

# **Firefighter Injuries**

The nature of the work firefighters do, saving lives and property, is hazardous, physically stressful, and mentally draining. It's no surprise that firefighters are prone to frequent and severe injuries at a higher rate than almost any other municipal department. We'll discuss how those injuries occur and potential corrective measures so our fire departments can be proactive in minimizing workplace injuries.

### Slip, Trip, and Fall Injuries

- Interior: hazards within fire department facilities like stairs, limited space, floor obstructions, and narrow vehicle passageways.
- Exterior: Hazards like a parking lot, walking obstructions, fatigue, and donning heavy gear.
- Environmental risk factors and types of activity:
  - Icy or snowy ground
  - Uneven terrain, holes
  - Sidewalk or a change in level
  - Stairway or steps
  - Wet surface
  - Debris, rocks, or other obstacles on the ground
  - Change in indoor floor level
  - Inadequate footwear
  - Poor visibility
  - Structure or hedge
  - Furniture
  - People
  - Animals
  - Vehicles
- General location of the event:
  - Lack of visual cues due to darkness, smoke, limited visibility conditions, and underfoot surface or ground
  - Crowd control
  - Rushed efforts
  - Dangerous conditions
  - Carrying objects
  - Fatigue

### • Possible Corrective Actions

- Identify hazards at the firehouse and correct them. Add stair rails or stair treads, improve lighting, repair floor drains, clean up spills or grease, and remove obstructions.
- Have situational awareness at the fire/accident scene, understanding not all scenes provide adequate footing, slowing down your motions and emotions, thinking clearly, and seeing clearly.
- Cold weather increases ice, snow, and slick footing conditions. Slow down your motions and emotions, wear proper PPE, move with conviction, clarity, and consciously maintain safe access to the accident scene, and improve lighting.





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#### Physical Exertion-Related Injuries

- Strain injuries sustained from overexertion and physically demanding activities
- · Often facing unknown situations that involve sudden rigorous activities
- Events are unplanned and occur in a variety of settings
- Engaging in forcible or difficult entries
- · Accessing building roofs which might be uneven or pitched
- Strain injuries sustained while:
  - Lifting and moving charged hose lines
  - Working with heavy equipment
  - Lifting and moving victims, creating cumbersome movements
  - Climbing ladders while donning heavy turnout gear

#### • Possible Corrective Actions

- Prepare your body ahead with exercise, proper eating, and improved sleep habits
- Train and practice good lifting techniques, including team lifting
- Train, train, and train some more on emergency situations and equipment handling
- Knowledge of National Incident Management System (NIMS) and your local Incident Command System (ICS) framework
- Utilize an emergency scene accountability program. Provide enhanced personnel safety for the individual firefighter and provide the incident command organization staff an improved means to track and account for personnel and their whereabouts within the danger area.
- Practice safe lifting techniques when handling equipment, victims, etc.

#### Burn/Inhalation Injuries

- Inhalation from toxic smoke is the primary cause of death from fires.
- Smoke inhalation causes acute life-threatening injuries and results in long-term lung and neurological damage.
- Firefighters can go down due to various circumstances including slip and fall, building failure, slick surfaces, physical exhaustion, and heart conditions which then may lead to burning or inhalation injuries.

## • Possible Corrective Actions

- Utilize appropriate PPE
- Train on appropriate PPE, including task-specific training
- Utilize an emergency scene accountability program
- Utilize a PASS (Personal Alert Safety System) device for firefighters entering a hazardous situation



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#### Mental and Emotional Stress

According to the National Institutes for Justice, mental and emotional stress contributes to physical and mental fatigue and increases the potential for injury. There are many stressors firefighters deal with on the job.

- Dangerous job functions like fire, smoke, vehicle accident, personal injury, etc.
- Hazardous and unknown response environments including fire, smoke, chemicals, crowds, water, cold, heat, etc.
- Emergency scenes involving personal injury and death
- Inadequate or broken equipment
- · Frequent rotating shifts
- Regular changes in duties
- Long, unpredictable hours

#### • Possible Corrective Actions:

- Train for various situations, as increased knowledge and awareness create levity when faced with adverse situations.
- Practice calming techniques such as monitored breathing, tactical time-outs, refocusing energies, enjoying a game or activity, taking a walk, exercising, improving sleep patterns, and talking to friends.
- Practice Stress First Aid, including the seven C's: Check, Coordinate, Cover, Calm, Connect, Competence, and Confidence <a href="https://www.everyonegoeshome.com/stress-first-aid-sfa-firefighters-emergency-services-personnel/">https://www.everyonegoeshome.com/stress-first-aid-sfa-firefighters-emergency-services-personnel/</a>
- Utilize your company's Employee Assistance Program (EAP)

The firefighters insured through the Comp Alliance suffer a variety of injuries due in part to their high-hazard job functions. It is imperative that all firefighters, including full-time, volunteer, and interior certified practice good work and life habits, and remain strong, both physically and mentally. The Comp Alliance appreciates firefighters for the life-saving work that they do.

