



# FLASHPOINT

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## PHILADELPHIA-DELAWARE VALLEY SFPE CHAPTER

### FEBRUARY MEETING

In keeping with the Board's agreement to provide an occasional alternate venue for our meetings, please note the changes for this month.

We are meetings on the 3rd Thursday so that the romantics among us can spend Valentine's night with their significant others.

**DATE: Thursday, February 16, 2017**

**LOCATION: Great American Pub,  
123 Fayette Street, Conshohocken, PA**

**FELLOWSHIP: 5:30PM**

**DINNER: 6:00PM**

**DINNER PROGRAM: SFPE Technical Update: Research, Tools and Methods for Fire Protection Engineers.**

**PRESENTED BY: Chris Jelenewicz,  
SFPE Technical Director and Editor of  
Fire Protection Engineering magazine.**

**COST: \$30.00 for dinner and program**

**Please reserve with Lou Annas, via email  
[LAnnas@bearindustries.com](mailto:LAnnas@bearindustries.com) , by 12:00 noon  
Friday February 10, 2017.**

Volume 22, Issue 6  
FEBRUARY 2017

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**Special points of interest:**

- *Phila-DelVal SFPE Trade Show is fast approaching!!*

### PRESIDENT'S SPARK

The next meeting will be held at the Great American Pub on Thursday 2/16/2017. We changed from the normal 2<sup>nd</sup> Tuesday of the month to account for Valentine's day so that all our members may spend time with their families. We will also have a \$30 fee for this meeting since the food costs are higher. Our meetings at Jacobs will remain \$25 per meeting. The January meeting was held at Jacobs. The speaker for January was Gary Lederman of Croker Corp. The presentation concentrated on the very hot top of how to measure corrosion in sprinkler piping. There are some state of art ways to determine the amount of corrosion and where it is located in the piping so that only the corroded piping may be replaced which saves the cost of replacing an entire sprinkler system. The food was great and attendance was excellent. I would like to thank everyone for the continued support of our meetings. We will have our first trade show in many years in the Spring. There will be many vendors and an opportunity for all of us to get some training (PDH Credits). Make sure you plan to attend if you can! -Bob Moser

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## FIRE-RATED DOOR ASSEMBLIES & NEW HOSPITAL ACCREDITATION STANDARDS

As of July 5, 2016, the Joint Commission and the Centers for Medicare & Medicaid Services (CMS) have adopted the 2012 versions of both NFPA 99 (Health Care Facility Code) and NFPA 101 (the Life Safety Code or LSC). **Beginning on November 1, 2016, facilities being inspected will be required to have all tests completed within the standards of NFPA 80 for all fire-rated door assemblies and annual testing will be required by July 5, 2017 for all fire-rated door assemblies (NFPA 80).**



### ADULT NURSING FACILITIES TO HOSPITAL

While sprinkler test sequencing has increased, the most important and major update to note is the annual inspection of fire-rated door assemblies. NFPA 80 door assembly and egress opening testing for institutional occupancies must be completed. These doors are located throughout a facility including occupancy separation doors, stair doors, building demising openings, horizontal exit doors, and hazardous area room doors. Among other criteria being tested for, this test is to determine: 1) whether or not the rated doors within the facility are capable of performing their function, 2) to prevent the spread of fire and smoke, and 3) how and when they were installed. The inspection looks at the door, frame, hardware, closers, gaskets, any modifications, and other listed elements to assert fitness and to assess the door assembly's ability to perform its function and maintain the original "as-tested" listed rating. In addition to fire door assemblies, all smoke barriers, corridor wall penetrations, means of egress lighting, and emergency exit signs shall need testing for proper functionality.

In the event that a facility does not meet these requirements, the Joint Commission allows for three courses of action as follows: 1) use corrective maintenance to document and resolve issues within 45 days, 2) obtain a LSC equivalence approved by the Joint Commission, or 3) create a Plan For Improvement (PFI) in the Statement of Conditions (SOC) form. Although these allowances are available, it is much better to proactively perform LSC compliance inspections and address any deficiencies to make the accreditation inspection process much smoother.

Accreditation not only promotes a safe environment for the employees, patients, and visitors of a health care facility; it can affect eligibility for participation in programs such as Medicare and Medicaid, impact liability insurance, project the quality of care and training of the staff, and many other invaluable benefits.

### UP TO 25% OF OPENINGS MAY FAIL

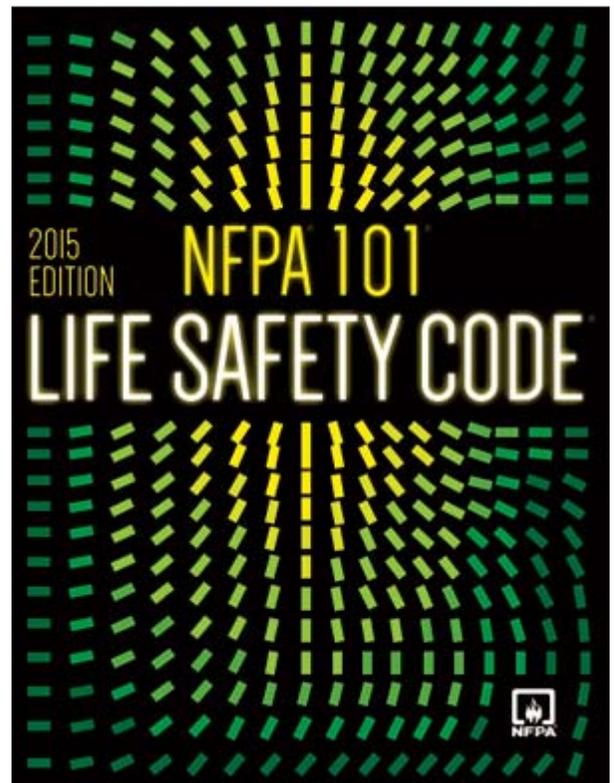
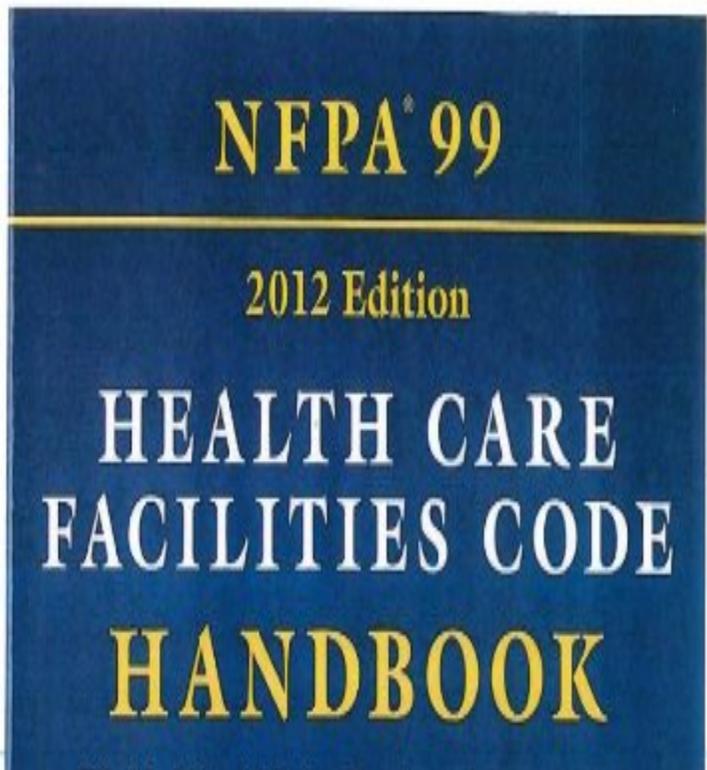
The Joint Commission suggests using a proactive LSC inspection to develop a Building Maintenance Program (BMP) which allows for planning and staging the repairs with minimal impact to the operation of the facility. For one large institutional facility in New York City, even large fire separation motorized entrance doors to the Metro subway were recently tested. Of course, after a dozen years of non-use the doors were frozen. This may be typical of up to 25% of all active openings in an institution.

## DOOR INSPECTION PROGRAM FOR HEALTH CARE FACILITIES

A door inspection program may consist of the following:

1. Cataloging all fire separation and egress openings.
2. Testing and re-testing in compliance with the NFPA 80 standard.
3. Confirming gasketing, closers, coordinators, hardware, frames, leakage, labels, fire-links, and travel hardware.
4. Identifying all holes, maintenance of non-standard manufacture/repairs, defects, and performance issues.
5. Compilation into CMS approved spreadsheet with testing protocols and sign-offs with maintenance detailing.

This was prepared by Dan Broughton, EIT, a Systems Engineer and Director of BIM with Professional Systems Engineering, LLC. You may contact him by calling 800-839-5060 x101 or by email at [dhb@profsyseng.com](mailto:dhb@profsyseng.com).



## REAL NEEDS Author: Angelo Verzoni

IN THE SUMMER OF 2015, city officials in Biddeford, Maine, a small, coastal city 20 miles south of Portland, sought benefit cuts for public safety workers, citing the need to lessen the burden on taxpayers. Labor unions representing Biddeford's firefighters, police officers, and public works employees fiercely opposed the proposals and urged people to protest them.

In an interview with the Journal Tribune, Biddeford firefighter and union president Tim Sevigny said the proposal to cut health care benefits for retired firefighters specifically irked him, as many active and retired firefighters suffer from post-traumatic stress disorder (PTSD) and need behavioral health care. "The dead people we see [on the job] are not like the dead people you see at a funeral," Sevigny told the newspaper, adding that the most difficult part of the job is "seeing people who've shot themselves in the face, hanged themselves, or overdosed." Sevigny's concern illustrates a problem facing fire departments nationwide: the need for behavioral health care for firefighters to treat PTSD, substance abuse, and other conditions brought on by the stressful and at times traumatic nature of the job.

According to the fourth and most recent [Needs Assessment Survey of the U.S. Fire Service](#), conducted by NFPA in 2015 and published in November, it's a need that the majority of departments is not addressing internally, with only one-fifth of fire departments reporting that they offer behavioral health programs. The same question was not asked in the previous three Needs Assessments, which include data from 2001, 2005, and 2010.

The 2015 Needs Assessment Survey was sent out electronically and by mail to 26,322 departments across the country. In total, 5,106 departments responded to the survey, and their answers were used to paint a picture of fire service needs in the U.S. and highlight areas that could use more funding.

One of the report's authors, Hylton Haynes, a senior research analyst in NFPA's Research Division, told NFPA Journal he was surprised by the behavioral health figures. "It's an extremely stressful job, and only 20 percent of departments have a program," he said.

The lack of implementation of behavioral health programs by departments comes at a time of increased calls to action. In September, for example, urban fire service leaders attending the annual Urban Fire Forum at NFPA's Massachusetts headquarters endorsed a position paper that pointed to the "patchwork of ineffective services" most departments offer when it comes to behavioral health and the need for improvements. "Fire chiefs have an important opportunity to demonstrate leadership and implement a new, more effective framework for responding to their employees' behavioral health needs," the paper reads.

Similarly, an NFPA report published in November, which examines [results from various research studies on suicide and behavioral health in the fire service](#), concludes that "it's no longer a matter of 'Suck it up and deal with it!' It's time to deliver firefighter suicide, behavioral health, and mental well-being awareness and prevention programs at the firefighter level."

### THE RURAL FACTOR

Behavioral health isn't the only health care area where departments have room to improve, according to the assessment, which also found deficiencies in basic firefighter fitness and health programs that departments are required to maintain by [NFPA 1500, Fire Department Occupational Safety and Health Program](#). Overall, only 27 percent of departments have such programs, the assessment shows. This is down from the 30 percent that reported having them in 2010. The 2015 figure translates to an estimated 716,000 firefighters currently working in departments without a program to maintain basic fitness and health.

In both behavioral health as well as general health and fitness, rural communities are driving averages down. Only 10 percent of departments in communities of fewer than 2,500 people have behavioral health programs, according to the assessment, whereas such programs exist in 76 percent of departments serving cities of 500,000 or more. Similarly, only 15 percent of rural departments said they had programs to maintain basic firefighter fitness and health, compared to 89 percent of departments in large cities.

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## REAL NEEDS (cont.)

In an interview with NFPA Journal, Mark Light, CEO and executive director of the International Association of Fire Chiefs, speculated that while departments might want to seek funding for health-related programs, they can't because they still struggle to fund the more tangible, day-to-day needs like acquiring new personal protective equipment (PPE). For example, even though the largest share of federal Assistance to Firefighter Grant (AFG) program funding from 2011-14 was distributed for PPE, 72 percent of departments reported in the assessment that they had PPE that was at least 10 years old, up from 63 percent in 2010. In contrast, health and wellness programs were awarded approximately 1 percent of total AFG funds in those four years.

Kevin Quinn, chairman of the National Volunteer Fire Council, had a slightly different take on why rural departments in particular aren't seeking funding for health programs and other resources: A pattern of denied grants has left them feeling discouraged, thereby leading fewer departments to even apply for grants. When rural departments do apply for grants, Quinn said, applications are often poorly written or are filed improperly.

"You read some of these grants and you'll know the department needs this money, but they're not following directions or not writing it clearly and concisely enough, and so they don't score well," he said. "They aren't funded." Quinn said the NVFC is determined to combat this issue through a continued push for federal funding for rural departments and education efforts to improve rural department heads' grant-writing skills.

Asked about behavioral health programs specifically, Light pointed to a number of other challenges preventing the implementation of effective programs, such as a lack of data pertaining to firefighter suicide attempts and suicide mortality rates. "There has to be some way of dealing with that issue and tracking that issue and not creating an environment that puts a stigma on a firefighter who admits they've thought about suicide," he said.

Volunteer firefighting presents a special challenge to quantifying this issue, according to Light. "What happens when you get someone who's an electrician who's also a volunteer firefighter who commits suicide?" Light said. "How do you then make sure that triggers someone to realize he was also a volunteer firefighter? I think that's very difficult to do when you have people from all walks of life serving as volunteer firefighters."

On a positive note, Quinn said he believes the percentages reported in the Needs Assessment do not reflect the number of rural departments that do provide their firefighters with behavioral health care or other resources. For example, he said, if firefighters in a rural department have seen something horrific, the chief would likely connect them with community resources to handle the effects of such a situation—an informal process that isn't typically documented. Quinn also contends that in some ways, rural departments have an advantage over urban departments when it comes to behavioral health care because of the tight knit nature of small communities, which he said can provide emotional support to those suffering from behavioral health conditions.

Outside of health care-related topics, Haynes said he was surprised the assessment showed a lack of community risk reduction activities. For example, 89 percent of departments said they did not conduct a wildfire safety program, and 88 percent said they did not conduct an older adult fire safety program. In these areas, the differences between urban and rural communities were less pronounced; less than one-third of departments in communities of 500,000 or more reported conducting wildfire safety programs and only about half reported conducting older adult fire safety programs.

Overall, the 2015 Needs Assessment contains nearly 40 percent more information than the last three assessments conducted by NFPA. This is due in part to an extended question set to address emerging concerns, such as fire service response to active shooters.

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## UPCOMING NFPA TECH TUESDAY SEMINARS

**Registration Fee: \$50 per seminar for Members & AHJs/\$150 per seminar for Non-Members.**

(Certificates are available at an extra fee of \$10 each, please contact [seminars@nfsa.org](mailto:seminars@nfsa.org) for info)

February 21, 2017

### Remote Monitoring and Remote ITM

Jason Webb

The use of remote or automated systems are becoming more commonplace and because of that, ensuring the automated inspection/testing equipment performs as needed is more important now than ever. The 2017 edition of NFPA 25 now contains regulations and guidance for automated inspections and testing. In this presentation, we will take a look at some of the remote inspection and testing systems that exist and what should be done to ensure their proper operation.

March 21, 2017

### Piping and Valve Installation

Louis Guerrazzi, EIT

Pipe and valves are key components of any sprinkler system. They need to be installed correctly and with consideration of how they will be used over the life of the system, which includes the ability to perform maintenance. Choosing the correct types components for the system at hand is a necessity. The detailed locations and trim for valves, including control valves, check valves and pressure reducing valves will be discussed. In general, this seminar will cover the installation requirements for pipe and valves for various sprinkler systems.

April 18, 2017

### Tanks per NFPA 22

Roland Asp, CET

Water-based fire protection systems need a reliable source of water. Stored water is a common and acceptable type of water supply for these systems. NFPA 22 is the *Standard for Water Tanks for Private Fire Protection*. This document describes the minimum requirements of the various types of tanks used for fire protection including gravity tanks, suction tanks, pressure tanks and break tanks. This seminar will highlight the requirements of this standard and will include valuable information on the various aspects of water tanks design and installation including: tank capacity, acceptable tank material, tank heating, pipe connections and fitting as well as acceptance test requirements and inspection testing and maintenance of water tanks.

#### TRIVIA QUESTION!

What nickname was given to the Philadelphia Flyers' proficient scoring line of Eric Lindros, John LeClair, and Mikael Renberg?

ANSWER ON PAGE 8!



#### FLASHPOINT

“The purpose of FLASHPOINT is to provide a forum for the transfer of information between members of the Philadelphia-Delaware Valley Chapter of Fire Protection Engineers (SFPE) and to give the chapter visibility.

Newsletter/Publicity Committee:

#### Dyllon Slatcher

Information for Publication can be submitted to: Dyllon Slatcher

EMAIL:

[dslatcher@OliverFPS.com](mailto:dslatcher@OliverFPS.com)

This newsletter is published 9 or 10 times per year (September through June) and received as part of membership of the chapter. Membership dues are \$25.00 Collected annually in the fall each year. For an application of membership please contact: **Lou Annas lan-nas@bearindustries.com**

#### VISIT OUR WESITE AT:

[www.sfpephiladelphia.org](http://www.sfpephiladelphia.org)

Articles written are the views of the Author and not necessarily those of the Philadelphia\_Delaware Valley Chapter of SFPE

# February 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 SOUTH JERSEY ASCET MTG.	2	3	4
5	6	7	8	9	10	11
12	13	14 VALENTINES DAY	15 DELAWARE ASCET MTG.	16 PHILA-DELVAL SFPE MTG.	17	18
19	20	21 BERKS ASCET MTG.	22	23	24	25
26	27	28 PHILADELPHIA ASCET MTG.				

## DATES TO REMEMBER

FEBRUARY 1: SOUTH JERSEY ASCET MEETING

FEBRUARY 14: VALENTINES DAY

FEBRUARY 15: DELAWARE ASCET MEETING

FEBRUARY 16: PHILADELPHIA– DELAWARE VALLEY SFPE CHAPTER MEETING

FEBRUARY 21: BERKS ASCET MEETING

FEBRUARY 28: PHILADELPHIA ASCET MEETING



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**Society of Fire  
Protection  
Engineers**

## MISSION STATEMENT

*The Philadelphia/Delaware Valley Chapter purpose is to advance the art and science of fire protection engineering and its allied fields, for the reduction of life and property losses from fire, to maintain high ethical standards on engineering among its members and to foster fire protection education.*

*Recognition of fire protection engineering as a discrete engineering discipline is a prime goal. Engineering disciplines exist because there is a special body of knowledge based on the fundamentals of mathematics, physics, chemistry, engineering science and economics.*

*The chapter strives to facilitate sharing of sound engineering experiences and knowledge between its members and the fire protection community in general with an active program of education and scholarship activities.*

## FUTURE CITY COMPETITION RESULTS!

Lionville Middle School Wins the 2017 Philadelphia Regional Future City Competition!



TRIVIA QUESTION ANSWER: THE LEGION OF DOOM!