# **2023 Fire Prevention Institute Offerings**

## Critical Components of CRR – Dennis Compton (60 minutes)

Community Risk Reduction (CRR) provides a platform for fire department leaders to assess risk, prevent harm, respond to incidents, and review the deployment and utilization of their resources to best protect their community. It can be a template for data-driven planning and decision-making, as well as establishing and communicating priorities inside and outside the department. CRR also establishes the foundation of a leadership and management mindset that guides the organization towards prevention, education, and investigations as key elements of its mission. This session will explore these assumptions and provide a unique perspective that can make current and future fire department leaders more effective.

## Learning Objectives:

- Examine critical fire department leadership behaviors that have an impact on culture, attitudes, performance, and outcomes.
- Review organizational and operational realities that can dictate the fire department's ability to function most effectively.
- Discuss focus areas within CRR that often have the most impact on the safety of the community, including the use of data to strengthen the department's ability to make timely changes

### **Historical Fires – John Swanson (120 minutes)**

This course will provide fire prevention professionals with:

- Review the history of significant fires in the United States that impacted model codes.
- Understand how many of the fire protection requirements are integrated and intended to work together (when one fails, it can often impact others).
- Provide a summary of fire safety issues from past fires so fire code officials can prioritize and address issues before something happens.

**John Swanson** has worked in the fire prevention industry as a Deputy State Fire Marshal Inspector/Plans Examiner, city fire marshal, and now with the National Fire Sprinkler Association for over 20 years. He is a Certified Fire Protection Specialist (CFPS) with NFPA. As a Codes & Standards Specialist, John is responsible for representing NFSA on ICC code committees and NFPA technical committees.

# Communication in Conflict - Tim Whitham (60 minutes)

Attendees will recognize how:

- EGO and Power can lead to Conflict.
- Communication has a big role to play in conflict management.
- To apply and learn: to keep a control on your emotions during difficult conversations.
- Consider during conflict: communication must not be done with members separately but must be on a common platform.

Tim Whitham; MS, EFO, a 30 plus-year veteran of fire & emergency services, is the Fire Chief of the Edwardsville Fire Department, in the Kansas City Kansas metro area. Tim holds a Master s Degree in Leadership with the Emphasis in Disaster Planning and Executive Fire Leadership and is a graduate of the Executive Fire Officer (EFO) Program. He is credentialed as a Chief Fire Officer (CFO) and Fire Marshal (FM) through the Center for Public Safety Excellence (CPSE). Tim is also accredited through the International Fire Service Accreditation Congress as a Fire Officer III, Instructor III, Inspector II, as well numerous other certifications. Tim is a Professor for Columbia Southern University, College of Safety & Emergency Services; teaching subjects at the Associate and Bachelor Degree level. He is also an Adjunct Instructor with the National Fire Academy and teaches for Kansas University. Tim currently is a member of the International Association of Fire Chiefs, where he serves as the Volunteer and Combination Officers Section Representative on the Fire Rescue International Program Planning Committee and other committees. Tim is an Army veteran having served in Airborne Infantry regiments in the enlisted and officer corps in active duty and National Guard units.

## Creative Ways to Engage Your Community - Kaitlin King (60 minutes)

Learn about the ways Snohomish Regional Fire & Rescue engages residents using creativity, technology, and some teaching tricks with their firefighter homeschool lessons. Objectives to Engage Residents by Using

- Creativity
- Teaching Tricks
- Technology

**Kaitlin King** is a Public Information & Education Officer with Snohomish Regional Fire & Rescue (SRFR) in Snohomish County, Washington. She is going on her 5th year with the district. Before working for SRFR, Kaitlin was a high school English & French teacher. With 6 years of teaching experience, Kaitlin regularly uses her years in the classroom to inform her teaching and program development for the fire service.

## PTSD in the Fire Service – Vern Porter (60 minutes)

In this presentation, I will begin with an introduction of myself, and my history in the fire service. I will tell my story and about my experience with PTSD, and show the trailer of the video (The Call We Carry) and explain where the full video can be found and viewed. I will talk about the video and the impacts it has had to people across the fire service. Then I would discuss the different resources that are out there and how they helped me in finding my way through the dark spot in my life. I will explain the different books I have used and the tools I use to continue to get through the rough times and enjoy the good times

**Vern Porter** has 35 years in the fire service, and began his career as a volunteer firefighter at 18 years of age in Roy, WA. Before moving into the resident program at Spanaway Fire about a year later. He was hired by the Tacoma Fire Department in 1994, and was promoted to Lieutenant in 2007. Vern transferred to the Prevention Bureau in 2015, and began investigating fires and enforcing the fire code. He was promoted to Deputy Fire Marshal in 2018. Vern is married to a wonderful wife and has four children.

### NFPA 921 for Fire Investigators – Gary Honold – (60 minutes)

This session will provide the attendees with:

- Information regarding the history of NFPA and the development of NFPA 921 Guide For Fire and Explosion Investigation.
- Organization and outline of the document.
- The significant changes from the 2017 edition to the 2021 Edition.

#### **Emerging Energy Technology – Gary Honold (60 minutes)**

Lithium-Ion batteries have infiltrated every corner of our electronic world and they bring many benefits to allow us to conquer tasks and problems once though impossible. Unfortunately, along with this groundbreaking technology, lithium-ion batteries also present unique fire and life safety hazards never seen on a scale like this before. This presentation will introduce this battery technology, along with its many applications. It will look at fire incidents, related codes and standards, as well as the latest research.

Attendees will be able to:

- Identify the failure methods if lithium-ion batteries
- Recall the major applications where lithium-ion batteries will be found
- Locate requirements for energy storage systems in the latest codes and standards
- Recognize the key takeaways from lithium-ion battery related research reports.

Gary Honold has been the Regional Director for the National Fire Protection Association's (NFPA) Northwest Field Office for ten years. His job responsibilities include working with AHJs (Authorities Having Jurisdiction), industry, trades, facility managers, and the public to research, adopt and implement over three hundred codes and standards developed by NFPA. He also assists his constituents with technical questions and training on the codes and standards by working with the NFPA subject matter experts and Staff Liaisons on the technical committees for each document. Mr. Honold is a Certified Protection Specialist with over ten years of code enforcement add fire investigation experience. He retired from the Missoula Fire Department (IAFF Local #271) after twenty-one years of service. During his tenure with the Missoula Fire Department, Mr. Honold held the positions of Firefighter/Paramedic, Fire

Inspector, Assistant Fire Marshal and Engine Company Captain. While serving as Assistant Fire Marshal, he was an elected member on the executive board for the Montana State Fire Marshal's Association, and worked on the committee addressing the statewide adoption of the Fire Code.

### WA. State WUI Amendments & Implementation – Micah Chappell (60 minutes)

One tool: Many uses! In this fun, interactive session, the speakers will provide an overview of NFPA 1300 Standard on Community Risk Assessment and Community Risk Reduction Plan Development and explain how professionals focused on community safety can use the process outlined in the standard to guide effective CRR initiatives. Attendees will learn why Community Risk Assessment is the critical first step in the CRR process and how the community profiles outlined in NFPA 1300 provide a helpful framework to tell the local data story. Additionally, the presenter will share unexpected benefits of implementing strategic, data-driven CRR such as internal buy-in, community support, and increased funding. Successful applications of CRR will be presented as vignettes from the field and will clearly explain how CRR serves as dynamic tool to solve typical problems faced by fire service personnel, community leaders, and local partners. Attendees will leave the session with concrete ideas about how to leverage CRR to meet local goals

# Air Monitoring for Fire Service Investigators - Chris Pfaff (60 minutes)

A wide body of knowledge has been built in the past decade over post fire air monitoring. Fire Investigators must be aware of the hazards of post fire investigations, and the only way to properly quantify toxic values is with an appropriate air monitor configured specifically to an Investigator's needs. Technology has advanced significantly in the past few years. In this discussion, we will go over OSHA values and terms as well as sensors that fire investigators should have on their personal detectors. We will also discuss emerging technologies to keep investigators safe at an investigation scene.

### Lithium-lon Concerns During Fire Investigators – Chris Pfaff (60 minutes)

In this presentation, Captain Pfaff will identify. The concerns related to the emerging threat of Li-Ion batteries during fire investigations. We will discuss the steps that need to be takes for suppression members prior to fire investigations being conducted, hazards fire investigators need to be aware of during all fire investigations that may include Li-Ion batteries. Of any size, and disposal issues related to Li-Ion batteries to consider for evidence preservation. We will also discuss issues related to NFPA 921 and shifts in investigation processes for fire investigations related to Li-Ion fires to include multiple sets, extreme fire behavior and other fire behavior issues.

<u>Li-lon Batteries and You: How to Spread the Word in Your Community – Chris Pfaff (60 minutes)</u> In this presentation, Captain Pfaff will discuss methods to inform and prepare the public on proper Li-lon battery storage, use, and charging. Taking lessons from FDNY and Seattle Fire, Captain Pfaff will open up the room to a group discussion on ow agencies and the Washington State Patrol are informing the public on proper storage and charging of personal Li-lon batteries, and safe charging methods for all form of Li-lon systems.

# Carbon Dioxide Code Enforcement - Chris Pfaff (60 minutes)

Captain Chris Pfaff will explain the physical properties of Carbon Dioxide. Its uses, hazards and the benefits within this presentation. We will also dive into International Fire Code, and lightly into NFPA 12 (Carbon Dioxide Extinguishing Systems) to understand where inspectors may find CO2. We will also discuss the benefits of the code as well as the limitations due to occupancy and use, and what inspectors need to be aware of.

Captain Chris Pfaff is a Marine Corps veteran and an 18-yerar fire service veteran, serving as a Captain with West Pierce Fire and Rescue, and is the Haz-Mat Manager for FEMA US&R WATF-1. He holds a Master's Degree for Fire and Emergency Management Planning with Oklahoma State University. He has been an Instructor for WPFR, Bates Tech, InSource Inc., numerous regional fire departments and <a href="https://www.HazmatAnd">www.HazmatAnd</a> Rescue.com for over ten years. He participates in the Washington State HazMat Committee, is the Pierce County LWPC Vice-Chair, and has served with IFSTA on both validation of HazMat exams and creation of CRR exams. Captain Pfaff has been a Prevention Officer at WPFR since 2020, with the responsibilities of CRR, Fire Inspections and Fire Investigations.

## Fire Sprinkler Systems for Fire Investigators - Rob Neale (120 minutes)

During post-fire analysis, NFPA 921 recommends fire investigators thoroughly document the fire sprinkler systems' history, design, installation and performance. This presentation will summarize NFPA 921 requirements and identify key fire sprinkler components that should be evaluated.

- Identify NFPA 921 Chapter 8 requirements for fire sprinkler documentation.
- Identify fire sprinkler components that are vulnerable to failure or tampering.
- Explain why design analysis plays an essential role in fire sprinklers and its impact on fire outcomes.

### Fire Pump Acceptance Testing- Rob Neale (120 minutes)

Fire pump assemblies are an integral part of many fire water-based fire protection systems. Once installed, pumps must be tested and evaluated to confirm they have not been damaged in transport or installation and will perform as the manufacturer specifies. This presentation will explore the tests required for fire pump acceptance, and attendees will be able to:

- Identify the performance tests required for fire pump acceptance.
- Compare the fire pump field test data to the manufacturer's shop test curve.
- Evaluate test results to determine pump performance

## Why Codes Matter to Fire Investigators - Rob Neale (120 minutes)

Building owners or tenants often tell investigators their property was "up to code" as if this statement somehow exonerates the buildings' performance in a fire. Regrettably, since building and fire codes set minimum compliance requirements, this is not a very resounding argument. Some code officials even say if you are "up to code" that means you are "one violation away from being non-compliant" Attendees will be able to:

- Link construction safety codes to fire and explosion investigation and NFPA 921, Guide for Fire and Explosion Investigations.
- Describe how code-mandated construction types, materials, passive and active features affect fire investigation (NFPA 921-7.2.1.1, 7.2.2.4.1, 7.3.1, 7.5.1 and 8.2).
- Explain how codes regulate initial building occupancy and subsequent changes (NFPA 921-7.2.4).
- List where to obtain information about planned design and as-built construction (NFPA 921-7.2.2.6)
- Identify the predominant building construction and safety codes and standards in use today.

#### **Rob Neale**

Rob is the owner and principal of Integra Code Consultants, a Maryland-based firm that provides construction code consulting, plan review and training. Previously, he was the International Code Council's Government Relations Vice President for National Fire Service Activities and Deputy Superintendent for the United States Fire Administration National Fire Academy in Emmitsburg, Maryland. He is the former Bellingham Fire Marshal and Chief at Lynden/Whatcom County Fire District No. 3...

# <u>Steps to Safety – A Community Approach to Older Adult & Fall Prevention – Andrea Vastis (120 minutes)</u>

In this interactive workshop, participants will engage with NFPA's Steps to Safety™ Prevent Fire and Falls at Home program which pairs Fire/EMS professionals with community partners to educate older adults for home fire and fall safety. Formerly titled Remembering When™ A Fire and Fall Prevention Program for Older Adults, Steps to Safety™ (STS) has re-tooled for the changes in the social, physical, and technological landscape to include an online professional training curriculum, new videos and social media assets, and updated messaging for use as part of group presentations, home visits, and the creation of a community resource network to support older adults and their caregivers. At the end of this presentation, attendees will be able to:

- Describe the burden of older adult fire & falls on community resources
- Describe the intersection of fire and fall risks for older adults
- Describe the role the Steps to Safety<sup>™</sup> plays as a foundation for older adult fire and fall prevention efforts
- Access Steps to Safety resources for integration into community education efforts.

Andrea Vastis is the Sr. Director of Public Education at the National Fire Protection Association (NFPA), with oversight of fire and life safety and wildfire education efforts. She received her Bachelor of Science degree in K-12 Health Education from Rhode Island College and her Master of Public Health with a concentration in Social and Behavioral Sciences from Boston University. She has over 28 years of experience in public health education and programming spanning worksite wellness, government, academia, and healthcare. Her focus is on improving access to education and healthcare, eliminating health disparities, supporting the profession of fire and life safety education, and providing culturally relevant programming. Prior to joining NFPA in June of 2018, she was Sr. Manager of Pharmacy Product Development for Patient Care Programs at CVS Health. She lives with her husband Ken Carlson, their two daughters Lily and Shuwei, and dog Bubba in Seekonk, Massachusetts.

## Maximize Public Outreach - Shawneri Guzman (60 minutes)

The presentation will provide innovative ways for delivering public education and outreach that maximizes community participation while taking the pressure off on-duty crews, especially during times of increasing call volumes and wall wait times in the hospitals. This information would be easily implemented in smaller agencies with limited staff on up to larger agencies with full public outreach staffing. The presentation also includes outreach ideas to non-English speaking families and refugees and will contain a Diversity, Equity and Inclusion (DEI) component.

#### Objectives:

- Learn how to maximize your public outreach efforts.
- Understand how our world is changing and how we need to tailor our programs to foster behavior change.
- Discuss & brainstorm innovative programs your agency has implemented or would like to discuss for crowdsourcing with your peers\*.

#### Shawneri Guzman

For more than 25 years, Shawneri has dedicated her career to injury prevention. She spent the majority of her career at Providence Hospital, a level II trauma center, working as a Trauma Data Analyst and Injury Prevention Specialist. There she was able to use real-time injury data to steer prevention efforts. In 2017, Shawneri made the bold move to leave healthcare and pursue a job at South County Fire, a Regional Fire Authority. This move allowed her to spend more time on prevention and outreach. She has been involved with Safe Kids Snohomish County since 2000, and currently serves as the President and Coordinator. Shawneri holds many certifications including Advance Injury Coding, Data Registry Management, Child Passenger Safety Technician & Instructor, Fire & Life Safety Educator and Youth Firesetter Interventionist, to name a few. She also serves on many local and state committees that include but are not limited to the Snohomish County Fire Prevention Association, Snohomish County Child Death Review Team, North Region Injury Prevention Committee, WA State Drowning Prevention Network, and the Safe Kids Washington Advisory board.

# This House Rocks - Mike Gagliano (120 minutes)

There is nothing quite like a firehouse. It can be the most incredible experience of your life or a miserable exile to purgatory. It can be a place of learning where skills are honed and techniques refined or a stagnant cesspool where competence erodes into ineffective complacency. What is it that causes one place to be cohesive and brimming with camaraderie, while just down the road there are dissension and drudgery? Learn five key areas that can turn any firehouse into the type of place that enables firefighters to thrive and fulfill their calling. This class will look at how to build and enjoy the type of firehouse/team everyone wants.

**Mike Gagliano** has over 33 years of fire/crash/rescue experience with the Seattle Fire Department and the United States Air Force. Mike teaches across the country on Fireground Tactics/Decision-Making, Air Management, Leadership and Company Officer Development. Captain Gagliano has written numerous fire service articles, is co-author of the bestselling books Air Management for the Fire Service, Challenges of the Firefighter Marriage and the SCBA chapter of the Handbook for Firefighter 1 & 2 from Pennwell. He is a member of the Fire Engineering/FDIC Advisory Board, Firefighter Air Coalition board and on the Emeritus Board of the Firefighter Safety Research Institute. Mike co-hosts the popular Fire Engineering radio webcast "The Mikey G and Mikey D Show" and partners with his wife Anne (Firelife.com) to teach on strategies for developing and maintaining a strong marriage/family

### CRR – The Long Game – Daniel Byrne (60 minutes)

For a true CRR program and community change there must be buy-in, belief, trust and persistence from the organization as well as the community. To achieve this you must see beyond your data and risks, but your whole community and their concerns as your own, and get involved at all levels regardless of the concern or risk. Learn how one department's long game approach is making the long-term change needed to achieve a true CRR program.

# JACOB Kit: One Kit – One Community – One Life Daniel Byrne (60 minutes)

Today's communities are facing dynamically changing risks, and it is important that fire departments be at the table of solutions to not only address those risks, but also to lead the solutions. Today, once such risk is school violence. Learn how several South Carolina fire departments joined together to address the risk, rallied their communities, and led a grassroots program to enhance student safety, not only in their communities, but also nationwide. Learn how you and your department can do the same with a JACOB Kit program.

**Daniel Byrne** is an Assistant Fire Chief for the Burton Fire District in Beaufort County, who oversees the district's Community Risk Reduction programs, and is a retired Assistant Fire Chief of Training for the Georgia Air National Guard 165th Fire Department. Byrne is a third-generation firefighter and holds a graduate degree in public administration/disaster management, and undergraduate degrees in Fire Science. Byrne is a contributing editor for Firehouse Magazine and Firehouse.Com. Byrne has 23 years experience in public relations and has received state and local awards for public relations and educational programs, as well as community partnerships. As the former Fire Marshal for the city of Beaufort, SC, Byrne saw a 60% reduction in fires, and received special mention for progressive fire prevention programs during a citywide ICMA study. Byrne has been both a conference presenter and keynote speaker.

# <u>Data Mining: Using Quantitative and Qualitative Data in Reducing Risk – Dr. Justin Heim (60 minutes)</u>

How do we know that a problem is a problem without the data to support it? Fire service leaders often lack the ability to source valid and reliable data when justifying community risk reduction problems. This presentation will look at reducing risk from a unique perspective. Participants will be able to identify sources of quantitative and qualitative data related to community risk reduction, learn how to develop an action plan to generate new quantitative and qualitative data to reduce risk in their community, and conduct basic research to analyze the data collected to better understand which problems are actually problems in their communities.

**Dr. Justin R. Heim** started in the fire service in 1999 with the German Township Fire Department in St. Joseph County, Indiana. He worked for the Clay Fire Territory (IN) prior to becoming a career fire chief in the Milwaukee metropolitan area in 2008. Due to a line of duty motor vehicle crash that occurred in September 2014, Dr. Heim retired on duty disability. He currently works as the Lead Faculty of Fire Science and Fire Administration at Columbia Southern University and is an adjunct professor at several other institutions of higher learning, including the National Fire Academy. Dr. Heim has a Ph.D. in Public Administration from Northcentral University and is a 2011 graduate of the National Fire Academy's Executive Fire Officer (EFO) program.

#### Bills, Bills and More Bills - Dave Kokot (60 minutes)

Politics is a part of the job and involves legislation at the national, state and local levels. This class will go over experiences and strategies (both successful, and not) for the continuing battle to protect and amend the Fire Code. The legislative process will be presented with lessons learned on how to change the laws in Washington State and a typical process for local adoption. The Congressional Fire Service Institute will also be discussed on how it is used to get the attention of our representatives to Congress.

**Dave Kokot** has over 40 years in the construction business both on the design side as well as on the code enforcement side. He has designed systems from Alaska to Hawaii to Sun Valley, and Edwards Air Force Base. His plan review background includes single-family homes to large high-rises and warehouses. In his spare time, he has written code language for the IFC and served as the Chair of the IFC TAG and Chair for the State Building Code Council. A past President of WSAFM

## Firefighting Cisterns - Stephen Rinaldi - (60 minutes)

Chelan County has developed a unique program that repurposes mobile water tanks for use as cisterns providing 21,000 to 42,000 of available fire flow water in remote areas. This program partners Chelan County with community groups, fire districts, and local state and federal agencies to identify and design the sites, install the tanks and coordinate testing to establish credit as a Mobile Water Supply Credit with WSRB, which provides greater credit than the tender credit allows.

**Stephen Rinaldi** has over twenty-five years of service as a fire and life safety professional, utilizing the all-hazards approach to emergencies in response to hurricanes, floods, wildland fires, a train derailment, the deadliest tornado to ever hit Central Florida, and even the BP oil spill affecting Florida's beaches. His extensive code development, implementation and interpretation experience has been applied in vary diverse areas. He has also provided coaching and mentoring to fire service members for over fifteen years as well as developing, implementing public education, inspection and investigation programs. He has presented numerous times and provided testimony to commissions, boards, organizations and the public regarding fire and life safety issues. He holds a Bachelors in Fire Science and a Masters in Organizational Leadership, along with several fire service certifications e.g., NFPA-CFPS, CPSE-FM,IAAI -CFI. ICC-FI2 and Plans Examiner.

# Risk Reduction in Places of Worship - Einar Jensen (60 minutes)

Places of worship come in all shapes and sizes and these occupancies are used for far more than religious services. As a result, fires in these occupancies pose significant risks to firefighters and occupants. This presentation, , will identify many of those risks and identify strategies for reducing risks in home communities through a combination of education, enforcement, engineering, and emergency response interventions.guide and lead yourself, your team or your department will be offered. A major objective of the presentation is to convey the benefits of regional and state collaboration as fire code officials with an emphasis on why you should never go it alone. At the end of this presentation, attendees will be able to:

- Explain how preparedness and operations can unite to reduce the risk of fire at places of worship
- Identify at least four uses of places of worship
- Explain the importance of cultural competency in the field of risk reduction
- Identify at least five strategies for reducing risk in places of worship

# <u>Teaching and Evaluating Programs to Measure Performance and Learning– Einar Jensen (60 minutes)</u>

Evaluation is essential for teaching and community risk reduction, but in my experience, we claim to measure outcomes when we are actually measuring outputs. There is a significant difference between performing and learning; we need to measure both to become more effective as instructors and to reduce risk in our communities. This presentation will explain the differences between performing and learning using examples from my Disasters in History Series in which I use historical incidents to teach preparedness, fire safety, and injury prevention. At the end of the presentation, attendees will be able to:

- Identify two benefits of evaluating CRR presentations:
- Explain two components of memory:
- Identify two ways to improve memory; and
- Explain the difference between performing and learning

**Einar Jensen,** Risk Reduction Specialist, works for Evergreen Fire/Rescue in Evergreen, CO. He has been in the fire service for over 25 years in both risk reduction and firefighting roles. He studied environmental history at the

University of Montana and University of Puget Sound and has published books about fire including the nonfiction Ancient Fire, Modern Fire: Understanding and Living with Our Friend & Foe. He belongs to the National Science Teaching Association and Colorado Risk Reduction Network.

# Dangers of Vacant Dwellings – Ray O'Brocki - (60 minutes)

This presentation will review two recent fires occurring in vacant dwellings that killed four firefighters. It will outline the many hazards and the pervasiveness of the vacant dwelling problem in urban centers. The presentation will discuss traditional ways authorities having jurisdiction have dealt with the vacant structure issue with specific focus on fire service solutions. Finally, offer "out of the box" ideas to mitigate the vacant dwelling problem. Learning Objectives:

Identify the risks and hazards associated with vacant structures

- Discuss traditional solutions employed by jurisdictions and the fire service to mitigate the hazards
  of vacant structures
- Examine possible "non-traditional" solutions.

Raymond O'Brocki, CBO, is the Manager of Fire Service Relations for the American Wood Council. Before that, he was the Chief Building Official for the city of Rockville, MD. He retired as the Assistant Fire Chief of the Baltimore City Fire Department in 2013. He was appointed fire marshal for Baltimore City in 2008. O'Brocki has served on the Maryland State Child Care Advisory Council, and Maryland State Fire Code Update Committee. He has served on the NFPA Urban Fire Safety Task Force. He is currently a sitting member of the NFPA 1 Technical Committee, the IFC committee and the ICC Fire Code Action Committee. Ray is the administrator of the Construction Fire Safety Coalition, a diverse group of industry and government, committed to reducing the occurrence and severity of construction sire fires. O'Brocki is a graduate of the University of Baltimore School of Law and a licensed attorney.

### Bills, Bills and More Bills - Dave Kokot (60 minutes)

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**Dave Kokot** has over 40 years in the construction business both on the design side as well as on the code enforcement side. He has designed systems from Alaska to Hawaii to Sun Valley, and Edwards Air Force Base. His plan review background includes single-family homes to large high-rises and warehouses. In his spare time, he has written code language for the IFC and served as the Chair of the IFC TAG and Chair for the State Building Code Council. A past President of WSAFM and an ASME Vice President of Professional Practice and Ethics, he has served on several Boards and Committee

# Communication in Conflict - Tim Whitham (60 minutes)

Attendees will recognize how: EGO and Power can lead to Conflict.

Attendees will consider how: Communication has a big role to play in conflict management. Attendees will apply and learn: to keep a control on your emotions during difficult conversations. Attendees will consider during conflict: Communication must not be done with members separately but must be on a common platform.

Tim Whitham; MS, EFO, CFO is a 30-year veteran of fire and emergency services, and is the Fire Chief of the Edwardsville Fire Department, in the Kansas City, KS metro area. Tim holds a Master's Degree in Leadership with Emphasis in Disaster Planning and Executive Fire Leadership and is a graduate of the Executive Fire Officer (EFO) program. He is credentialed as a Chief Fire Officer (CFO) through the Center for Public Safety Excellence, as well as accredited through the International Fire Service Accreditation Congress as a Fire Officer III, Instructor !!!, Inspector!!, as well as numerous other certifications. Tim is a Professor for Columbia Southern University, College of Safety and Emergency Services; teaching students at the Associate and Bachelor Degree level. He is also an adjunct Instructor with the National Fire Academy. Tim is currently a member of the International Association of Fire Chiefs, where he serves as the Volunteer and Combination Officers Section Representative on the Fire Rescue International Program Planning Committee, and other committees.

#### Fire Data Analysis – Dave Lynam (60 minutes)

Attendees at this session will learn or refresh their memory of basic techniques to analyze fire incident and investigation data and to use that data to define their own community fire problems and trends. Session also includes discussion of how to use fault and decision tree analytics to prove the effectiveness of fire prevention programs and efforts.

# Fire Setters Case Review Dave Lynam & Kelly Montgomery 120 minutes)

Case Review – Shelly Arndt - In November of 2015, a Kitsap County Superior Court jury convicted Shelly Arndt of aggravated first-degree murder for setting a house fire that killed her longtime boyfriend. Arndt is currently serving a life sentence without the possibility of parole, having unsuccessfully appealed her convictions. Attendees at this session will learn how the scene and subsequent investigation unfolded,

how scenarios were tested using full scale modeling, and how the prosecutor successfully presented and managed the trial resulting in the conviction together with valuable lessons learned presented by the lead prosecutor and fire marshal for the case.

**David Lynam** is the Fire Marshal and Deputy Building Official for Kitsap County, with more than twenty years of experience as an investigator, AHJ and manager of Prevention Bureaus in Washington and Oregon. David is a graduate of the National Fire Academy's Executive Fire Officer Program, a certified fire and explosion investigator, holds a Master of Business Administration degree, and is a frequent instructor for Vision 20/20 and other organizations in developing metrics for prevention organizations and community risk assessment and evaluation.

**Kelly Montgomery** is a recipient of the Washington State Bar Association's Professionalism in Practice award, and is a Deputy Prosecutor for Pierce County. After being admitted to the Bar in 1998, Kelly spent most of the next twenty years working as a Deputy and then Senior Deputy Prosecutor for Kitsap County, eventually heading the Major Crimes Unit, where she successfully prosecuted dozens of arson, homicide, burglary and similar major and violent crimes.

### Combustible Dust - Mark Mannex (60 minutes)

A Dust Hazards Analysis (DHA) is a systematic review to identify and evaluate the potential fire, flash fire, or explosion hazards associated with the presence of combustible particulate solids in a process or facility. A DHA is required by the IFC for all facilities with a combustible dust hazard. Many facilities have not had a DHA performed. DHA objectives and procedures are not well understood by facility owners, design professionals or AHJs, impairing their more widespread implementation. A DHA is an analysis based on general concepts, which can be implemented as a part of preliminary facility design or at an operating installation. Deep knowledge of the challenging engineering involved with detailed explosion mitigation design, such as deflagration vents and explosion suppression systems, is not needed for the correct application or review of a DHA.

Content will include the following learning objectives:

- Understand code requirements for a DHA.
- Be aware of the scope and overall objectives of the applicable NFPA standards.
- Understand the scope, depth, and objectives of a DHA.
- Understand how a DHA fits into an overall facility dust safety management plan during the life of
  the facility, including hazards awareness identification and training, ignition source control,
  managing change, Inspection, Testing and Maintenance (ITM) of processing equipment and
  safeguards, housekeeping control of fugitive dust deposits, and fire and explosion emergency
  planning.

**Mark Mannex** is the President of Mannex Engineering located in Sammamish WA. He is a registered professional engineer with separately tested Fire Protection and Mechanical endorsements. He has over 43 years of fire protection experience, including 17 as the Chief Engineer of the Northwest US with FM Global.

# WSRB & Public Fire and Life Safety Educators: Your Role in your Department Rating Robert Ferrell & Jamie McIntyre (60 minutes)

- Define current WSRB requirements for Public Fire and Life Safety Educator work.
- Discuss rating process and how educator work impacts a departments overall rating.
- Provide examples of current documentation used by Washington State Public Fire and Life Safety educators
- Identify opportunities for mentorship and collaboration for new fire educators in Washington State.

**Robert Ferrell**, Vice President Public Protection, is an employee of Washington Surveying and Rating Bureau (WSRB) for over 25 years. Major responsibilities include overseeing community protection class evaluations, building code effectiveness evaluations and fire protection system technologies. Mr. Ferrell is a licensed Professional Fire Protection Engineer with Washington State and currently serves on the National Fire Protection Association (NFPA) Technical Committees on Wildland and Rural Fire Protection, Fire Prevention Organization and Deployment and on the board of directors for the Washington State Association of Fire Marshals (WSAFM).

Jamie McIntyre, LICSW, holds a Bachelors of Arts in Psychology from Whitworth University, and a Masters of Social Work from Eastern Washington University. McIntyre has served as the Community Risk Reduction Manager for the City of Spokane Fire Department since July 2016. She is currently Vice-Chair of the Washington State Public Fire Educators and serves on the NFPA Education Section Board. Prior to joining the fire service, McIntyre worked in the social service arena for over 10 years, including program planning and evaluation for the Area Agency on Aging.

# What You See Is What You Get - Or Is It? - Clark Roberts (60 minutes)

- Understanding the importance of Trust, each participant will learn the importance of trust through the lens of a person who cannot see.
- The life-saving power of Clear Concise Communication, each participant will gain a greater understanding to the importance of verbal directions and verbal pictures to create a safe environment.
- Perspective How to see through the eyes of a person who is blind, each participant will learn the importance of looking through a different lens to see more clearly

When **Clark Roberts** lost his sight at age 24, he gained his vision. Clark is a subject matter expert who is dedicated to sharing a message of hope, resiliency, and encouragement. From motivating the vision of companies by reigniting their mission and business teams; to transforming lives of students of all ages, Clark has impacted the lives of over 50,000 people, providing tools and knowledge to inspire and motivate them to see their life and opportunities differently. Through this increased awareness, each person learns the power of choice as they look at overcoming the challenges that life can bring, celebrate their differences, and live a life that is full and rewarding, a life filled with kindness and compassion. Clark will inspire you to look at life through a different lens, to reach beyond your limitations and live a life of significance all while inspiring others to do the same.

# <u>School District Threat Assessment Data Tools – DeLeon Gausen (120 minutes)</u>

- I. Brief overview
- a. Objectives
- b. Salem-Keizer Cascade Model
- i. Level 1
- ii. Level 2
- II. Motivations and Mental Health Concerns
- a. Motivating factors
- b. Psychological factors
- c. Additional factors
- III. Risk Assessment and Psychological Evaluation
- IV. Role of Fire Service Professionals in Threat Assessment

**DeLeon Gause**, has been Student Threat Assessment Coordinator for Educational Service District 123 since 2020. He has worked in the field of behavioral health for over 6 years. Prior to re-joining the ESD as Threat Assessment Coordinator, DeLeon served as a care coordinator/WISe teams supervisor for youth returning from JRA with violent/sexual assault related offenses, at Lutheran Community Services NW. During that time as a WISe representative, he also met with youth in Benton Franklin Juvenile Justice Center to help assist in safety planning and referral CANS screening for youth interested in enrolling in services. DeLeon, is currently enrolled in Ed.M. Language Literacy & Technology program at WSU Tri-Cities.

Additional Threat Assessment experience includes formal training on the Salem-Keizer Cascade Threat Assessment System as well as 3 years of membership with the Association of Threat Assessment Professionals. In addition to working as Student Threat Assessment Coordinator, DeLeon has volunteered with the local Boys & Girls Club, 2nd Harvest, and youth gang outreach organizations in collaboration with his non-profit organization, S.H.I.N.E, to support in community building opportunities. He also provides an array of presentations and trainings at the local, regional and state level.

# Engaging Communities in Wildfire Preparedness – The Wildfire Ready Neighbors Program– Guy Gifford (60 minutes)

After participating in this session, attendees should be able to:

- Understand how a social marketing program (Wildfire Ready Neighbors) engage individuals to take action around their home to prepare for the next wildfire.
- Execute a micro grant program to engage communities in preparedness.
- Identify non-fire service local partners who are involved with Community Resiliency.
- Evaluate the Community Wildfire Defense Grant opportunities for your communities
- Engage with DNR Community .Resilience Coordinators and recognize programs that they may bring to your community.

Guy Gifford started his wildland firefighting career on a 20-person crew in 1984, for the Washington State Department of Natural Resources (DNR). In 1991, he began his Forestry career in the Spokane area for the DNR and has worked in numerous Forestry/Wildfire positions since then. Currently, he is the Statewide Community Resilience manager. The Community Resilience program includes the following programs Firewise USA Sites, Community Wildfire Protection Plans, Wildfire Ready Neighbors and Community Wildfire Defense Grants. He conducts wildfire risk assessments using NFPA standards on individual homes giving recommendations on steps landowners can take to increase the chance of their home surviving the next wildfire. Prior to his current position, in Northeast region, he reviewed all new Firewise community applications and assessments. He also wrote assessments and plans for new Firewise communities and gave numerous presentations on Defensible Space to the public and agencies. He has also worked with landowners and communities in the DNR Cost Share Program and assessed forest health issues with Non Industrial Private Forest (NIPF) landowners. Guy has a B.S. Forest Resource Management degree from the University of Idaho.

# <u>Teaching and Evaluating Programs to Measure Performance and Learning – Einar Jensen (60 minutes)</u>

Evaluation is essential for teaching and community risk reduction, but in my experience, we claim to measure outcomes when we are actually measuring outputs. There is a significant difference between performing and learning; we need to measure both to become more effective as instructors and to reduce risk in our communities. This presentation will explain the differences between performing and learning using examples from my Disasters in History Series in which I use historical incidents to teach preparedness, fire safety, and injury prevention. At the end of the presentation, attendees will be able to:

- Identify two benefits of evaluating CRR presentations;
- Explain two components of memory;
- Identify two ways to improve memory; and
- Explain the difference between performing and learning

## Risk Reduction in Places of Worship - Einar Jensen (60 minutes)

Plenty of people use historic disasters in their community risk reduction messaging, but too many use them ineffectively or sprinkle them into presentations with the intent of scaring audiences. Fear does not motivate learning, but curiosity and empathy do. This presentation will utilize three modules of my Disasters in History Series (1911 Triangle Fire, 1940s Nightclub Fires, and 1958 Our Lady of Angels Fire) to show how disasters can be used effectively to enhance fire safety and risk reduction messaging among adult audiences, including firefighters. We will consider why some disasters are better choices than others for harvesting lessons learned. I will also address the evaluation and marketing components for a presentation series. At the end of this presentation, attendees will be able to:

- Explain how preparedness and operations can unite to reduce the risk of fire at places of worship
- Identify at least four uses of places of worship
- Explain the importance of cultural competency in the field of risk reduction
- Identify at least five strategies for reducing risk in places of worship

**Einar Jensen** is a Risk Reduction Specialist with Evergreen Fire/Rescue in Evergreen, CO. He has been in the fire service for over 25 years in both risk reduction and firefighting roles. He studied environmental history at the

University of Montana and University of Puget Sound and has published books about fire including the nonfiction Ancient Fire, Modern Fire: Understanding and Living with Our Friend & Foe. He belongs to the National Science Teaching Association and Colorado Risk Reduction Network.

### Building and Bolstering a K-12 Public Education Program – Courtney Thompson (60 minutes)

This presentation aims to provide an overview of K-12 educational programming that can be replicated in any fire district. We want to share what we are doing in Central Pierce but also provide participants with tangible takeaways (lesson plans, presentations, and letters to staff/principals, budgeting, timelines, and implementation guides). Additionally, this presentation is meant to serve the needs of personnel delivering curricula who may be in need or want of strategies to ensure effective teaching. Course Objectives:

- Engage in conversations centered around the development and implementation of K-12 fire and life safety programming from the perspective of both the fire service and education professionals.
- Collaborate on best practices for obtaining and delivering K-12 curricula within a fire district.
- Examine materials that can be utilized to either initiate, bolster, or modify existing K-12 educational programming within a fire district.

**Courtney Thompson** is a public educator for Central Pierce Fire & Rescue. Before joining the Prevention & Education division in January 2022, she worked as a teacher for over 10 years in both Arizona and Washington. Her teaching experience includes pre-K/kindergarten, middle school, and high school. She is passionate about utilizing best practices in teaching, making education accessible for all, and collaborating with other professionals to make the greatest impact. Central Pierce Fire & Rescue covers an 84 square mile area that includes 50 public schools (33 elementary, seven middle and 10 high schools).

## Validity of Witness Statements - Dale Zlock (120 minutes)

One of the first things we are taught as fire investigators or in investigations in general is the importance of obtaining witness statements. Not only from the public but also from first responders and other professionals. How much should we rely on those statements, especially if they are not corroborated by physical evidence? As fire investigators, we are also supposed to use the scientific method. So, what does science have to tell us about the human mind's ability to accurately observe and recall events? What impact does, or should, this research have on how we conduct investigations is the topic of this discussion

#### <u>Vehicle Infotainment Systems- Dale Zlock (60 minutes)</u>

Most modern vehicles at least since the early 2000's are more computer than they are a car. Vehicles now generally have no fewer than 5-6 separate computer systems on board. A number of these have to do with the direct operation of the vehicle: engine management, anti-lock braking, climate control, safety restraint systems etc. These systems have little to no user input by the operator of the vehicle, so are not as useful for criminal investigations. Some are used during accident investigations, but they generally require an engineer to get to the data. However, one system is different and that is the Infotainment System. This class will cover what is an infotainment system. What information do they track and store? And how is the information accessed and analyzed.

Dale Zlock retired after 43 years of criminal investigations. The majority of his career focusing on the investigation of financial and organized crime. He spent 21 years as a Special Agent with the Washington State Gambling Commission with assignments in Special Investigations, Financial Investigations, and Intelligence. Following his tenure with the WSGC, Mr. Zlock joined the National Insurance Crime Bureau, holding positions as a Special Agent in the Northwest region and Chief Analyst of the Strategic and Tactical Intelligence Department in NICB headquarters. As Chief Analyst, Mr. Zlock oversaw the implementation of the National Insurance Crime Analysis Program. Mr. Zlock has a Bachelor of Science degree in Information Technology Management and Associate degree in Fire Sciences. Mr. Zlock held certifications as Criminal Analyst, Fraud Examiner, Vehicle Forensics Examiner and Fire Investigator (IFSAC-WA)

# <u>Fire, Burn & Cold Injury Prevention with People Who Are Unhoused– Barclay Stewart (60 minutes)</u> After this session, attendees should be able to:

- Describe the fire, burn and cold injury problem in among people who are unhoused in King County
- Highlight current community participatory action research to improve prevention resources and dissemination related to fire and injury prevention with people who are unhoused

 Identify opportunities for partnership in advancing fire, burn and cold injury prevention with people who are unhoused outside of King County

### **Barclay Stewart**

Dr. Barclay Stewart is a trauma and burn surgeon and injury prevention and control researcher at Harborview Medical Center and UW Medicine Regional Burn Center. UW Medicine Regional Burn Center is collaborating with the NIDILRR-funded Northwest Regional Burn Model System, King County Public Health, and several homelessness service organizations to develop and test fire, burn and cold injury prevention resources for people who are unhoused in King County. Additionally, they are developing dissemination strategies for the prevention resources for King County and beyond based on work directly with people with lived experience of being unhoused. Dr. Stewart has worked with UN agencies, ministries of health, and other research groups on fire and burn injury prevention among refugees/displaced persons, people living in low-income countries, and women susceptible to chemical assault (e.g., acid attacks).

# Risk Assessments and Data Tools- Greg Baruso & Britney Johnson (60 minutes)

After this session, attendees should be able to:

- Identify data elements to collect
- Identify data sources
- Develop a Community Profile Using GIS Technology

**Greg Baruso** is the current Public Information/Community Risk Reduction Officer for the Washington State Patrol, Fire Protection Bureau. Besides his PIO duties, he also facilitates public education with the Residential Fire Sprinkler Demonstration Trailer at various events throughout the state

**Britney Johnson** is the current Assistant Deputy State Fire Marshal in the NFIRS Coordinator position for the Washington State Patrol, Fire Protection Bureau .She feels NFIRS data is very important to fire protection and prevention, and looks forward to working with the SFMO stakeholders.

## Presenting Inclusive Fire Safety Education Programs - Erica Littlewood (60 minutes)

This presentation will discuss:

- Discuss challenges of presenting inclusive community education programs and the potential difficulty id reaching historically under-included populations.
- Explore how CRR concepts may help agencies determine which under-served groups exist in their communities.
- Present ideas for revising traditional fore and life safety programs to include all community members.

**Erica Littlewood** has been a fire and life safety educator for almost twenty years. For the past three years, Erica has worked as a project manager at North Sound Accountable Community of Health. She is interested in bringing together the goals of community risk reduction and inclusion so educators may consider how to reach all members of a community.

# Fire Pattern Recognition and Analysis - Jason Mardirosian (120 minutes)

This course will discuss the fundamental aspect of recognizing, analyzing, and categorizing various fire patterns noted during scene examinations. We will also discuss the foundational importance of the ability to do a sound and accurate fire pattern analysis and the importance and plays in court.

#### Interviews and Interrogation – Jason Mardirosian (60 minutes)

This course will discuss and demonstrate the importance of what evidence, training, education, and experience plays in the ability to conduct effective interviews and interrogations at the fire scene.

# <u>Public-Private Sector Partnerships – Managing Complex Scenes – Jason Mardirosian (120 minutes</u>

This course will discuss the differences between the different aspects of public sector investigations versus private sector investigations. The student will be made aware of the various advantages to each side of these investigations, and the complexities that come along with public and private sector investigations occurring simultaneously.

Jason Mardirosian, MS, BS, IAAI - CFI, CI, ECT, NAFI - CFEI, CFII, As a Lieutenant with the Chicago Fire Department and as an investigator with FEC LLC, Mr. Mardirosian has over 27 years of experience in the public sector, 20 in the private sector, and over 17 years teaching, Mr. Mardirosian brings a vast and unique amount of experience to the field of Fire & Arson investigations, education and training. He has investigated over approximately 3,000 Fire scenes and has testified as an expert over 70 times. Covering an array of topics from fire dynamics, thermal dynamics, reliability and validity of testing, organized and analytical approaches to fire/arson/explosion scene investigation, evidence collection, fire fatality investigations, explosion scene investigations, fire pattern and fire effect analysis, fundamentals of fire investigations, interviewing and interrogation to report writing and courtroom testimony, Mr. Mardirosian has taught nationally (New York, Texas, Indiana, Iowa, Colorado, Wisconsin, Alaska, Maine, U.S. Virgin Islands) and internationally (Jamaica, United Arab Emirates, Algiers) for the IAAI and the Dept. of Justice and State Department. Finally, Jason was the recipient of the 2006 IAAI Investigator of the Year Award

### Energy Storage Systems - What AHJs Need to Know - Ken Brouillette (120 minutes)

This course will cover issues related to Energy Storage Systems. At the end of the presentation, attendees will:

- Understand what an Energy Storage System is
- Understand what codes or standards are available to use in Washington State.
- Understand the difference between UL 9540 and 9540A, Best practices for permitting, plan reviews and inspections.

Ken Brouillette has been with the Seattle Fire Department for over 6 years. His role is providing technical assistance to the member of the fire department and developing the Seattle Fire Code. He also serves on the State Building Code Council's IFC Technical Advisory Group., representing Fire Chiefs. Ken has over 32 years of experience in the fire service, which includes time as a Fire Marshal or Fire Code Official for the city of Tucson Fire Department in Arizona, and in the Washington State cities of Lakewood, University Place and Puyallup. Ken is certified through the International Code Council as a Fire Marshal, Building Official, Fore Code Official, Fire Plans Ezaminer, Fire Code Specialist, Fire Inspector 1 and !, and Building Inspector. Ken is also an ICC Preferred Provider through his company, "Fire Code Consultant,"

# <u>Sprinkler Contractor License/Certification Enforcement– Esther Hernandez & Humberto Rodriguez (60 minutes)</u>

This session will provide an overview of the Washington State Fire Marshal's Office - Fire Sprinkler and Contractor Licensing and Certification Program.

The session will cover following Course Objectives:

- Review of what the laws require of the SFMO for the industry
- How we go about ensuring compliance before the industry meets the AGJ
- What the jurisdiction can do to assist with enforcement/compliance during construction.

**Humberto Rodriguez** is an Assistant Deputy State Fire Marshal and has been with the SFMO for more than 20 years. He supports the Sprinkler Licensing and Certification program through administration of the licensing software, managing the renewal cycle, and serving as a subject-matter expert on the RCWs and WACs.

**Rieley Thompson** is a Deputy State Fire Marshal and has been with the SFMO for 2+ years. She recently transferred into the newly created Compliance Specialist position and is responsible for administrative investigations within the Sprinkler, Fireworks, and Fire Safe Cigarette programs.

# <u>Best Practices in Washington Community Risk Reduction and Educator Updates – Ben Shearer</u> (60 minutes)

Don't Put Community Risk Reduction in a Corner - The best 60 minutes of your day! Listen, Learn AND Share:

- Successful programs
- Classes/Trainings

- Idea sharing
- Networking

**Ben Shearer** has been a member of the Pasco Fire Department since 1989. He has always advocated for a planned education campaign for the community. Since 2017 Ben has been leading the CRR efforts for the Fire Department.

Ben is the current Chair of the Washington Public Educators and the NFPA-Washington State Educational Representative. For the last 5 wildland fire seasons, Ben has been a PIO for a SE Washington Type 3 Incident Management Team.