Emergency Preparedness/Business Continuity Conference Sessions

The latest methodologies for accurately assessing risks and consequences, emergency preparedness, contingency planning, and incident management and recovery capabilities.

M08  America's PrepareAthon! Moving Millions to Prepare  Monday 8:00 - 9:00 AM
Karen Marsh, FEMA, ICPD

The Federal Emergency Management Agency (FEMA) has created America's PrepareAthon!SM, a grassroots campaign for action to increase the number of people who know the disasters most relevant to their community, know what to do to be safe and mitigate damage, practice these actions, and contribute to community resilience planning. This session will present the evidence-based design, implementation, and ongoing evaluation of the program, including findings from a recent national survey designed to track changes in the public's knowledge, attitudes, and behaviors related to preparedness.

M24  Building Evacuation Planning for Safety Managers and Building Owners  Monday 9:30 - 10:30 AM
Joseph Versteeg, Versteeg Associates, Nasser A. Al-Zeyara, Qatar Civil Defence

This session will help building owners and managers to understand the fundamentals of emergency planning for a wide range of threats that impact occupant safety, building protection, and the continuity of operations. Key elements include evaluating threats, conducting building and neighborhood assessments, and identifying anticipated responses, as well as managing private-public stakeholder relationships. **Sponsored by: Architects, Engineers, & Building Officials Section**

M40  120 Hours Out: Are You Ready For a Hurricane?  Monday 11:00 AM - 12:00 PM
Brandon Murray, San Antonio Fire Department

Given the recent focus on man-made emergencies, preparation for natural weather phenomenon may get overlooked. This, coupled with the fact that hurricanes are increasingly being seen in areas unaccustomed to them means that many communities at risk may be unprepared. This session will present best practices, focusing on the development and implementation of a 120-hour plan, which will benefit any city/state at risk.
GS  General Session  Monday 1:30 PM - 3:30 PM

Chair’s Remarks
Ernest J. Grant, RN, MSN, PhD(c), FANN, Outreach Nurse Clinician, North Carolina Jaycee Burn Center, UNC Hospitals, Chapel Hill, NC; Chair, NFPA Board of Directors

President’s Remarks
Jim Pauley, President & CEO, NFPA

Keynote Address: Disaster Response
Emergency shelters are desperately needed, but tents just won’t work. What’s the solution? Your town’s been devastated by a tornado, but relief is nowhere to be found. What would you do? Money can flow, and plans can be drawn, but who’s going to actually do the work? Get unique answers to these questions and more, at this year’s keynote session with a twist. Three speakers. Three creative and compelling stories. You do not want to miss this! Sponsored by: UL

T08  RI State Fire Officials and CVS Health: Partnering for Success  Tuesday 8:00 - 9:00 AM
Vincent Quinterno, Rhode Island State Fire Marshal’s Office

Given the massive budget cuts many state and municipal fire services are experiencing, corporate partnership may be an attractive option. This session will detail how the partnership of a Fortune 12 company and a state fire marshal’s office was formed, and how together they worked to make their corporate community a safer environment.

T09  Evacuation Planning for ALL – Not Just Some  Tuesday 8:00 - 9:00 AM
Allan Fraser, NFPA

Prepared for the next evacuation? Have you considered the needs of everyone in your community? Whether your ‘community’ is a single floor, an entire building, a city, a county, or your whole state…20% of the population have disabilities, 12.8% are elderly, 20.2% are children under 14. That’s more than 50% of your community who’ll need help evacuating. Still think you’re prepared?

T24  High-Rise Evacuation Planning: Hold the Mayo (Clinic)  Tuesday 9:30 - 10:30 AM
Terrance Schoonover, Mayo Clinic & Patricia Hlavka, Mayo Clinic

Fire drills are one thing. Evacuating an entire 11-story laboratory building at 10:30 on a workday morning is something entirely different. This session will describe the Mayo Clinic's multi-year evacuation improvement project, including why it was initiated, who was involved in carrying it out, as well as how the project, which culminated in a full-scale exercise, was managed. In addition, you’ll hear how evacuation simulation software was used to identify egress challenges, how over 1,700 building occupants evacuated the building in 13 minutes without a single injury; and how the multi-year project improved community partnerships and response capabilities.

T40  Emergency Action Planning for High-Rise Buildings  Tuesday 11:00 AM - 12:00 PM
Kristin Bigda, NFPA & Jack Murphy, Fire Safety Directors Association of Greater New York

This session will provide guidance on developing Emergency Action Plans for high-rise office buildings--critical to occupant safety during an emergency. In February of 2014, NFPA's High-Rise Building Safety Advisory Committee released "Guidelines to Developing Emergency Action Plans for All-Hazard Emergencies in High-Rise Office Buildings," which has become a valuable resource for those developing and implementing Emergency Action Plans within the high-rise building community. Current code requirements for Emergency Action Plans as well as recent high-rise building fire events will be addressed.

David Stymiest, Smith Seckman Reid, Inc.

Presented by the Chairman of the NFPA 110/111 TC on Emergency Power Supplies, this session will discuss changes in the 2016 editions of NFPA 110 and NFPA 111. This session is intended to facilitate understanding of the changes on these important emergency power supply systems and SEEPSSS. The speaker, an acknowledged industry expert on emergency power systems, will also review emergency power inspection, testing, and maintenance issues and their impact on operational reliability. ● INTERMEDIATE

**Evacuate or Shelter in Place? Critical Incident Management During the Boston Marathon Terrorist Attack**

John Tello, Boston Properties

Boston’s Prudential Center is a mixed use property that includes three high-rise office buildings and a shopping center; it’s located directly across from the site of the 2013 Boston Marathon Bombing. The decisions made and actions taken by Prudential Center property management and security staff provide a case study in emergency management during an incident involving a deliberate, man-made hazard created in the immediate vicinity of a mixed use property. This multi-media presentation will include video of the aftermath (to illustrate occupant behaviors), as well as audio recordings of security and law-enforcement responders and the live public address messages directed to occupants of the high-rise office towers. ● INTERMEDIATE

**NFPA 1616, Standard for Mass Evacuation and Sheltering:**

A New Standard

Dean R. Larson, PhD, Larson Performance Consulting

This session will discuss the development of the draft of NFPA 1616, Standard on Mass Evacuation and Sheltering, which was approved in August 2014. ● ADVANCED

**Risk Assessment Techniques and Tools to Improve Safety**

Jeffrey Foisel, Dow Corning Corporation & James Haiser, Jr., Dow Corning Corporation

For Environmental, Health, and Safety professionals, effectively managing risk is an essential component of their job. Identifying, evaluating, controlling, and communicating these risks are essential building blocks to a comprehensive safety program. Although this sounds simple, many organizations find it difficult to collect and use this information effectively. This presentation will outline an approach successfully used in an industrial setting to identify, assess, and communicate risk. Included will be a review of two simple methods to present and prioritize risk to facilitate management discussions that gain support for resolving risks. ● BEGINNER

*Sponsored by: Industrial Fire Protection Section*

---

*Updated 2/11/2015 and subject to change. Please check nfpa.org/conference for updates.*

---

**REGISTER TODAY!** nfpa.org/conference
Fire & Emergency Services Conference Sessions

A look at what's new in fire-fighting technology, safety preparedness for first responders, incident command strategies, and fire prevention and inspection techniques.

M10  Green Building's Impact on Fire Fighter Safety  Monday 8:00 - 9:00 AM
Brian Meacham, Worcester Polytechnic Institute; & Michael Gollner, University of Maryland

Quantification of Green Building Features on Firefighter Safety is a 3-year project to reduce firefighter injuries and deaths associated with unknown or unanticipated fire environments and structural responses associated with green building elements. This session will provide an update on Year 2 efforts, which are focused on fire performance experiments involving selected 'green' structural systems for U.S. domestic housing and naturally versus mechanically ventilated building and envelope systems. These experiments will inform development of a screening tool for fire risk and hazard assessment of green features for new and existing construction, potential modifications to firefighting tactics as appropriate to green building technologies, and education and training materials associated with fire in green buildings. Sponsored by: Research Section

M11  Transient Thermal Response of Fire Fighter Clothing and Helmets in Heated Flow Path Conditions  Monday 8:00 - 9:00 AM
Kristopher Overholt, NIST

Understanding the transient thermal response of fire fighter protective clothing and helmets under realistic heated flow path conditions is important to minimize skin burns and thermal injuries. NFPA 1971, Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, specifies performance requirements of fire fighter protective clothing using a standardized thermal protective performance (TPP) test procedure. The TPP test is based on existing skin burn thresholds but does not consider the effects of flow path conditions at various velocities. This session presents experimentally measured temperatures from fire experiments in which fire fighter protective clothing and helmets were exposed to heated flow path conditions. Small-scale experiments were conducted in a heated convective flow loop. Large-scale fire experiments were conducted in a single-story and a two-story structure that contained typical room furnishings and well-characterized convective flow paths. Sponsored by: Fire Service Section
Changing the Fire Service Culture to Ensure Everyone Goes Home

Chris Connealy, Texas State Fire Marshal's Office

Monday 9:30 - 10:30 AM

Firefighters must have the courage to face a multitude of risks in order to save lives and protect their communities. A different type of courage is required to stay safe in potentially dangerous situations, avoiding needless risks and tragic consequences. This provocative and moving presentation is designed to change the culture of accepting the loss of firefighters as a normal occurrence. Building on the untold story of line-of-duty death survivors, it reveals how family members must live with the consequences of a firefighter death and provides a focus on the need for firefighters and officers to change fundamental attitudes and behaviors in order to prevent line-of-duty deaths and ensure that “everyone goes home” at the end of the day.

**BEGINNER**  
*Sponsored by: Education Section, International Fire Marshals Association*

---

Heavy Timber Construction of Buildings: What Fire and Building Officials Need to Know

Monty Armstrong, Rocky View County Fire Rescue Service

Monday 9:30 - 10:30 AM

Heavy timber construction is on the rise; with 6-story wood frame buildings being permitted in many areas of Canada, there is a move to allow for heavy timber over 10 stories. Fire and building officials need to understand this type of construction, how it relates and compares to other systems normally used in buildings of this height, and how to properly prepare for a fire emergency response.

---

Traffic Incident Management and Fire Fighter Safety

Jack Sullivan, ResponderSafety.com

Monday 11:00 AM - 12:00 PM

NFPA 1091, Standard for Traffic Control Incident Management Professional Qualifications, outlines job performance requirements (JPRs) necessary to perform temporary traffic control duties and operate safely at emergency incidents on all types of roads and highways. This session will review those JPRs and strategies and tactics for safer roadway operations.

**INTERMEDIATE**  
*Sponsored by: Fire Service Section*

---

Understanding and Addressing the U.S. Fire Fighter Fatality Problem

Rita Fahy, NFPA; Kenneth R. Willette, NFPA; & Thomas Hales, NIOSH/CDC

Monday 11:00 AM - 12:30 PM

This session will present the results of NFPA's 2014 fire fighter fatality study, along with two or three multi-year analyses of specific aspects of the fire fighter fatality problem, including a look at NIOSH's investigation of deaths related to cardiac and other medical issues. NFPA standards that address issues raised in the fatality study and NIOSH investigations will also be discussed.

*Sponsored by: Fire Service Section*
GS General Session Monday 1:30 PM - 3:30 PM

Chair’s Remarks
Ernest J. Grant, RN, MSN, PhD(c), FANN, Outreach Nurse Clinician, North Carolina Jaycee Burn Center, UNC Hospitals, Chapel Hill, NC; Chair, NFPA Board of Directors

President’s Remarks
Jim Pauley, President & CEO, NFPA

Keynote Address: Disaster Response
Emergency shelters are desperately needed, but tents just won’t work. What’s the solution? Your town’s been devastated by a tornado, but relief is nowhere to be found. What would you do? Money can flow, and plans can be drawn, but who’s going to actually do the work? Get unique answers to these questions and more, at this year’s keynote session with a twist. Three speakers. Three creative and compelling stories. You do not want to miss this! Sponsored by: UL

T12 Flagstaff Watershed Protection Project: They Did What? Tuesday 8:00 - 9:00 AM
Paul Summerfelt, Flagstaff Fire Dept.

The Flagstaff Watershed Protection Project (FWPP) is the culmination of almost two decades of progressive, comprehensive municipal wildland fire management, resulting in a gradual and profound paradigm shift within the community. In November 2012, voters authorized a $10 million municipal bond with a 73.6% approval rate to fund forest treatments in two critical watersheds on another jurisdiction, outside of the city’s corporate limits. The election demonstrated community understanding of the vulnerability of these two watersheds and a commitment to act rather than wait for the inevitable fire. Learn how the Flagstaff Fire Dept. moved the community to such overwhelming support.

T26 The Environmental Impact of Fire Tuesday 9:30 - 10:30 AM
Brian Meacham, Worcester Polytechnic Institute

Most people are familiar with the wide-ranging impact and cost of fires to people and property; they may not, however, be aware of the impact fires have on the natural environment, as such impact is often less immediate and obvious. The environmental impacts of fire can include air contamination from the fire plume, which in turn may contaminate land and water as particulate settles; contamination from firefighting water runoff, which may contain toxic products; and other environmental discharges or releases from burned materials or resulting from burning structures, tanks, or other containers. This session presents the outcomes of a Fire Protection Research Foundation-supported project to develop and disseminate a compilation of the existing state of knowledge and gaps in our understanding of the environmental impacts of fire. Sponsored by: Research Section

T42 The Business of Code Enforcement Tuesday 11:00 AM - 12:00 PM
Allan Fraser, NFPA

Shrinking budgets...escalating demands from contractors, owners, and public officials....code changes—all affect your department and make it more challenging to run your operations consistently, accurately, and quickly. Taking a business approach to code administration can make your job easier and public safer. This session shares some proven solutions for doing just that.

T43 The Research Road Map for Smart Fire Fighting Tuesday 11:00 AM - 12:00 PM
Derek Deskins, NFPA Research Foundation

The fire service and other emergency first responders are currently benefiting from enhanced electronic technologies; the increasingly sensor-rich environment they operate in provides access to vast amounts of highly useful data. The "smart" fire fighter of tomorrow is envisioned as being able to fully utilize the available data to perform their job efficiently and effectively. This presentation reports on the development of a research roadmap to address the smart fire fighting and the smart fire fighter of the future. ● Intermediate Sponsored by: Fire Service Section
**T57  Fire Service Research in the Wake of the Cherry Road Fire: What We Knew Then and What We Know Now**

Daniel Madrzykowski, NIST/Fire Research

In 1999, a townhouse fire on Cherry Road in Washington, D.C., claimed the lives of two fire fighters and burned others. NIST performed computer simulations of the fire using the NIST Fire Dynamics Simulator (FDS) and Smokeyview, to provide insight on the fire development. Since then, NIST has conducted research on PPE, fire dynamics in structures, and improved FDS. PPE standards and the understanding of fire dynamics in structures have improved significantly. NIST recently ran a series of full-scale fire experiments to complete understanding of this incident and examine the best means of attacking a walkout basement fire. This presentation will examine how a fire department's approach to a similar fire might differ today.

*Sponsored by: Fire Service Section, Research Section*

**T58  Attic and Exterior Fire Hazard Mitigation**

Robin Zevotek, Underwriters Laboratories

According to the U.S. Fire Administration, an estimated 10,000 residential building attic fires are reported to U.S. fire departments each year; they cause an estimated 30 civilian deaths, 125 civilian injuries, and $477 million in property loss. These attic fires are difficult to mitigate and have led to numerous line-of-duty deaths and injuries. Underwriters Laboratories received a research grant in 2011 to further study the hazards of attic and exterior fires and current fire service mitigation tactics. This presentation will discuss the results of the 28 wall tests, 3 wall and eave tests, 4 full scale attic tests, and 3 field experiments conducted under the grant. ● INTERMEDIATE  

*Sponsored by: Fire Service Section*

**T72  Fire Fighter Safety Research: How Does It Impact You?**

Sean P. DeCrane, Cleveland Fire Department; Robert J. James, UL, LLC; & Todd Harms, City of Phoenix Fire Department

Fire Fighters often hear of fire research programs and subsequent safety efforts. But, do they understand how such things impact them directly? Do they know whether the efforts have real-world applicability? These are some of the questions that this panel of experts will tackle. This interactive presentation will highlight numerous research programs, as well as efforts to incorporate the findings into codes and fire department SOPs. You'll also learn how you can have input on future research.

**T73  The Drones are Coming: Incorporating Unmanned Aircraft Systems into the Fire Service of the Future**

John Flynn, Yonkers, New York Fire Department & Bart Elias, U.S. Congressional Research Service

This presentation will explore the emerging opportunities and challenges associated with deploying unmanned aircraft as part of Fire and Emergency Service response. It will explore available and emerging unmanned aircraft and sensor technologies, the current legal and regulatory framework, and possible mission profiles and scenarios for deploying unmanned aircraft. The various challenges identified regarding drone operations will be discussed, with a particular focus on safety and privacy concerns.

**W01  Feature Presentation: The Lac-Mégantic Railway Disaster – A Town Destroyed and 47 Killed: Lessons Learned**

Denis Lauzon, Lac-Mégantic Fire Department & J Gordon Routley, Montreal Fire Department

The story of the Lac-Mégantic incident is an important chapter in the modern era of risk management. A runaway train composed of 72 tank cars transporting crude oil from North Dakota to the east coast derailed in the center of the town in rural Quebec. The resulting fire claimed 47 lives and destroyed the center of the community. The details will provide valuable lessons for attendees from several different sectors.  

*Sponsored by: Fire Service Section*
W11  **What Is Happening with Fire Experience Data?**

**Marty Ahrens, NFPA**

Data from the USFA’s National Fire Incident Reporting System (NFIRS) combined with NFPA’s annual fire department experience survey tell us how big the fire problem is, what the leading causes of fires are, and what kind of progress we are making. There’s widespread agreement that this data is valuable, but also that its quality and ease of collection could be improved. Several groups have received AFG grants to address issues related to quality, better documentation of structural firefighting, fire department performance measures, fire fighter injuries, and youth firesetting. NFPA and NIST sponsored a workshop on “Today and Tomorrow’s Fire Data” in 2014 to discuss these findings. This session will provide an overview of the discussions on current practices and proposed future directions.

W27  **The 2013 CA Rim Fire: Lessons Learned**

**Todd McNeal, Twain Harte Fire**

As the third largest wildfire in the history of California, the Rim Fire is without question one for the history books. The valuable lessons that an incident of this magnitude can convey to today's fire service are innumerable and still being identified. This session will provide valuable insights into the new extreme fire behavior potential in the nation's fuel beds, as shown during the Rim Fire. ● BEGINNNER

W28  **Restoring Public Confidence in Fire Investigations**

**Chris Connealy, Texas State Fire Marshal Office, Nick Vilbas, Innocence Project of Texas**

The Texas State Fire Marshal Office has gone through a very difficult period with much media scrutiny on the quality of its fire investigations. The Texas Forensic Science Commission issued reports in 2009 and 2011 resulting in 17 recommendations to improve the quality of fire investigations. Attendees will learn what improvements were made and why this is not just a Texas State Fire Marshal Office issue—all fire investigators and leaders of these organizations need to understand their risk exposure.

*Updated 2/11/2015 and subject to change. Please check nfpa.org/conference for updates.*