

BULLETIN

NO: 17-079
DATE: May 2, 2017
TO: All Personnel
FROM: David Picone, Battalion Chief, Health and Safety Officer
SUBJECT: **Safety Alert - Rhabdomyolysis**

The OHSC (Occupational Health and Safety Committee) and its analysis of injury trends has identified an alarming uptick in cases related to **Rhabdomyolysis** (often called rhabdo).

While last year presented only a few cases we have seen four (of varying degree) just in this quarter (Jan-March 2017).

With a current outlook of a very busy wildland and summer beach season, it is important to get this notice out with prevention and treatment recommendations.

Supervisors please review the "**Safety Alert**" with all your personnel to insure the signs, symptoms, treatment and effects of rhabdo are understood.

Watch for any of these signs (*on or off-duty*) in yourself or crew members and, of course, be safe!!

Please contact the Health and Safety Division at SDFDHealth&Safety@san Diego.gov with comments or areas of improvement. For all other questions contact HSO/Battalion Chief David Picone at 619.533.4466 or dpicone@san Diego.gov.



San Diego Fire-Rescue Department Health & Safety Division **SAFETY ALERT**

Div/Sec: Fire and Lifeguard Divisions

Heat and Exertion Injury & Illness Prevention and Education

Date: 4-28-2017

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Feedback
Suggestions
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SDFDHEALTH&SAFETY@SANDIEGO.GOV

The San Diego Fire-Rescue Department has experienced a recent increase in a dangerous medical condition that is not well recognized or understood.

Rhabdomyolysis (often called rhabdo) is a condition resulting from the breakdown of damaged muscle tissue. Due to prolonged physical exertion, firefighters and lifeguards are at increased risk for rhabdomyolysis. If not recognized and treated early, rhabdomyolysis can cause permanent disability and may be fatal.

Rhabdomyolysis is often mistaken for heat stress and dehydration. It can occur in well-conditioned athletes doing their usual workouts. DO NOT ignore these symptoms.

What are the signs and symptoms of rhabdomyolysis?

- Muscle aches or pains out of proportion to the amount of exercise being done
- Muscle cramping
- Tea-colored or cola-colored urine

Early detection could save your career and your life!
Reporting your symptoms is not a sign of weakness.

How do I know if I have rhabdomyolysis?

The only sure way is to seek medical care. A licensed healthcare provider will determine if you need to have a serum creatine phosphokinase (CK or CPK) test to look for muscle proteins in the blood. You cannot tell by symptoms alone if you have rhabdomyolysis. Severe cases of rhabdomyolysis require hospitalization to monitor the heart and kidneys and to provide emergency treatment for dangerous heart rhythms and loss of kidney function. High volumes of intravenous fluids are needed to flush out the muscle proteins and electrolytes without damaging the kidneys. If the kidneys fail, immediate dialysis is needed. Sometimes kidney function does not recover, requiring a lifetime of dialysis.

What can increase your risk for rhabdomyolysis?

- Over-the-counter medications such as decongestants and antihistamines
- Certain antibiotics
- Dietary supplements such as creatine
- Some weight loss products
- Cholesterol lowering drugs known as statins
- Excessive caffeine intake

Note: If you have had rhabdo you are more susceptible to get it again.



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Rhabdomyolysis can be treated without complications if it is recognized early.

What should I do if I have symptoms?

Listen to your body! If your muscles hurt more than expected, if you can't tolerate exertion more than you previously could, or if your urine is unusually dark:

- Stop your current activity
- Tell your supervisor or trainer about your symptoms
- Seek immediate care at the nearest medical facility
- Ask to be checked for rhabdomyolysis

The overall prognosis of rhabdomyolysis is favorable as long as it is recognized and treated promptly. Most causes of rhabdomyolysis are reversible. Severe cases of rhabdomyolysis may be associated with kidney damage and electrolyte imbalance and hospitalization and even dialysis can be required.

Information to share with your healthcare provider:

- Due to the prolonged exertion in wildland firefighting, training, fire response activities or beach rescue situations with direct and extended sun exposure you are at increased risk for rhabdomyolysis. Carrying heavy loads (e.g., pack weights up to 110 lbs.) across steep terrain, heat stress, and dehydration are exacerbating factors encountered by firefighters as they do their job. Recently, several cases of rhabdomyolysis have been diagnosed across the state, with some becoming permanently disabled.
- Clinicians should have a high index of suspicion for rhabdomyolysis in firefighters who present for treatment of heat stress and dehydration, muscle pain, or exercise intolerance. A serum creatine phosphokinase (CK or CPK) should be performed in wildland firefighters to ensure early diagnosis so that aggressive treatment can start as soon as possible. Urinary dipsticks to check for myoglobin in the absence of red blood cells are not an accurate screening tool for rhabdomyolysis. Only a serum CPK can confirm or exclude this diagnosis.

The above information is provided by the Centers for Disease Control (CDC) and National Institute for Occupational Safety and Health (NIOSH).

For more information visit:

[WebMD Information](#)

[Wikipedia Information](#)

“Promoting Safe and Healthy Lives”