

NWCG Risk Management Committee

Safety Bulletin: 26-001

May 27, 2026



To: Wildland Fire Community

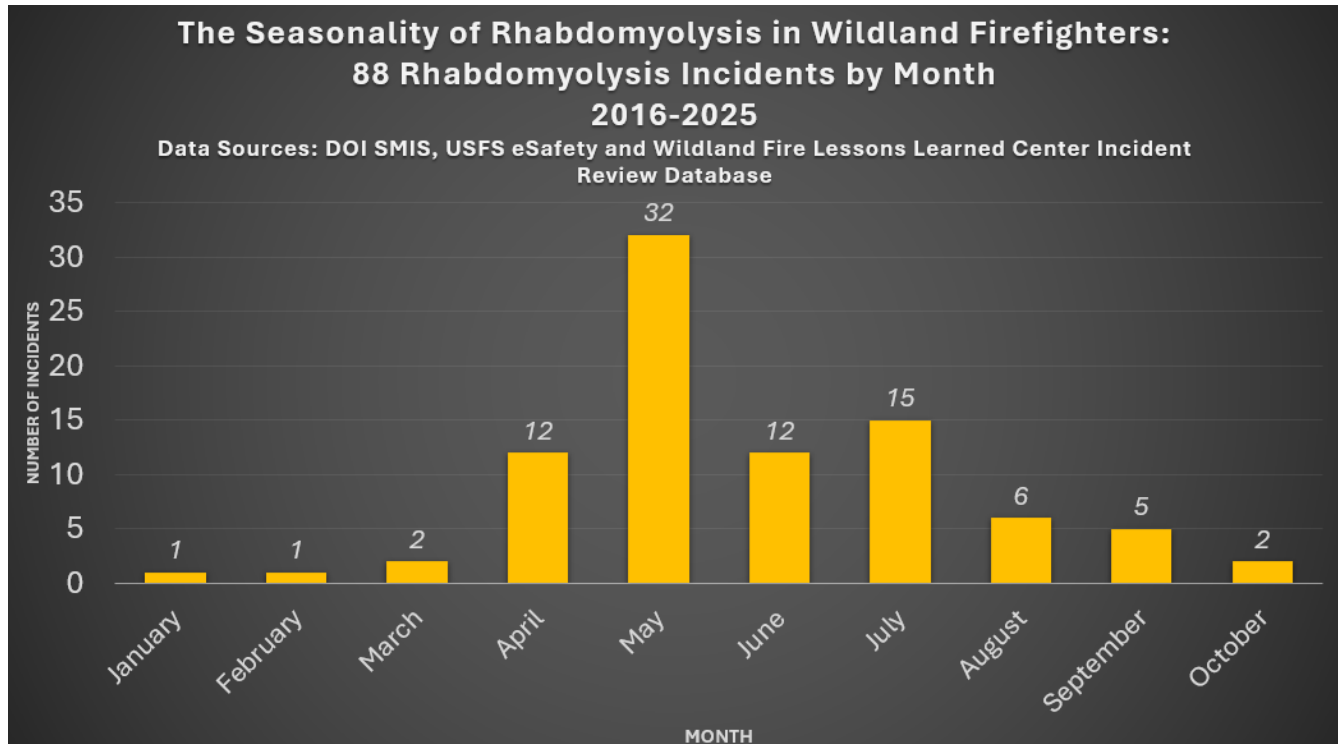
From: Risk Management Committee

Subject: Rhabdomyolysis in Wildland Firefighters

Issue: Update Rhabdomyolysis education tools during a period of increased reporting.

Background: From 2016 to 2025, 88 rhabdomyolysis (rhabdo) cases were reported from USFS, DOI, contractors, and local partners. Each report offers valuable lessons. Fostering a reporting culture aids in recognizing reporting surges. Recently, there has been a noticeable increase in heat-related illness (HRI) and rhabdo cases. When this happens, data is reviewed for trends or emerging issues. Analysis from eSafety, Safety Management Information System (SMIS), and the Wildland Fire Lessons Learned Center (LLC) shows this surge is common for this time of year.

Figure 1. Seasonality of Rhabdomyolysis in Wildland Firefighters



Findings: Data review and context highlight several key lessons:

1. A startlingly high percentage of cases happen during the Work Capacity Test rather than active fire suppression. The fast-paced 3-mile walk with a 45-lb pack, often done early in the season before full acclimatization, consistently leads to hospitalizations.

NWCG standards are interagency by design; however, the decision to adopt and utilize them is made independently by the individual member agencies and communicated through their respective directives systems.

2. Many firefighters report feeling “tired but fine” right after the event. Symptoms like “tea-colored” urine and severe swelling may not appear until 2 to 3 days later, causing dangerous delays in seeking medical care.
3. The most severe cases often involve elite crew (e.g., hotshots, smokejumpers). Data shows that “being in shape” does not prevent rhabdo. In fact, high mental drive can cause individuals to ignore pain, leading to catastrophic muscle breakdown.
4. There is no single cause for rhabdomyolysis, but it rarely results from exertion alone. Rhabdo is highly individual and may stem from a mix of factors like weather, hydration, nutrition, and medication or supplement use.
5. The 2016 USFS National Technology Development Program (NTDP) Rhabdo Report notes other causes include nutrition deficiency, low calorie intake, dehydration, prolonged activity, and poor acclimation.
6. Education materials on HRI and rhabdo have not been emphasized since 2018. The NWCG Risk Management Committee aims to reinvigorate the wildland fire community by sharing updated and previous rhabdo educational resources.

Educational Resources:

- 2016 NTDP Rhabdo Report https://lessonslearned-prod-media-bucket.s3.us-gov-west-1.amazonaws.com/s3fs-public/2023-02/Updated%20Rhabdo%20Report%202016_0.pdf
- 2018 NTDP Rhabdo Reminder 2018 https://lessonslearned-prod-media-bucket.s3.us-gov-west-1.amazonaws.com/s3fs-public/2023-02/Rhabdo%20Reminder_2018%20Final_0.pdf
- Wildland Fire Lessons Learned Center (LLC) Products
 - Rhabdo Video <https://www.youtube.com/watch?v=BimjWhHDww0>
 - 2026 LLC Blog <https://wildfirelessons.wpcomstaging.com/2026/04/21/early-season-pt-lessons/>
 - 2018 LLC Blog: <https://wildfirelessons.wpcomstaging.com/2018/04/27/r-u-rhabdo-ready/>
 - Smokejumper Training Rhabdo 2022 <https://lessonslearned-prod-media-bucket.s3.us-gov-west-1.amazonaws.com/s3fs-public/2023-07/Smokejumper%20Training%20Rhabdo%20RLS.pdf>
 - Augusta IHC Rhabdomyolysis Medical Incident 2022 <https://lessonslearned-prod-media-bucket.s3.us-gov-west-1.amazonaws.com/s3fs-public/2023-02/Augusta%20Rhabdo%20RLS.pdf>
 - Sequoia and Kings Canyon NP Rhabdomyolysis 2016 https://lessonslearned-prod-media-bucket.s3.us-gov-west-1.amazonaws.com/s3fs-public/2023-02/SEKI_Rhabdo_LLRLR.pdf
 - Nez Perce Clearwater National Forest Rhabdo 2016 https://lessonslearned-prod-media-bucket.s3.us-gov-west-1.amazonaws.com/s3fs-public/irdoc/Rhabdomyolysis_FLA_%20NezPerce_Clearwater.pdf

- IHC Rhabdo 2014 https://lessonslearned-prod-media-bucket.s3.us-gov-west-1.amazonaws.com/s3fs-public/irdoc/RLS_Rhabdo_7_31_14.pdf
- 257 Fire Rhabdo 2012 https://lessonslearned-prod-media-bucket.s3.us-gov-west-1.amazonaws.com/s3fs-public/irdoc/RLS_257_Fire_Rhabdo_Incident.pdf
- 6 Minutes for Safety (6MFS) Exertional Rhabdomyolysis Daily Topic <https://www.nwcg.gov/6mfs/firefighter-health-and-first-aid/exertional-rhabdomyolysis>
- 2018 CDC Wildland Firefighter Rhabdo Wallet Card https://lessonslearned-prod-media-bucket.s3.us-gov-west-1.amazonaws.com/s3fs-public/2023-02/0qNtvb4SBCMxptJCuE3t_CDC_Wallet_Card_2018.pdf
- 2018 CDC Wildland Firefighter Rhabdo Risk Fact Sheet https://lessonslearned-prod-media-bucket.s3.us-gov-west-1.amazonaws.com/s3fs-public/2023-02/CDC_Heat_Rhabdo_2018_0.pdf
- 2018 CDC What Wildland Firefighters Need to Know About Rhabdo Fact Sheet https://lessonslearned-prod-media-bucket.s3.us-gov-west-1.amazonaws.com/s3fs-public/2023-02/udVowdRZQkyiSFk6ycvd_CDC_Rhabdo_2018.pdf
- Human Performance Resources by the Consortium for Health and Military Performance (CHAMP)
 - Military Clinical Practice Guideline for the Management of Exertional Rhabdomyolysis in Warfighters <https://www.hprc-online.org/resources-partners/whec/clinical-care/clinical-practice>
 - Warrior Heat- and Exertion-Related Events Collaborative Website <https://www.hprc-online.org/resources-partners/whec>

Contact: For more information, contact your agency representative on the NWCG Risk Management Committee. Roster available at <https://www.nwcg.gov/committee/risk-management-committee/roster>.