

## Preventing Emergency Responder Fatigue

Workers may be at risk of experiencing injuries from fatigue and stress during responses to oil spills, hazardous materials cleanup activity, and other large-scale disaster response and recovery operations. This also includes virtual and hybrid workers.

### What is Fatigue?

Fatigue is extreme tiredness resulting from mental or physical exertion or illness, which can result in a lack of energy or motivation.

People with fatigue may experience a wide range of symptoms such as feeling drowsy, constantly yawning, falling asleep at work, difficulty concentrating, reduced judgment, slow reflexes, and unplanned absence.

Risk Factors that Increase Fatigue	
<ul style="list-style-type: none"> <li>• Working long hours, consecutive days, and varied shifts</li> <li>• High temperatures, humidity, and sun exposure</li> <li>• Wearing personal protective equipment (PPE)</li> <li>• Exposure to traumatic events</li> <li>• Taking certain medications when working in hot temperatures</li> <li>• Alcohol and/or drug use</li> <li>• Underlying medical condition</li> <li>• Physically demanding or strenuous work</li> <li>• Insufficient or fragmented sleep</li> <li>• No breaks or short breaks</li> <li>• Long commutes/long travel to worksite and/or changes in time zone</li> </ul>	<p><b>Virtual/Hybrid Work Considerations:</b></p> <ul style="list-style-type: none"> <li>○ Workers continuing to work both their day-to-day jobs and supporting the response</li> <li>○ Working longer hours due to different time zones</li> <li>○ Contributions may be omitted or are viewed as less valuable given the lack of face-to-face interactions</li> <li>○ Feelings of isolation, frustration, and lack of separation of home life from work</li> </ul>

How Does Fatigue Affect Workers?	
<ul style="list-style-type: none"> <li>• Reduced attention or concentration</li> <li>• Irritability</li> <li>• Limited short-term memory</li> <li>• Impaired decision making</li> <li>• Increased absences</li> <li>• Slower reaction times</li> </ul>	<p><b>Virtual/Hybrid Work Considerations:</b></p> <ul style="list-style-type: none"> <li>○ Eye strain and blurred vision</li> <li>○ Feeling emotionally or mentally drained after numerous video or phone calls</li> <li>○ Impaired ability to handle work responsibilities</li> <li>○ Lack of focus or forgetfulness</li> </ul>

## How Does Fatigue Affect the Workplace?

- Decreased alertness, concentration, and memory
- Increased risk of injuries
- Reduced productivity
- Elevated costs

### Virtual/Hybrid Work Considerations:

- Decreased engagement
- Negative attitudes toward meetings and work
- Poor team dynamics
- Difficulties in communication
- Team burnout

## What Can Employers Do?

- Complete an [Assessment of Hazards and Work Activities](#)
- Implement a Fatigue Risk Management Plan
- Train employees on Fatigue and Managing Sleep Disorders
- Examine staffing issues (i.e., workload and hours)
- Arrange schedules to include breaks and sleep
- Schedule worker's leave (i.e., take 48 hours of time off after working 12 hours a day for 14 days)
- Plan demanding work around weather conditions
- Rotate personnel during strenuous or detailed tasks
- Acclimatize new workers using the "Rule of 20 Percent"<sup>1</sup>
- Returning workers to hot temperatures after an absence of one week or more need to be re-acclimated
- Establish work teams or a buddy system
- Assign a safety professional to monitor workers
- Provide air-conditioned or shaded areas for breaks and cool water for workers to drink
- Provide employees with procedures for monitoring personnel for fatigue signs and symptoms

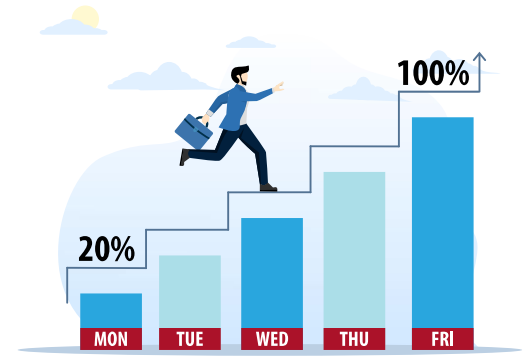










Figure 1 The Rule of 20 Percent

### Virtual/Hybrid Work Considerations:

- Establish set work hours for virtual response support
- Adjust virtual response support staff work hours to accommodate different time zones
- Encourage remote workers to take their scheduled rest breaks throughout a work shift
- Fully "deploy" to the response remotely, instead of supporting one's day-to-day work and the response simultaneously

<sup>1</sup> For additional information on the "Rule of 20 Percent", visit [Heat - Protecting New Workers | Occupational Safety and Health Administration \(osha.gov\)](https://www.osha-slc.gov/Heat-Protecting-New-Workers).

What Can Workers Do to Protect Themselves?	
	Know the signs and symptoms of fatigue
	Monitor yourself and your coworkers
	Use a buddy system during work hours and while commuting to/from worksites
	Get 7-9 hours of sleep a day without disruptions
	Eat a balanced diet and maintain a healthy weight
	Hydrate by drinking water or other electrolyte-containing fluids
	Take scheduled rest breaks
	Exercise regularly

Additional Resources
<ul style="list-style-type: none"> <li>&gt; <a href="#">Guidance for Managing Worker Fatigue During Disaster Operations</a></li> <li>&gt; <a href="#">Work and Fatigue (NIOSH-CDC)</a></li> <li>&gt; <a href="#">Long Work Hours, Extended, or Irregular Shifts, and Worker Fatigue (OSHA)</a></li> </ul>