



## Health and Safety

### Overview



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## PHYSICAL HAZARDS

- Animal Related Incidents
- Musculoskeletal Injuries
- Slips, Trips and Falls
- Fatigue

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## Animal Encounters


- Injuries - Kick, crush, bite, scratch
- Zoonoses
- Aggressive dogs
- Prevention
  - Remain alert
  - Proper restraint
  - Avoidance



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## Musculoskeletal


- Strains, sprains
- Ergonomic injury
  - Awkward postures
  - Highly repetitive motions
  - High hand force
  - Heavy, frequent, or awkward lifting



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## Safe Lifting

- Assess object
  - Get assistance if needed
- Lifting technique
  - Bend at knees
  - Grasp object firmly
  - Lift using legs
    - Keep back straight and upright position
    - Keep object within your power zone
  - Pivot, if turning – do not twist



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## Slips, Trips and Falls


- Common
  - Uneven, wet, icy surfaces
  - Personal Protective Equipment
    - May limit motion and vision
- Prevention
  - Watch for hoses, cables, ropes
    - Keep out of walkways
  - Adequate lighting
  - Identify hazardous areas

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## Sharps

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- Needles and other sharps
  - Needle sticks very common
- Handle and dispose of properly
  - Avoid recapping
  - Direct disposal
  - Use rigid disposal containers
  - Account for sharps after use



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## Fatigue

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- Extended shifts
  - Increased errors, accidents, injuries
- Signs of fatigue
  - Sleepiness, decreased alertness or motivation
  - Irritability
  - Giddiness
  - Headaches, decreased appetite
- Rest or time off

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## ENVIRONMENTAL HAZARDS

- Weather Related Injury
- Insects
- Noise
- Electrical Shock
- Chemical Exposure

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## Extreme Heat

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- Sunburn, dehydration
- Heat cramps
  - Muscle spasms
- Heat exhaustion
  - Paleness, dizziness, nausea, fainting
- Heat stroke
  - High body temperature, little or no sweating, confusion
  - Seek medical attention immediately

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## Extreme Heat

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- Prevention
  - Sunscreen
  - Monitor yourself and others for signs
  - Take breaks and seek shade
  - Keep hydrated - water/sports drinks
  - Avoid caffeine/alcohol

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## Extreme Cold

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- Frostbite
  - Cold, numb, hard, pale
- Hypothermia
  - Numbness, lethargy, behavior
- Prevention
  - Appropriate clothing
    - Cover ears, hands, and face
  - Stay dry and avoid over-exertion
  - Warm individual, seek medical attention



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## Insects

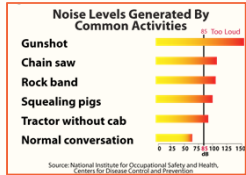
- Bites and stings
- Vector-borne diseases
- Prevention
  - Repellants with DEET or Picaridin
  - Wear long sleeves and long pants
  - Tuck pants into boots



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## Noise

- Can lead to permanent damage
- Hazardous at 85 dBA for 8 hours
  - Conversation difficult at 3 feet



Activity	Approximate Noise Level (dBA)
Gunshot	140-150
Chain saw	100-110
Rock band	90-100
Squealing pigs	85-90
Tractor without cab	80-85
Normal conversation	60-70

Source: National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention

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## Electrical Shock

- Power equipment, cords, downed power lines
- Prevention of shock and electrocution
  - 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

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## Chemical Hazards

- Examples
  - Animal facilities
  - Carbon monoxide
  - Disinfectant products
- Prevention
  - Awareness
  - Do not use in confined spaces
  - Personal Protective Equipment

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## PSYCHOLOGICAL HAZARDS

- Stress
- Depression

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## Stress

- Recognize the signs
- Physical
  - Nausea, dizziness, headaches
- Cognitive
  - Disorientation, memory
- Emotional
  - Anxiety, guilt, grief, irritability
- Behavioral
  - Anger, withdrawal, depression, drug or alcohol abuse

**stress can cause**

↓

physical effects

↓

cognitive effects

↓

emotional effects

↓

behavior effects

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## Dealing with Stress

- Ways to reduce stress
  - Monitor self and others for signs
  - Take frequent rest breaks
  - Accept what cannot change
  - Maintain schedule as possible
  - Communicate with loved ones
  - Take advantage of support programs

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## CONTINGENCY PLANS

- Evacuation
- Shelter-In-Place
- Fire/Explosion
- Hazardous Material Release
- Severe Weather

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## Contingency Plans

- Evacuation
  - Pre-determined signal and site
  - All are accounted for
- Shelter-In-Place
  - Pre-determined locations
  - Remain until "all clear" is given

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## Fire/Explosion Response


- Attempt to extinguish if deemed safe
  - Extinguisher kept in every vehicle
- If fire is out of control
  - Sound warning alarm
  - Evacuate to safe distance
  - Account for team members
  - Notify Command Staff and fire department
  - Remove vehicles and equipment if possible



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## Severe Weather

- Considerations for halting work:
  - Heavy precipitation
  - Extreme heat or cold
  - Limited visibility
  - Treacherous conditions (tornadoes)
  - Lightning
  - Flood potential



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## ROLES AND RESPONSIBILITY

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## ICS: Health and Safety

- Safety Officer
  - Assure safe working environment
  - Identifies hazards and sets procedures
  - Provides training
  - Develops Health and Safety Plan
  - Authority to issue stop work order
- Other Sections also have a role
- Everyone’s responsibility

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## 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

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## Resources

- USDA Foreign Animal Disease Preparedness (FAD PReP) Guidelines: Health and Safety  
[http://www.aphis.usda.gov/animal\\_health/emrs/naheems.shtml](http://www.aphis.usda.gov/animal_health/emrs/naheems.shtml)

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## Acknowledgments

Development of this presentation was by the Center for Food Security and Public Health at Iowa State University through funding from the Multi-State Partnership for Security in Agriculture

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