



# Michigan **FIRE** Service Connection

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September 11, 2001.....We will never forget.

As we look back over the last nine years we are very aware of the many changes that have taken place since September 11, 2001. Our travel, whether by land or air, has certainly changed. But more importantly our lives have changed. As an individual or as a nation I don't think we really thought something like that day would take place.

Each and every day I think about the events of 9/11 . . . where I was, how I first heard the news about a plane hitting that first tower in New York City, and the subsequent, tragic events that unfolded that fateful morning. I vividly remember learning that a second plane had flown into the other tower, that a plane crashed in Pennsylvania, and yet another plane crashed into the Pentagon. The day unfolded like a horror movie. But most importantly I remember my reaction...the feeling in my stomach....when I learned that the towers had collapsed and 343 New York City fire fighters had lost their lives as well as hundreds of citizens. That is clearly something I will never forget.

On September 11, let us pause and pay respect to not only those brave fire service members who lost their lives but also for the loss of the hundreds of citizens. Let us also pay respect and say thanks to those brave men and women who continue the fight to keep us safe from further harm both here in the United States and overseas.

As we have heard sung in songs many times –  
God Bless America, Land of the Free, and Home of the Brave.

Sincerely,

Ronald R. Farr  
State Fire Marshal

#### MISSION

The mission of the State Fire Marshal and the Bureau of Fire Services is to protect lives and property by fostering a fire safe environment through inspections, plan review, enforcement, regulation, fire fighter training, data collection and public fire education.

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# **NFPA Safety Alert Regarding Antifreeze in Residential Fire Sprinkler Systems**

## **Background**

Automatic fire sprinkler systems with antifreeze solutions have more than 60 years of successful use in commercial applications and an equally successful experience since they have been in use in residential applications. Most fire fatalities occur in the home, and when home sprinklers are present, the risk of dying in a home fire decreases by 83 percent. The National Fire Protection Association (NFPA) supports and urges the expanded use of residential sprinkler systems as the most effective way to prevent fire injury and death in the home and other residential occupancies.

While NFPA emphasizes that residential sprinkler systems are and remain reliable and effective, a recent fire incident involving a sprinkler system that contained a high concentration antifreeze solution has raised concerns about the combustibility of antifreeze solutions in residential sprinkler systems. The incident involved a grease fire in a kitchen where a sprinkler system with a reported 71.2 percent concentration of antifreeze deployed. The fire resulted in a single fatality and serious injury to another person. (Recently, NFPA received a report of another incident, this time in a living room, which may have been exacerbated by the presence of an antifreeze solution.)

Following the first incident, NFPA initiated a research project with the Fire Protection Research Foundation (Foundation) and an initial set of fire tests was also conducted by Underwriters Laboratories (UL). Based on information learned from these efforts, NFPA issued an interim safety alert and recommendations in July 2010 and began additional research to gain further information on antifreeze solution performance under various fire scenarios.

The Foundation has completed this additional research in a report entitled "Antifreeze Solutions in Home Fire Sprinkler Systems: Phase II Research Interim Report" (2010), and NFPA is providing updated safety information and guidance based on the test results (see the box below).

## **Key findings of fire tests**

- Antifreeze solutions with concentrations of propylene glycol exceeding 40 percent and concentrations of glycerin exceeding 50 percent have the potential to ignite when discharged through automatic sprinklers.
- Both the 40 percent propylene glycol and 50 percent glycerin solutions demonstrated similar performance to that of water alone for fire control throughout the series of tests.
- Based on the results of this research, antifreeze solutions of propylene glycol exceeding 40 percent and glycerin exceeding 50 percent are not appropriate for use in residential fire sprinkler systems.
- Consideration should be given to reducing the acceptable concentrations of these antifreeze solutions by an appropriate safety factor.

## **NFPA Standards Council Action**

Based on the Foundation report, the NFPA Standards Council, the body that oversees the NFPA standards development process, issued tentative interim amendments (TIA) to NFPA 13, *Standard for the Installation of Sprinkler Systems*; NFPA 13D, *Standard for Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes*; and NFPA 13R, *Standard for Installation of Sprinkler Systems in Residential Occupancies Up To and Including Four Stories in Height* banning the use of antifreeze in sprinkler systems in new construction of residences and in the dwelling unit portions of other occupancies. (8/16/10)

## **Important Safety Information and NFPA Guidance Regarding Antifreeze in Residential Fire Sprinkler Systems**

### **New Systems**

For now, and until any further action by NFPA consensus standards committees, NFPA sprinkler standards prohibit the use of antifreeze in new residential fire sprinkler systems.

NFPA standards prohibit the use of antifreeze in residential fire sprinkler systems in new construction following the August 16, 2010, issuance of tentative interim amendments (TIA) to NFPA 13, NFPA 13D, and NFPA 13R. If you are putting in a new residential fire sprinkler system (including all NFPA 13D applications and the dwelling-unit portions of NFPA 13 and NFPA 13R systems), refer to the latest editions of NFPA 13, NFPA 13D and NFPA 13R, as amended by TIAs 1000, 995, and 994.

### **Existing Systems**

NFPA sprinkler standards are installation standards and do not currently address the problem of antifreeze in existing systems. NFPA, in its role as a safety advocate, believes that owners and contractors should take immediate steps to review the status of their existing residential sprinkler systems and take appropriate action. A complete ban on antifreeze is appropriate for new systems during the period that the NFPA standards committees review the Fire Protection Research Foundation reports and determine whether limited use of antifreeze in these systems is appropriate. A more difficult problem presents itself, however, with existing systems, some of which cannot be easily retrofitted or redesigned so as to avoid the need for antifreeze. Because of the lifesaving benefit of these systems, simply shutting down these systems should not be an option. For owners and contractors who now must determine how to handle these systems, NFPA is offering the following guidance regarding existing systems:

- Residential fire sprinklers are extremely effective fire protection devices, significantly reducing deaths, injuries, and property loss from fire. These systems should not be disconnected.
- Existing residential fire sprinkler systems, whenever possible, should not contain an antifreeze solution.
- If you have, or are responsible for, an existing residential occupancy with a fire sprinkler system, contact a sprinkler contractor to check and see if there is antifreeze solution in the system.

- If there is antifreeze solution in the system, determine if other means, such as insulation, can be used to provide adequate freeze protection.
- If there is no viable alternative to antifreeze solutions, NFPA recommends the following:
  - Use only propylene glycol or glycerin antifreeze solution.
  - The antifreeze solution should be the lowest possible concentration required for the needed freeze potential, but under no circumstance should the antifreeze solution exceed a maximum concentration of 40 percent of propylene glycol or a maximum concentration of 50 percent of glycerin. Consideration should be given to reducing these concentrations by an additional safety factor.
  - The antifreeze solution should only be a factory pre-mixed solution; use of factory pre-mixed solutions is essential to ensure the proper concentration level and solution integrity.
  - Antifreeze solutions should only be used with the approval of the local authority having jurisdiction.

For more information, including copies of the Foundation reports and the TIAs, and to stay up to date on any further guidance or information that NFPA may provide on this issue, regularly consult [www.nfpa.org/antifreeze](http://www.nfpa.org/antifreeze).

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# NFIRS News



Homeland  
Security

## **NFIRS NEWS from the Department of Homeland Security**

*National Fire Incident Reporting System*

The [Emergency Management and Response—Information Sharing and Analysis Center \(EMR-ISAC\)](#) was notified that the United States Fire Administration (USFA) recently made available a new [National Fire Incident Reporting System \(NFIRS\)](#) web-based data entry tool known as the Data Entry Browser Interface (DEBI). It enables total web-based data entry into NFIRS, eliminating the need to download and install client software on the NFIRS

user's computer. DEBI will run using standard web browsers that provide access to the application from any computer that has an Internet connection.

In order to use DEBI, which the EMR-ISAC confirmed is free of cost to all users, a fire department must have completed the user [registration](#). Additionally, its NFIRS state program manager must have assigned it the necessary permissions to use the new tool and activated its account. A department should contact its NFIRS [State Program Manager](#) if it does not already have an active NFIRS user account.

The Federal Fire Prevention and Control Act of 1974 (PL 93-498) authorized the USFA's National Fire Data Center to gather and analyze information on the magnitude of the nation's fire problem as well as its detailed characteristics and trends. NFIRS was established in order to carry out the intentions of the Act. NFIRS has two objectives: to help state and local government develop fire reporting and analysis capability for their own uses, and to obtain data that can be used to more accurately assess and subsequently combat the fire problem at a national level.

## **Using the NFIRS Data Entry Tool (DET) with Windows 7**

The United States Fire Administration (USFA) shares ways other users have found to get the NFIRS Data Entry Tool to work with Windows 7. The following workaround has proven to work:

Disable Aero for Windows 7 and use Windows Classic instead.

1. Right-click on the desktop and choose Personalize from the menu.
2. Scroll the themes down until the Basic and High Contrast themes are seen.
3. Click Windows Classic, and OK. The desktop should change to Windows Classic that will apparently allow the Client Tool to run.
4. When the session is over, change back to the default.

## **Michigan Fire Service Directory**

**PLEASE check your department's E-MAIL address in the directory.** The Bureau has noticed that a lot of the email addresses are not up to date. The online directory can be found at: [http://www.dleg.state.mi.us/fire\\_directory/](http://www.dleg.state.mi.us/fire_directory/). **Please note that the directory is updated quarterly. Changes to department contact information may not be reflected in the directory immediately.**

Below is a link to update your department's information in the directory. You may submit the form by fax to (517) 335-4061, e-mail to [howardr2@michigan.gov](mailto:howardr2@michigan.gov), or mail to Bureau of Fire Services, Attn: Rhonda Howard, PO Box 30700, Lansing MI 48909. Thank you in advance for your help to keep the most accurate information in the directory.

### **Fire Service Directory Update Form:**

[http://www.michigan.gov/documents/dleg/Fire\\_Service\\_Directory\\_Information\\_UpdateDESI\\_GN\\_rev.1.31.09\\_270867\\_7.pdf](http://www.michigan.gov/documents/dleg/Fire_Service_Directory_Information_UpdateDESI_GN_rev.1.31.09_270867_7.pdf)

You may also locate the form on our website at [www.michigan.gov/bfs](http://www.michigan.gov/bfs), click on Forms and Publications.

## Reminder to Submit NFIRS Reports Online

As of January 1, 2008, the Bureau of Fire Services no longer accepts paper reports. The National Fire Incident Reporting System (NFIRS) is available online and the Bureau of Fire Services requests that all fire departments enter these reports using this online system. If you need assistance in setting up this program please contact Rhonda Howard (contact information is listed below).

### Fatal Fire Reporting

#### **UPDATED FATAL FIRE REPORT FORM NOW AVAILABLE**

In addition to the basic NFIRS report, the Bureau of Fire Services also tracks all fire-related deaths. These statistics are used for program development, legislation, and prevention programs. Fire departments responding to a fatal fire are required to submit the "Michigan Fatal Fire Report" within 24 to 48 hours of the death. The report form is available at: [http://www.michigan.gov/documents/dleg\\_bccfs\\_fatalrep\\_94417\\_7.pdf](http://www.michigan.gov/documents/dleg_bccfs_fatalrep_94417_7.pdf)

## Civilian Fatal Fire Statistics 2009 and 2010

### 2009 – Reported as of 7/30/10

January	9
February	12
March	17
April	16
May	16
June	13
July	13
August	10
September	7
October	14
November	16
December	16
<b>Total</b>	<b>161</b>

### 2010 – Reported as of 8/24/10

January	19
February	18
March	15
April	13
May	5
June	3
July	3

### Questions?

If you have questions regarding your department, NFIRS reporting functions or fatal fire reporting, please contact Rhonda Howard at (517) 241-0691 or [howardr2@michigan.gov](mailto:howardr2@michigan.gov).

# Office of Fire Fighter Training



**News and Notes from the OFFT**  
By Joseph A. Grutza, Director, Office of Fire Fighter Training



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## Clarification on Fire Fighter I Practical Examination Station 2

*The OFFT has heard concerns from instructors who use the Jones and Bartlett curriculum to teach Fire Fighter I and II. The information below addresses those concerns.*

Specifically, the first five steps of station #2 of our MFFTC fire fighter practical examination requires that each tester (1) check the cylinder pressure (at least 90 percent full), (2) open the cylinder valve completely, (3) check the regulator and cylinder gauge to ensure that they read within 100 psi of each other, (4) verify low pressure alarm and (5) verify PASS activation.

Although this information is available in other sections of the chapter, the Skills Drill on page 55 of the Jones and Bartlett does not show these steps. Since Station 2 requires that 10 out of the 10 steps be completed successfully to pass the station, instructors using all curriculums, especially those using Jones & Bartlett, need to review ALL the material in this chapter and others in order to prepare their students to successfully complete the practical stations.

## Additional Course Opportunities for Pre-Service Students

At the August 11, 2010 Michigan Fire Fighters Training Council (MFFTC) meeting a motion was approved to permit the MFFTC Regional Training Centers (RTC) to sponsor and conduct additional courses to their registered pre-service students.

The following courses can now be registered with our office:

- Vehicle Extrication (K01B)
- Advanced Vehicle Stabilization (K02A)
- Elevator Training (K10B)
- Introduction to Wildland Fire Suppression (L25B)
- NIMS-Incident Command for the Fire Service (L13A)
- Clandestine Drug Lab Awareness (F04A)
- Building Construction: Combustible (L01A)
- Building Construction: Noncombustible (L02A)

As with all our courses, qualified instructors must be used to present these programs.

The Office of Fire Fighter Training (OFFT) and the MFFTC is happy to be able to offer our RTC's this additional training opportunities for our future fire service members.

## Other News...

### **22nd Annual Michigan Arson Prevention Committee Juvenile Firesetter Seminar**

#### **SAVE THE DATE:**

**March 1 - 2, 2011  
Mount Pleasant, MI**

We are pleased to announce the 22nd Annual Michigan Arson Prevention Committee Juvenile Firesetter Seminar, which will be held in Mount Pleasant, MI on March 1-2, 2011.

The seminar will feature a rich educational program, covering various aspects of multi-disciplinary juvenile firesetting intervention. Key topics to be addressed include: navigating the intake and interview process with children; impact of social media on risky fire use; strategies to address the "experimental" juvenile bomb maker; associated juvenile legal issues; working with youth who have learning disabilities or mental health issues; and collaborating with school personnel on JFSI. This seminar encompasses the complex and challenging issue of juvenile firesetting, and provides methods to keep youth, families, schools, and communities safe.

The seminar is designed for a multi-disciplinary audience, including: fire service, police, juvenile legal and court personnel, educators, juvenile intervention specialists, injury prevention clinicians and educators, social workers, case workers, probation officers, arson investigators, school personnel (teachers, nurses, counselors, administration, and resource officers), youth assistance, social service agencies, mental health clinicians, community health educators, first responders, and healthcare personnel.

Additional information will be posted on the MAPC website:

[www.mi arsonprevention.org](http://www.mi arsonprevention.org)

# Michigan State Police Training Academy



## Training Announcement

### *Defensive Driving Lecture*

The Michigan State Police Training Academy is hosting a Defensive Driving Lecture. The following topics will be covered:

- Defensive Driving
- Civil Liability
- Emergency Response Driving
- Night Driving

**DATE:** Wednesday, October 6, 2010  
Wednesday, November 3, 2010

**TIME:** 10 a.m. to 3 p.m.  
1 hour lunch break (on your own)

**PLACE:** Michigan State Police Training Academy  
7426 N. Canal Road  
Lansing, MI 48913

**COST:** \$15

**REGISTRATION:** Fax completed [enrollment form](#) to [Ms. Sheila Cowles](#) at (517) 322-6363. For more information, contact [Lt. Keith Wilson](#) at (517) 322-1789. Seating is limited to 200.

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Thanks to all of you for the continued articles, information, photos and comments – your input is important. Any questions regarding the Bureau of Fire Services newsletter may be directed to Terry Fobbs at (517) 373-8331 or [fobbst@michigan.gov](mailto:fobbst@michigan.gov).

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**For additional information about the Bureau of Fire Services and to subscribe or unsubscribe to the “Michigan Fire Service Connection” go to:**

[http://www.michigan.gov/dleg/0,1607,7-154-28077\\_42271---,00.html](http://www.michigan.gov/dleg/0,1607,7-154-28077_42271---,00.html)



<http://www.michigan.gov/dleg>



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