 or greater)
  - Take breaks and seek shade
  - Keep hydrated - water/sports drinks
  - Avoid caffeine/alcohol
  - Monitor yourself and others for signs
  - Seek medical attention promptly

#### **Extreme Cold**

- Cold, wet and windy conditions can contribute to frostbite and hypothermia
- Prevention
  - Appropriate clothing
  - Cover ears, hands, and face
  - Stay dry and avoid over-exertion
  - Warm individual, seek medical attention

#### **Insects**

- Bites and stings from insects can cause physical trauma and possibly exposure to vector-borne diseases
- Prevention
  - Repellants with DEET or Picaridin
  - Wear long sleeves and long pants
  - Tuck pants into boots

## Noise

- Loud or prolonged noise exposure can occur from heavy equipment, power tools, or animal vocalization and may result in hearing damage
- Prevention
  - Hazardous levels are probable if holding a conversation is difficult at 3 feet (arm's length)
  - Use some type of hearing protection for "loud" situations is used

## Electrical Shock

- Power equipment, cords and downed power lines can pose a risk of shock or electrocution
- Prevention
  - Inspect cords/cables for damage
  - Do not use damaged cords/cables
  - Use caution when working in wet areas
  - Observe area for downed power lines
  - Assume all power lines are active

## Chemical Hazards

- Chemical exposure hazards may occur when entering animal facilities, using gas-powered tools or preparing or applying disinfectant products.
- Prevention
  - Awareness
  - Do not use in confined spaces
  - Personal Protective Equipment (e.g., respiratory protection)

## Psychological Hazards and Prevention

### Stress

- Long unusual hours, physical demands and emotional stress can affect mental health and manifest in a variety of ways
  - Physical: Nausea, dizziness, headaches
  - Cognitive: Disorientation, memory
  - Emotional: Anxiety, guilt, grief, irritability
  - Behavioral: Anger, withdrawal, depression, drug or alcohol abuse
- Prevention
  - Monitor yourself and others for signs
  - Take frequent rest breaks
  - Accept what cannot change
  - Maintain schedule as much as possible
  - Communication: Loved ones, other responders, support programs

## Contingency Plans

- Unforeseen situations may arise. Be aware of contingency plans for the following situations.
  - Fire/Explosion Response
  - Hazardous Material Release
  - Severe Weather
- Know the plans for evacuation or sheltering-in-place

## On-Site Safety

Health and safety during an emergency response is everyone's responsibility

- Safety Officer Responsibility
  - Assure safe working environment
  - Identify hazards and sets procedures
  - Provide training
  - Develop Health and Safety Plan
  - Authority to issue stop work order
- Responder Responsibility
  - Follow health and safety procedures
  - Report all injuries, accidents
  - Report unsafe conditions or safety concerns
  - Adhere to the chain of command
  - Be aware of surroundings
  - Wear all PPE correctly

## Additional Resources

USDA Foreign Animal Disease Preparedness (FAD PrEP) Health and Safety Guidelines  
[http://www.aphis.usda.gov/animal\\_health/emergency\\_management/downloads/nahems\\_guidelines/fadprep\\_nahems\\_guidelines\\_health\\_safety\\_final\\_16may2011.pdf](http://www.aphis.usda.gov/animal_health/emergency_management/downloads/nahems_guidelines/fadprep_nahems_guidelines_health_safety_final_16may2011.pdf)

OSHA Emergency Preparedness and Response Safety and Health Guidelines  
<http://www.osha.gov/SLTC/emergencypreparedness/guides/index.html>

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