



Frontline Responder

Course Plan

Course Details

Description:	This course provides awareness-level information on behavioral health and cancer needed for frontline responders to safely, effectively, and competently describe stress and list stressors; identify and describe the impacts of stress; describe factors and demonstrate practices for resilience; describe types, prevalence, and causes of cancer; describe exposure to carcinogenic chemicals; and describe and demonstrate minimizing exposure and risk to cancerous contaminants.
Designed For:	Frontline responders
Prerequisites:	Completion of PTSD or mood self-assessment
Standard:	Complete all activities.
Hours (Total):	8 hours (6.75 lecture / 1.25 application)
Maximum Class Size:	50
Instructor Level:	Registered Instructor
Instructor/Student Ratio:	1:50 lecture; 1:10 application
Restrictions:	None
SFT Designation:	FSTEP

Table of Contents

Course Details	1
Required Resources.....	3
Instructor Resources.....	3
Online Instructor Resources.....	3
Behavioral Health:.....	3
Cancer Awareness:	4
Student Resources.....	4
Facilities, Equipment, and Personnel.....	5
Timetable.....	6
Timetable Key	7
Unit 1: Introduction.....	8
Topic 1-1: Orientation and Administration	8
Topic 1-2: Identifying the Different Levels of the Behavioral Health and Cancer Awareness Curriculum Series	9
Unit 2: Stress and Resilience	10
Topic 2-1: Describing Stress and Listing Stressors	10
Topic 2-2: Identifying and Describing the Impacts of Stress.....	11
Topic 2-3: Describing Factors and Demonstrating Practices for Resilience.....	13
Topic 2-4: Describing Indicators or Behavioral Health Distress	15
Unit 3: Cancer Awareness.....	16
Topic 3-1: Describing Types, Prevalence, and Causes of Cancer.....	16
Topic 3-2: Describing Exposure to Carcinogenic Chemicals	18
Topic 3-3: Describing and Demonstrating Minimizing Exposure and Risk.....	19
How to Read a Course Plan.....	23
Acknowledgments.....	24

Required Resources

Instructor Resources

To teach this course, instructors may use:

- See online resources

Online Instructor Resources

The following instructor resources are available online at

<https://osfm.fire.ca.gov/divisions/state-fire-training/fstep-curriculum>:

- Fire Hero Learning Network: https://www.fireherolearningnetwork.com/Training_Programs/Default.aspx
- First Responder Center for Excellence: <https://www.firstrespondercenter.org>
- First Responder's Resiliency, Inc.: [resiliency1st.org](https://www.resiliency1st.org)
- Florida Firefighter Safety and Health Collaborative: <https://www.floridafirefightersafety.org>
- Healing Our Own: <https://healingourown.org>
- IAFF Health and Safety: <https://www.iaff.org/health-safety/>
- National Fallen Firefighter Foundation: <https://www.firehero.org>
- National Volunteer Fire Council: <https://www.nvfc.org>
- UL Firefighter Safety: Health Research: <https://fsri.org>

Behavioral Health:

- [California Professional Firefighters: cpf.org/health-and-safety](https://cpf.org/health-and-safety)
- Crisis Response Care: www.crisisresponse.org
- Everyone Goes Home: <https://www.everyonegoeshome.com>
- FirefighterAid, Cancer Awareness Month Video: <https://youtu.be/5ArbRNomAJQ?si=MgZo7KlcWpiApn9x>
- FirefighterAid CAPP Presentation Introduction & Impact Film: <https://youtu.be/RJ8CQnXRTu0?si=6IHg7wE3mZ-4Rm6i>
- Firefighter Behavioral Health Alliance: <http://www.ffbha.org>
- International Critical Incident Stress Foundation, Inc., Global Learning Programs: icisf.org/education-training
- MassHealth Commonly Used Substance Use Disorder Screening Instruments: <https://providers.masspartnership.com/pdf/CommonlyUsedSUDScreeningInstruments.pdf>
- PTSD Checklist for Civilians: https://www.mirecc.va.gov/docs/visn6/3_ptsd_checklist_and_scoring.pdf
- The Mood Disorder Questionnaire: <https://www.sadag.org/images/pdf/mdq.pdf>
- World Health Organization Programme on Mental Health WHOQOL User Manual: https://iris.who.int/bitstream/handle/10665/77932/WHO_HIS_HSI_Rev.2012.03_eng.pdf?sequence=1_!!NcZN9E-XsvE!PRmJhriuvE-yX6U5R-

[KD4LCZxhOb9GFjD1KIP 88HKcKO7KNZAxOMmDCsffjUx4BIS73SFOMNc3snXlk7hCh2xTcP7vipXY\\$](https://www.youtube.com/watch?v=KD4LCZxhOb9&list=PL88HKcKO7KNZAxOMmDCsffjUx4BIS73SFOMNc3snXlk7hCh2xTcP7vipXY$)

Cancer Awareness:

- San Diego Fire-Rescue CAPP Clean Cab Program: <https://youtu.be/5RI2hpf-qUo?si=zdLcPVn5HKT-ZGkD>
- San Diego Fire-Rescue Post Fire Gross Decontamination: <https://youtu.be/OLbYr3SVavk?si=cjmv72SzYqkrDUAd>
- Miami-Dade Fire Rescue On-Scene Gross Decontamination: https://youtu.be/i_Sg5ZM7rII
- Fire Fighter Cancer Cohort Study: <https://www.ffccs.org>
- Firefighter Cancer Support Network: <https://firefightercancersupport.org>
- Healthy In – Healthy Out: <https://www.wscff.org/health-wellness/healthy-in-healthy-out/>
- IAFC Lavender Ribbon Report Best Practices for Preventing Firefighter Cancer: https://www.iafc.org/docs/default-source/1vcos/vcoslavendaribbonreport.pdf?sfvrsn=13f88b0d_8

Student Resources

To participate in this course, students need:

- Everyone Goes Home: <https://www.everyonegoeshome.com>
- Fire Fighter Cancer Cohort Study: <https://www.ffccs.org>
- Fire Hero Learning Network: https://www.fireherolearningnetwork.com/Training_Programs/Default.aspx
- Firefighter Behavioral Health Alliance: <http://www.ffbha.org>
- Firefighter Cancer Support Network: <https://firefightercancersupport.org>
- First Responder Center for Excellence: <https://www.firstrespondercenter.org>
- Florida Firefighter Safety and Health Collaborative: <https://www.floridafirefightersafety.org>
- Healing Our Own: <https://healingourown.org>
- Healthy In – Healthy Out: <https://www.wscff.org/health-wellness/healthy-in-healthy-out/>
- IAFC Lavender Ribbon Report Best Practices for Preventing Firefighter Cancer: https://www.iafc.org/docs/default-source/1vcos/vcoslavendaribbonreport.pdf?sfvrsn=13f88b0d_8
- IAFF Health and Safety: <https://www.iaff.org/health-safety/>

- MassHealth Commonly Used Substance Use Disorder Screening Instruments: <https://providers.masspartnership.com/pdf/CommonlyUsedSUDScreeningInstruments.pdf>
- National Fallen Firefighter Foundation: <https://www.firehero.org>
- National Volunteer Fire Council: <https://www.nvfc.org>
- PTSD Checklist for Civilians: https://www.mirecc.va.gov/docs/visn6/3_ptsd_checklist_and_scoring.pdf
- The Mood Disorder Questionnaire: <https://www.sadag.org/images/pdf/mdq.pdf>
- UL Firefighter Safety: Health Research: <https://fsri.org>
- World Health Organization Programme on Mental Health WHOQOL User Manual: [https://iris.who.int/bitstream/handle/10665/77932/WHO_HIS_HSI_Rev.2012.03_eng.pdf?sequence=1;!!NcZN9E-XsvE!PRmJhriuvE-yX6U5R-KD4LCZxhOb9GFjD1KIP_88HKcKO7KNZAxOMmDCsffjUx4BIS73SFOMNc3snXlk7hCh2xTcP7vjpXY\\$](https://iris.who.int/bitstream/handle/10665/77932/WHO_HIS_HSI_Rev.2012.03_eng.pdf?sequence=1;!!NcZN9E-XsvE!PRmJhriuvE-yX6U5R-KD4LCZxhOb9GFjD1KIP_88HKcKO7KNZAxOMmDCsffjUx4BIS73SFOMNc3snXlk7hCh2xTcP7vjpXY$)

Facilities, Equipment, and Personnel

Facilities

The following facilities are required to deliver this course:

- Standard learning environment or facility, which may include:
 - Writing board or paper easel chart
 - Markers, erasers
 - Amplification devices
 - Projector and screen
 - Laptop or tablet with presentation or other viewing software
 - Internet access with appropriate broadband capabilities
- Open area for practice decontamination
- Yoga or relaxation activity space

Equipment

The following equipment is required to deliver this course:

- Whiteboards, projectors, markers, erasers, and other classroom materials
- Complete sets of wildland and structural PPE and SCBA for each student
- Wipes (can be simulations, e.g., paper towels)
- Isolation bags
- Gross decontamination kit, including buckets, brushes (wet and dry), dish soap, water supply (hoses, nozzles, and fittings)

Personnel (Optional)

The following personnel are optional for delivering this course:

- Yoga or relaxation instructor
- Culturally competent subject matter experts
- First responders providing testimonials

Timetable

Segment	Lecture	Application	Unit Total
Unit 1: Introduction			
Topic 1-1: Orientation and Administration	0.75	0.0	
Topic 1-2: Identifying the Different Levels of the Behavioral Health and Cancer Awareness Curriculum Series	0.25	0.0	
Unit 1 Totals	1.0	0.0	1.0
Unit 2: Stress and Resilience			
Topic 2-1: Describing Stress and Listing Stressors	1.0	0.0	
Topic 2-2: Identifying and Describing the Impacts of Stress	1.0	0.0	
Topic 2-3: Describing Factors and Demonstrating Practices for Resilience	1.25	0.25	
Topic 2-4: Describe Indicators of Behavioral Health Distress	0.50	0.0	
Unit 2 Totals	3.75	0.25	4.0
Unit 3: Cancer Awareness			
Topic 3-1: Describing Types, Prevalence, and Causes of Cancer	0.5	0.0	
Topic 3-2: Describing Exposure to Carcinogenic Chemicals	0.5	0.0	
Topic 3-3: Describing and Demonstrating Minimizing Exposure and Risk	1.0	1.0	
Unit 3 Totals	2.0	1.0	3.0
Course Totals	6.75	1.25	8.00

Timetable Key

1. The Timetable documents the amount of time estimated to deliver the content included in the course plan.
2. Time is documented using the quarter system: 15 min. = .25 / 30 min. = .50 / 45 min. = .75 / 60 min. = 1.0.
3. The Course Totals do not reflect time for lunch (1 hour) or breaks (10 minutes per each 50 minutes of instruction or assessment). It is the instructor's responsibility to add this time based on the course delivery schedule.
4. Application (activities, skills exercises, and formative testing) time will vary depending on the number of students enrolled. The Application time documented is based on the maximum class size identified in the Course Details section.
5. Summative Assessments are determined and scheduled by the authority having jurisdiction. These are not the written or psychomotor State Fire Training certification exams. These are in-class assessments to evaluate student progress and calculate course grades.

Unit 1: Introduction

Topic 1-1: Orientation and Administration

Terminal Learning Objective

At the end of this topic, a student will be able to identify facility and classroom requirements and identify course objectives, events, requirements, assignments, activities, skills exercises, resources, evaluation methods, and participation requirements in the course syllabus.

Enabling Learning Objectives

1. Identify facility requirements
 - Restroom locations
 - Food locations
 - Emergency procedures
2. Identify classroom requirements
 - Start and end times
 - Breaks
 - Electronic device policies
 - Special needs and accommodations
 - Other requirements as applicable
3. Review course syllabus
 - Course objectives
 - Calendar of events
 - Course requirements
 - Student evaluation process
 - Assignments
 - Activities
 - Required student resources
 - Class participation requirements

Discussion Questions

1. Determined by instructor

Application

1. Determined by instructor

Topic 1-2: Identifying the Different Levels of the Behavioral Health and Cancer Awareness Curriculum Series

Terminal Learning Objective

At the end of this topic, a student will be able to identify the different levels of the Behavioral Health and Cancer Awareness curriculum series and the courses and requirements for completion.

Enabling Learning Objectives

1. Identify the courses in the Behavioral Health and Cancer Awareness curriculum series
 - BHCA 1A: Frontline Responder
 - BHCA 2A: Multilevel Supervisor
2. Identify any other requirements for the curriculum series

Discussion Questions

1. Determined by instructor

Application

1. Determined by instructor

Unit 2: Stress and Resilience

Topic 2-1: Describing Stress and Listing Stressors

Terminal Learning Objective

At the end of this topic, given an assignment as a frontline responder, a student will be able to describe stress and list common sources of stress so that signs, symptoms, and reactions to and sources of stress are described.

Enabling Learning Objectives

1. Define types of stress
2. Describe the signs and symptoms of and reactions to stress
3. List common stressors found in various situations and environments:
 - On-duty/workplace/station life
 - Relationships with peers/coworkers
 - Relationships with administration/supervisors
 - Relationships with the community
 - Workplace/station environment stressors
 - Quarters
 - Sleep hygiene
 - Alarm/alert systems
 - Agency or department behavior and culture
 - Off-duty/family and personal life
 - Transitioning to home life
 - Work-life imbalance
 - Finances
 - Responding to incidents
 - Extended deployments or shift assignments
 - Long-term injuries
 - Training
 - Retirement

Discussion Questions

1. How do high-frequency calls without resolution impact job satisfaction?
2. What are some techniques for transitioning between work and home life?
3. What is hypervigilance and how does it manifest at work and home?
4. What are some stressors you will encounter in fire service training and/or the academy?

Application

1. Determined by instructor

Instructor Notes

1. The instructor should refer to the Healing Our Own, Firefighter Behavioral Health Alliance, National Fallen Firefighter Foundation, Florida Firefighter Safety and Health Collaborative, and National Volunteer Firefighter Council websites.

Topic 2-2: Identifying and Describing the Impacts of Stress

Terminal Learning Objective

At the end of this topic, given an assignment as a frontline responder, a student will be able to identify and describe the physiological and emotional impacts of stress so that the impacts of stress are described.

Enabling Learning Objectives

1. Describe the physiological and emotional impacts of stress
 - Acute, chronic, and cumulative stress
 - Stress and the brain
 - Parasympathetic versus sympathetic (fight or flight)
 - Adrenal fatigue
 - Mood and cognitive impacts
2. Define trauma
 - Perception versus actual injury
3. Define moral injury
 - Violation of individual values and beliefs
4. Define posttraumatic stress disorder and posttraumatic stress injury
 - Terminology
 - Presumptive worker's compensation
 - SB542, Dahle (2018)
 - Labor Code § 3212.15
5. Describe the psychological and emotional impacts of trauma
 - Acute, chronic, and cumulative trauma exposure
6. Describe signs and symptoms associated with unmanaged stress and trauma
 - Anger and irritability
 - Sleep problems
 - Depression
 - Marital and family issues
 - Substance abuse
 - Addictions
 - Suicidal ideation
 - Intrusive thoughts
 - Other forms of self-harm or risky behavior

Discussion Questions

1. What is the difference between acute, chronic, and cumulative stress?
2. What does trauma do your body?
3. Do you feel you have a healthy relationship with substances, including drugs and/or alcohol?

Application

1. Determined by instructor

Instructor Notes

1. Have the students discuss the results of the self-assessment they completed before the course began.
2. The instructor should refer to the Healing Our Own, Firefighter Behavioral Health Alliance, National Fallen Firefighter Foundation, Florida Firefighter Safety and Health Collaborative, IAFF, and National Volunteer Firefighter Council websites.
3. Provide the students with Behavioral Health Alliance's and/or IAFF's current firefighter suicide statistics.
4. The instructor may refer to Thomas Joiner's Interpersonal Theory of Suicide for information specific to suicidal ideation.

Topic 2-3: Describing Factors and Demonstrating Practices for Resilience

Terminal Learning Objective

At the end of this topic, given an assignment as a frontline responder, a student will be able to describe factors and demonstrate practices contributing to resilience so that resilience factors are described and resiliency practices are demonstrated.

Enabling Learning Objectives

1. Describe the role of psychological hygiene in meditating and mitigating stress
 - Nutrition
 - Sleep
 - Exercise
 - Relaxation techniques
 - Rest
2. Demonstrate relaxation techniques
3. Describe healthy and unhealthy coping mechanisms
4. Identify potential consequences of unhealthy coping mechanisms
5. Describe the role of communication in coping with stress
 - Personal life
 - Professional life
 - Social support systems
6. Describe resources available within the AHJ, such as:
 - Organizational resources
 - Peer support
 - Critical Incident Stress Management (CISM)
 - Culturally competent clinicians
 - Chaplains
 - Preventive tools
 - Employee/student assistance programs (EAP/SAP)
 - Wellness retreats
 - Therapy and support or service animals
7. Describe external resources, such as:
 - Community groups (non–fire service/non–public safety)
 - Faith-based groups
 - Health care system
 - Culturally competent clinicians
 - Hotlines and crisis resources
 - Therapy and support or service animals

Discussion Questions

1. What are some coping skills for stressors you will encounter in the fire service?
2. How is a personal support system a part of resilience?
3. What internal and external resources are available in your AHJ, and how do you access them?
4. What would you do if a peer showed signs and symptoms of stress?

Application

1. Give students their completed self-assessments. Have them use the techniques, resources, and mechanisms in the enabling learning objectives to come up with specific strategies for dealing with stressors.

Instructor Notes

1. The instructor must present information on evidence-based relaxation techniques, possibly including yoga, breathing exercises, and mindfulness exercises. The instructor could choose to bring in someone to lead the class in relaxation techniques, such as a yoga instructor or someone familiar with breathing exercises.
2. Culturally competent providers and clinicians can help provide the information in this topic. These may include peer counselors, chaplains, or psychologists with experience in fire and frontline-responder culture.

Topic 2-4: Describing Indicators or Behavioral Health Distress

Terminal Learning Objective

At the end of this topic, given a list of resources, a student will be able to communicate with a person that may be in distress or struggling with their behavioral health and wellness so that the person understands and can access resources.

Enabling Learning Objectives

1. Describe how to directly communicate about behavioral health distress
 - Recognize indicators
 - Consider danger to self/danger to others
 - Approach
 - Respectful, calm, nonjudgmental, nonconfrontational, validating, timing, and setting
 - Communicate
 - Define and use active listening techniques
 - Not “fixing”
 - Express concern citing specific reasons, using indicators, that a person may be in distress
 - Ask follow-up questions and continue active listening
2. Assist in educating and accessing internal and/or external support resources

Discussion Questions

1. What would you do if a peer showed signs and symptoms of distress?
2. What biases and barriers can prevent people from talking to their peers about their behavioral health?
3. What are some nonjudgmental and support questions you can ask if someone is having behavioral health distress?
4. How will you care for yourself regardless of your peer’s response/decisions?

Application

1. Determined by instructor.

Instructor Notes

None

Unit 3: Cancer Awareness

Topic 3-1: Describing Types, Prevalence, and Causes of Cancer

Terminal Learning Objective

At the end of this topic, given data on the prevalence of cancer in the fire service and risk and protective factors, a student will be able to describe types and prevalence of occupational cancer and list common causes of cancer in the fire service so that types and prevalence are described and causes are listed.

Enabling Learning Objectives

1. Describe cancer prevalence in the fire service
 - Types/locations
 - Statistics
2. Define carcinogenic agent
 - Occupational
 - International Agency for Research on Cancer (IARC) groupings
 - Chemicals
3. List risk factors specific to the fire service, including but not limited to:
 - Duration and dose of exposure to carcinogenic chemicals
 - Sleep disruption and shift work (IARC Group 2A)
 - UV radiation (IARC Group 1)
4. List risk or protective factors specific to lifestyle or personal life, including but not limited to:
 - Tobacco or nicotine
 - Alcohol
 - Stress
 - Diet or food choices
 - Exercise
 - Infectious agents
 - Age
 - Metabolic syndrome
 - Overweight
 - Mental health
 - Genetic history
 - Hormones

Discussion Questions

1. How do tobacco, nicotine, and alcohol use affect your ability to claim workers' compensation for cancer?
2. How are behavioral health, lifestyle, your occupation, and cancer risk related?
3. How do factors such as race and gender impact occupational cancer risk?
4. What are some types of carcinogenic agents other than chemical carcinogens?

Application

1. Determined by instructor

Instructor Notes

None

Topic 3-2: Describing Exposure to Carcinogenic Chemicals

Terminal Learning Objective

At the end of this topic, given an assignment as a frontline responder, a student will be able to describe exposure to carcinogenic chemicals so that exposure sources and routes and categories and states of carcinogenic chemicals are listed.

Enabling Learning Objectives

1. List sources of exposure, including but not limited to:
 - Fires and products of combustion
 - Hazardous materials
 - Environmental (station)
 - Apparatus cross-contamination
2. List common states of carcinogens
 - Gases
 - Particulates
 - Size
 - Radiation
3. List common categories of carcinogenic chemicals
 - Polycyclic aromatic hydrocarbon (PAHs)
 - Volatile organic compounds (VOCs)
 - Polyfluoroalkyl substances (PFAs)
4. List routes of exposure to carcinogenic chemicals
 - Absorption
 - Inhalation
 - Ingestion
 - Injection or penetration
5. List common sources of exposure found in various situations and environments
 - Fire suppression
 - Overhaul, mop-up, and post-incident activities
 - PPE
 - Equipment
 - Apparatus and private vehicle
 - Station
 - Home

Discussion Questions

1. What are some sources of exposure to carcinogens after a fire is extinguished?
2. How does duration of exposure relate to absorption of carcinogenic chemicals?
3. What are the exposure risks for members not engaged in the IDLH environment?

Application

1. Determined by instructor

Instructor Notes

None

Topic 3-3: Describing and Demonstrating Minimizing Exposure and Risk

Terminal Learning Objective

At the end of this topic, given an assignment as a frontline responder, a student will be able to describe the factors and behaviors and demonstrate best practices for minimizing contaminant exposure and risk so that factors and behaviors are described and best practices for minimizing risk and exposure are demonstrated.

Enabling Learning Objectives

1. Identify unmodifiable factors
 - Infectious agents
 - Genetic history
 - Hormones
 - Age
2. Identify modifiable factors
 - Exposures
 - Sleep
 - Tobacco and nicotine
 - Alcohol
 - Diet
 - Exercise
 - Metabolic syndrome
 - Overweight/obesity
 - UV radiation
 - Consumer products (e.g. personal care products, cleaning agents)
3. Define exclusion (hot) zones, contamination reduction (warm) zones, and support/clean (cold) zones on a fireground and at the fire station
4. Identify and demonstrate the best practices for minimizing contaminant exposure and risk during fire suppression, overhaul, mop-up, and post-incident activities, including but not limited to:
 - Wearing full PPE with SCBA until no longer exposed to carcinogenic chemicals
 - At wildland and wildland-urban-interface fires, wearing full PPE until no longer exposed to carcinogenic chemicals
 - Gross decontamination procedures in the warm zone prior to rehabilitation and/or demobilization
 - Appropriate placement and cleaning procedures for rehabilitation
 - Establish rehabilitation in the cold zone
 - Establish rehabilitation away from smoke (uphill, upwind)
 - Establish rehabilitation away from any sources of exhaust
 - Ensure clean hands, mouth, and face prior to eating or drinking
 - Only enter rehabilitation area after gross decontamination and removal of contaminated gear, when possible
 - Storage of contaminated gear in single-use isolation bags outside apparatus cab for transport

5. Identify and demonstrate the best practices for PPE that minimize contaminant exposure and risk
 - Proper fit
 - Best practice is two complete sets of everything
 - Helmet, hood, coat and liner, gloves, pants and liner, suspenders, boots, radio straps, hose/truck belts, web gear, eye protection, respiratory protection, wildland jacket and pants
 - Wearing PPE
 - Ensuring it is clean before you put it on
 - Best practices for hood exchange
 - Transfer and storage of PPE and equipment between job sites or station assignments and home
 - Gross decontamination/preliminary exposure reduction
 - Performed in the warm zone
 - Those being decontaminated or providing decontamination must wear PPE and SCBA and remain on supplied air for the duration of the decontamination process
 - While handling contaminated PPE, use EMS gloves
 - Dry, wet, or combination method
 - Wiping and washing hands, face, neck, armpits, torso, and groin
 - Isolating contaminated turnouts in single-use bags
 - Laundering turnouts per AHJ
 - Airing out turnouts at least twenty-five minutes outdoors out of direct sunlight before washing
 - Commercial washer for helmet and liners, SCBA, boots, and gloves, per AHJ
 - Extractor washer for turnouts, per AHJ
 - Turnout dryer, per AHJ
 - While washing turnouts, need to wear EMS gloves and respirator and protective clothing and have a negative pressure environment as applicable
 - Documentation per AHJ
6. Identify and demonstrate the best practices for handling contaminated equipment that minimize exposure and risk
 - The dangers of equipment off-gassing and cross-contaminating after exposure
 - Completing gross decontamination
 - Having a designated decontamination station
 - PPE for all decontamination practices
 - Cleaning products designed for purpose
 - Apparatus
 - The clean cab concept and treating contaminants as biohazards
 - Turning off apparatus and other vehicles to minimize exhaust

7. Identify and demonstrate the best practices that minimize contaminant exposure and risk at the station
 - Avoid cross-contamination
 - Identify hot, warm, and cold zones in fire stations
 - Treat living quarters as cold zones
 - PPE must never enter cold zones
 - Keep all doors at zone interfaces shut
 - Wash hands, face, and neck before entering the cold zone
 - Identify possible warm zones in fire stations (areas of interface between hot and cold)
 - Showering as soon as possible following incident release (cold and then hot water)
 - Infrared saunas as chemical decontamination units (CDUs), per AHJ
 - PPE storage in the warm zone
 - Washing and storing garments and undergarments worn beneath PPE separately at the station
 - Identify activities that may occur in hot zones
 - Treat apparatus bay/floor as a hot zone
 - The following should not be located in the hot zone:
 - Ice machines
 - Workout equipment, where possible
 - SCBA fill station
 - PPE storage should be situated to prevent exhaust carcinogen contamination
 - Off-duty storage
 - Response-ready storage
 - Use of diesel exhaust capture systems
 - Tool maintenance and checks performed outdoors, wearing PPE, to prevent exposure
 - Tool decontamination performed in a negative pressure environment and while wearing PPE to prevent carcinogen exposure, when possible
 - Perform apparatus pretrips outside of the apparatus floor with the station doors and apparatus doors and windows closed
8. Identify and demonstrate the best practices that minimize contaminant exposure and risk at home
 - Avoid cross-contamination, including with PPE
 - Don't wash work items at home
 - PPE
 - Uniforms
 - Personal items used during work hours
 - Garments or undergarments worn beneath PPE
 - Keep all work items in a nonpermeable sealed bag or container in vehicle and avoid direct sunlight and heat
 - Shower prior to leaving the station

9. Document all exposures, injuries, and illnesses within AHJ reporting system

Discussion Questions

1. What are the best practices for hood types, proper donning and doffing, and exchange?
2. Under what circumstances is it best to do dry decontamination or wet decontamination?
3. Why is it critical to complete an exposure report for all exposures, injuries, and illnesses on all incidents?

Application

1. If course is not delivered in conjunction with Fire Control 3: Structural Fire Fighting corequisite, give students a gross decontamination kit. Have the students demonstrate gross decontamination.

Instructor Notes

1. The instructor may choose to demonstrate documenting exposure per AHJ policy.
2. This topic is interrelated with those pertaining to behavioral health and stress reduction. Some of the wellness behaviors will overlap.
3. Discuss best practices for personal decontamination/cross contamination (using a minimum of one (1) video recommendation from Instructor Resources).
4. NFPA 1550 Standard for Emergency Responder Health and Safety addresses exposure reports.
5. The instructor must refer to and share the NIOSH photo showing the limits of PPE in preventing exposure.

How to Read a Course Plan

A course plan identifies the details, logistics, resources, and training and education content for an individual course. Whenever possible, course content is directly tied to a national or state standard. SFT uses the course plan as the training and education standard for an individual course. Individuals at fire agencies, academies, and community colleges use course plans to obtain their institution's consent to offer course and provide credit for their completion. Instructors use course plans to develop syllabi and lesson plans for course delivery.

Course Details

The Course Details segment identifies the logistical information required for planning, scheduling, and delivering a course.

Required Resources

The Required Resources segment identifies the resources, equipment, facilities, and personnel required to deliver the course.

Unit

Each Unit represents a collection of aligned topics. Unit 1 is the same for all SFT courses. An instructor is not required to repeat Unit 1 when teaching multiple courses within a single instructional period or academy.

Topics

Each Topic documents a single Terminal Learning Objective and the instructional activities that support it.

Terminal Learning Objective

A Terminal Learning Objective (TLO) states the instructor's expectations of student performance at the end of a specific lesson or unit. Each TLO includes a task (what the student must be able to do), a condition (the setting and supplies needed), and a standard (how well or to whose specifications the task must be performed). TLOs target the performance required when students are evaluated, not what they will do as part of the course.

Enabling Learning Objectives

The Enabling Learning Objectives (ELO) specify a detailed sequence of student activities that make up the instructional content of a lesson plan. ELOs cover the cognitive, affective, and psychomotor skills students must master to complete the TLO.

Discussion Questions

The Discussion Questions are designed to guide students into a topic or to enhance their understanding of a topic. Instructors may add to or adjust the questions to suit their students.

Application

The Application segment documents experiences that enable students to apply lecture content through cognitive and psychomotor activities, skills exercises, and formative testing. Application experiences included in the course plan are required. Instructors may add additional application experiences to suit their student population if time permits.

Instructor Notes

The Instructor Notes segment documents suggestions and resources to enhance an instructor's ability to teach a specific topic.

CTS Guide Reference

The CTS Guide Reference segment documents the standard(s) from the corresponding Certification Training Standard Guide upon which each topic within the course is based. This segment is eliminated if the course is not based on a standard.

Skill Sheet

The Skill Sheet segment documents the skill sheet that tests the content contained within the topic. This segment is eliminated if the course does not have skill sheets.

Acknowledgments

State Fire Training gratefully acknowledges the following individuals and organizations for their diligent efforts and contributions that made the development and publication of this document possible.

Cadre Leadership**Caryn Petty**

Cadre Coleader

Deputy State Fire Marshal III (Specialist), State Fire Training

Chris Fowler

Cadre Coleader

Division Chief, State Fire Training

Laura Garwood

Cadre Editor

Sacramento State University

Cadre Participants

Dr. Alana Brunacini, DBH, LPC

Doctor of Behavioral Health, Brunacini Professional Services

Joe Ekblad

Fire Captain, CAL FIRE SDU

Katharine Erhardt

Fire Captain, Alameda County Fire Department

Jake Hannan

Battalion Chief, CAL FIRE Training Centers

Mary Murphy

Medical Services Office Battalion Chief, North County Fire Protection District

Kyle O'Neill

Fire Captain, San Diego Fire-Rescue Department

Keola Park

Battalion Chief, Fresno Fire Department

Dan Riddle

Fire Captain, Santa Clara County Fire Department

Kristin Thompson

EMS Division Chief, Newport Beach Fire Department

Dr. Derek Urwin

Engineer, Los Angeles County Fire Department

Benjamin Vernon

Fire Captain/PM, San Diego Fire-Rescue Department

Partners

State Fire Training also extends special acknowledgement and appreciation to the Conference and Training Services Unit with the College of Continuing Education at California State University, Sacramento, for its ongoing meeting logistics and curriculum development support, innovative ideas, and forward-thinking services. This collaboration is made possible through an interagency agreement between CAL FIRE and Sacramento State.