





Fire Service Vulnerability Assessment Program

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FIREFIGHTER INJURY & ILLNESS REDUCTION (FIRE) PROGRAM WORKGROUP

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JOELLEN KELLY

VAP PROGRAM MANAGER

EGH/NFFF



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The Assessment Idea

In 2012, the Executive Director Ron Siarnicki, on behalf of the NFFF, accepted a request from the United States Fire Administration to oversee the development of a Risk Assessment Tool—the Vulnerability Assessment Program or VAP—that will reduce firefighter line-of-duty deaths and injuries.



U.S. Fire Administration



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National Fallen Firefighters Foundation

In 1992, the National Fallen Firefighters Foundation was created by Congress, and charged with the mission to honor the nation's fallen firefighters, and to provide resources to assist their survivors in rebuilding their lives.



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Everyone Goes Home[®]

In 2004, the NFFF expanded its mission to include the prevention of firefighter injuries and line-of-duty deaths through the Everyone Goes Home[®] program and the 16 Firefighter Life Safety Initiatives.



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FLSI Initiative # 3

The VAP directly supports Firefighter Life Safety Initiative
#3:

“Focus greater attention on the integration of risk management with incident management at all levels, including strategic, tactical and planning responsibilities.”



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The Vision

- A fire chief or safety team will answer questions on-line about his or her fire department.
- The VAP tool will assess the vulnerability in that fire department to firefighter injury/LODD.
- The VAP tool will prioritize and summarize the vulnerability and provide the user with actionable information and resources to address these vulnerabilities.
- The results of this survey will give department leaders the actual data they need when they identify needs and seek resources.

THE VAP IS FREE AND CONFIDENTIAL

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What is at stake?

- Line-of-duty deaths
- Career-ending injuries
- Lost-time injuries
- Minor injuries
- Potential lawsuits
- Cost of injuries and fatalities
- Emotional and financial costs to survivors



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Firefighter Fatalities in the United States

In 2021, we will remember and honor 96* firefighters who died while on duty in the United States during 2020.

*In total 106 firefighters will be recognized

Source: FEMA and the National Fallen Firefighters Foundation



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VAP Utility at the Local Level

- Develop immediate operational plans to address low-to no-cost exposures: policies, procedures, work practice controls, etc.
- Develop long-range plans for high-dollar and high-impact items such as purchase of/modification of vehicles.
- Educate elected and appointed officials on fire department capabilities and limitations.
- Educate the public on risks and exposures to gain community support for preventing LODDs and injuries.



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VAP Utility for Firefighters

- Educate firefighters on risk potential and areas of exposure.
- Develop joint risk reduction initiatives between labor and management at the national and local level.
- Evaluate efforts toward prevention after LODD and injuries occur.
- Provide a way to measure success in line-of-duty injury and death prevention initiatives.



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VAP Utility at the National Level

- Help address the data gap that exists in the fire service.
- Provide a reasonable at-a-glance picture of where particular efforts are needed.
- Assist departments in assessing where they stand in terms of risks against departments of similar size and staffing configurations .
- Provide leaders at the national level with data for program continuation, such as the Assistance to Firefighters Grant Program.



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Who was involved?

Fire Service Organizational Stakeholders

- ✓ National Fallen Firefighters Foundation
- ✓ United States Fire Administration
- ✓ Fire Department Safety Officers Association
- ✓ International Association of Arson Investigators
- ✓ International Association of Black Professional Fire Fighters
- ✓ International Association of Fire Chiefs
- ✓ International Association of Fire Fighters
- ✓ International Association of Women in Fire & Emergency Services
- ✓ National Association of Hispanic Firefighters
- ✓ National Fire Protection Association
- ✓ National Volunteer Fire Council
- ✓ North American Fire Training Directors

During the development process, multiple stakeholder meetings were held to gather input and provide updates.

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Who was involved?

Other Stakeholders

- ✓ Insurance Industry (multiple companies)
- ✓ Fire Apparatus Manufacturers Association (FAMA)
- ✓ Fire and Emergency Manufacturers and Services Association (FEMSA)
- ✓ USFA Forest Service
- ✓ Navy Fire & Emergency Services & Command
- ✓ NIOSH, Fire Fighter Fatality Investigation and Prevention Program
- ✓ OSHA - Standards and Guidance
- ✓ Center for Public Safety Excellence
- ✓ ICMA, Center for Public Safety Management
- ✓ International Fire Service Training Association (IFSTA-FPP), Oklahoma State University



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VAP Phases (2012-2014)

1. Research of best practices in risk identification and prevention.
2. Identify/Analyze fire service LODD root causes and their causal (and contributing) factors.
3. Develop VAP assessment categories & questions.
4. Design and build the software.
5. Test, Deploy and collect Data.



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Phase II

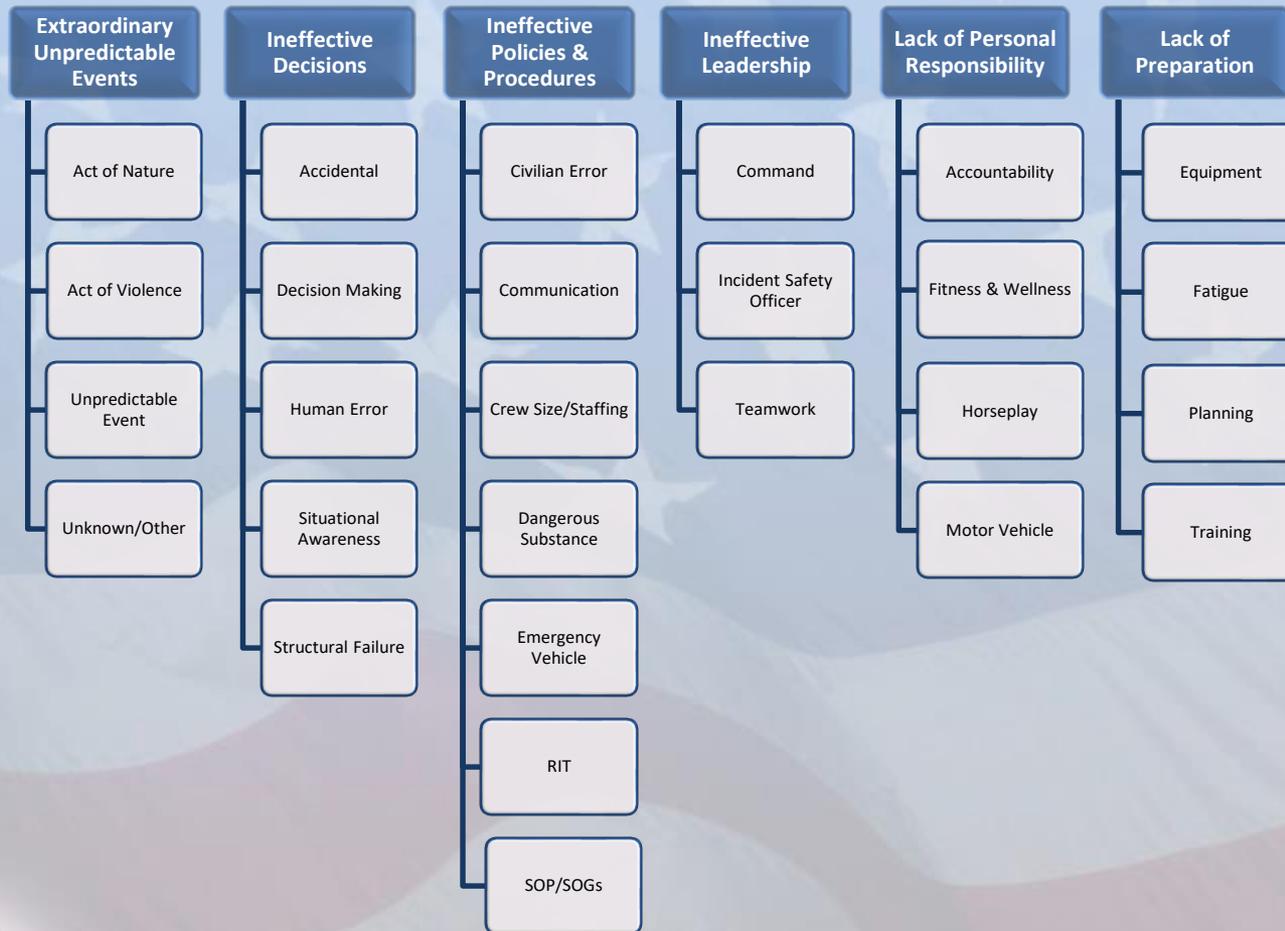
Identify/Analyze fire service LODD root causes and causal (and contributing) factors.



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High Level Contributing Factors—Root Causes



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Contributing Factors Breakdown Examples

Motor Vehicle

Excessive speed during response

Emergency response mode used for non-emergency incident

Failure to develop policy for POV use and response

Failure to use seatbelts

Failure to properly maintain vehicle

Inappropriate use of vehicle - not designed for road conditions

Weather-related defective road conditions

Defective road conditions (rain, ice, darkness, water accumulation)

Failure of roadway component (bridge, shoulder)

Failure to enforce seat belt use policy

POV mechanical failure (blowout, brake failure)

Unfamiliarity with roads

Failure to stop at stop sign or signal

Self-assigned response without being dispatched



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Contributing Factors Breakdown Examples

Crew Size/Staffing

- Inadequate apparatus crew size
- Attempting a task with insufficient personnel
- Failure to adhere to 2 in/2 out requirement
- Inadequate staffing available on initial full assignment
- Lack of staff support for the incident commander
- Too many firefighters in hazardous area for the task at hand
- Procedures do not match unit staffing/capability
- Inadequate number of staff available for lifting
- Insufficient backup staff for hazmat entry
- Insufficient backup staff for confined space entry
- No RIT crew available
- RIT crew inappropriately assigned other duties
- Lack of firefighter at aerial turntable
- Too few firefighters assigned to the incident



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VAP: How it is Organized

- Log-In Page (www.firevap.org)
- Organization Profile
- 2021 VAP Assessment
- Department-Community Survey
- Resource Report



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VULNERABILITY
ASSESSMENT
PROGRAM

[Program Overview](#) [FAQs](#) [Contact Us](#)

First time user?

Click here to [Create Profile](#)

Login

Email

Password

[Forgot your password?](#)

[Log in](#)



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www.usfa.fema.gov



www.firehero.org



Important! You must be your organization's Authorized Representative to create a profile.

Welcome to the Vulnerability Assessment Tool. The Authorized Representative is the primary user who will lead all assessments for your organization. Once your profile is approved, the Authorized Representative will be able to create additional accounts for other organization members to assist in taking assessments.

*All fields marked with * are required.*

Contact Information

First Name: *

Last Name: *

Title:

Phone:

Email: *



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NFFF - VAP: Vulnerability Assessment Tool

Test User

Authorized Representative

Logout

Dashboard

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My Assessments

There are no assessments in progress at this time.

Survey

Department and Community Survey ⓘ

Begin Survey

Available Assessments

2014 Vulnerability Assessment Program Risk Assessment ⓘ

Begin

News

Let Your Senators and Representatives Know that You Support the Fire Sprinkler Incentive Act

Your online signature will be added to a letter of support that is forwarded to your Senators and Representatives. Thank you for taking the time to get involved and being a voice for our nation's fire service and survivors on this very important life safety!



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Dashboard > Survey: Department and Community Survey

Department and Community Survey

In order to receive your suggested VAP resources, you are required to complete the Department and Community Survey. You may complete the survey before or during your work on the 2014 Vulnerability Assessment Program Risk Assessment itself. Regardless, the Department and Community Survey must be completed.

Save Survey

Apparatus

Please provide the total number of apparatus for the following:

Engines

Trucks

Heavy Rescue Squads

Tanker/tenders

Brush/Quick Attack

Specialty vehicles

What types of water supply are available in your service area?



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2014 Vulnerability Assessment Program Risk Assessment

This assessment is designed to help you identify situations, policies and procedures within your fire service organization that may lead to a firefighter injury or fatality, and to recommend low and no-cost solutions to reduce or eliminate those risk factors.

0%

Required Surveys

Department and Community Survey

Begin

Required surveys must be completed prior to submitting the assessment.

Ineffective Decisions 1

Accidental

Begin

Decision Making

Begin

Human Error

Begin

Situational Awareness

Begin

Structural Failure

Begin



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Ineffective Policies & Procedures - Emergency Vehicle

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Does your department ensure all personnel responding in emergency vehicles are secured by seatbelts or safety restraints in approved passenger compartments while the vehicle is moving?

- NO
 YES

Remarks:

Enter any internal notes or remarks here for collaboration within your organization.

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Completed Ineffective Policies & Procedures - Emergency Vehicle

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You have completed the Emergency Vehicle Contributing Factor section.

Risk Level: **High Risk**

There is a strong need for corrective measures. Your organization may continue to operate, but a corrective action plan must be put in place as soon as possible. No corrective action may result in the highly costly loss of major tangible assets or resources; may significantly violate, harm, or impede an organization's mission, reputation, or interest; or may result in human death or serious injury.

NEXT SECTION: Ineffective Policies & Procedures - RIT/RIC

[Continue](#) →

Ineffective Policies & Procedures ⓘ

Ineffective Policies and Procedures significantly increase the risk of death or injury to firefighters on the fireground, during training, and even while performing routine activities in the firehouse. Ideally, all of a fire department or agency's activities are guided by comprehensive SOPs, which are consistently enforced by organizational leadership. When the entire department is operating from the same playbook, members understand organizational expectations and are working together toward a common goal. When SOPs go the extra step and articulate firefighter safety as an organizational value, it sends a strong and unified message to its members that each of their lives is valued. Questions in this portion of the VAP survey will assess 1) do adequate SOPs exist within the organization? and 2) Do the chief and other officers actively and consistently enforce these policies?

Civilian Error		Continue
Communication	Medium Risk	Revisit
Crew Size/Staffing	Low Risk	Revisit
Hazardous Substances	High Risk	Revisit
Emergency Vehicle	High Risk	Revisit
RIT/RIC		Begin
SOPs/SOGs		Begin

Ineffective Leadership ⓘ



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2014 Vulnerability Assessment Program Risk Assessment

This assessment is designed to help you identify situations, policies and procedures within your fire service organization that may lead to a firefighter injury or fatality, and to recommend low and no-cost solutions to reduce or eliminate those risk factors.

100%

Congratulations! You have reached the end of the 2014 Vulnerability Assessment Program Risk Assessment!

Click 'Submit Assessment' to finalize your assessment and view your results, or revisit sections by clicking the appropriate 'Revisit' button below.

Once the Assessment is submitted your organization will have access to the resources available based on all your responses. You will not be able to make changes to your responses.

Submit Assessment

Required Surveys

Department and Community Survey

Submitted

Required surveys must be completed prior to submitting the assessment.

2014 Vulnerability Assessment Program Risk Assessment

This assessment is designed to help you identify situations, policies and procedures within your fire service organization that may lead to a firefighter injury or fatality, and to recommend low and no-cost solutions to reduce or eliminate those risk factors.

100% - Assessment submitted on Jul 9, 2014 11:11:21 AM

Your assessment has been submitted. Below are the resources available, based on your assessment.

Test User
Authorized Representative
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Required Surveys

Department and Community Survey

Submitted

Required surveys must be completed prior to submitting the assessment.

Ineffective Decisions 1

Accidental

Medium Risk

Resources

Decision Making

High Risk

Resources

Human Error

Medium Risk

Resources

Situational Awareness

High Risk

Resources

2014 Vulnerability Assessment Program Risk Assessment Resources

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This assessment is designed to help you identify situations, policies and procedures within your fire service organization that may lead to a firefighter injury or fatality, and to recommend low and no-cost solutions to reduce or eliminate those risk factors.

Ineffective Decisions

Accidental

Medium Risk

Your department's risk increased because you do not offer training for potential hazards around fire stations and other department facilities.

- [OSHA 3111 Hazard Communication Guidelines for Compliance](#)

Your department's risk increased because you do not provide a fire safety orientation to newly arriving or detailed personnel.

- [Stepping Up: Orientation for the New Firefighter](#)
- [NFPA 1500 Standard on Fire Department Occupational Safety and Health Program \(Cpt 9: Facility Safety\)](#)

Your department's risk increased because you do not have MSDS data sheets readily available for inspection in fire stations or other department facilities.

- [OSHA 3111 Hazard Communication Guidelines for Compliance](#)

Your department's risk increased because you do not perform routine safety inspections in fire stations and other department facilities.

- [Model Station Safety Inspection form](#)

Your department's risk increased because personnel are required to perform non-emergency duties.

- [Emergency Vehicle Safety Initiative FA-272/August 2004](#)

Your department's risk increased because you do not have an SOP for safe vehicle movement in and around fire stations and other department facilities.

Emergency Vehicle

Your department's risk increased because you do not have SOPs for safely operating emergency vehicles.

- [USFA/IAFC Guide to Model Policies and Procedures for Emergency Vehicle Safety](#)
- [USFA/IAFF Best Practices for Emergency Vehicle and Roadway Operations Safety](#)

Your department's risk increased because you do not require all emergency vehicle drivers to comply with traffic laws and rules of the road during non-emergency operations.

- [Guide to IAFC Model Policies and Procedures for Emergency Vehicle Safety](#)

Your department's risk increased because you do not clearly identify vehicles that are allowed to respond in emergency mode. (I.e., with activated lights and siren.)

- [Guide to IAFC Model Policies and Procedures for Emergency Vehicle Safety](#)

Your department's risk increased because you do not clearly identify traffic law exceptions that are allowed, in accordance with applicable state/local regulations, during emergency responses.

- [Guide to IAFC Model Policies and Procedures for Emergency Vehicle Safety](#)

Your department's risk increased because firefighters are not allowed to perform maintenance on emergency vehicles.

- [NFPA 1451: Standard for a Fire and Emergency Services Vehicle Operations Training Program](#)

Your department's risk increased because you do not provide formal training for all personnel allowed to perform maintenance on emergency vehicles.

- [NFPA 1451: Standard for a Fire and Emergency Services Vehicle Operations Training Program](#)

Your department's risk increased because the emergency vehicles in your department have components that restrict their top speed.

- [NFPA 1901: Standard for Automotive Fire Apparatus](#)

Your department's risk increased because the emergency vehicles in your department equipped with back-up cameras.

- [Article: Know this before buying fire truck rearview cameras \(FireRescue.com, April 24, 2014\)](#)

Your department's risk increased because the emergency vehicles in your department equipped with "black box" event recorders.

- [NFPA 1901 Standard for Automotive Fire Apparatus](#)
- [Event Data Recorders--The "Black Box" for Safet Response \(Firehouse, 2007\)](#)
- [VDR's: Underutilized Tools in Evey New Fire Apparatus](#)

Your department's risk increased because you do not have a SOP for safely backing emergency vehicles.

- [Guide to IAFC Model Policies and Procedures for Emergency Vehicle Safety](#)

The VAP Surveys:

- VAP (Updated Resources 2020)
- Company Officer Risk Assessment (2021)
- VAP Quick 100 (2020)
- Firefighter Cancer Prevention VAP (2021)
- Cardiac Disease Prevention VAP (2021)
- Behavioral Health VAP (2022/23) FF
Behavioral Health Alliance estimate: 119
firefighters and EMT paramedics died by
suicide in 2019



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VAP Support

The VAP has been awarded support and citations from:

- Center for Public Safety Excellence
- The United States Conference of Mayors
- CFSI National Advisory Committee



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Questions and Comments

Thank You!

www.fireVAP.org

If you have any questions about VAP, please send your questions or comments to

VAP Program Manager

jkelly@firehero.org

For immediate assistance 301-801-1246



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SAVE THE DATES:

2021 National Fire Service Research Agenda Symposium

February 15+ (VIRTUAL)

Registration link: <https://cvent.me/0l72oq> (register as ATTENDEE)

Please spread the word to colleagues who have an interest in fire service research.

40th Annual NFFF Memorial Weekend

October 2-3, 2021

Emmitsburg, MD.

www.firehero.org

jkelly@firehero.org



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