



ROCKY MOUNTAIN COORDINATING GROUP

Bureau of Indian Affairs (Southwest, Rocky Mountain and Great Plains Regions)
Bureau of Land Management (Colorado and Wyoming)
Fish and Wildlife Service (Mountain-Prairie Region)
Forest Service (Rocky Mountain Region)
National Park Service (Intermountain and Midwest Regions)
State Agencies in Colorado, Wyoming, South Dakota, Nebraska and Kansas

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To: All Units in the Rocky Mountain Geographic Area

From: Coordinator, Rocky Mountain Multi-Agency Coordinating (RM MAC) Group

Subject: **Fatigue Management Considerations**

Issue: The Geographic Area is in the midst of a very busy fire season. Many of you have been engaged with an extremely heavy workload for several months now and this could continue for another month or more. Fatigue is likely an issue given this situation and it is important that leadership pay attention and manage this issue.

Definition: Accumulated (chronic) fatigue is defined as fatigue from which normal rest does not produce recovery. Accumulated fatigue is often caused by extended periods of stress with inadequate recovery periods, which results in decreased productivity, compromised immune function, and reduced awareness. Fatigued workers perform poorly, behave carelessly, tolerate greater errors and become inattentive. Chronic fatigue often results in increased stress, which may present itself through certain behavioral and physiological indicators.

Behavioral Indicators

- Decreased motivation and low morale
- Increased irritability and depression

Physiological Indicators

- Confused, poor problem solving
- Poor abstract thinking
- Poor attention and decisions
- Poor concentration and memory
- Extreme emotional responses
- Social/behavioral changes

Considerations

Fatigue is particularly an issue in emergency response, such as firefighting. In an emergency, the effects of fatigue become critical, and may result in:

- Spatial disorientation (proximity and location of hazards, escape routes, and safety zones)
- Loss of vigilance (impairment of self-preservation behavior and situational awareness)

- Workload monitoring (miscalculating task requirements)
- Failure to consider consequences of actions

Critical management decisions (stress situations) will create a sleep debt, which increases the chance fatigue will impair abilities. As fatigue progresses, vigilance declines – we don't hear, see, think, or focus as well, and reactions slow. Individuals and crews differ in their ability to perform during extended operations.

Conclusions/Recommendations

People are incapable of making self-determinations of fatigue, therefore:

- **Fatigue needs to be addressed as a risk management issue and included in risk assessments.**
- **The margin of safety needs to increase as fatigue progresses.**
- **Leadership should monitor and manage employee fatigue**
 - Recognize signs of fatigue
 - Implement fatigue countermeasures
 - Mandate rest when necessary

Questions may be addressed by Rocky Mountain Multi-Agency Coordination (MAC) Group at 303-445-4329.

Sincerely,

/s/ Mark L. Jones

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CC: RMCG Representatives
RM IMTs