

Module Title: Introduction to Hazardous Materials and Scene Safety

Target Audience: New firefighters with basic or no knowledge of hazardous materials, how to identify if they are dealing with hazardous materials, and the steps to responding safely to the hazardous materials incident.

Learning Objectives:

1. Define what a hazardous material is.
2. Summarize the steps for how to safely respond to a hazardous materials incident.

Seat Time: 30 minutes

Outline:

- Introduction/Welcome
- Navigation
- Firehouse Scenario
- Pre-Assessment
- Case Study
- Learning Objectives
- What is a Hazardous Material (Objective 1)
- The Practical Definition
- Knowledge Check
- The Importance of Safety (Objective 2)
- Safety, Isolate, Notify
- Summary/Restatement of course objectives
- Intro Slide to assessment
- Assessment
- Course completion/Congratulations

Directions: Please make sure objectives meet desired training outcomes. I want to ensure that the avatars/characters are believable in the scenarios including their dialogue and interactions.

Module Resources/References: <https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2021-01/ERG2020-WEB.pdf>

Color Palette:



Slide 1.1 Menu Title: <i>Welcome</i>			Objective: [#]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>No top/bottom border</p> <p>Background image: Photographic image firefighters attacking a fire (stock image)</p> <p>Course title set in semitransparent shape overlaying the background image</p> <p>Custom Start and Navigation buttons.</p>	<p>[Slide Title] Hazardous Materials and Scene Safety</p> <p>[Buttons] START</p> <p>NAVIGATION</p>	<p>Welcome to the Introduction to Hazardous Materials and Scene Safety eLearning course. In this course, you will learn the importance of responding safely to a hazardous materials call.</p> <p>If you are familiar with the course navigation player, click the Start button to begin. If you would like some guidance with navigating the course, click the Navigation button.</p> <p>When you're ready, let's get started.</p>	<p>The Start and Navigation buttons will fade in timed with the VO reference.</p> <p>The Start button will jump to slide 1.3</p>

Notes:			
Slide 1.2 Menu Title: Navigation			Objective: [#]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Player shows Menu on the left.</p> <p>Background image: Same photographic image used on Welcome slide but semi-transparent.</p> <p>Callout shapes with labels point to player features.</p>	<p>[Slide Title] Navigation</p> <p>[Directions] Use these options to navigate the course.</p> <p>[Callouts] Next Previous Accessibility Volume Replay Seek bar Play/Pause Menu Resources</p>	<p>Please take a moment to review the course player so you feel comfortable navigating through the course. If you know your way around, you may proceed to the next slide.</p> <p>If you'd like to go backward or forward in the course, click the previous or next buttons. Accessibility options are located here. To adjust the volume, click the volume icon. Click the replay button to see the entire slide again or adjust the seek bar at any time to review a portion of the slide. You can also pause the player. Click the same button again to resume playing. Revisit a slide by using the menu on the left. Finally, click the Resources tab to learn more about Privacy by Design. Click the next button now to begin the course.</p>	<p>Callout shapes with text labels will fade in timed with their reference in the audio.</p>
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Slide 1.3 Menu Title: <i>Firehouse Scenario</i>			Objective: [#]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Firehouse engine bay setting</p> <p>This slide begins with just the avatar of Anton (probationary firefighter)</p>	<p>[Slide Title] Firehouse Scenario</p> <p>[Anton callout]</p>	<p>[Anton] [1] Wow! That was easy. Who knew the key to understanding how to respond to</p>	<p>The thought and callout text will be displayed on the slide timed with the VO audio.</p>

<p>on the right side of the slide facing the learner. Maria avatar (an experienced firefighter) will appear on the left side of the slide facing right. Anton avatar will stay on the right side of the slide and face the left where Maria is once she enters.</p> <p>The two avatars are slightly offset to the right of the slide, not centered.</p> <p>Thought bubbles and callout shapes track Anton's thoughts and their conversation on screen. As Anton and Maria converse, the callout shape will remain between them.</p> <p>Anton avatar has 3 poses: thinking, excited, conversing</p> <p>Anton changes from thinking to excited between his first two thought bubbles, then settles on conversing after Maria enters. Fire alarm is displayed on the far wall of the engine bay.</p>	<p>Wow! That was easy. Who knew the key to understanding how to respond to a hazardous materials call was just memorizing some colors!</p> <p>[Maria callout] Hey Anton! What are you up to?</p> <p>[Anton callout] Oh, hey Maria! I just finished going back over the emergency response guidebook.</p> <p>[Maria callout] That's great! I thought I overheard you saying something about memorizing colors...</p> <p>Have you reviewed what you need to do once you get on the scene?</p> <p>[Anton callout] I just focused on the colors...I'm sure as long as I have those memorized, I will be ready for anything!</p>	<p>a hazardous materials call was just memorizing some colors!</p> <p>[Maria] [2] Hey Anton! What are you up to?</p> <p>[Anton] [3] Oh, hey Maria! I just finished going back over the emergency response guidebook.</p> <p>[Maria] [4] That's great! I thought I overheard you saying something about memorizing colors... Have you reviewed what you need to do once you get on the scene?</p> <p>[Anton] [5] I just focused on the colors...I'm sure as long as I have those memorized, I will be ready for anything!</p> <p>[Narrator] [6] Click on the fire alarm to see what happens next.</p>	<p>Slide begins with Anton alone in the firehouse setting thinking aloud to himself.</p> <p>Move Maria along motion path to enter the room from the right before the audio plays for her first line. Maria avatar changes from walking to conversing once she completes her motion path into the room. Maria then appears on the right facing left. Callout shapes track their conversation, with slide text fading in and out timed with the VO</p> <p>When VO directs the learner to click on the fire alarm, a hotspot on the clock will trigger jumping to the next slide along with the sound of a fire alarm going off.</p> <p>Directions to click on the fire alarm will fade in with the VO.</p> <p>A short video of a fire truck responding to a call plays to inform the learner that Anton left the firehouse for an emergency call. The slide</p>
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	<p>[Directions] Click on the fire alarm to find out what happens next.</p>		<p>automatically advances to the next scene after the video.</p> <p>The Next button will be hidden on this slide.</p>
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Slide 1.4 Menu Title: Firehouse Scenario 2 <i>[Hidden from Menu]</i>			Objective: [#]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Same background space as slide 1.3, so appears as same slide.</p> <p>Callout shapes track conversation on screen.</p> <p>Anton avatar is upset.</p> <p>Maria avatar is concerned.</p>	<p>[Slide Title] Firehouse Scenario</p> <p>[Maria callout] Anton, you really need to think about what you are doing when we have a hazardous materials call.</p> <p>[Anton callout] But I really thought knowing just the colors would help. I don't understand why this is so complicated.</p> <p>[Maria callout] It isn't necessarily complicated, Anton. You need to understand what challenges hazardous material calls present and how to properly and safely respond to them.</p>	<p>[Maria] [1] Anton, you really need to think about what you are doing when we have a hazardous materials call. You really could have hurt yourself or someone else on that call!</p> <p>[Anton] [2] But I really thought knowing just the colors would help. I don't understand why this is so complicated.</p> <p>[Maria] [3] It isn't necessarily complicated, Anton. You need to understand what challenges hazardous material calls present and how to properly and safely respond to them.</p> <p>It's not about memorization. We have guides to help with that. Safety, however, has to be practiced.</p> <p>[Anton] [4] --...okay, Maria. Where do I start?</p>	<p>The callout text will be displayed on the slide timed with the VO audio.</p> <p>This slide and the following slide should be hidden in the Menu so that it appears to the learner that slides 1.3, 1.4, and 1.5 are all a continuation of the same slide.</p> <p>Callout shapes track their conversation, fading in and out timed with the VO.</p> <p>When the timeline ends, the slide auto advances to the next slide with a pre-assessment question.</p> <p>The Next button will be hidden on slides this slide.</p>

	<p>It's not about memorization. We have guides to help with that. Safety, however, has to be practiced.</p> <p>[Anton callout] ...---...okay, Maria. Where do I start?</p>		
<p>Notes:</p>			

Slide 1.5 Menu Title: Firehouse Scenario 3 <i>[Hidden from Menu]</i>			Objective: [#]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>A large rectangle is centered on the slide and holds the preassessment question, directions, and answer choices. White space around the rectangle. The rectangle should use multiple palette colors.</p> <p>The answer choices appear below the question and directions and are written in three smaller rectangles aligned left to right.</p> <p>The right rectangle holds the correct answer. The selected state includes the text "YES."</p> <p>The middle rectangle holds the least appropriate answer. The selected state includes the text "TRY AGAIN."</p>	<p>[Preassessment question]</p> <p>What did Anton fail to recognize when he thought color was the only factor that determined how he responds to a hazardous materials incident?</p> <p>[Directions] Select the answer that you think is best.</p> <p>[Left Answer Choice – Wrong] Hazardous materials require much more</p>	<p>[Narrator]</p> <p>[1] Think about how Anton approached his knowledge of hazardous materials. What should Anton have understood clearly before he responded to an incident involving hazardous materials?</p> <p>Click on the answer that you think is best.</p> <p>[Narrator – Left Audio]</p> <p>[2] Not quite. It is true that hazardous materials identification requires far more analysis than just looking at color. Understanding color is one aspect of that multi-tiered approach to identification.</p> <p>[Narrator – Middle Audio]</p> <p>[3] NO. Though you will be guided in the right direction by the chemical ID number listed on a placard, you must also pay</p>	<p>Rectangle with preassessment question, directions, and answer choices grow in from the bottom right corner of the slide with an entrance animation.</p> <p>The VO begins once the question-and-answer choices finish their entrance animation.</p> <p>Learner is restricted from clicking on the answer choices until the Question and Directions VO completes.</p> <p>Learners can click on any answer choice rectangle. Each</p>

<p>The right rectangle holds the second-best choice. The selected state includes the text “TRY AGAIN.”</p>	<p>analysis. Color is one quick way to identify what you are dealing with, but due to the variety of hazards transported it is not the sole factor.</p> <p>[Middle Answer Choice – Wrong] Hazardous materials can’t be identified by the color of the placard. You can only use the chemical ID number to properly identify the material being transported.</p> <p>[Right Answer Choice – Correct] Safety First. Responding to a hazardous materials call begins before you get in the apparatus. Memorizing placards is not important. Scene safety is.</p>	<p>attention to the nature of the material, or color classification, you are dealing with.</p> <p>[Narrator – Right Audio] [4] Yes! It is important to understand that firefighters do not need to memorize a complex system of colors, numbers, and symbols. The most important part of responding to a hazardous materials incident is scene safety.</p>	<p>rectangle with text has a hover state.</p> <p>Each answer choice triggers a different VO response and triggers “Correct” or “Try Again” to appear in place of the previous text, depending on the answer chosen. Learners can freely click among the answer choices to get feedback until they select the correct answer. Audio should not overlap, meaning if the learner clicks on one answer choice and the audio starts playing, it should stop if they click on another answer choice.</p> <p>When the audio completes on the CORRECT answer (right), this slide will auto advance to Slide 1.6.</p> <p>The Next button will be hidden on slides this slide.</p>
<p>Notes:</p>			

Slide 1.6 Menu Title: Learning Objectives			Objective: [#]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Same background as slide 1.4, so appears as if we are coming back to where we left off before preassessment question.</p> <p>Anton avatar has 3 poses: 1st with same upset expression as when we left him in slide 4; then he listening expression facing right; and then a smile expression facing left</p> <p>Maria avatar has 2 poses: First facing left with a concerned expression; then she changes to a smile expression with an extended arm gesture to the left.</p> <p>The learning objectives will appear on the right half of the slide, to the left of both avatars, which will be facing the learning objectives. The objectives text will appear in a similarly styled rectangle as the preassessment question. The rectangle should use multiple palette colors.</p>	<p>[Slide Title] Learning Objectives</p> <p>[Maria callout] Listen, Anton...You are right to think about the color of the placard, but there are a few other important things to keep in mind when you are responding to a hazardous material call. Let's work together to prepare you for what to look for before we get the next call.</p> <p>In this module, you will learn to</p> <p>[Learning Objectives] ...define what a hazardous material is. ...summarize the safety steps that need to be taken before responding to a hazardous materials call</p> <p>[Directions] Select the Next button to continue.</p>	<p>[Maria] [1] Listen, Anton, I know you have been working really hard trying to memorize these placards, let me help you.</p> <p>I don't want you to experience this frustration again.</p> <p>Let's start at the beginning before we even get to the call and learn some basics to help you be successful and safe!</p> <p>By the time we finish, you'll know how to:</p> <p>...define what a hazardous material is</p> <p>...summarize the safety steps that need to be taken before responding to a hazardous materials call</p> <p>[Narrator] [2] Click on the next button to learn more.</p>	<p>Maria avatar begins in concerned pose. Anton begins with an upset expression.</p> <p>When the VO says "I don't want you to experience..." Anton avatar changes to a listening/content expression.</p> <p>When VO says "Let's start at the beginning..." Maria avatar changes to smile with extended arm gesturing to left.</p> <p>As the VO says, "By the time we finish..." Maria avatar moves along a motion path to the left to be closer to Anton. Anton avatar flips to face the left and his expression changes to a smile.</p> <p>On the left side of the screen, the learning objectives text will fade in timed with the VO.</p> <p>Directions to select Next will appear on bottom right corner of the screen and fade in timed with the VO</p>
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Slide 1.7 Menu Title: What is a Hazardous Material? The Challenge			Objective: 1
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Background is one of the palette colors (lightened).</p> <p>Anton avatar is on the left and Maria is on the right. They are situated at the bottom of the screen so that only approximately 2/3 of their bodies are shown on the screen.</p> <p>Maria avatar is explaining. Anton avatar is listening.</p> <p>There are four graphics displayed: OSHA, DOT, EPA and the U.S.NRC</p> <p>Examples of hazardous materials fade in timed with narration.</p>	<p>[Slide Title] What is a Hazardous Material?</p> <p>Click on each agency to reveal their definition of what a hazardous material is.</p> <p>[graphic of Department of Transportation]</p> <p>“...any chemical or item that is a risk to public safety or the environment when being transported or moved in commerce...”</p> <p>[graphic of Environmental Protection Agency]</p> <p>“...any item or chemical which can cause harm to people, plants, or animals when exposed by spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching,</p>	<p>[Narrator]</p> <p>The best place to start is understanding what hazardous materials are. Let’s work towards a definition that is practical in the field.</p> <p>When defining a hazardous material the challenge is that there is not 1 consistent definition and not 1 consistent approach. You can get different definitions depending on the source. Looking at all of these there are some common traits.</p> <p>When you are ready, click on each picture to read the definition applied to a hazardous material from that agencies perspective. Can you spot the differences?</p> <p>[Anton]</p> <p>Maria, that is a lot to remember!</p> <p>[Maria]</p> <p>You are right, Anton. Fortunately, we have a practical definition that we can all agree on.</p>	<p>This slide will have the avatars set to the left of an area large enough to display the logos of four agencies that have slightly different definitions of what a hazardous material is. The logos fade in timed with the narration.</p> <p>The learner is instructed to click on each logo to reveal the agencies definition. The narration will point out the slight difference.</p> <p>Each logo once clicked, takes the learner to a new layer. Once the definitions are completed the slide will automatically advance to</p> <p>There are two tabs dividing the text block. One is labeled definition and the other is labeled Practical Definition. The learner is restricted from clicking on the tabs until the narration gives instructions to click on the first tab. The second tab is restricted until the narration is complete on the first.</p>

	<p>dumping, or disposing into the environment.”</p> <p>[Graphic of OSHA]</p> <p>“...any substance or chemical which is hazardous to people’s health or is physically hazardous.”</p> <p>[graphic of U.N.NRC]</p> <p>“...any material that produces ionizing radiation.”</p> <p>Click next when you are ready to move on.</p>		<p>As the narration begins, there is a chart displaying a number of hazardous materials placards information. This fades out with narration and is replaced with an official definition.</p> <p>As the narration continues, the examples are displayed as pictures. The learner is invited to click on each picture to reveal a definition of the material.</p> <p>As the narration continues, Maria explains that there is also a better definition to use when responding as a first responder.</p> <p>This definition fades in timed with the narration.</p>
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Slide 1.8 Menu Title: Ignoring the signs			Objective: 1
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Background is one of the palette colors (lightened). This slide has a lot of open space leaving room for a video and some</p>	<p>What are the consequences or poor planning?</p>	<p>[Narrator] Now that we have a practical definition of what a hazardous material is, let’s take a look at the tragic results of lack of</p>	<p>This slide has a title question meant to get the learner to think and see the impact of poor hazard awareness. The</p>

<p>introductory facts about when and where this incident occurred.</p>	<p>Incident Date: April 17, 2013</p> <p>Incident Location: West, Texas</p> <p>Hazard Involved: Fertilizer grade ammonium nitrate</p>	<p>training and hazard awareness and how it transformed the lives of so many in West, Texas in 2013..</p> <p>Click play to view the video.</p>	<p>learner is given some brief background about where the incident took place and the time.</p> <p>The learner controls the playback of the video. Following the video the learner is advanced to the next slide automatically.</p>
<p>Notes:</p>			

Slide [1.8]/Menu Title: Safety Precautions			Objective: 2
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Nearly the entire slide is taken up by an accordion interaction. Five tabs displaying the tab titles take up about 1/3 to 1/4 of the accordion area, and are shown vertically, leaving the remaining space for content to show within the accordion frame.</p> <p>The closed accordion will show on the screen to start.</p> <p>When the learner clicks on each tab, it will pop to its open position and display the information for that tab.</p>	<p>[Slide Title] Safety Precautions [Numbered Tabs]</p> <ol style="list-style-type: none"> 1. Approaching the scene 2. Secure the scene 3. Identify the hazard 4. Assess the situation 5. Respond <p>[Subtitle, shown on closed accordion]</p> <p>The five safety precautions to consider</p>	<p>[Narrator]</p> <p>First responders have one of the most stressful jobs in the world. They go from resting to responding in seconds. Heart rates increase, adrenalin rushes into the system, and thoughts rush through their brains at speeds the average population does not experience. In an emergency, it is imperative that first responders recognize that they are the help. They need to respond in a safe manner with the understanding that if they don't make it to the call, or if they make a mistake, that they then can become a secondary call that requires those responding to the original call to shift resources and now respond to a second</p>	<p>During the first part of the narration, a stock video will play inside the area that is the "cover" of the closed accordion. The video should be related to the theme of firefighter safety/training/responding to a call.</p> <p>When the VO reaches, "Technology has improved..." the video will begin to fade out. The video will end when the VO reaches, "...it is important to understand..."</p>

<p>Each tab should be a different palette color. The layer associated with each tab, and therefore the “open” section of each accordion area should have the same background palette color as the tab for that section.</p>	<p>before and during a hazardous materials call. [Directions, shown on closed accordion.] Select each tab to learn more.</p>	<p>call. Technology has improved the first responders’ ability to have access to information that was not always available in the past. It is important to understand the steps to take before you put on your gear and jump in the fire truck. Failure to plan, is planning to fail. Click on each tab to learn the steps you should take and practice into your memory so that you respond safely each time to a hazardous situation.</p>	<p>The title text and direction text will fade in timed with the VO reference. The learner will be able to click on the tabs, which will open the accordion and show the corresponding slide layer. When the learner clicks on each tab, the accordion can “pop” open at the corresponding layer, or it can glide open. Each layer will show the accordion in the open position and have content related to the tab title. The Next button will be restricted until all 5 of the tabs have been selected and all 5 layers have been viewed. When the learner clicks on the next button, it will jump to slide 1.9.</p>
<p>Notes:</p>			

Slide [1.8a]/Menu Title:			Objective: 2
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Unique image related to tab content shown on left side within open accordion. Text is to the right of the image.</p>	<p>[Subtitle] Approaching the Scene</p>	<p>When arriving on the scene, it is important to understand that you are beginning to “size up” the scene. You should be aware of your surroundings</p>	<p>Learner can select another tab from this layer or be automatically brought back to the base layer to select a new</p>

<p>Subtitle displayed prominently within open section of accordion. Bullet points listed below.</p>	<ul style="list-style-type: none"> • Approach cautiously from upwind, uphill, and/or upstream • Stay clear of vapor, fumes, smoke, and spills. • Keep vehicle at a safe distance from the scene 	<p>including the weather, wind direction, and other conditions that exist that may pose a danger to you. Make sure you observe the scene from a safe distance using binoculars if necessary before you enter the area.</p>	<p>tab, depending on how the accordion interaction is developed.</p>
<p>Notes:</p>			

Slide [1.8b]/Menu Title:			Objective: 2
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Unique image related to tab content shown on left side within open accordion. Text is to the right of the image.</p> <p>Subtitle displayed prominently within open section of accordion. Bullet points listed below.</p>	<p>[Subtitle]</p> <p>Secure the Scene</p> <ul style="list-style-type: none"> • Isolate the area. • Protect yourself. • Protect others 	<p>Once you have assessed the situation from a distance, it is time to secure the scene. Move bystanders away. It is important to do this keeping your own protection in mind. Utilize the resources you have such as your PA system to alert and protect members of the public from dangers.</p>	<p>Learner can select another tab from this layer or be automatically brought back to the base layer to select a new tab, depending on how the accordion interaction is developed.</p>
<p>Notes:</p>			

Slide [1.8c]/Menu Title:			Objective: 2
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:

<p>Unique image related to tab content shown on left side within open accordion. Text is to the right of the image.</p> <p>Subtitle displayed prominently within open section of accordion. Bullet points listed below.</p>	<p>[Subtitle]</p> <p>Identify the Hazards</p> <ul style="list-style-type: none"> • Placards • Container Labels • Shipping papers • Rail car and Road Trailer Identification Chart • Safety Data Sheets • Knowledge of persons on scene • Emergency Response Guidebook guide page 	<p>Once the initial size up is complete and you have secured the scene, it is time to identify what hazard you are dealing with. There are several methods to do this. Hazardous placards, which we will go over in more detail in the next part of this training), labels on shipping containers, shipping papers that are located within the vehicle or carried by the driver, charts that have pictures giving you a visual aid as to what the trailer may contain, and safety data sheets are all ways that may be available. It is important to understand that these are all possible resources but will not always be available.</p> <p>Always remember that you should look for a person that is already on the scene that may have knowledge of what is being carried and that you have the Emergency Response Guidebook to assist you.</p>	<p>Learner can select another tab from this layer or be automatically brought back to the base layer to select a new tab, depending on how the accordion interaction is developed.</p>
<p>Notes:</p>			

Slide [1.8d]/Menu Title:		Objective: 2	
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Unique image related to tab content shown on left side within open accordion. Text is to the right of the image.</p>	<p>[Subtitle]</p> <p>Assess the situation.</p> <ul style="list-style-type: none"> • Fire, spill, or leak? 	<p>Assessing the situation takes a team of trained professionals. Sizing up your scene will require you to identify what hazard you are dealing with. Is there a fire, a spill, or a leak? What are the</p>	<p>Learner can select another tab from this layer or be automatically brought back to the base layer to select a new tab, depending on how the</p>

<p>Subtitle displayed prominently within open section of accordion. Bullet points listed below.</p>	<ul style="list-style-type: none"> • Weather conditions • Terrain • Who/what is at risk • Actions to take. • Resources required. • Obtain help 	<p>weather conditions at the scene? What type of terrain are you dealing with? Is it flat ground, uphill, or downhill are some of the questions you might ask here. Who or what is at risk? Is it people that are in the most danger, property, or is it the environment? Each one may require a different action such as evacuation of the area, sheltering in place, or even diking the area if you are dealing with an environmental hazard. Consider the human and equipment resources you need to control the scene. More is always better than less. Finally, get help from qualified agencies and personnel. Make sure your department and the local agencies are aware of the situation and have trained personnel responding to the situation.</p>	<p>accordion interaction is developed.</p>
<p>Notes:</p>			

Slide [1.8e]/Menu Title:			Objective: 2
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Unique image related to tab content shown on left side within open accordion. Text is to the right of the image.</p> <p>Subtitle displayed prominently within open section of accordion. Bullet points listed below.</p>	<p>[Subtitle]</p> <p>Respond</p> <ul style="list-style-type: none"> • Wear appropriate PPE. • Do not become part of the problem. 	<p>After carefully approaching the scene, securing the scene, identifying the hazards, and assessing the situation, only now can you respond. It is important to understand that you must always consider the hazard when determining the appropriate Personal Protective Equipment. Some hazards require traditional bunker gear, while others may</p>	<p>Learner can select another tab from this layer or be automatically brought back to the base layer to select a new tab, depending on how the accordion interaction is developed.</p>

	<ul style="list-style-type: none"> • Establish proper communication. • Reassess frequently. • Safety first 	<p>require a hazardous materials suit. It is also important to understand that though your first reaction may be to rush in and rescue people, you must not do this if you can place yourself in a situation that makes you part of the problem. This is hard as a first responder, but important. You did not create the problem. Do not become part of it. Ensure that all lines of communication are established properly such as a command post and lines to your local government agencies. As the situation changes, you will need to communicate these changes quickly. Remember, safety of everyone, including yourself is the number one priority.</p>	
<p>Notes:</p>			

Slide 1.9 Menu Title: Knowledge Check			Objective: 2
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Anton and Maria are arranged on a slide with a neutral background. Between them conversation bubbles are displayed on the screen displaying their conversation.</p> <p>Maria is smiling and talking. Anton is smiling and talking</p>	<p>[Slide Title] Knowledge Check</p> <p>[Anton Caption] That's a lot of information to think about. I wasn't even thinking about all of the steps I needed to take before I rushed in to help those people.</p>	<p>[Anton] That's a lot of information to think about. I wasn't even thinking about all the steps I needed to take before I rushed in to help those people.</p> <p>Now I understand that responding to a hazardous materials call is so much more than just getting on the fire truck and rushing in to be a hero.</p>	<p>Slide automatically advances to the next slide when the timeline ends on this slide.</p>

	<p>Now I understand that responding to a hazardous materials call is so much more than just getting on the fire truck and rushing in to be a hero.</p> <p>[Maria caption] You're right Anton! There are a lot of safety considerations before you even arrive at the scene. Knowing these steps will help you respond in a manner which not only protects the property, people, or environment, but also protects you and the other first responders on the scene.</p> <p>Knowing this, why don't we go over some of the things you didn't consider the first time to make sure your next response is effective and safe?</p>	<p>[Maria] You're right Anton! There are a lot of safety considerations before you even arrive at the scene. Knowing these steps will help you respond in a manner which not only protects the property, people, or environment, but also protects you and the other first responders on the scene.</p> <p>Knowing this, why don't we go over some of the things you didn't consider the first time to make sure your next response is effective and safe?</p>	
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Notes:

Slide 1.10 Menu Title: KC [Hidden from menu]			Objective:
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Background is one of the palette colors (lightened).</p> <p>Anton avatar is on the left and Maria is on the right. They are situated at the bottom of the screen so that only approximately 2/3 of their bodies are shown on the screen.</p> <p>The avatars are set far apart leaving room for five large stock images that reflect the five steps of what a first responder should do before rushing into a scene. The images serve as hints and are labeled STEP 1, 2, 3, 4, and 5 below the picture. They are positioned toward the lower portion of the screen. Step 1 is on the left and step 5 are on the right. These</p>	<p>[Knowledge Check]</p> <p>[Directions] Drag the images below to the corresponding step they should be performed in below.</p> <p>[Drag Items, and pictures; answers are provided in brackets but should not be included in slide text]</p> <ul style="list-style-type: none"> • Image for step 1 [approach cautiously] • Image for step 2 [secure the scene] • Image for step 3 [Identify the hazard(s)] • Image for step 4 [Assess the situation] • Image for step 5 [Respond] 	<p>[Narrator] Let's help Anton respond safely to a hazardous materials call. Below are five images labeled step 1 through 5. Drag the steps at the top of the screen into the correct order Anton should perform them into the images at the bottom.</p> <p>Click the submit button when you are finished.</p>	<p>This slide is a freeform drag-and-drop KC interaction. The 5 steps of responding to a hazardous materials situation are situated at the top of the screen stacked on top of each other in random order. They will be set in rectangles in one of the palette colors.</p> <p>Allow 2 attempts in the form settings.</p> <p>Arrange the dropped items so that once they are dropped the learner can see which step they dropped where.</p> <p>Each drag item should have a correct and incorrect state. Correct states appear as normal states. Incorrect states appear red. Delay the item states until the interaction is submitted.</p> <p>When the learner clicks submit it will show either the correct or try again feedback layer on the first attempt.</p>

			<p>Dropped items do not reset for the second attempt. The learner will drag the items from where they were dropped.</p> <p>After the second attempt the learner will see either the correct or incorrect layer.</p>
Notes:			

Slide [1.10a]/Menu Title:			Objective: [#]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Anton and Maria avatars are arranged on the slide layer the same way they were arranged on the base layer. Maria's expression changes to explaining.</p> <p>The steps are shown in the correct order.</p> <p>Between the avatars are the caption for Maria and the Continue button with the slide text directions.</p>	<p>[Slide Title] Correct</p> <p>[Directions] Click continue</p> <p>[Maria Caption] Great job! You've got it!</p>	<p>[Maria] Great Job! You've got it!</p> <p>[Narrator] Click the continue button to learn about how to read an emergency placard.</p>	<p>The correct and incorrect layers should be customized. Do not use the built-in buttons and textboxes.</p> <p>The continue button jumps to slide 1.12</p>
Notes:			

Slide [1.10b]/Menu Title:			Objective: [#]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:

<p>Anton and Maria avatars are arranged on the slide layer the same way they were arranged on the base layer. Maria's expression changes to explaining.</p> <p>The steps are shown in the correct order</p> <p>Between the avatars are the caption for Maria and the review button with the slide text directions.</p>	<p>[Slide Title] Incorrect</p> <p>[Directions] Click Review</p> <p>[Maria Caption] Let's practice a little more.</p> <p>[buttons] Review</p>	<p>[Maria] Almost. Since safety is the most important concept to understand, why don't we review before moving on.</p> <p>[Narrator] The correct answers are shown here. Click on the Review button to review the steps you should take when responding to a hazardous materials call safely.</p>	<p>The correct and incorrect layers should be customized. Do not use the built-in buttons and textboxes.</p> <p>The Review button jumps to slide 1.11</p>
<p>Notes:</p>			

Slide [1.10c]/Menu Title:			Objective: [#]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Anton and Maria avatars are arranged on the slide layer the same way they were arranged on the base layer. Maria's expression changes to explaining.</p> <p>The steps are shown in the correct order</p> <p>Between the avatars are the caption for Maria and the Continue button with the slide text directions.</p>	<p>[Slide Title] Try Again</p> <p>[Directions] Click Try Again</p> <p>[Maria Caption] It looks like you are starting to get it!</p>	<p>[Maria] It looks like you are starting to get it!</p> <p>[Narrator] Click the continue button to learn about how to read an emergency placard.</p>	<p>The correct and incorrect layers should be customized. Do not use the built-in buttons and textboxes.</p> <p>The try again button uses the same trigger that was originally on the built in button on this layer</p> <p>The continue button jumps to slide 1.11</p>
<p>Notes:</p>			

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Slide [1.11]/Menu Title: Review [hide from menu]			Objective: [#]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Anton and Maria avatars are arranged on the slide layer the same way they were arranged on the base layer. Maria's expression changes to explaining. Anton's expression changes to listening.</p> <p>Set between them are boxes labeled Step 1, Step 2, Step 3, Step 4, and Step 5.</p> <p>There is a red fire siren at the top of the page near the directions.</p> <p>The steps are shown in the correct order</p> <p>Between the avatars are the caption for Maria and the Continue button with the slide text directions.</p>	<p>[Slide Title] Review</p> <p>[Directions] Click on the steps you would like to review. Click on the red siren when you are finished reviewing.</p> <p>[Step 1 Card Front] Step 1</p> <p>[Step 1 card back] Approaching the Scene</p> <ul style="list-style-type: none"> • Approach cautiously from upwind, uphill, and/or upstream • Stay clear of vapor, fumes, smoke, and spills. <p>Keep vehicle at a safe distance from the scene.</p> <p>[Step 2 Card Front]</p>	<p>[Narrator] Click on the cards that you would like to review. When you are finished, click on the red fire siren.</p>	<p>[Show layer 1.11a when the timeline starts on this layer]</p> <p>This slide has a click to reveal interaction.</p> <p>The learner can click on each rectangle, and it will reveal the bulleted list of steps related to that category.</p> <p>There will be a red siren on the top of the screen.</p> <p>When the learner clicks on the siren a trigger will bring the learner to layer 1.11b</p> <p>The next button is hidden.</p>

	<p>Step 2</p> <p>Step 2 Card [Back]</p> <p>Secure the Scene</p> <ul style="list-style-type: none">• Isolate the area.• Protect yourself. <p>Protect others.</p> <p>[Step 3 Card Front]</p> <p>Step 3</p> <p>[Step 3 Card Back]</p> <p>Identify the Hazards</p> <ul style="list-style-type: none">• Placards• Container Labels• Shipping papers• Rail car and Road Trailer Identification Chart• Safety Data Sheets• Knowledge of persons on scene <p>Emergency Guidebook guide page</p> <p>[Step 4 Card Front]</p> <p>Step 4</p> <p>[Step 4 Card Back]</p>		
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	<p>Assess</p> <p>Assess the situation.</p> <ul style="list-style-type: none">• Fire, spill, or leak?• Weather conditions• Terrain• Who/what is at risk.• Actions to take.• Resources required. <p>Obtain help.</p> <p>[Step 5 Card Front]</p> <p>Step 5</p> <p>[Step 5 Card Back]</p> <p>Respond</p> <ul style="list-style-type: none">• Wear appropriate PPE.• Don't become part of the problem.• Establish proper communication.• Reassess frequently. <p>Safety first</p>		
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Notes:			

Slide [1.11a]/Menu Title: Review [hide from menu]			Objective: [#]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Anton and Maria avatars show through from the base layer. They are not placed on this layer. The steps from the base layer are hidden.</p> <p>[Place the objects from the base layer on this layer]</p> <p>Maria's conversation is in the callout shapes.</p>	<p>[Slide Title]</p> <p>Review</p> <p>[Maria Caption]</p> <p>Let's go back over these steps in order. You will get it!</p>	<p>[Maria]</p> <p>Let's go back over these steps in order. You will get it!</p>	<p>The caption text will be displayed on the layer with the VO audio.</p> <p>This layer will automatically hide when the timeline ends, showing the base layer of slide 1.11.</p>
Notes:			

Slide [1.11b]/Menu Title: Review [hide from menu]			Objective: [#]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Anton and Maria are in the same position. The assets are on the base layer of the slide and showing through on this layer, as with layer 1.10a</p>	<p>[Slide Title]</p> <p>Review</p> <p>[Directions]</p> <p>Select the Next button to continue</p> <p>[Anton Caption]</p>	<p>[Anton]</p> <p>[1] This is starting to make much more sense to me now. Thank you for the review, Maria.</p> <p>[Maria]</p> <p>[2] That's good to hear, Anton! Let's review.</p>	<p>The text directions to select the next button will appear toward the end of the timeline.</p> <p>The next button will be displayed when the timeline ends on this layer.</p>

	<p>This is starting to make much more sense to me now. Thank you for the review, Maria.</p> <p>[Maria Caption]</p> <p>That's good to hear, Anton! Let's review.</p>		
<p>Notes:</p>			

Slide 1.12 Menu Title: Summary			
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>This slide does not have the standard top/bottom border. Rather, the Summary title is placed at the very top left of the slide and the rest of the slide is framed with a rectangle with all assets set within the frame.</p> <p>Maria avatar will appear on the left of the slide gesturing to the right. A caption bubble displaying her VO text will display to her right.</p> <p>The Summary Points will appear on the right half of the slide, to the right of Maria avatar and caption, so she is facing the summary points.</p>	<p>[Slide Title] Summary</p> <p>[Maria caption] It's time for your assessment. You'll answer 5 questions. You must earn 80% to pass. Here's a summary of what you learned...</p> <p>[Summary Points] Safety: Approach the scene only after: Securing Identifying hazards Assessing the situation Obtaining help</p>	<p>[Maria] [1] It's time for your assessment. You'll answer 5 questions. You must earn 80% to pass. Here's a summary of what you learned...Scene safety is priority number one. Before you can respond to the situation, you must ensure that the scene is safe. Then, approach the scene upwind. Never place yourself downwind from the incident. Secure the scene. Identify the hazard you are dealing with and then obtain the help you need. Call in as many resources as you need.</p> <p>Remember that you don't need to memorize the placards. Understanding the basic four-color placarding system is key to understanding what hazard you are dealing with. Repetition, practice, and tabletop</p>	<p>This slide has an entrance Fade transition of 1.25 seconds.</p> <p>The Take the Quiz Button fades in timed with the VO.</p> <p>The Next button is hidden on this slide.</p> <p>When the learner clicks the Take the Quiz button, advance to Slide 1.13.</p>

<p>The summary text will appear in the same styled rectangle as the learning objectives. The rectangle should use multiple palette colors, same as with LO.</p> <p>A button with the same formatting as the Review and Continue buttons in the KC will appear below the Summary Points.</p>	<p>Placards: Don't memorize Every Apparatus has an updated ERG Every member responding is fully trained and competent in using the book</p> <p>[button] Take the Quiz</p>	<p>exercises all play an important role in training your new members.</p> <p>[Narrator] [2] When you're ready, click on the "take the quiz" button.</p>	
<p>[Notes:</p>			

Slide 1.13 Menu Title: [All assessment slide titles should be hidden from the Menu]			
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>All 5 assessment question slides should have the same layout and formatting.</p> <p>This slide does not have the standard top/bottom border. Rather, the Assessment title is placed at the very top left of the slide. The rest of the slide uses a color from the palette as a solid background.</p> <p>Anton avatar is shown on the right side of the screen facing to the left, as if to indicate that he is taking the quiz along with the learner.</p>	<p>[Slide Title] Assessment</p> <p>[Directions] Select the Best answer choice and click Submit.</p> <p>[Question] Before Anton responds to a hazardous materials call, what should he have a firm understanding of?</p> <p>[Answer Choices] 1. He should always be ready to put water on the fire as soon as possible.</p>	<p>[Narrator] Help Anton respond appropriately to the hazardous materials call. Select the best answer choice and click the submit button when you are finished.</p> <p>Before Anton responds to a hazardous materials call, what should he have a firm understanding of?</p>	<p>Score by question with 1 attempt for each quiz question as the learner progresses through the quiz. They will be able to Retake the entire quiz at the end if they do not pass.</p> <p>Results slide 1.18; graded quiz slide – multiple choice.</p> <p>When the learner clicks Submit, submit multiple choice and advance to next slide.</p> <p>The learner should not get <i>immediate</i> feedback with</p>

<p>The directions appear on the top of the slide to the right of the title bar.</p> <p>The question text appears larger than the multiple-choice answer options, which are displayed below the question and to the left of Anton avatar.</p>	<p>Water always makes the situation better.</p> <p>2. Anton should make sure he does a complete size-up of the scene before entering. He should avoid rushing in above all else. [CORRECT ANSWER</p> <p>3. Anton should get as close to the scene as possible so that he can identify the emergency hazard he is dealing with.</p>		<p>Correct or Incorrect feedback layers. They should answer all the questions sequentially FIRST in the graded assessment, then receive their score on the Results page. If they do not pass, they can come back and review the quiz.</p>
<p>Notes:</p>			

Slide 1.14 Menu Title: [All assessment slide titles should be hidden from the Menu]			
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Same visual display for slides, 1.13, 1.14, 1.15, 1.16, and 1.17</p>	<p>[Slide Title] Assessment</p> <p>[Directions] Select the Best answer choice and click Submit.</p> <p>[Question] When responding to a hazardous materials call, how should Anton approach the scene?</p> <p>[Answer Choices]</p>	<p>[Narrator] When responding to a hazardous materials call, how should Anton approach the scene?</p>	<p>Same settings for slides 1.13, 1.14, 1.15, 1.16, and 1.17</p>

	<p>1. Anton should pay no attention to how he approaches the scene. The most important thing is getting as close to the incident as possible as quickly as possible.</p> <p>2. Anton should approach the scene from upwind, upstream, and/or uphill always paying attention to where he is in relation to the incident. [CORRECT ANSWER]</p> <p>3. Anton should immediately respond to the victims and/or those who are being immediately impacted by the incident.</p>		
<p>Notes:</p>			

<p>Slide 1.15 Menu Title: [All assessment slide titles should be hidden from the Menu]</p>			
<p>Visual / Display:</p>	<p>Slide Text:</p>	<p>Narration / Voiceover:</p>	<p>Animation / Interaction:</p>
<p>Same visual display for slides, 1.13, 1.14, 1.15, 1.16, and 1.17</p>	<p>[Slide Title] Assessment</p> <p>[Directions] Select the Best answer choice and click Submit.</p>	<p>[Narrator] Anton has completed all of the necessary safety steps in the correct order and by looking at the emergency placard on the truck becomes confused. What should Anton do immediately?</p>	<p>Same settings for slides, 1.13, 1.14, 1.15, 1.16, and 1.17</p>

	<p>[Question] Anton has completed all of the necessary safety steps in the correct order and by looking at the emergency placard on the truck becomes confused. What should Anton do immediately?</p> <p>[Answer Choices]</p> <p>1. Since he sees red and associates that color with fire, he should immediately grab a fire hose.</p> <p>2. Anton should immediately grab the Emergency Response Guidebook to look up the appropriate response. [CORRECT ANSWER]</p> <p>3. Since Anton is having a difficult time seeing the placard, he should move closer to the scene.</p>		
<p>Notes:</p>			

<p>Slide 1.16 Menu Title: [All assessment slide titles should be hidden from the Menu]</p>			
<p>Visual / Display:</p>	<p>Slide Text:</p>	<p>Narration / Voiceover:</p>	<p>Animation / Interaction:</p>

<p>Same visual display for slides, 1.13, 1.14, 1.15, 1.16, and 1.17</p>	<p>[Slide Title] Assessment</p> <p>[Directions] Select the Best answer choice and click Submit.</p> <p>[Question] Why is it important for Anton not to rush into the scene without having the proper protective gear on or having established that the scene is safe to enter?</p> <p>[Answer Choices] 1. If Anton becomes injured because he did not practice safety or wear the appropriate protection he will divert resources away from the primary incident. [CORRECT ANSWER]</p> <p>2. Anton might miss victims that are not directly next to the scene.</p> <p>3. Anton should not rush because more help is coming and there is nothing Anton can do until they arrive on scene.</p>	<p>[Narrator] Why is it important for Anton not to rush into the scene without having the proper protective gear on or having established that the scene is safe to enter?</p>	<p>Same settings for slides, 1.13, 1.14, 1.15, 1.16, and 1.17</p>
<p>Notes:</p>			

Slide 1.17 Menu Title: [All assessment slide titles should be hidden from the Menu]			
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Same visual display for slides, 1.13, 1.14, 1.15, 1.16, and 1.17	<p>[Slide Title] Assessment</p> <p>[Directions] Select the Best answer choice and click Submit.</p> <p>[Question] Until you know exactly what material you are dealing with, which response below would be the best response?</p> <p>[Answer Choices] 1. If it is on fire, put it out. 2. Get as many victims away from the danger as quickly as possible 3. Assume all materials are hazardous until proven that they are not. [CORRECT ANSWER}</p>	<p>[Narrator] Until you know exactly what material you are dealing with, which response below would be the best response?</p>	Same settings for slides, 1.13, 1.14, 1.15, 1.16, and 1.17
Notes:			

Slide 1.18 Menu Title: Results [Hide from Menu]			
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:

<p>Color from palette is shows as background on slide.</p>	<p>[Slide Title] Results</p> <p>Your Score: XX% Passing Score: YY%</p>	<p><i>[Narration only on layers]</i></p>	<p>Use a Result side to show Success layer 1.18a when timeline starts if results are equal to or greater than the passing score.</p> <p>Show Failure layer 1.18b when timeline starts if results are less than passing score.</p> <p>Base layer will be visible (show through) from Success or Failure slide layers.</p> <p>Results variable reference shows the percent score only. Do not show the points variable reference. Built in graded quiz variable reference displays learner score where XX appears on slide</p> <p>80% to pass shown where YY appears on slide</p>

Slide 1.18a Menu Title:			
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
<p>Anton and Maria avatars appear, both happy.</p> <p>Green checkmark next to slide text</p>	<p>Congratulations, you passed.</p> <p>[button] Continue</p>	<p>[Narrator] Thank you for taking the quiz. Congratulations! You passed. You can review your results by clicking on the review quiz button. If you are satisfied with your results and ready to move on, please click on the continue button.</p>	<p>Review button: shows correct/incorrect response when reviewing</p> <p>Continue button jumps to Slide 1.19</p>

Notes:			

Slide 1.18b Menu Title:			
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Anton and Maria avatars appear, both disappointed/concerned. Red "X" next to slide text	You did not pass. [buttons] Retake Quiz Review Quiz	[Narrator] Thank you for taking the quiz. Unfortunately, you did not pass. You can review your results by clicking on the review quiz button. When you are ready to try again, please click on the retake quiz button.	Retake button: resets results slide and jumps to Slide 1.13 Review button: shows correct/incorrect response when reviewing
Notes:			

Slide 1.19 Menu Title: Congratulations			
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
This slide has a similar design as the Welcome slide. No top/bottom border Background image: Photographic image of a group of firefighters walking back from a scene happily.	[Slide Title] Congratulations! You completed the course.	Congratulations on completing the introduction to hazardous materials and scene safety course. Now you have the base knowledge necessary to safely respond to a hazardous materials call.	

Course title set in semitransparent shape overlaying the background image			
Notes:			