

Health and Injury Risks MUSCULOSKELETAL INJURIES	PHOENIX FIRE DEPARTMENT HEALTH & FITNESS M. P. 1-A02.01 01/1998-N Page 1 of 1
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INTRODUCTION

The most prevalent injuries sustained by firefighters are musculoskeletal injuries in the form of strains and sprains, with lower back injuries being the most common. Fractures, dislocations, shin splints, tendinitis, and overall joint and muscle soreness also occur, but less frequently. While there is presently not sufficient data to make an absolute correlation between specific activities and injury types, certain assumptions can be made with a degree of confidence. Perhaps the most important assumption is the basic role fitness plays in reducing the frequency and severity of these types of injuries.

RISK FACTORS

Fatigue

Fatigue is defined as physical exertion to a state of abnormal exhaustion. It can be related to muscular and aerobic factors. Fatigue can also manifest itself in more subtle terms such as;

- Increased resting heart rate.
- Irritability
- Disturbed sleep patterns.

How much, and when a person experiences fatigue, is a direct reflection of that individual's fitness level. The more physically fit an individual is the less likely they are to become fatigued and ultimately that translates into a decreased risk for injury. This point is especially relative to emergency scene operations because of the intense physical demands associated with this type of work.

Flexibility

Because emergency scene operations often take place without the luxury of a warm-up and an opportunity to stretch, risk of muscular strains is increased dramatically.

It is recommended that whenever possible stretching should be performed while responding. It is also important and perhaps much more feasible that stretching be included as part of a sound fitness program. Particular attention should be paid to stretches that increase flexibility in the shoulders and low back.