



## **Rhabdomyolysis Epidemiological Study**

The NWCG Risk Management Committee (RMC) is very concerned with the number and severity of reported cases of rhabdomyolysis within the wildland fire community. The first confirmed case was documented in our firefighters in 2006. To date, one probable case and nine confirmed cases of rhabdomyolysis in wildland firefighters have been brought to our attention. Two wildland firefighters are permanently disabled from rhabdomyolysis, which can cause permanent kidney damage. The actual number of affected wildland firefighters is likely higher due to suspected under-recognition and misdiagnosis. An assessment presented to the RMC November 4, 2010, showed that the arduous-duty firefighter job duties and conditions involve several risk factors for rhabdomyolysis.

The RMC has requested a study, called an EPI-AID, through the Centers for Disease Control and Prevention (CDC). Since this type of study involves risk factors unique to a work environment, the National Institute for Occupational Safety and Health (NIOSH) will be providing technical assistance.

The objective of this study is to:

- 1) Determine the risk factors for rhabdomyolysis among wildland firefighters.
- 2) Assess under-recognition of rhabdomyolysis among wildland firefighters.
- 3) Recommend measures to prevent rhabdomyolysis among wildland firefighters.
- 4) Recommend improvements in the wildland fire injury and illness reporting system that will improve detection of future cases of rhabdomyolysis.
- 5) Recommend further studies that would decrease the risk of rhabdomyolysis among wildland firefighters and improve clinical outcomes.
- 6) Develop targeted educational materials for firefighters and local healthcare providers to increase prompt diagnosis and treatment of rhabdomyolysis.

The EPI-AID will include:

1. A review of medical records of firefighters diagnosed with rhabdomyolysis.
2. A survey of selected wildland firefighters about work history, medical history, known risk factors for rhabdomyolysis, and signs and symptoms consistent with

rhabdomyolysis. The survey will be distributed both to firefighters who did and who did not have confirmed diagnoses of rhabdomyolysis. It is very important for all firefighters who are asked to complete the survey to do so, even if they did not have symptoms and/or risk factors for rhabdomyolysis, so the results of the investigation can be as accurate as possible.

NWCG will NOT have access to information collected by CDC/NIOSH as part of this study. Although the NWCG will assist in disseminating instructions to wildland firefighters on how to access the online questionnaire for this EPI-AID, responses can only be accessed by CDC/NIOSH personnel.

CDC/NIOSH personnel will ask firefighters diagnosed with rhabdomyolysis to complete a medical records release form so that CDC/NIOSH personnel may obtain their records for review. CDC/NIOSH protects any individually identifiable information according to federal law. Results of review of medical records and analysis of survey data are presented in the final report for the entire group surveyed as a whole and never as individual or identifiable results.

CDC/NIOSH investigators will be making a site visit to meet with NWCG the week of January 10, 2011, and we plan for the survey to be ready around that time. RMC is requesting full cooperation and participation within the wildland fire community to support this study and encourage those contacted by CDC/NIOSH to provide timely and accurate information.

We are anxious to get results from this study so we can move forward on prevention measures and educating the wildland fire community and medical facilities that support us in the time of need. NWCG has asked CDC/NIOSH to complete their assessment by mid-February so that the results of this investigation can be disseminated before the annual spring training events. Therefore, timely responses to questionnaires from firefighters and prompt completion and return of medical records release forms are essential if this deadline is to be met.

If you have any questions or concerns, please contact me at (208)387-5175 or [michelle\\_ryerson@nifc.blm.gov](mailto:michelle_ryerson@nifc.blm.gov).

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