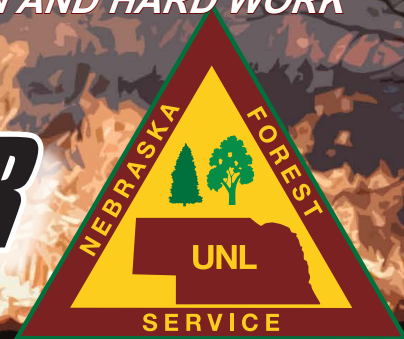


THANKS NEBRASKA FIREFIGHTERS FOR YOUR DEDICATION AND HARD WORK  
DURING THIS VERY BUSY FIRE SEASON!

# THE RURAL FIREFIGHTER

Issue 03-12—Aug 2012



Nebraska Forest Service

[www.nfs.unl.edu](http://www.nfs.unl.edu)

## NFS Initiates Fire Suppression Role

The Nebraska Forest Service (NFS) has a tradition of providing grants, training, planning, equipment and fire prevention assistance. After extensive planning and discussion, NFS has joined 47 other state forestry agencies by including fire suppression in the package of assistance made available to fire departments and the people of Nebraska.



Nebraska Engine 841 on its maiden voyage to the Cottonwood Fire in Sioux County, June 2012.

In addition to the longstanding aerial fire suppression program managed with our partners at the Nebraska Emergency Management Agency and membership in the Wildland Incident Response and Assistance Team with the State Fire Marshal, NFS now fields a type 4 engine and four 5,000 gallon tractor trailer water tenders. The leading goal of this change is to provide for an expanded level of on-the-job training opportunities for NFS staff and volunteer firefighters that will directly enhance skill levels, advance in-state certification and boost the overall level of suppression capacity in Nebraska.

As an agency, our capacity is limited, even more so with the loss of two vital personnel following successive federal budget cuts. So it's safe to say that Nebraska Engine 841 will not be on every wildland large fire in the state. But when a fire exceeds local capacity and state assistance is requested, the engine may also be requested. We would be glad to lend a hand as long as personnel are available to staff the engine. Early notification is best, so if you're considering aerial applicators, that would be a good time to consider and request Engine 841.

We know one engine can have just so much impact on Nebraska wildfires, but we're excited about this step forward. We also know the location of Engine 841



may lead NFS firefighters to become very adept at mop up and patrol, but if it provides local firefighters a chance to get off the fireline for some rest and rehab before the next fire, we're happy to come get our hands dirty with you. And please send us your feedback on this project!

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*The Nebraska Forest Service: Improving lives by protecting,  
enhancing and utilizing Nebraska's tree and forest resources*

## ***National Incident Management System Training***

Over the past few years, National Incident Management System (NIMS) training has changed slightly. Previously, training required of each supervisory position was relatively firm (captains need this level, chiefs need this, etc.). Now however, the system focuses more on core competencies of an **ICS position** rather than a specific officers position, and takes into account related responsibilities and activities and an incident's size and/or complexity.

Is this less straightforward? Perhaps, but it does allow some flexibility in identifying training that meets the needs of *your* organization with *your* personnel in *your* district. But since it is a little different, here are some recommendations. For more information, download the Homeland Security publication "National Incident Management System Training Program" at [training.fema.gov/EMIWeb/IS/ICSResource/assets/nims\\_training\\_program.pdf](http://training.fema.gov/EMIWeb/IS/ICSResource/assets/nims_training_program.pdf) or contact Chuck Chase at the Nebraska Emergency Management Agency at (402) 471-7178 or [chuck.chase@nebraska.gov](mailto:chuck.chase@nebraska.gov).

### ***Training Determined by Incident Complexity***

**The following training, at a minimum, should be taken by individuals who may be assigned supervisory roles during:**

#### **Type 1, 2, and 3 incidents:**

- o ICS-100
- o ICS-200
- o ICS-300
- o ICS-400
- o IS-700
- o IS-800
- o Appropriate ICS Position-specific courses

#### **Type 4 incidents:**

- o ICS-100
- o ICS-200
- o IS-700

#### **Type 5 incidents:**

- o ICS-100
- o IS-700

### ***Core Courses***

The following is a list of core NIMS courses, length and corresponding National Wildfire Coordinating Group (NWCG) certification level. Courses listed as "online," as well as other courses, may be found at [training.fema.gov/IS/](http://training.fema.gov/IS/).

**ICS-100** Introduction to the Incident Command System - 3 hours online.  
- NWCG: firefighter type 2 (FFT2).

**ICS-200** ICS for Single Resources and Initial Action Incidents - 3 hours online, 12 hours classroom.  
- NWCG: single resource boss.

**ICS-300** Intermediate ICS for Expanding Incidents - classroom only 18-24 hours.

- NWCG: type 3 incident commander (ICT3), strike team/task force leaders, safety officers (SOFR).

**ICS-400** Advanced ICS - classroom only 20-22 hours.

- NWCG: type 2 positions including type 2 incident commander (ICT2), type 2 planning section chief and type 2 logistics section chief.

**IS-700** NIMS, an Introduction - online 3 hours.

- NWCG: none

**IS-800** National Response Framework (NRF), an Introduction - online 3 hours, classroom 8 hours.

- NWCG: none

### ***Class A Foam Buckets Needed***

With the amount of foam that has been delivered this fire season, we're running low on 5 gallon foam buckets. If you have any empty ones you would be willing to part with, get

in touch with Lew at the Fire Shop and he will coordinate a time to come get them. The Fire Shop number is 402.624.8061

### ***Incident Complexity***

**Type 1** - Most complex, often requiring national resources. Can exceed 1,000 personnel. Written incident action plans required for each operational period. Example: Sioux County Complex, 2006.

**Type 2** - Extends beyond the capabilities of local control and is expected to go multiple operational periods. Typically does not exceed 500 personnel. Example: Dawes County Complex, 2006

**Type 3** - Can extend beyond local control requiring a significant number of resources, possibly including state resources. Some or all ICS positions activated. Extends into multiple operational periods. Example: Cottonwood Fire, 2012

**Type 4** - Usually does not extend beyond the local level, but may require a strike team, task force and/or mutual aid. No written IAP required. Example: many local wildland fire incidents.

**Type 5** - Usually handled with minimal personnel - up to six or a couple engines and a tender, for example. Usually contained within the first operational period.



### ***Calendar of Events***

Oct. 1-4	43rd Annual Nebraska Fire & Arson Investigation Conf. Kearney
Oct. 18-20	NSVFA Annual Conference, Kearney
April 13-21	Sixth annual Nebraska Wildland Fire Academy, Crawford



# ***Rhabdomyolysis in Wildland Firefighters***

*Provided by the National Wildfire Coordinating Group and the National Institute for Occupational Safety and Health.*

Rhabdomyolysis can have deadly and debilitating consequences if not correctly identified in a timely manner. The symptoms of rhabdomyolysis can mimic those of heat stress and dehydration.

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

Due to the prolonged exertion wildland firefighters may undergo during training and fire response activities, they 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 in wildland firefighters with some becoming permanently disabled.

***Share this with your healthcare provider***

Clinicians should have a high index of suspicion for rhabdomyolysis in wildland firefighters who present for treatment for 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 serum CPK can confirm or exclude this diagnosis.

Help keep our wildland firefighters safe by asking all patients about their work. Have a high suspicion for rhabdomyolysis among those who are wildland firefighters.

## **What can increase your risk for rhabdomyolysis?**

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

## **What are the signs and symptoms of rhabdomyolysis?**

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

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

## **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 (CPK or CK) 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 rates 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.

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 that you previously could, or if your urine turns unusually dark you should:

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

Reporting your symptoms is not a sign of weakness.

**Early detection could save your career and your life!**

## Great Plains Interstate Fire Compact

Interstate compacts for the prevention and control of wildfires were authorized by the Weeks Law of 1911. Compacts streamline sharing of state and local resources directly between member states. The federal dispatch system does not need to be initiated, and resources can be mobilized in advance of a state emergency declaration.

During a busy fire season, it's likely that some fires will overwhelm local resources. The key advantage of compact membership is rapid resource acquisition. With a minimum number of calls, resources can be dispatched to assist a fellow compact member in providing rapid, aggressive initial attack, a key part of keeping wildfires small and significantly less costly.

Some things need to happen before Nebraska can be a member of the Great Plains Compact, including enabling legislation and development of a funding method to reimburse the use of other resources. The Nebraska Forest Service recognizes the great potential of this in protecting our state's forest resources and supports joining the Great Plains Compact. For information, go to [www.gpifc.org/](http://www.gpifc.org/).



## Harvest on its Way

With dry conditions and harvest potentially coming early this year, here are some tips to share with the folks in your area:

Check for fire hazards before starting work each day. All equipment needs to be checked for:

- Crop residue around hot parts.
- Damaged exhaust systems.
- Worn or badly frayed drive belts.
- The odor of burning electrical wiring.
- Worn or out-of-alignment moving parts (indicate a lack of lubricant?).
- Signs of leaking fluids, oil and fuel.

Preventive maintenance prolongs equipment life and reduces fire hazards. Here's what you can do:

- Keep bearings/gears lubricated.
- Remove crop residue from areas prone to generate 'normal' heat.
- Replace worn and broken belts.
- Keep lubricants at proper levels.
- Repair fuel system leaks.
- Repair or replace damaged or worn out exhaust systems. Install a spark arrester to catch burning particles.
- Repair damaged electrical wiring.
- Keep oily rags in covered metal containers.
- Monitor static electricity if large amounts of grain dust are present.

During harvest, safe fueling practices may be ignored in an effort to save a little time. The few seconds saved are insignificant when compared to the loss of expensive farm equipment or time spent in a hospital burn ward.

Follow these safety practices:

- Shut engines off when refueling.
- Allow engines to cool 15 minutes.
- Extinguish open flames and smoking materials before refueling.
- Wipe away any excess fuel spilled and allow the fumes to dissipate.
- Never put flammable liquids in glass or non-approved plastic containers.

Faulty exhaust systems and catalytic converters on pickups and cars can cause a wildfire in tall vegetation.

- Manifolds and exhaust pipes reach temperatures of 500°F to 1000°F. Dry grass will ignite within minutes at temperatures as low as 400°F.
- Catalytic converters reach temperatures of 1400°F to 1600°F and can ignite tall grass, weeds or stubble, instantly.
- Vehicles with low ground clearance are especially prone to causing wildfire.



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