

Module Title: Preventing and Responding to Heat Stress

Target Audience: Electrical Powerline Workers who will be working in high temperature and high humidity in the spring and summer months.

Learning Objectives:

1. Describe the negative effects of heat stress.
2. Identify risk factors that contribute to heat stress.
3. Identify preventative measures that can be taken to avoid heat stress.
4. Recognize the symptoms of heat stress.
5. Determine proper treatment for heat stress symptoms.

Seat Time: 30 minutes

Outline:

- Welcome / Navigation
- Learning Objectives
- Dangers of Heat Stress
- Risky Conditions
- Knowledge Check
- Preventing Heat Stress
- Knowledge Check
- Symptoms of Heat Stress
- Knowledge Check
- Treating and Responding to Heat Stress Symptoms
- Course Summary
- Quiz
- Congratulations

Font:

Lato (body; captions)

Lato Semibold (sub headings)

Lato Black (titles/headings)

Color Palette:



Custom Borders:



Avatar:

1 avatar (Anton) to represent crew supervisor

Directions:

Feedback should be provided either:

- within the notes section in the table below, or
- via comments within this document

Specific feedback requested regarding accuracy and scope of content as related to the working conditions of electrical linemen.

Review cycle completion date: Wednesday, January 3, 2024

Global Comments:

- Slide size 16:9 (960x540)
- Classic player
- Menu sidebar on left
- Player controls include volume and seekbar
- Unless otherwise noted, all slides will include the custom borders, noted above
- All photographic images included in asset library
- All avatar poses included in asset library.
- All icons included in asset library.
- Assessment slides are indicated in **orange** slide layer titles below.

Slide: 1.1 / Menu Title: Welcome			
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
No top/bottom border Background Image: Photographic image of electrical power line towers on the left, with bright orange background covering the entire slide. Course title is left-aligned just to the right of the image of the electrical towers. “Preventing, Recognizing, Responding to” are in Lato Semibold, 36 pt., with each verb on a separate line. “and” is in Lato Light text, 36 pt. “Heat Stress” is in Lato Black, bolded text, 48 pt, on a separate line, with horizontal Random Bars animation. Course description is italicized Custom Start and Navigation buttons	[Slide Title] Preventing, Recognizing, and Responding to Heat Stress A course for electrical powerline installers and repairers. [Buttons] Start Navigation	[Narrator] <i>Welcome to your guide to preventing, recognizing, and responding to heat stress for electrical powerline installers and repairers.</i> <i>Select the start button to begin the course or select the navigation button to learn how to move through the module.</i>	The title will fly in from the left timed with the VO reference. The course description will enter at the same time as “Heat Stress”. “Heat Stress” horizontal Random Bars animation will last from slide entrance until the end of the VO sentence, “...and repairers.” The Start and Navigation buttons will appear timed with the VO reference. The Start button will jump to slide 1.3 The Navigation button will jump to the next slide (slide 1.2)
Notes:			

Slide: 1.2 / Menu Title: Navigation			LO:
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Player shows Menu on the left. Background Image: Photographic image of an electrical lineman working at the top of a powerline pole, with blue sky in the background. Large black rectangle attached to the bottom of the top ribbon, aligned to the left of the slide,, with slide title in large, bold, white text. Caption bubbles with labels (orange bubbles, bordered in black, with white text) point to player features. Player feature labels/pointers have shadow effect. Large black arrow follows motion paths.	[Slide Title] Course Navigation [Captions] Next Prev Volume Replay Seekbar Pause / Resume Menu	[Narrator] <i>Please take a moment to review the player features so you feel comfortable navigating through the course.</i> <i>To move backward or forward in the course, select the previous or next button.</i> <i>If you need to adjust the volume, select the volume icon.</i> <i>Select the replay button to see the entire slide again.</i> <i>The seekbar can be used to review a portion of the slide.</i> <i>You can pause or resume by selecting this button.</i> <i>If you'd like to revisit a slide, you can use the menu on the left.</i> <i>Select the next button to begin the course.</i>	Caption bubbles with text labels will fade in timed with their reference in the audio. Large black arrow animate (grow, from top) onto the screen during the first sentence of the VO. Large black arrow will travel along motion paths from the center of the slide to the applicable player features, timed with their VO reference. Large black arrow will move to the caption for the next button in time with the VO to click to begin the course.
Notes:			

Slide: 1.3			
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
No top/bottom border Foreground image of desk with potted plant and edge of computer monitor Background images of corkboard with pinned announcements and reports; wall calendar Avatar Anton appears to be seated behind the desk, on the phone, expressing worry.. After the phone conversation, Avatar Anton will look at the learner for the remainder of the slide, with expressions/poses changing from concern, imploring, gesturing for emphasis, and frowning with frustration. Speech bubbles track VO.	[Anton on phone speech bubble] Wait, What? Okay, I'll head over there now. [Anton addressing learner speech bubble] I just found out that one of my guys had to be taken to the hospital because he passed out on the job site. That's the fourth time one of our crew members has been to the E R for heat stress in just the last two weeks, and we aren't even to the hottest part of the season yet. We have to do something to make sure our guys stay healthy – and safe!	[Anton on phone] [1] <i>Wait, What? Okay, I'll head over there now.</i> [Anton to learner] [2] <i>I just found out that one of my guys had to be taken to the hospital because he passed out on the job site.</i> [3] <i>That's the fourth time one of our crew members has been to the E R for heat stress in just the last two weeks,</i> [4] <i>and we aren't even to the hottest part of the season yet.</i> [5] <i>We have to do something to make sure our guys stay healthy – and safe!</i> [Narrator] <i>Select the next button to continue.</i>	The caption text will be displayed on the slide, timed with the VO audio. Slide begins with Anton on the phone, learning that one of his workers has been taken to the hospital. After the phone conversation, Anton addresses the learner for the remainder of the slide, with gestures and poses changing with each sentence, as indicated in narration/voiceover column. Next button disabled. Slide auto-advances to next slide.
Notes:			

Slide: 1.4 / Menu Title: Learning Objectives			
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Same photographic background as slide 1.1, with image of electrical lineman overlaid in front, on the left side of the slide, looking at the learner. Large black rectangle attached to the bottom of the top ribbon, aligned to the left of the slide,, with slide title in large, bold, white text (same formatting as slide 1.2)	[Slide Title] Learning Objectives [Bulleted List] • Describe negative effects • Identify risk factors • Identify preventative measures • Recognize symptoms • Determine proper treatment	[Narrator] <i>By the end of this course, you will be able to describe the negative effects of heat stress, identify risk factors that contribute to heat stress, identify preventative measures that can be taken to avoid heat stress for you or your crew, recognize the symptoms of heat stress, and determine the proper treatment for heat stress symptoms.</i>	Bulleted list of learning objectives will fly in from the left in time with the VO reference. Next button disabled until 0.5 seconds prior to VO completion.
Notes:			

Slide: 1.5 / Menu Title: Effects of Heat Stress			LO: 1 Effect of Heat Stress
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Photographic image of lineman on powerpole on left side of slide. Slide background is white. Text on right side of slide. 3 identical icons (dark orange caution triangle with exclamation point in the center) centered across white portion of slide, below the directions, with left icon left-aligned to beginning of	[Scrolling text] Powerline worker deadliest occupations overexertion and heat stress bodily reaction most common non-fatal accidents [Directions] Select each icon below.	[Narrator] <i>Your job as a powerline worker is one of the deadliest occupations in the United States. Overexertion and heat stress, along with the bodily reaction to each, are the most common non-fatal accidents.</i> <i>Select each icon below to learn more about the dangers of heat stress for powerline workers.</i>	Scrolling text enters and exits the screen using float in (up)/float out (up) animation in time with the VO. Directions to click each icon appears in time with the VO. 3 caution triangle icons appear with shape animation (out). Appearance of each icon is staggered, timed to begin/end with VO of directions to click each

directions. Icons change from orange to black when clicked.	[Directions (delayed)] Click Next to continue.		icon below. Icons are restricted from clicking until VO completes. Next button disabled until all 3 icons have been clicked and all 3 layers have been viewed. Icons change state to viewed (black). Delayed directions appear when all 3 layers have been viewed.
Notes:			

Slide: 1.5a			LO: 1 Effect of Heat Stress
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Base layer graphics (borders and photographic image on left of slide; 3 icons) remain visible so it appears that this layer is a part of the base layer. “Mental performance” and “decision-making capabilities” are Lato Semibold.	[Slide Title] Mental performance and decision-making capabilities are compromised when the body is suffering from heat stress and dehydration.	[Narrator] <i>Mental performance and decision-making capabilities are compromised when the body is suffering from heat stress and dehydration.</i>	This layer corresponds to the left (first) icon on the base layer. Icon changes from orange to black when clicked. Text fades in with VO. Icons are restricted from clicking until VO completes.
Notes:			

Slide: 1.5b			LO: 1 Effect of Heat Stress
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Base layer graphics (borders and photographic image on left of slide; 3 icons) remain visible so it appears that this layer is a part of the base layer. “Visual-motor tracking”, “short-term memory”, and “attention span” are Lato Semibold.	[Slide Title] Dehydration can lead to a decline in visual-motor tracking, as well as short-term memory and attention span	[Narrator] <i>Dehydration can lead to a decline in visual-motor tracking, as well as short-term memory and attention span.</i>	This layer corresponds to middle (second) icon on the base layer. Icon changes from orange to black when clicked. Text fades in with VO. Icons are restricted from clicking until VO completes.
Notes:			

Slide: 1.5c			LO: 1 Effect of Heat Stress
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Base layer graphics (borders and photographic image on left of slide; 3 icons) remain visible so it appears that this layer is a part of the base layer. “reduction in reaction time and arithmetic efficiency” are in Lato Semibold.	[Slide Title] Dehydration can lead to a reduction in reaction time and arithmetic efficiency. [Directions] Select next to continue.	[Narrator] <i>Dehydration can lead to a reduction in reaction time and arithmetic efficiency.</i>	This layer corresponds to right (third) icon on the base layer. Icon changes from orange to black when clicked. Text fades in with VO. Icons are restricted from clicking until VO completes. Next button is enabled when all 3 layers have been viewed.

			Next button will jump to next slide.
Notes:			

Slide: 1.6			LO: 1 Effect of Heat Stress
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Background identical to slide 1.5 so it appears that this slide is a part of slide 1.5. Slide title in Lato Black, centered at top of white side of slide. Bulleted text below title. Orange “caution” stamp appears towards the end of the slide timeline.	[Slide Title] Crucial Skills Necessary for Powerline Workers [Bulleted List] • mental performance • decision-making capabilities • visual-motor tracking • short-term memory • attention span • reaction time • arithmetic efficiency	[Narrator] <i>Mental performance, decision-making capabilities, visual-motor tracking, short-term memory, attention span, reaction time, and arithmetic efficiency are crucial skills necessary for powerline workers. When one or more of these skills are compromised, there is an increased risk of injury.</i>	Slide title is present from beginning. Bullet items float in (from bottom) in time with VO reference. Orange caution stamp enters with spin & grow (clockwise, full spin) for the duration of the VO final sentence. Orange caution stamp fades out at end of slide timeline, with bulleted list remaining visible and unobstructed.
Notes:			

Slide: 1.7 / Knowledge Check			LO: 1 Effect of Heat Stress
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:

Photographic image of lineman at top of powerline on the left (background) against blue sky, with lineman from slide 1.4 on the right (foreground), facing the learner. Image group has rounded corners and faded edges. White slide background. Slide title centered on slide, in front of background image. Drag and Drop Interaction: Word bank of 7 words, each within an orange rectangle, arranged vertically, just left of center. Drop targets are blue rectangles with blank lines, arranged vertically, just right of center. Each drop target rectangle is connected to an orange rectangle with the second word of the phrase.	[Slide Title] Knowledge Check: Describe Negative Effects of Heat Stress [Directions] Drag each term on the left to the correct blue box on the right in order to complete the list of skills that may be compromised due to heat stress. Select submit to check your answers. [Drag Items] visual reaction arithmetic short term mental decision attention [Adjoining Each Drop Target] performance - making capabilities - motor tracking memory span time efficiency	[Narrator] <i>Heat stress can have a detrimental effect on many skills necessary for powerline workers.</i> <i>Here you have a list of crucial skills that may be compromised as a result of heat stress. Drag the correct term from the word bank on the left into the correct blank in order to complete each of the seven skills.</i> <i>Select the submit button to check your answers.</i>	This is a free-form drag and drop interaction. Slide begins with background image group. Background image group fades to semi-transparent rectangle. Large slide title fades in, timed with VO introduction to KC. Slide title fades out as question directions and second semi-transparent rectangle fade in with VO. The terms with drop targets will fly in from the right and the drag items (word bank) will fly in from the left in time with VO. Allow 2 attempts in the form settings. Shuffle answers for each attempt. When the learner selects Submit, it will show either the correct or try again feedback layer on the first attempt. The answer choices reset and shuffle for the second attempt. After the second attempt, the learner will see either the correct or incorrect layer.
Notes:			

Slide: 1.7a /			LO: 1 Effect of Heat Stress
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Background Image: Screenshot of correct slide. Large blue feedback rectangle with rounded corners and white text, centered in the available space to the left of the completed drag and drop interaction. Blue Continue button with white text and shadow effect, centered below the blue feedback box.	[Blue Feedback Box] Great Job! [Button] Continue	[Narrator] <i>That's right! Mental performance, decision-making capabilities, visual-motor tracking, short-term memory, attention span, reaction time, and arithmetic efficiency are all crucial skills that can be negatively affected by heat stress.</i>	All built-in feedback components are either deleted or covered by the screenshot of the correct drag and drop response. Blue feedback rectangle enters with zoom animation. Continue button appears after VO completes. Continue button jumps to the next slide. Next button is hidden.
Notes:			

Slide: 1.7b /			LO: 1 Effect of Heat Stress
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Background Image: Screenshot of correct slide. Large blue feedback box with rounded corners and white text,	[Blue Feedback Box] Incorrect [Button]	[Narrator] <i>That's not quite right. Remember that mental performance, decision-making capabilities, visual-motor tracking, short-term</i>	All built-in feedback components are either deleted or covered by the screenshot of the correct drag and drop response.

centered in the available space to the left of the completed drag and drop interaction. Blue Continue button with white text and shadow effect, centered below the blue feedback box.	Continue	<i>memory, attention span, reaction time, and arithmetic efficiency are all crucial skills that can be negatively affected by heat stress.</i>	Blue feedback rectangle enters with zoom animation. Yellow border with soft edges appears as a highlight around each crucial skill rectangle, timed with VO reference. Continue button appears after VO completes. Continue button jumps to the next slide. Next button is hidden.
Notes:			

Slide: 1.7c /			LO: 1 Effect of Heat Stress
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Background Image: Screenshot of correct slide. Large blue feedback box with rounded corners and white text, centered in the available space to the left of the completed drag and drop interaction. Blur Try Again button with white text and shadow effect, centered below the blue feedback box.	[Blue Feedback Box] That's Not Quite Right [Button] Try Again	[Narrator] <i>That's not quite right! Remember that mental performance, decision-making capabilities, visual-motor tracking, short-term memory, attention span, reaction time, and arithmetic efficiency are all crucial skills that can be negatively affected by heat stress.</i> <i>Select the Try Again button to see if you can correctly complete the list of crucial skills that can be negatively affected by heat</i>	All built-in feedback components are either deleted or covered by the screenshot of the correct drag and drop response. Blue feedback rectangle enters with zoom animation. Yellow border with soft edges appears as a highlight around each crucial skill rectangle, timed with VO reference. Try Again button appears with VO reference and uses same trigger

		<i>stress.</i>	as built in Try Again button. Next button is hidden.
Notes:			

Slide: 1.8 / Menu Title:			LO: 2 [Identify Risk Factors]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Same layout as slide 1.3, but with Anton addressing the learner. Anton expressions indicate thought and concern. Speech bubbles track VO	[Anton thought bubbles] You know, it seems like there are days when it's hot, but none of the guys have trouble dealing with the heat, and then there are days when the guys really struggle. Days like today, when we have guys winding up in the hospital! There must be certain conditions we should pay more attention to so we can be better prepared and can avoid having our guys sick, or worse.	[Anton thinking] [1] You know, it seems like there are days when it's hot, but none of the guys have trouble dealing with the heat, [2] and then there are days when the guys really struggle. [3] Days like today, when we have guys winding up in the hospital! [4] There must be certain conditions we should pay more attention to so we can be better prepared and can avoid having our guys sick, or worse.	The caption text will be displayed on the slide, timed with the VO audio. Slide begins with Anton thinking. Expressions and poses change in time with VO, as indicated in narration/voiceover column. Next button disabled. Slide auto advances.
Notes:			

Slide: 1.9 / Menu Title: Risky Conditions			LO: 2 [Identify Risk Factors]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Yellow background with thermometer photographic image hovering on the left side of the slide. Large title text fills most of the available slide space. Weather Conditions right aligned and distributed vertically to fill most of the available slide space. Custom dark gray “Other Considerations” button.	[Slide Title] Risky Conditions [Weather Conditions] High Temperature High Humidity Direct Sun Exposure No Breeze [Button] Other Considerations	[Narrator] <i>You'll want to watch the weather forecast to determine how risky the conditions are for you and your crew. Weather conditions, such as temperature above 80 degrees, humidity levels above 30 percent, no cloud cover, and no breeze or wind can increase the risk of heat stress.</i> <i>Select the Other Considerations button to find out three more important factors to consider.</i>	Slide title fades in at beginning of timeline. Slide title exits with wheel (one spoke) animation timed with the end of first sentence in VO text Weather Conditions fly in from right in time with VO reference. “Other Considerations” button appears in time with VO reference. Next button disabled until layer 1.7a completes.
Notes:			

Slide: 1.9a			LO: 2 [Identify Risk Factors]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Base layer graphics are visible so this layer appears to be a part of the base layer. Other considerations right aligned and distributed/centered vertically to fill most of the	[Other Considerations] Heavy Physical Labor Poor Acclimation Low Liquid Intake	[Narrator] <i>In addition to weather conditions, be aware that heavy physical labor increases the risk of heat stress, as does not properly acclimating to hot working conditions. Finally, low</i>	Other considerations fly in from right in time with VO reference. Next button disabled until VO completes. Directions appear when VO

available slide space.	[Directions] Select Next to continue.	<i>liquid intake increases the risk of heat stress.</i>	completes. Next button jumps to next slide.
Notes:			

Slide: 1.10 / Menu Title: Knowledge Check			LO: 2 [Identify Risk Factors]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Photographic image of lineman at top of powerline on the left against blue sky, with lineman from slide 1.4 on the right, facing the learner. Image group has rounded corners and faded edges. White slide background. Slide title centered on slide, in front of background image. KC question and answer choices appear in front of background image.	[Slide Title] Knowledge Check: Identify Risk Factors [Directions] Select four risk factors that contribute to heat stress. [Answer Choices] High temperature (correct) Low humidity (incorrect) High humidity (correct) High liquid intake (incorrect) Not properly acclimating to the heat (correct) Low liquid intake (correct) Cloud cover (incorrect)	[Narrator] <i>Let's see how well you can identify risky conditions that can lead to heat stress. Select four risk factors that contribute to heat stress. When you have made your selections, select the submit button to check your answers.</i>	This is a multi-select KC interaction with 7 answer choices (4 correct). Slide begins with background image group. Background image group fades to semi-transparent rectangle. Large slide title fades in, timed with VO introduction to KC. Slide title fades out as question directions fade in from top in time with VO. The answer choices should be shuffled and fade in from bottom after VO directions. Allow 2 attempts in the form settings. When the learner selects Submit, it will show either the correct or try again feedback layer on the

			first attempt. The answer choices reset and shuffle for the second attempt. After the second attempt, the learner will see either the correct or incorrect layer.
Notes:			

Slide: 1.10a			LO: 2 [Identify Risk Factors]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
White background Background image from slide 1.7, with all risk conditions listed (weather conditions and other considerations), centered on the slide with rounded corners and faded edges, leaving large area of white slide background visible. "Yes!" entered in large text above the background image. Blue "Continue" button (same formatting for all KCs) at bottom right corner of slide.	[Slide Title] Yes!	[Narrator] <i>That's right. High temperature and humidity, direct sun exposure, no breeze, heavy physical labor, poor heat acclimation, and low water intake all contribute to an increased risk of heat stress.</i>	Delete the built-in buttons and textboxes on this layer and hide the remaining objects by using a white rectangle to cover objects on this slide. The background image will sit on top, so the correct and incorrect layers appear customized. Slide title enters with zoom animation (from center) Background image fades in. Continue button appears after VO completes. Continue button jumps to the next slide.

			Next button disabled on this slide layer.
Notes:			

Slide: 1.10b			LO: 2 [Identify Risk Factors]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Background image from slide 1.7, centered on the slide with rounded corners and faded edges, leaving large area of white slide background visible. Title is large, dark grey text centered to fill the yellow space on the background image.. Conditions in large, dark grey text, right aligned and centered vertically to fill the yellow space on the background image. Blue “Continue” button at bottom right corner of slide (same formatting for all KCs).	[Slide Title] Risky Conditions [Risky Conditions] High Temperature High Humidity Direct Sun Exposure No Breeze Heavy Physical Labor Poor Acclimation Low Liquid Intake	[Narrator] <i>Remember, risky weather conditions include temperature above 80 degrees, humidity levels above 30 percent, no cloud cover, and no breeze or wind can increase the risk of heat stress. Heavy physical labor also increases the risk of heat stress, as does not properly acclimating to hot working conditions and low liquid intake.</i>	Delete the built-in buttons and textboxes on this layer and hide the remaining objects by using a white rectangle to cover objects on this slide. The background image will sit on top, so the correct and incorrect layers appear customized. Slide title appears in dark grey text on background image, filling the available yellow space of the image. Slide title exits with wheel animation just before VO begins listing the risky conditions. Each “risky condition” fades in timed with VO reference so that the completed slide includes all 7 “risky conditions”. Continue button appears after VO completes. Continue button jumps to the

			next slide.
Notes:			

Slide: 1.10c			LO: 2 [Identify Risk Factors]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Same layout as layer 1.8b Blue “Try Again” button at bottom right corner of slide (same formatting for all KCs)	[Slide Title] Not quite right. [Risky Conditions] High Temperature High Humidity Direct Sun Exposure No Breeze Heavy Physical Labor Poor Acclimation Low Liquid Intake	[Narrator] <i>That’s not quite right.</i> <i>Remember, weather conditions include temperature above 80 degrees, humidity levels above 30 percent, no cloud cover, and no breeze or wind. Heavy physical labor also increases the risk of heat stress, as does not properly acclimating to hot working conditions and low liquid intake.</i> <i>Select the try again button to see if you can select the correct answers.</i>	Delete built-in buttons and textboxes on this layer and hide remaining objects by using a white rectangle to cover objects on this slide. The background image will sit on top, so the correct and incorrect layers appear customized. Slide title appears in dark grey text on background image, filling available yellow space of image. Title text fades away before VO begins listing risky conditions. Each “risky condition” fades in timed with VO reference so that the completed slide includes all 7 “risky conditions”. Black “Try Again” button with shadow appears at bottom right corner of slide, timed with VO reference, and using the same trigger that was originally on the built-in button on this layer.

			Try Again hides this layer, returning the learner to base layer to try KC question again. KC responses do not reset, so learner can see their original answer and make changes before submitting again.
Notes:			

Slide: 1.11 / Menu Title: Preventing Heat Stress			LO: 3 [Prevention]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Background photographic image of powerline poles set against bright orange sky. 10 black icons arranged in two rows, distributed across the slide." • Glass of water • Cooler • No coffee cup • Shade tree • Long sleeved shirt • Calendar/time page • Staircase with arrow • Man with hard hat • Clapsed hands • No sun	[Slide Title]	[Narrator] <i>Now that you know the conditions that contribute to heat stress, let's learn how to avoid heat stress when working in risky conditions. Click each icon to find out more about 10 simple steps you and your crew can take to reduce the occurrence of heat stress.</i>	Slide begins with just the background image. As VO refers to clicking each icon, large semi-transparent grey rectangles with black icons centered within appear one at a time, filling in across the top row and then filling in across the bottom row so that the entire background image is covered with a semi-transparent grey overlay and 10 black icons. Icons/Rectangles are restricted from clicking until VO completes. Each rectangle includes a hover state (semi-transparent orange rectangle) and viewed state (fully transparent rectangle).

			Next button is disabled until all layers have been visited and all rectangle states are set to viewed. Next button jumps to slide 1.10
Notes:			

Slide: 1.11a			LO: 3 [Prevention]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
No borders. Background video of black powerlines silhouetted against orange sunset with grey clouds. Rectangle grey text box with bright orange border, includes water icon from base layer and text. “8 ounces” and “20 minutes” are bold font. Detail text is bold and italicized.	[Slide Title] Drink plenty of water. [Description] Aim to drink at least 8 ounces of water for every 20 minutes of work. [Detail] Drink water BEFORE you are thirsty.	[Narrator] <i>Make it a goal to drink at least 8 ounces of water for every 20 minutes of work. It is important that you drink water before you begin work and that you drink water before you feel thirsty.</i>	Text box includes icon in upper left corner with bold title. Icon and title together are horizontally centered in the top third of the text box. Description and detail are left justified and fill the text box horizontally. Text box floats in (from bottom). This layer is hidden when the VO completes.
Notes:			

Slide: 1.11b			LO: 3 [Prevention]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Same layout as layer 1.9a. Text box includes cooler icon from base layer.	[Slide Title] Stock your coolers. [Description] • Ice • Water • Low-sodium electrolyte drinks	[Narrator] <i>All workers should have access to coolers packed with ice, water, and low-sodium electrolyte drinks. Drinking cold water can help lower body temperature. Low-sodium electrolyte drinks can prevent muscles from cramping and spasming.</i>	Text box formatted the same as on layer 1.9a but with cooler icon in place of water icon. This layer is hidden when the VO completes.
Notes:			

Slide: 1.11c			LO: 3 [Prevention]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Same layout as layer 1.9a. Text box includes no caffeine icon from base layer. “No” font is Lato Black “Caffeine” and “ALCOHOL” is bold text.	[Slide Title] Avoid caffeine and alcohol.. [Description] • No tea • No coffee • No beverage containing caffeine • No ALCOHOL	[Narrator] <i>Avoid tea, coffee, or any beverage containing caffeine, which increases dehydration. Also avoid alcohol, as alcohol increases dehydration, as well.</i>	Text box formatted the same as on layer 1.9a but with no caffeine icon in place of water icon. This layer is hidden when the VO completes.
Notes:			

Slide: 1.11d	LO: 3 [Prevention]
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Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Same layout as layer 1.9a. Text box includes tree icon from base layer. “shade of a tree” and “15 degrees cooler” is bold text.	[Slide Title] Rest in the shade. [Description] The shade of a tree can feel up to 15 degrees cooler.	[Narrator] <i>Rest in the shade as often as possible. Trees release water into the air, and sitting in the shade of a tree can make the temperature feel 10 to 15 degrees cooler.</i>	Text box formatted the same as on layer 1.9a but with tree icon in place of water icon. This layer is hidden when the VO completes.
Notes:			

Slide: 1.11e			LO: 3 [Prevention]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Same layout as layer 1.9a. Text box includes shirt icon from base layer.	[Slide Title] Wear light-colored clothing. [Description] • Loose-fitting • Light-colored • Moisture-wicking	[Narrator] <i>While powerline workers have certain industry-standard, OSHA-compliant clothing requirements, choosing lighter colored and looser fitting options when available will help to reduce overheating.</i>	Text box formatted the same as on layer 1.9a but with shirt icon in place of water icon. This layer is hidden when the VO completes.
Notes:			

Slide: 1.11f			LO: 3 [Prevention]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:

Same layout as layer 1.9a. Text box includes calendar icon from base layer. “Rest periods”, “water”, and “shaded” are bold font.	[Slide Title] Modify schedules. [Description] Allow for: • frequent rest periods • water breaks • shaded or air conditioned	[Narrator] <i>Work schedules should be modified to allow for frequent rest periods with water breaks in shaded or air conditioned areas.</i>	Text box formatted the same as on layer 1.9a but with calendar icon in place of water icon. This layer is hidden when the VO completes.
Notes:			

Slide: 1.11g			LO: 3 [Prevention]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Same layout as layer 1.9a. Text box includes staircase icon from base layer. “More frequent breaks” and “acclimate to the heat” are bold font.	[Slide Title] Gradually increase workloads. [Description] and allow for more frequent breaks for workers needing to acclimate to the heat.	[Narrator] <i>Gradually increase workloads and allow for more frequent breaks for workers new to the heat or for those who have been away from work. This allows for acclimatization to the heat.</i>	Text box formatted the same as on layer 1.9a but with calendar icon in place of water icon. This layer is hidden when the VO completes.
Notes:			

Slide: 1.11h			LO: 3 [Prevention]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:

Same layout as layer 1.9a. Text box includes man in hard hat icon from base layer. “Monitor” and “Protect” are bold font.	[Slide Title] Assign a responsible worker. [Description] • Monitor conditions • Protect workers	[Narrator] <i>Designate a responsible person to monitor conditions and protect workers who are at an increased risk of heat stress.</i>	Text box formatted the same as on layer 1.9a but with man in hard hat icon in place of water icon. This layer is hidden when the VO completes.
Notes:			

Slide: 1.11i			LO: 3 [Prevention]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Same layout as layer 1.9a. Text box includes clasped hands icon from base layer. “Monitor” and “Encourage” are bold font.	[Slide Title] Use a buddy system. [Description] • Monitor responses to the heat • Encourage preventative measures	[Narrator] <i>Use a buddy system. Monitor each other's responses to the heat and encourage preventative measures.</i>	Text box formatted the same as on layer 1.9a but with clasped hands icon in place of water icon. This layer is hidden when the VO completes.
Notes:			

Slide: 1.11j			LO: 3 [Prevention]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:

Same layout as layer 1.9a. Text box includes no sun icon from base layer.	[Slide Title] Block direct sun. [Description] • Visors • Bandanas • Sun Block	[Narrator] <i>Block out direct sun by using visors, bandanas to protect the back of the neck, and sunblock.</i>	Text box formatted the same as on layer 1.9a but with no sun icon in place of water icon. This layer is hidden when the VO completes.
Notes:			

Slide: 1.12			LO: 3 [Prevention]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Same office setup as slide 1.3 but with large white rectangle with grey border and shadow effect to represent white board on the wall to the left of Avatar Anton. Avatar Anton looks at learner and changes expression/pose with each bulleted item. Captions track Anton's speech.	[White Board Text] • drink 8 fl. oz every 20 minutes • stock coolers with ice, water, electrolytes • avoid caffeine • rest in the shade • choose light-colored, loose-fitting, moisture-wicking clothing • schedule frequent rest periods and water breaks • gradually increase workloads • designate a monitor • use a buddy system • block direct sun	[Anton] [1] <i>Wow. That is a lot to remember, but it all makes sense.</i> [2] <i>And it is important that our crews remain safe and healthy as we head into the warmer months.</i> [3] <i>I need to make sure my crew leaders know that all crew members need to be drinking at least 8 ounces of water every 20 minutes,</i> [4] <i>and to keep their coolers stocked with ice, water, and electrolyte drinks.</i>	Avatar Anton gestures to learner, with poses and expressions changing with VO, as noted in narration/voiceover column . White board fades into view as Anton begins reciting the “need to know” items. Items from the bulleted list float in from bottom on the white board as the VO mentions each “need to know” item. Next button is restricted until 0.5 seconds before the end of the VO.

		[5] <i>Many of our guys fuel up with coffee and sodas in the morning,</i> [6] <i>but they need to know that caffeine should be avoided.</i> [7] <i>I know they like to get the job done as fast as they can,</i> [8] <i>but they need to be told that resting in the shade is required, not just allowed.</i> [9] <i>I'll make sure our new hires know how important loose-fitting, light-colored, and moisture-wicking clothes are.</i> [10] <i>I'm going to have to make sure our crew leads create schedules that allow the guys plenty of rest periods and water breaks.</i> [11] <i>I also need to make sure they start the new guys off slowly, allowing them more frequent breaks so they can get used to working in the heat and humidity.</i> [12] <i>You know, our linemen are pretty</i>	
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		<i>tough guys, and they don't like to appear weak.</i> [13] <i>I'll make sure each crew has a designated monitor to watch out for those high-risk conditions and remind the rest of the crew to hydrate and take breaks.</i> [14] <i>If each guy has a buddy watching out for signs of overheating and encouraging them to drink water, take breaks, and keep cool, that will help.</i> [15] <i>Oh, and I need to remind everyone to apply their sunblock, wear visors to keep the sun off their face, and bandanas to keep the sun off their necks!</i>	
Notes:			

Slide: 1.13 / Menu Title: Knowledge Check			LO: 3 [Prevention]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Slide background and title formatting are identical to previous KCs. 4 orange rectangles with recap information. 4 large orange boxes with	[Slide Title] Knowledge Check: Preventing Heat Stress [Recap Information] Schedule frequent rest/water breaks Gradually increase workloads	[Narrator] <i>Crew leaders will need to be sure to schedule frequent rest periods and water breaks, gradually increase workloads for new workers, designate crew monitors, and make sure linemen use a buddy system.</i>	This is a free-form drag and drop interaction. Slide begins with background image group. Background image group fades to semi-transparent, and large

question stems in white text. Each orange box includes a white rectangle in which the correct answer will be placed. Below each orange question stem box are smaller orange rectangles with the drag items.	Designate a monitor Use a buddy system [Stems (drag items)] • Drink 8 fl. oz of water: (every 20 minutes, every hour, when thirsty) • Stock coolers with ice, water, and: (sodas, electrolyte drinks, energy drinks) • Caffeine should be: (avoided, consumed in moderation, used when feeling tired) • Choose light-colored, moisture-wicking, and (loose-fitting clothing, tight-fitting clothing) [Directions] Select and drag the correct term or phrase to complete each reminder below. Select submit to check your answers.	<i>But it's important that you remember to take the following precautions.</i> <i>Drag and drop the correct term to complete each reminder of what YOU can do to minimize the occurrence of heat stress. Select the submit button to check your answers.</i>	slide title fades in, timed with VO introduction to KC. Slide title fades out as recap information rectangles appear, timed with VO reference. Recap information fades out, followed by stems and drag items flying down from the top with staggered entrance (each stem with associated drag items entering as a group). Directions fade in last stem/drag items animation completes. The learner will drag the correct response from below each question stem and drop it into the white space within each question stem rectangle. Allow 2 attempts in the form settings. When the learner selects Submit, it will show either the correct or try again feedback layer on the first attempt. The answer choices will not reset for the second attempt, allowing the user to adjust their response. After the second attempt, the learner will see either the correct or incorrect layer.
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Notes:			

Slide: 1.13a / Menu Title:			LO: 3 [Prevention]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Screenshot of correct responses at the top of the page. Blue feedback box below the correct response image. Blue Continue button (formatting identical to preview KC custom buttons)	[Blue Feedback Box] Great Job! [Button] Continue	[Narrator] <i>That's right! Drinking 8 fl. oz every 20 minutes, stocking coolers with ice, water, and low-sodium electrolyte drinks, avoiding caffeine, and choosing light-colored, loose-fitting, moisture-wicking clothing are all simple steps you can take to help reduce the occurrence of heat stress. Remember that it is also important to schedule frequent rest periods and water breaks, gradually increase workloads for new workers or those who have been away from the heat, designate a responsible crew member to monitor conditions and workers' responses to the heat, use a buddy system, and wear visors, bandanas, and sunscreen to block direct sun.</i>	All built-in feedback components are either deleted or covered by the screenshot of the correct drag and drop response. Blue feedback rectangle enters with zoom animation. Correct Stems/Drag and Drop responses appear in time with VO. Blue feedback rectangle fades out to make room for blue rectangles with additional reminders of preventative measures not assessed through this KC, fading in with VO reference.. Continue button appears after VO completes. Continue button jumps to the next slide. Next button is hidden.

Notes:

Slide: 1.13b /			LO: 3 [Prevention]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Screenshot of correct responses at the top of the page. Blue feedback box below the correct response image. Blue Continue button (formatting identical to preview KC custom buttons)	[Blue Feedback Box] Incorrect [Button] Continue	[Narrator] <i>That's not quite right! Remember that drinking 8 fl. oz every 20 minutes, stocking coolers with ice, water, and low-sodium electrolyte drinks, avoiding caffeine, and choosing light-colored, loose-fitting, moisture-wicking clothing are all simple steps you can take to help reduce the occurrence of heat stress. Remember that it is also important to schedule frequent rest periods and water breaks, gradually increase workloads for new workers or those who have been away from the heat, designate a responsible crew member to monitor conditions and workers' responses to the heat, use a buddy system, and wear visors, bandanas, and sunscreen to block direct sun.</i>	All built-in feedback components are either deleted or covered by the screenshot of the correct drag and drop response. Blue feedback rectangle enters with zoom animation. Correct Stems/Drag and Drop responses appear in time with VO. Blue feedback rectangle fades out to make room for blue rectangles with additional reminders of preventative measures not assessed through this KC, fading in with VO reference.. Continue button appears after VO completes. Continue button jumps to the next slide. Next button is hidden.

Notes:

Slide: 1.13c /			LO: 3 [Prevention]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Screenshot of correct responses at the top of the page. Blue feedback box below the correct response image. Blue Try Again button (formatting identical to preview KC custom buttons)	[Blue Feedback Box] Not Quite Right [Button] Try Again	[Narrator] <i>That's not quite right! Remember that drinking 8 fl. oz every 20 minutes, stocking coolers with ice, water, and low-sodium electrolyte drinks, avoiding caffeine, and choosing light-colored, loose-fitting, moisture-wicking clothing are all simple steps you can take to help reduce the occurrence of heat stress. Remember that it is also important to schedule frequent rest periods and water breaks, gradually increase workloads for new workers or those who have been away from the heat, designate a responsible crew member to monitor conditions and workers' responses to the heat, use a buddy system, and wear visors, bandanas, and sunscreen to block direct sun.</i> <i>Select the Try Again button to see if you can correctly complete the list of crucial skills that can be negatively affected by heat stress.</i>	All built-in feedback components are either deleted or covered by the screenshot of the correct drag and drop response. Blue feedback rectangle enters with zoom animation. Correct Stems/Drag and Drop responses appear in time with VO. Blue feedback rectangle fades out to make room for blue rectangles with additional reminders of preventative measures not assessed through this KC, fading in with VO reference.. Try Again button appears with VO reference and uses same trigger as built in Try Again button. Next button is hidden.

Slide: 1.14 / Menu Title: Symptoms of Heat Stress			LO: 4 [Recognize Symptoms]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Background Image: Photographic image of linemen working on powerlines to the right of the image with closeup of lineman in the foreground on the left of the image, with blue sky in the background. Semi-transparent white rectangle appears on left half of the screen with slide title in large bold print left-aligned in the center of the rectangle. Custom oval buttons with blue background, thick orange border, and white text, arranged vertically down the center of the semi-transparent white rectangle.	[Slide Title] Common Symptoms [Buttons] Body Temp. Skin Pulse Stability Muscles Consciousness	[Narrator] <i>With proper preventative measures, you can reduce the occurrence or severity of heat stress. However, it is important that you recognize the common symptoms of heat stress so you can recognize them in yourself and in your fellow crew members.</i> <i>Select each button below to learn more about six common symptoms of heat stress. When you have finished, select the next button to continue.</i>	Slide begins with just the background image. When VO begins second sentence ("However, it is important..."), semi-transparent white rectangle with slide title fades in on the left side of the slide. The rectangle will not extend all the way to the left of the slide; there should be a small ribbon of the background image still clearly visible on the left of the rectangle. Slide title fades out and custom buttons appear one at a time as the VO begins the third sentence {"Click each button..."}. Buttons are restricted until VO completes. Buttons include hover states (black border). Buttons include selected and visited states (black border) when clicked. Each button shows the corresponding layer. Buttons include completed states

			(black border and white circle with check mark to the left of the button caption) after the audio on the corresponding layer completes. Buttons can be selected in any order, but next button is restricted until all layers have been viewed and all buttons show the completed state. Next button jumps to slide 1.12
Notes:			

Slide: 1.14a			LO: 4 [Recognize Symptoms]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Base layer images are visible so each layer appears as part of the base layer. Black arrow extends from Body Temp. button to text box. Top of text box aligned with top of corresponding button. Orange text box with black border and white text. Text box title and body text are centered on slide. "101 degrees Farenheit" is bold	[Slide Title] Body Temperature [Body Text] A high body temperature is one of the first symptoms of heat stress. If a worker's body temperature has risen to 101 degrees Fahrenheit, it is time to take action to bring the body's core temperature back down within a more normal range.	[Narrator] <i>A high body temperature is one of the first symptoms of heat stress. If a worker's body temperature has risen to 101 degrees Fahrenheit, it is time to take action to bring the body's core temperature back down within a more normal range.</i>	Button is set to selected state when clicked on the base layer. Black arrow extends from the selected button to an orange rectangular text box with a thick black border and white text. Base layer button changes to completed state after the audio completes. A transparent rectangle overlay is used to restrict base layer buttons until audio completes.

text.			
Notes:			

Slide: 1.14b			LO: 4 [Recognize Symptoms]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Base layer images are visible so each layer appears as part of the base layer. Black arrow extends from Skin button to text box. Top of text box aligned with top of corresponding button. Orange text box with black border and white text. Text box title and body text are centered on slide.	[Slide Title] Color of Skin [Body Text] Skin that is hot, red, or damp is an early indicator of heat stress. If not addressed, severe heat exhaustion may follow, which is characterized by pale skin accompanied by heavy sweating.	[Narrator] <i>Skin that is hot, red, or damp is an early indicator of heat stress. If not addressed, severe heat exhaustion may follow, which is characterized by pale skin accompanied by heavy sweating.</i>	Button is set to selected state when clicked on the base layer. Black arrow extends from the selected button to an orange rectangular text box with a thick black border and white text. Base layer button changes to completed state after the audio completes. A transparent rectangle overlay is used to restrict base layer buttons until audio completes.
Notes:			

Slide: 1.14c			LO: 4 [Recognize Symptoms]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Base layer images are visible so each layer appears as part of the	[Slide Title] Pulse	[Narrator] <i>A fast pulse, accompanied by</i>	Button is set to selected state when clicked on the base layer.

base layer. Black arrow extends from Pulse button to text box. Top of text box aligned with top of corresponding button. Orange text box with black border and white text. Text box title and body text are centered on slide.	[Body Text] A fast pulse, accompanied by fast and shallow breathing, is an indicator of heat stress. If left untreated, it may progress to heat stroke.	<i>fast and shallow breathing, is an indicator of heat stress. If left untreated, it may progress to heat stroke.</i>	Black arrow extends from the selected button to an orange rectangular text box with a thick black border and white text. Base layer button changes to completed state after the audio completes. A transparent rectangle overlay is used to restrict base layer buttons until audio completes.
Notes:			

Slide: 1.14d			LO: 4 [Recognize Symptoms]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Base layer images are visible so each layer appears as part of the base layer. Black arrow extends from Stability button to text box. Bottom of text box aligned with bottom of corresponding button. Orange text box with black border and white text. Text box title and body text are centered on slide.	[Slide Title] Stability [Body Text] A headache and dizziness are early indicators that the body is suffering from heat stress. If left untreated, nausea and confusion may follow. These are indicators of more severe heat stress. Action must be taken to avoid more serious injury.	[Narrator] <i>A headache and dizziness are early indicators that the body is suffering from heat stress. If left untreated, nausea and confusion may follow. These are indicators of more severe heat stress. Action must be taken to avoid more serious injury.</i>	Button is set to selected state when clicked on the base layer. Black arrow extends from the selected button to an orange rectangular text box with a thick black border and white text. Base layer button changes to completed state after the audio completes. A transparent rectangle overlay is used to restrict base layer buttons until audio completes.

Notes:

Slide: 1.14e			LO: 4 [Recognize Symptoms]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Base layer images are visible so each layer appears as part of the base layer. Black arrow extends from Muscles button to text box. Bottom of text box aligned with bottom of corresponding button. Orange text box with black border and white text. Text box title and body text are centered on slide.	[Slide Title] Muscles [Body Text] Muscle pain, cramps, or spasms can occur due to dehydration. These cramps or spasms typically occur in the abdomen, back, arms, or legs. Take action to avoid more severe heat illness.	[Narrator] <i>Muscle pain, cramps, or spasms can occur due to dehydration. These cramps or spasms typically occur in the abdomen, back, arms, or legs. Take action now to avoid more severe heat illness.</i>	Button is set to selected state when clicked on the base layer. Black arrow extends from the selected button to an orange rectangular text box with a thick black border and white text. Base layer button changes to completed state after the audio completes. A transparent rectangle overlay is used to restrict base layer buttons until audio completes.
Notes:			

Slide: 1.14f			LO: 4 [Recognize Symptoms]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Base layer images are visible so each layer appears as part of the base layer.	[Slide Title] Loss of Consciousness	[Narrator] <i>Loss of consciousness as a result of heat stroke is a severe medical</i>	Button is set to selected state when clicked on the base layer.

Black arrow extends from Consciousness button to text box. Bottom of text box aligned with bottom of corresponding button. Orange text box with black border and white text, with the following exceptions: “Dial 9-1-1” is large, Lato Black text, black. “severe medical emergency” is bold, black text. Text box title and body text are centered on slide.	[Body Text] Dial 9-1-1 Loss of consciousness as a result of heat stroke is a severe medical emergency.	<i>emergency.</i> <i>Dial 9-1-1 or transport the individual to the nearest hospital emergency room immediately.</i>	Black arrow extends from the selected button to an orange rectangular text box with a thick black border and white text. Base layer button changes to completed state after the audio completes. A transparent rectangle overlay is used to restrict base layer buttons until audio completes.
Notes:			

Slide: 1.15			LO: 4 [Determine Treatment]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Same office as 1.3 and 1.10, but with a wider view so there is room for Anton to stand beside his desk. Anton texts on his phone. Speech bubbles track the VO of Anton's thoughts. Anton's pose changes as he	[Anton texting caption] Okay, I think it's time to get all of my crew leads in here so I can make sure they all know how important it is to not only take action to prevent heat-related injuries, but to also know what symptoms to watch out for. [Anton addressing learner caption]	[Anton texting] <i>Okay, I think it's time to get all of my crew leads in here so I can make sure they all know how important it is to not only take action to prevent heat-related injuries, but to also know what symptoms to watch out for.</i> [Anton addressing learner] <i>I need to make sure they know</i>	Anton avatar begins in texting pose with concerned expression. When the VO says “I need to make sure...”, Anton avatar changes to a crossed arm, thinking expression. Next button is disabled. Slide auto-advances to next slide.

addresses the learner.	I need to make sure they know what should be done if one of their crew members exhibits symptoms though. I need to figure that out before our meeting.	<i>what should be done if one of their crew members exhibits symptoms though. I need to figure that out before our meeting.</i>	
Notes:			

Slide: 1.16 / Menu Title: Treating and Responding to Heat Stress Symptoms			LO: 4 [Determine Treatment]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Nearly the entire slide is taken up by an accordion interaction. 6 tabs, numbered 1-6 take up about $\frac{1}{3}$ of the accordion area and are shown vertically, leaving the remainder of the space for content to show within the accordion frame. The closed accordion will show on the screen to start, with a cover image with a bright blue photographic background with thermometer in the foreground on right side and a man drinking water in the unfocused background on the left. Bright blue square with thick orange border and white title text.	[Slide Title] Treating Heat Stress [Tab Numbers] 1 2 3 4 5 6	[Narrator] <i>Even if you've taken care to avoid heat stress, it is important that you know what to do in the event that a crew member succumbs to heat exhaustion or, worse, heat stroke. Let's look at how to properly respond to the various signs and symptoms of heat stress.</i> <i>Select each tab in order to reveal measures that should be taken when responding to heat stress symptoms.</i>	During the narration, the tabs will be restricted from selecting. The cover image 6 colored tabs will be in place . Title box fades in, leaving a small border of the cover image visible Tab numbers 1-6 appear in staggered order in time with VO reference to selecting the tabs. When the learner clicks on each tab, the accordion will slide open to reveal the tab layer. Tabs will automatically close upon completion of layer timeline. Tabs will be restricted so they must be selected in order. Next button is restricted until all layers have completed.

Each tab will be a gradation of the primary palette colors..			Next button jumps to slide 1.17
When the learner clicks on each tab, it will slide to its open position			
Notes:			

Slide: 1.16a			LO: 4 [Determine Treatment]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Red tab Red background Large white rectangle with thick blue border is centered on the tab.. Tab text is black, at the top of the rectangle. Layout of layers 1.16a, 1.16b, 1.16c, 1.16d, 1.16e, and 1.16f are all the same, but with tab-specific text and image: Large photograph of a shade tree takes up most of the remaining space in the white rectangle.	[Slide Title] Move to a cooler area, out of direct sunlight.	[Narrator] <i>The first thing to do is move to a cooler area, out of direct sunlight. Remember that trees release water into the air, and sitting in the shade of a tree can make the air feel significantly cooler. If the work site has no trees, then seek the shade of a canopy or tent, or even the shade cast from the crew truck.</i>	Tab slides closed when timeline completes, returning learner to base layer to select a new tab.
Notes:			

Slide: 1.16b			LO: 4 [Determine Treatment]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Orange tab Orange background Layout of layers 1.16a, 1.16b, 1.16c, 1.16d, 1.16e, and 1.16f are all the same, but with tab-specific text and image: Large photograph of a man rubbing his upper thigh takes up most of the remaining space in the white rectangle.	[Slide Title] Gently massage and stretch cramping muscles.	[Narrator] <i>Heat cramps and muscle spasms are a mild form of heat injury and one of the first stages of heat illness. Rest, cool down, drink electrolyte-containing sports drinks, and practice gentle, range-of-motion stretching and gentle massage to the affected muscle group.</i>	Tab slides closed when timeline completes, returning learner to base layer to select a new tab.
Notes:			

Slide: 1.16c			LO: 4 [Determine Treatment]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
15% transparent orange tab with white backing layer 15% transparent orange background Layout of layers 1.16a, 1.16b, 1.16c, 1.16d, 1.16e, and 1.16f are all the same, but with tab-specific text and image: Large photograph of a man drinking a bottle of water takes up most of the remaining space	[Slide Title] Drink cool water with added electrolytes every 15 minutes.	[Narrator] <i>Dehydration is a primary contributor to heat stress. While workers should be drinking water throughout the day in order to prevent heat stress, if symptoms have begun, then it's time to switch to replenishment and recovery. Drink cold water with electrolyte additives or a sports drink with electrolytes. Electrolytes help your body function properly, including</i>	Tab slides closed when timeline completes, returning learner to base layer to select a new tab.

in the white rectangle.		<i>regulating heart rate and maintaining a healthy body temperature.</i>	
Notes:			

Slide: 1.16d			LO: 4 [Determine Treatment]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
30% transparent orange tab with white backing layer 30% transparent orange background Layout of layers 1.16a, 1.16b, 1.16c, 1.16d, 1.16e, and 1.16f are all the same, but with tab-specific text and image: Large photograph of a man with a wet towel draped around his neck and held to his face takes up most of the remaining space in the white rectangle.	[Slide Title] Apply cool, wet towels to face, neck, chest, and limbs.	[Narrator] <i>Use the melted ice in the crew ice chest to wet several towels. Apply these towels to the face, neck, chest, and limbs in order to bring down the core temperature. If you have access to a fan, direct the fan to blow across the wet towels to increase the cooling effect.</i>	Tab slides closed when timeline completes, returning learner to base layer to select a new tab.
Notes:			

Slide: 1.16e			LO: 4 [Determine Treatment]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Yellow tab Yellow background	[Slide Title] Remove protective clothing	[Narrator] <i>Rubber sleeves and fire-retardant gear are necessary</i>	Tab slides closed when timeline completes, returning learner to base layer to select a new tab.

Layout of layers 1.16a, 1.16b, 1.16c, 1.16d, 1.16e, and 1.16f are all the same, but with tab-specific text and image: Large photograph of linemen gear (rubber gloves, hard hat, equipment belt) take up most of the remaining space in the white rectangle.		<i>for electrical powerline workers, but are unforgiving in the heat. Remove all protective clothing, including vests, gloves, hats, boots, and long sleeves, and loosen any other tight garments.</i>	
Notes:			

Slide: 1.16f			LO: 4 [Determine Treatment]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
25% transparent Yellow tab with white backing layer. 25% transparent Yellow background Layout of layers 1.16a, 1.16b, 1.16c, 1.16d, 1.16e, and 1.16f are all the same, but with tab-specific text and image: Large photograph of a HEATSTROKE sign takes up most of the left side of the white rectangle. Slide text is black, on the right side of the rectangle.	[Slide Title] Dial 9-1-1 [Body Text] • Move to shade • Remove sweaty clothing • Apply ice • If losing consciousness, do NOT give anything to drink	[Narrator] <i>Heatstroke is a medical emergency. Heatstroke victims have lost their ability to regulate their temperature. Because of this, their temperature will increase quickly and very high. A body temperature of 106 degrees or higher, a loss of consciousness, delirium, or flushed skin with no sweat are indications of a medical emergency. Dial 9 1 1 immediately and move to a shady area or cool building, remove sweaty clothing, apply ice packs around the neck, armpit and groin. Do not attempt to give anything to drink unless the person is fully conscious.</i>	Tab slides closed when timeline completes, returning learner to base layer to select a new tab.

Notes:			

Slide: 1.16g			LO: 4 [Determine Treatment]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
This layer includes the tabs on the left of the slide, but the right of the slide has a bright blue background. Rectangles with text and images from layers 1.13a-1.13f distributed across the slide in two rows. Final rectangle includes information regarding heatstroke as a medical emergency	[Rectangle 1] Move to a cooler area, out of direct sunlight. [Rectangle 2] Gently massage and stretch cramping muscles. [Rectangle 3] Drink cool water with added electrolytes every 15 minutes. [Rectangle 4] Apply cool, wet towels to face, neck, chest, and limbs. [Rectangle 5] Remove protective clothing. [Rectangle 6 Symptoms] • 106 degrees • Loss of consciousness • Delirious • Flushed skin with no sweat [Rectangle 6] Dial 9-1-1	[Narrator] [1] <i>Moving to a cooler area, out of direct sunlight,</i> [2] <i>massaging and stretching cramped muscles,</i> [3] <i>drinking water with electrolytes every 15 minutes,</i> [4] <i>applying cool wet towels,</i> [5] <i>and removing protective clothing will alleviate symptoms of heat exhaustion.</i> [6] <i>But remember that heatstroke is a medical emergency. If an individual's body temperature is 106 degrees, if they have lost consciousness, if they are delirious, or have flushed skin with no sweat, you must dial</i>	This summary layer is revealed when all tabs have been viewed. Rectangles from slides 1.13a-1.13f fade in from top left, top middle, top right, bottom, left, bottom middle, bottom right in time with VO reference to each. Rectangle 6: • begins with image of heatstroke sign that fades out to the list of symptoms floating up in time with VO reference. • Symptoms fade out as large "Dial 9-1-1" text zooms in to fill the space in time with VO reference. • Large "Dial 9-1-1" text zooms out and bulleted list of what to do while waiting floats up in time with VO reference. Next button remains disabled until 0.5 seconds before VO ends. Learners may select any tab to

	[Rectangle 6 While Waiting] Dial 9-1-1 • Move to shade • Remove sweaty clothing • Apply ice • If losing consciousness, do NOT give anything to drink	9-1-1. While waiting for E M S services, move the individual to the shade, remove sweaty clothing, and apply ice to bring down the core body temperature. Never attempt to give food or drink to an unconscious individual. You may select any tab to review this information, or select the next button to continue.	review information, or select the next button to jump to the next slide.
Notes:			

Slide: 1.17 / Menu Title: Course Summary			LO:
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Background Image: Photographic image of powerlines set across a bright orange sunset. Semi-transparent white rectangle takes up slightly more than half of the slide, positioned to the right of the slide, with background image showing equal amounts to the top, bottom, and right of the rectangle. Slide text in black, left-aligned within the semi-transparent	[Slide Title] Summary [Slide Subtitle] Reventing, Recognizing, and Responding to Heat Stress [Body Text] • Describe negative effects • Identify risk factors • Identify preventative measures • Recognize symptoms • Determine proper treatment	[Narrator] You should now be able to describe the negative effects of heat stress, identify risk factors that contribute to heat stress, identify measures to prevent heat stress for you and your crew, recognize the symptoms of heat stress, and determine proper treatment of heat-related illnesses including heatstroke.	Slide begins with rectangle, title, and subtitle in place. Each bulleted item fades in from bottom, timed with VO reference.

rectangle.			
Lato Semibold used for slide text.			
Notes:			

Slide: 1.18 / Menu Title: Quiz Intro			LO:
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
No standard borders. Slide has plain white background with thick red borders at the top and bottom of the slide. The same photographic image of the lineman from slides 1.5 and 1.6 appears on the right of the slide (reversed from the image on slides 1.5 and 1.6). Slide text is black and left-aligned on the left side of the slide, with text large enough to take up most of the available white space. Directions are italicized.	[Slide Title] Final Graded Quiz [Slide Subtitle] 5 questions Must earn 80% to pass [Directions] Click Next when you are ready to begin.	[Narrator] <i>Time for the quiz! There are 5 questions to check your knowledge. You will need to answer 80% of them correctly to pass the quiz.</i> <i>If you do not pass the quiz, you will be able to review the course before taking the quiz again. You may continue to take the quiz until you have passed.</i> <i>Use the menu to review this course now, or select the next button when you are ready to begin.</i>	Border and background image are shown from beginning of slide timeline. All slide text fades in timed with VO reference.
Notes:			

Slide: 1.20	LO: 2 [Identify Risk Factors]
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Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Same border and photographic image from slide 1.15, but with image of lineman reversed and on the left side of the slide. Quiz questions and answer choices take up most of the available white space to the right of the image. Quiz question is larger font than directions. Directions are italicized. Answer choices are smaller font than quiz questions and directions. Custom review slide will have matching upper and lower borders (correct=green, incorrect=dark red with feedback in white text within the upper border).	[Question] Which of the following weather conditions indicate an increased risk for heat stress? [Directions] Select all that apply. [Answer Choices] Low humidity High humidity Clear skies Cloudy skies High temperature Windy Heavy physical labor Low liquid intake [Review: Incorrect] Tip: Review “Risky Conditions” from the course menu.	[Narrator] <i>Which of the following risk factors indicate an increased risk for heat stress?</i> <i>Select all that apply.</i> <i>Then select the submit button.</i>	Score by question with 1 attempt for each quiz question as the learner progress through the quiz. The will be able to retake the entire quiz at the end if they do not pass. Answer choices will be shuffled. Results slide 1.20; graded quiz slide - multiple response. When learner clicks Submit, submit multiple response and advance to next slide. The learner will not receive immediate feedback with correct or incorrect feedback layers. They must complete all quiz questions sequentially before receiving their score on the Results page. If they do not pass, they can review the quiz and retake it as many times as necessary in order to pass. Custom Review: If question is answered correctly, top and bottom border will be green, with correct answers shown and no audio. If question is answered incorrectly, top and bottom border will be dark red, with correct answers shown. Original

			slide audio will play automatically, and top border will include tip for review in white text..
Notes:			

Slide: 1.21			LO: 3[Preventative Measures]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Same visual layout for slides 1.16, 1.17, 1.18, 1.19, and 1.20 Below slide directions are a stack of yellow cards with dark orange border and black text. Bottom of available slide space includes 2 large drop zones: Square with large check mark Square with large x	[Question] What measures should workers take to prevent heat stress? [Directions] Drag each card to the correct box. [Cards] • Drink 8 ounces of water every 20 minutes. (✓) • Drink 8 ounces of water every hour. (✗) • Stock coolers with ice, water, and electrolyte drinks. (✓) • Stock coolers with ice, water, and sodas. (✗) • Avoid caffeine. (✓) • Drink caffeinated beverages for extra energy. (✗) • Avoid alcohol.(✓)	[Narrator] It is important to remember measures you can take to prevent heat stress. Read each card below and decide if the statement is an effective preventative measure or if the statement is NOT an effective preventative measure. When you have sorted all of the cards, select the submit button.	Same settings for slides 1.19, 1.20, 1.21, 1.22, and 1.23 Drag and drop question. Cards appear one at a time, with the order shuffled. Drop zones with labels are highlighted in time with VO reference. Custom Review will be formatted to appear the same as other quiz review slides. Screenshot of correct responses will be visible on the review layer.

	Enjoy a beer during lunch breaks.(✗) [Drop Zone Labels] Effective preventative measures NOT effective preventative measures. [Review: Incorrect] Tip: Review “Prevention” from the course menu.		
Notes:			

Slide: 1.23			LO: 5 [Determine Treatment]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Same visual layout for slides 1.16, 1.17, 1.18, 1.19, and 1.20	[Question] Which of the following are suggested ways to reduce body temperature? [Directions] Select all that apply. [Answer Choices] Move to a shaded area - Apply gently, range-of-motion stretching Remove protective clothing	[Narrator] <i>Select the appropriate response if a worker becomes delirious, loses consciousness, or reaches a body temperature of 106 degrees, then select the submit button.</i>	Same settings for slides 1.19, 1.20, 1.21, 1.22, and 1.23 Multiple choice question. Custom Review is the same for slides 1.19, 1.20, 1.21, 1.22, and 1.23 but with corresponding “tip” for incorrect answers.

	• Apply cool towels to the face, neck, chest, and limbs • Call 9-1-1 [Review: Incorrect] Tip: Review “Treatment and Response” from the course menu.		
Notes:			

Slide: 1.22			LO: 4 [Recognize Symptoms]
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Same visual layout for slides 1.16, 1.17, 1.18, 1.19, and 1.20	[Question] Which of the following are symptoms of heat stress? [Directions] Select all that apply. [Answer Choices] • Body temperature of 100 degrees • Heavy sweating • Fast pulse with fast and shallow breathing • Headache and dizziness • Thirst • Muscle pain, cramps, and spasms • Body temperature of 101 degrees of higher • Hot, red, damp skin	[Narrator] <i>Which of the following are symptoms of heat stress? Select all that apply, then select the submit button.</i>	Same settings for slides 1.19, 1.20, 1.21, 1.22, and 1.23 Multiple response question. Custom Review is the same for slides 1.19, 1.20, 1.21, 1.22, and 1.23 but with corresponding “tip” for incorrect answers.

	[Review: Incorrect] Tip: Review “ Symptoms ” from the course menu.		
Notes:			

Slide: 1.19			LO: 1 [Describe effects]												
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:												
Same visual layout for slides 1.16, 1.17, 1.18, 1.19, and 1.20	[Question] What crucial skills may be compromised as a result of heat stress?	[Narrator] <i>Heat stress can have a detrimental effect on many skills necessary for powerline workers.</i> <i>Match the correct terms to complete this list of crucial skills that may be compromised as a result of heat stress, then select the submit button.</i>	Same settings for slides 1.19, 1.20, 1.21, 1.22, and 1.23 Matching question. Custom Review is the same for slides 1.19, 1.20, 1.21, 1.22, and 1.23 but with corresponding “tip” for incorrect answers.												
	[Directions] <i>Match the correct terms to complete the list.</i>														
	[Terms]														
	<table><tr><td>Choice</td><td>Match</td></tr><tr><td>Mental</td><td>performance</td></tr><tr><td>Decision</td><td>- making capabilities</td></tr><tr><td>Visual</td><td>- motor tracking</td></tr><tr><td>Short-term</td><td>memory</td></tr><tr><td>Attention</td><td>span</td></tr></table>			Choice	Match	Mental	performance	Decision	- making capabilities	Visual	- motor tracking	Short-term	memory	Attention	span
	Choice			Match											
	Mental			performance											
	Decision			- making capabilities											
	Visual			- motor tracking											
Short-term	memory														
Attention	span														

	<table><tr><td>Reaction</td><td>time</td></tr></table> [Review: Incorrect] Tip: Review “Negative Effects” from the course menu.	Reaction	time		
Reaction	time				
Notes:					

Slide: 1.24			LO:
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Same visual layout as slide 1.15 (quiz intro.)	[Slide Title] Quiz Results Your score: XX% Passing Score: YY%	[Narration only on layers]	Use a Result slide to show Success layer 1.24a when timeline starts if results are equal to or greater than the passing score. Show Failure layer 1.24b when timeline starts if results are less than the passing score. Base layer will be visible from Success or Failure layers. Results variable reference shows the percent score only (not the points variable reference). Build in graded quiz variable reference displays learner score where XX appears on slide. 80% to pass shown where YY appears on slide.

Notes:

Slide: 1.24a			LO:
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Base layer graphics are visible. Red “Review Quiz” and “Continue” buttons side by side below the passing score information.	Click the Review button to review your answers. Click the Continue button when you are finished. Nice job, you passed! (Button) Review Quiz [Button] Continue	[Narrator] <i>Thank you for taking the quiz, and Congratulations on passing! You can review your results by clicking on the review quiz button. If you are satisfied with your results and are ready to move on, please select the Continue button.</i>	Review button; shows correct/incorrect response to each question when reviewing. Continue button: jumps to slide 1.25
Notes:			

Slide: 1.24b			LO:
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Base layer graphics are visible. Red “Review Quiz” and “Retry” buttons side by side below the passing score information.	Click the Review button to review your answers. Click the Retake button to retake the quiz. Sorry, you didn’t pass.	[Narrator] <i>Thank you for taking the quiz. Unfortunately, you did not pass. You can review your results by selecting the review quiz button. When you are ready to try again, please select the retake quiz button.</i>	Review button; shows correct/incorrect response to each question when reviewing. Retake button; resets results slide and jumps to slide 1.19

	(Button) Review Quiz		
	[Button] Retry Quiz		
Notes:			

Slide: 1.25 / Menu Title: Conclusion			LO:
Visual / Display:	Slide Text:	Narration / Voiceover:	Animation / Interaction:
Same background image as slide 1.14. Large semi-transparent white rectangle with thick black border takes up most of the slide. Lineman from slides 1.4 and 1.8 is inside the rectangle, positioned against the bottom right border, and sized to vertically fill the rectangle. Text is on the left side of the rectangle, left-aligned, and sized to fill most of the available space. Custom red Restart and Exit Course buttons are located next to one another, centered below the body text.	[Slide Title] Course is Complete! [Body Text] Congratulations! You have completed the training on preventing, recognizing, and responding to heat stress for electrical powerline installers and repairers. You may exit the course or restart it by clicking the buttons below. [Button] Restart [Button] Exit Course	[Narrator] <i>Congratulations! You have completed the training on preventing, recognizing, and responding to heat stress for electrical powerline installers and repairers. You may exit the course or restart it by selecting the buttons below.</i>	Next and back buttons are hidden.
Notes:			

