

Instructions



Hot Weather Safety

Ingrid Sandberg - Michigan LTAP
Center for Technology & Training (CTT)

iasandbe@mtu.edu



Agenda

- Heat Related Illnesses
- Prevention Strategies
- Weather Related Threats

Heat Related Illnesses

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How your body cools down



Risk Factors

- Age
- Medications
- Underlying conditions
- Physical fitness
- Lifestyle choices



Other Risk Factors

- Not used to working in hot weather
- Not knowing warning signs
- Ignoring warning signs



Even more risk factors

- PPE (chainsaw safety!)
- Hot equipment/exhaust
- Limited air movement



Warning signs!

- Muscle cramps
- Muscle weakness
- Nausea (sick to your stomach)
- Irritability
- Light-headed or dizzy
- Heavy sweating
- Headache
- Thirst

Heat Stroke

- MEDICAL EMERGENCY
- Confusion
- Slurred speech
- Red, hot, DRY skin
- Profuse sweating
- Very high body temp
- Loss of consciousness
- Seizures

Heat Stroke First Aid

- CALL 911 - THIS IS AN EMERGENCY!!!
- Move them to a shady, cool area
- Stay with the person
- Remove outer clothing
- Cool with cold water or ice bath if possible
- Wet the skin, soak clothing in cool water
- Fan the air around them
- Place cold wet towels or ice on their head, neck, armpits, and groin



Heat Exhaustion

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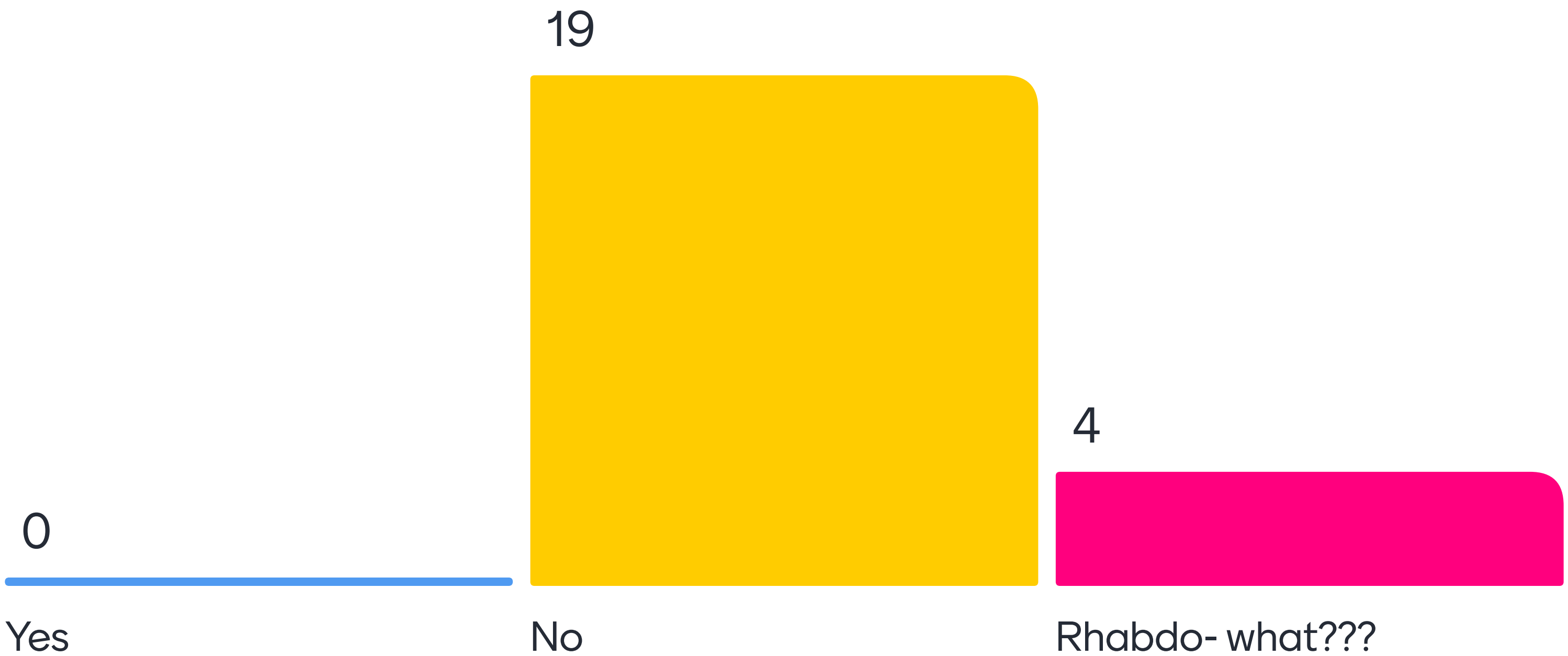


Heat Exhaustion First Aid

- Take to a clinic or Emergency room for evaluation
- Remove from hot area
- Give liquids to drink
- Remove unnecessary clothing (shoes and socks!)
- Cool with cold compresses or wash head, face, neck with cold water
- Encourage frequent sips of water
- Do not let them return to work that day



Have you ever heard of rhabdomyolysis?



Rhabdomyolysis

- Muscle cramps/pain
- Abnormally dark urine
- Weakness
- Exercise intolerance



Rhabdomyolysis First Aid

- STOP WORKING
- Increase fluids (water preferred!)
- Seek medical care immediately
- Ask to be checked for rhabdomyolysis

Heat Cramps



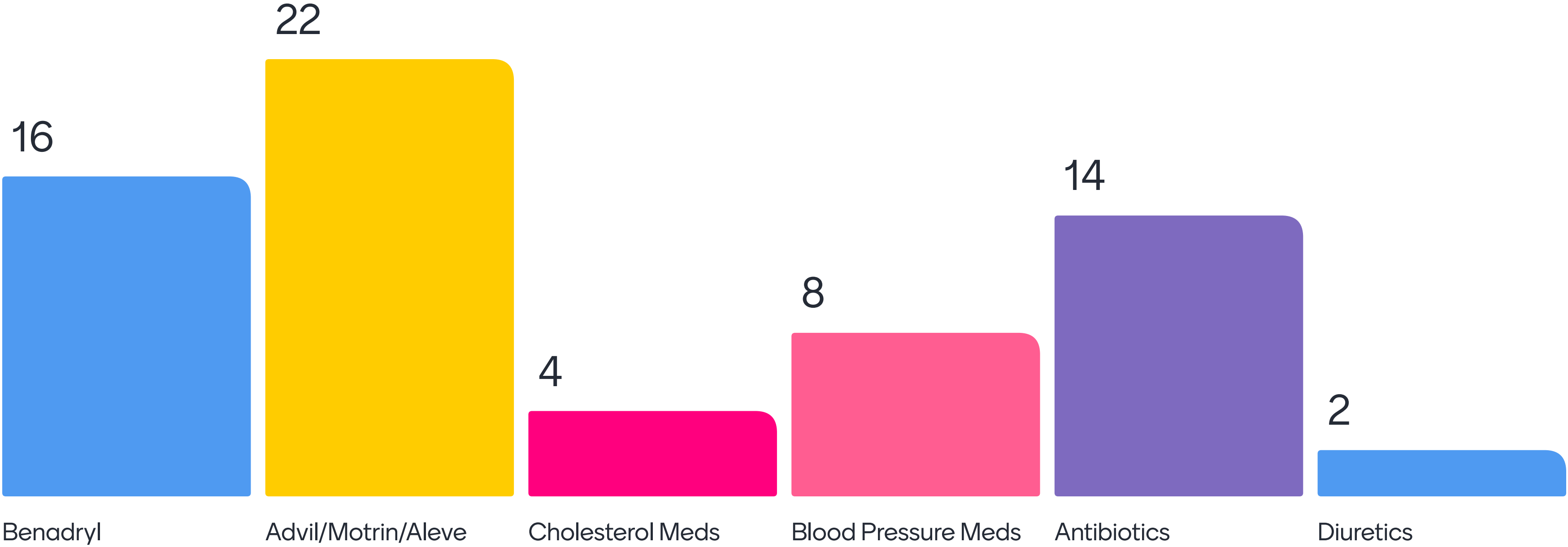
Heat Cramps First Aid

- Rest in a cool, shady area
- Drink water and have a snack or a sports drink
- Avoid salt tabs
- Wait a few hours before resuming strenuous activity
- Seek medical attention if underlying conditions exist
 - Heart problems
 - Low sodium diet
- Seek medical attention if cramps do not subside in 1 hour

Sunburns!



Do you ever take any of the following?



Photosensitivity

- More prone to sunburn
- Sunburns are more severe
- Can be caused by medications
- Can also be a reaction between something on your skin & the sun
 - Giant Hogweed
 - Lime juice



Sunburns can be serious!



Sunburn symptoms to worry about

Blisters

Nausea

Fever

Headache

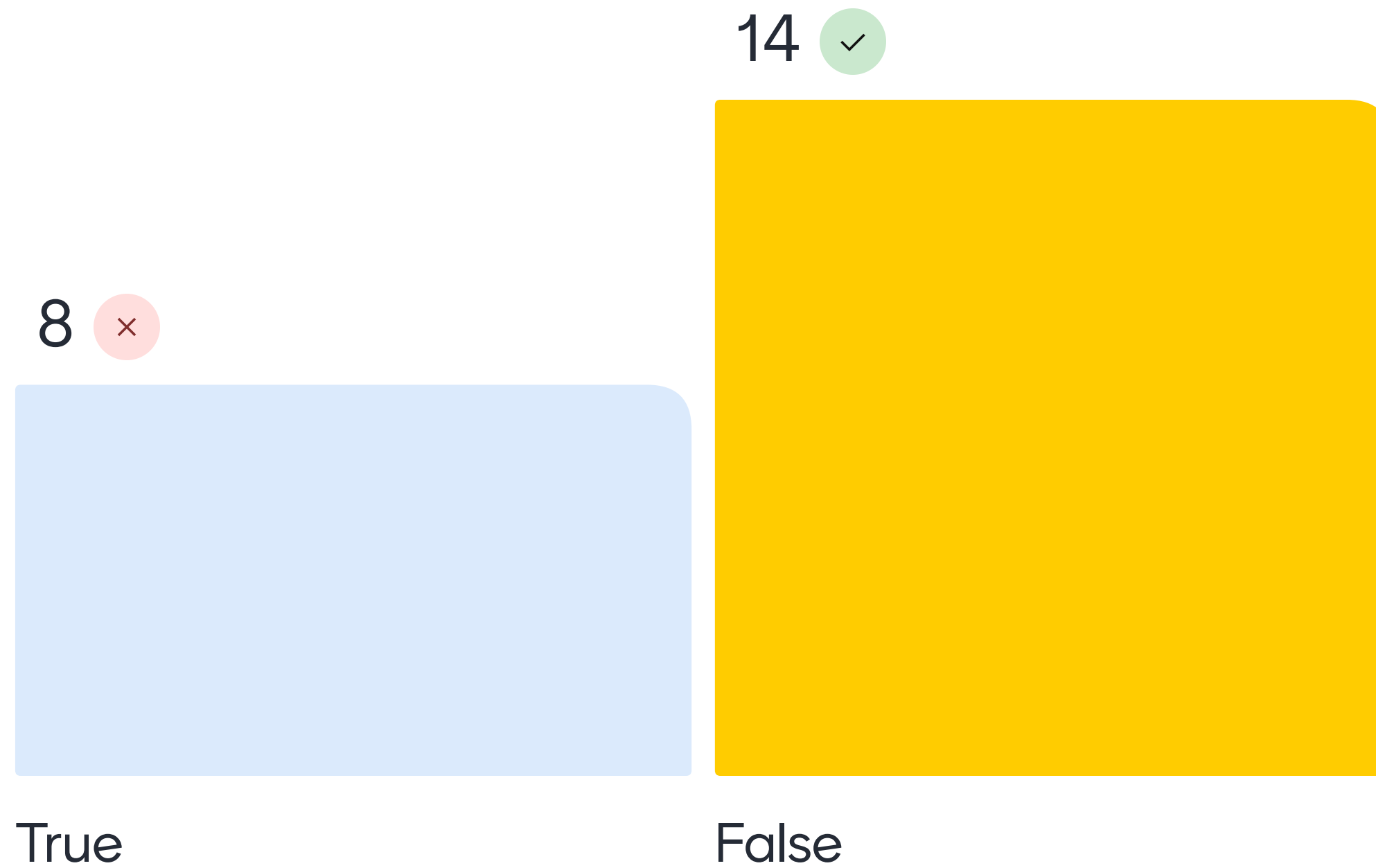
Swelling

Dehydration

How much water is enough?



Gatorade or other electrolytes are the best way to hydrate



Hydrate regularly!

→ 1 cup of cool water every 15-20 minutes



Electrolyte drinks

- Intense exercise lasting over 2 hours
- Increased sweating
- Replaces salts lost through sweat
- Can be high sugar!

Other ways to get electrolytes

- Bananas
- Oranges
- Celery
- Watermelon
- Coconut water



Acclimate slowly!



Ease into hot weather work

- Increase time gradually
- 20% per day
- Not just for the start of summer!



Watch out for new folks!

- Enthusiastic
- Want to make a good impression
- May push themselves

Prevention

- Avoid high risk work conditions
- Schedule strenuous work for cooler times
- Take scheduled breaks for water, rest



Heat Index!

NOAA or National Weather Service Heat Index Chart



		Temperature (°F)															
		80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
Relative Humidity (%)	40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
	45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
	50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
	55	81	84	86	89	93	97	101	106	112	117	124	130	137			
	60	82	84	88	91	95	100	105	110	116	123	129	137				
	65	82	85	89	93	98	103	108	114	121	128	136					
	70	83	86	90	95	100	105	112	119	126	134						
	75	84	88	92	97	103	109	116	124	132							
	80	84	89	94	100	106	113	121	129								
	85	85	90	96	102	110	117	126	135								
	90	86	91	98	105	113	122	131									
	95	86	93	100	108	117	127										
100	87	95	103	112	121	132											

Likelihood of Heat Disorders with Prolonged Exposure and/or Strenuous Activity

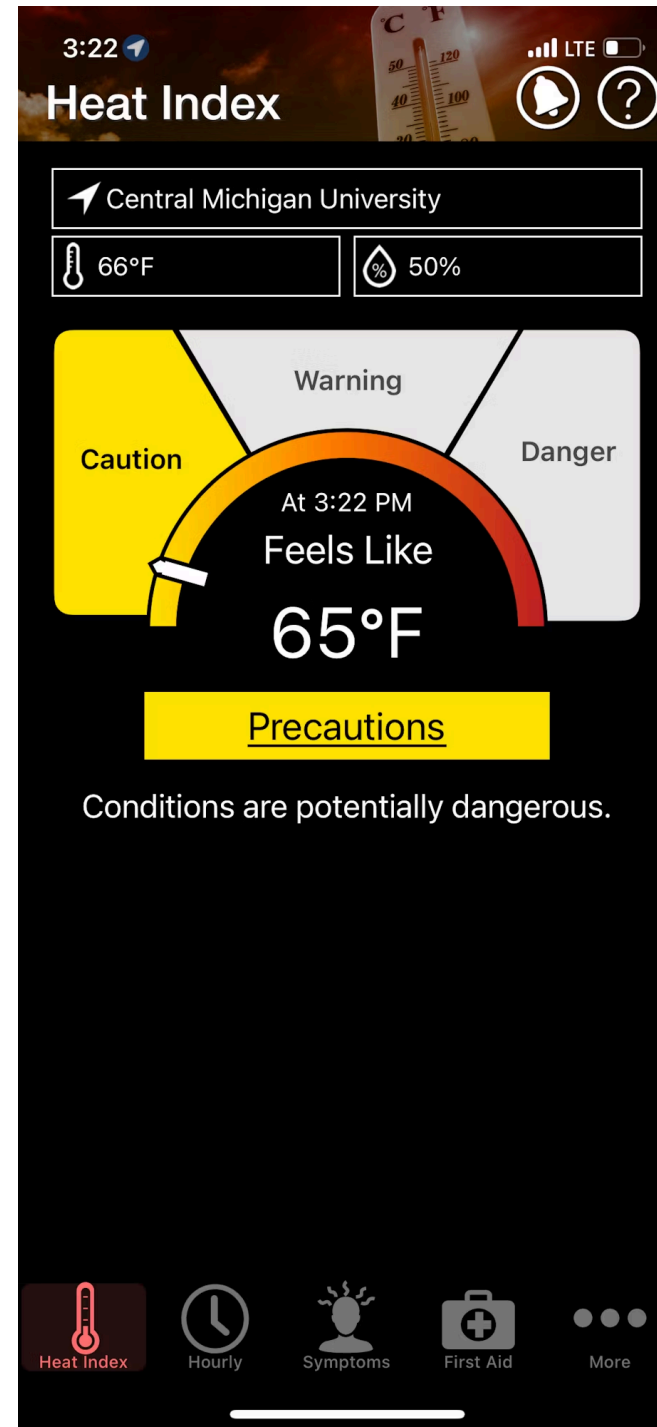
■ Caution
 ■ Extreme Caution
 ■ Danger
 ■ Extreme Danger

Heat index assumes shady and light wind conditions! Can be 15° F more!



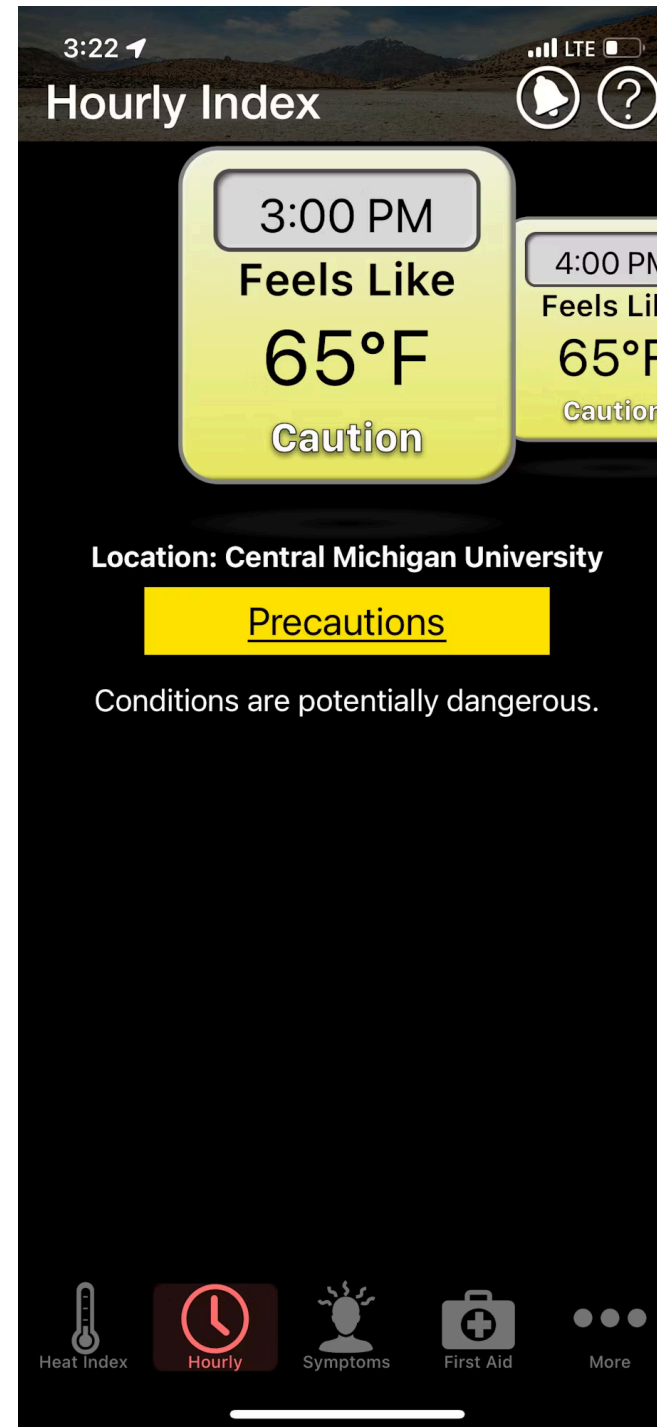


OSHA/NIOSH Heat Index App



Tap Precautions for more info on current conditions



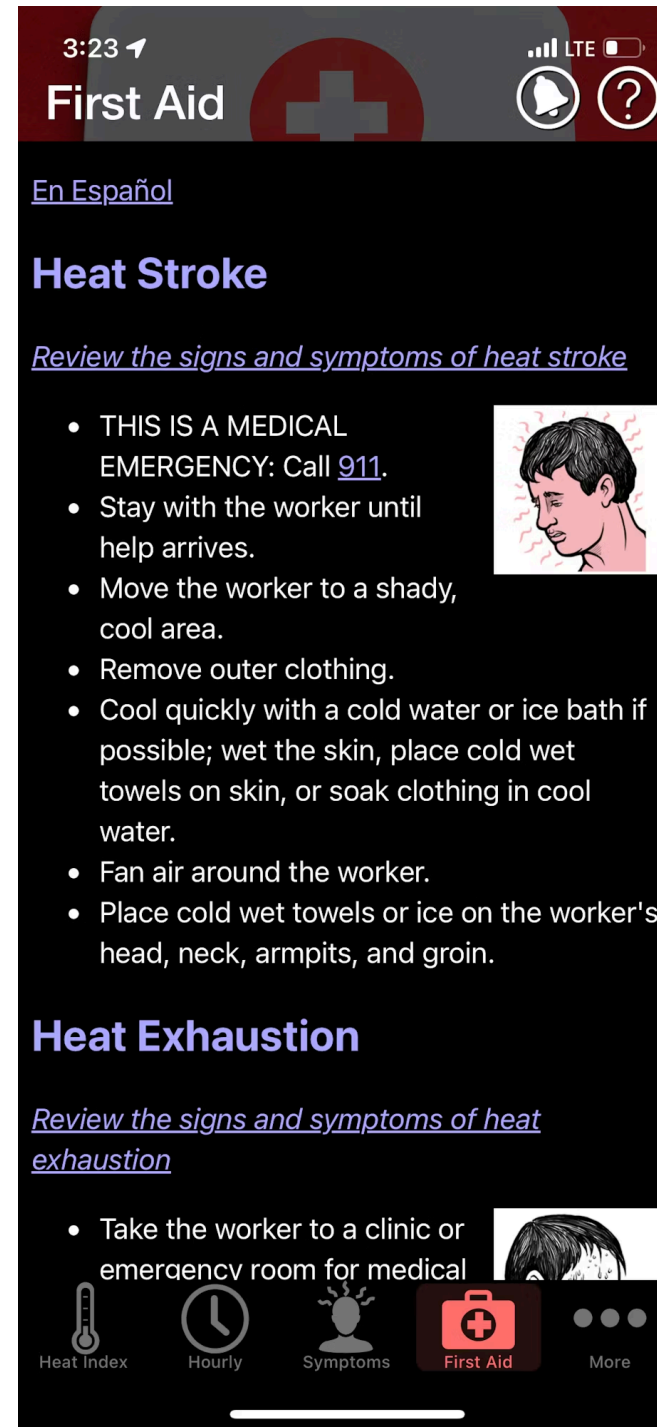


Scroll through to look at the next 12 hours

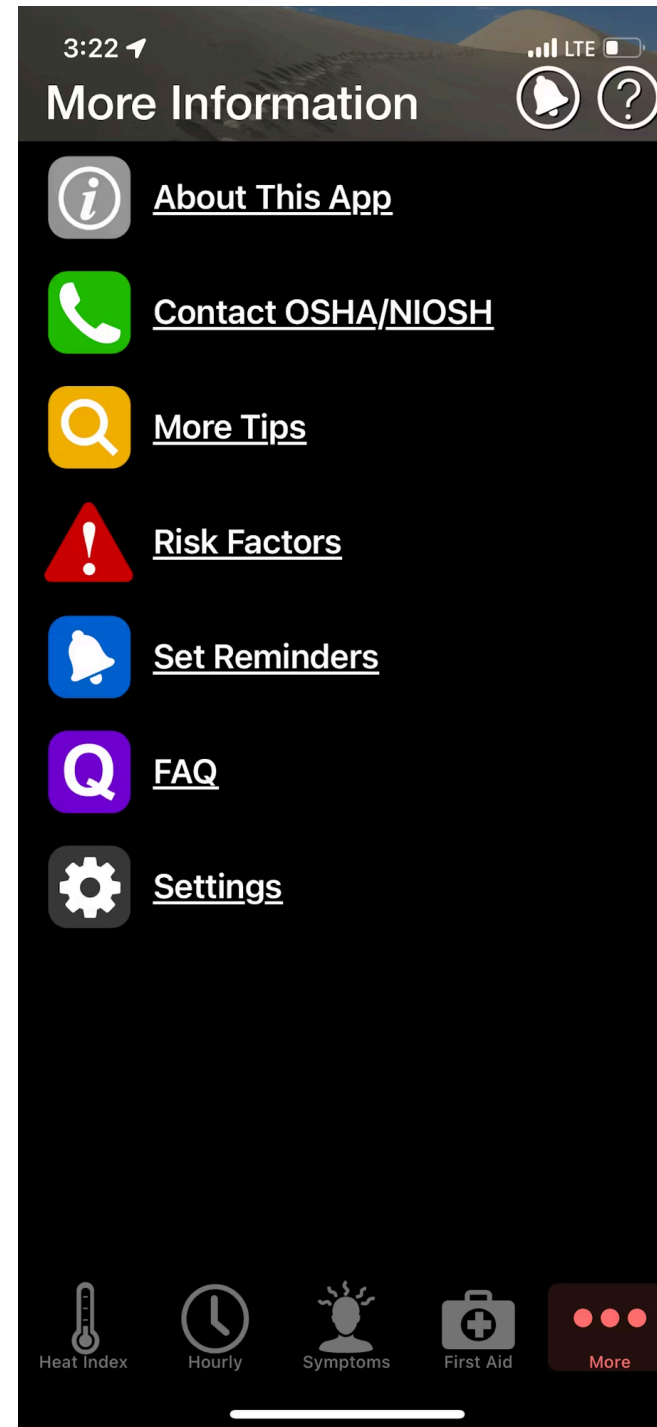


Signs and Symptoms - Scroll down for more illnesses





First Aid - Scroll down for more illnesses



"More Tips" is a great resource!



UV Index

Above 3 = Sunscreen

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Sunscreens

- At least 30 SPF
- Chemical
- Mineral
- A 1/4 teaspoon for your face, ears, neck
 - Two finger lengths
- 1 teaspoon per arm
 - About the size of a quarter
- Reapply frequently

Other ways to avoid the sun

- Cover up!
- Temporary shade
- Wide brim hats or shades
- Long sleeves
- Collared shirts



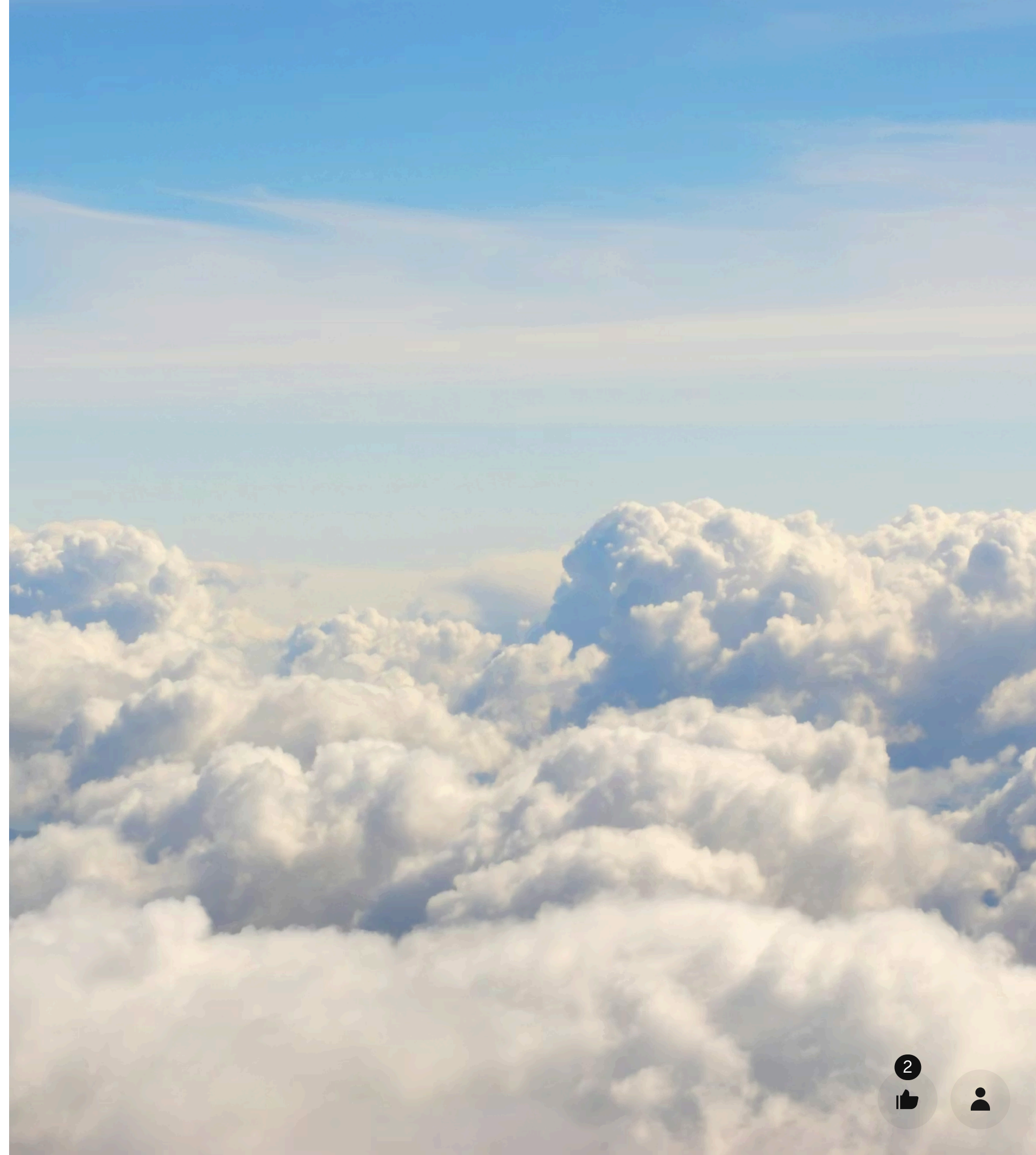
Don't forget sunglasses!

→ UVA/UVB protection!

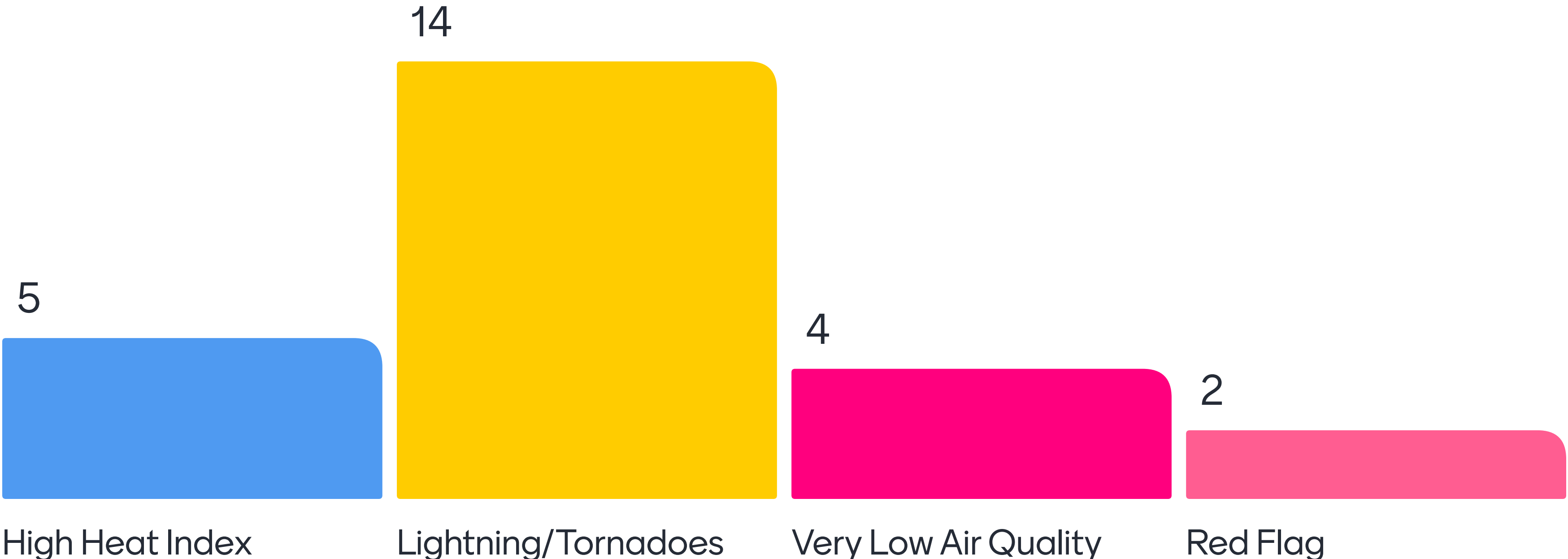
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Weather!



Does your agency have policies or procedures for work in these conditions?



Examples

Above _____ heat index, we will take rotating scheduled breaks

If there is a threat of tornadoes, _____ will be designated to monitor conditions

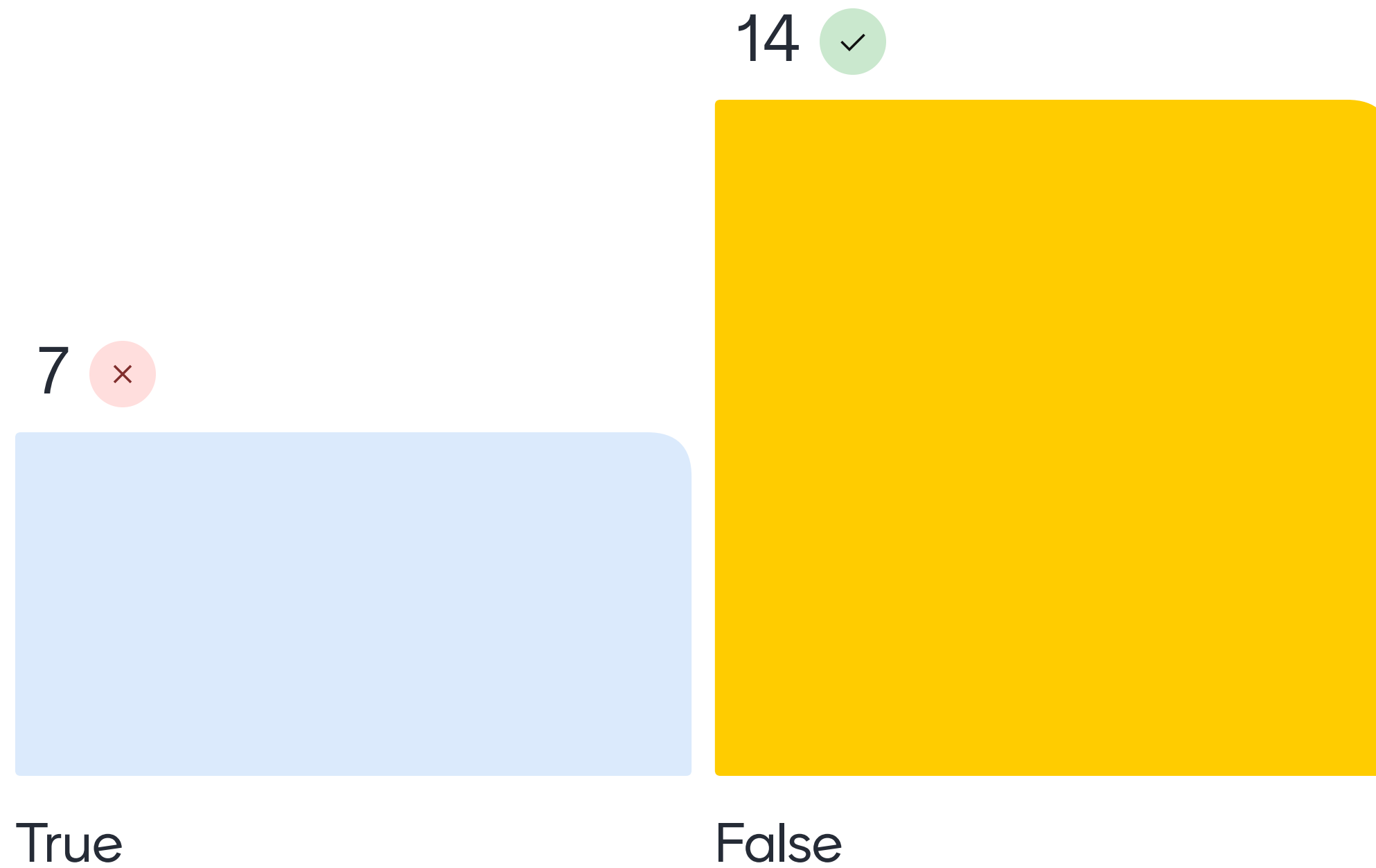
If there is a Red Flag warning, crews will need to carry _____

Inclement weather conditions

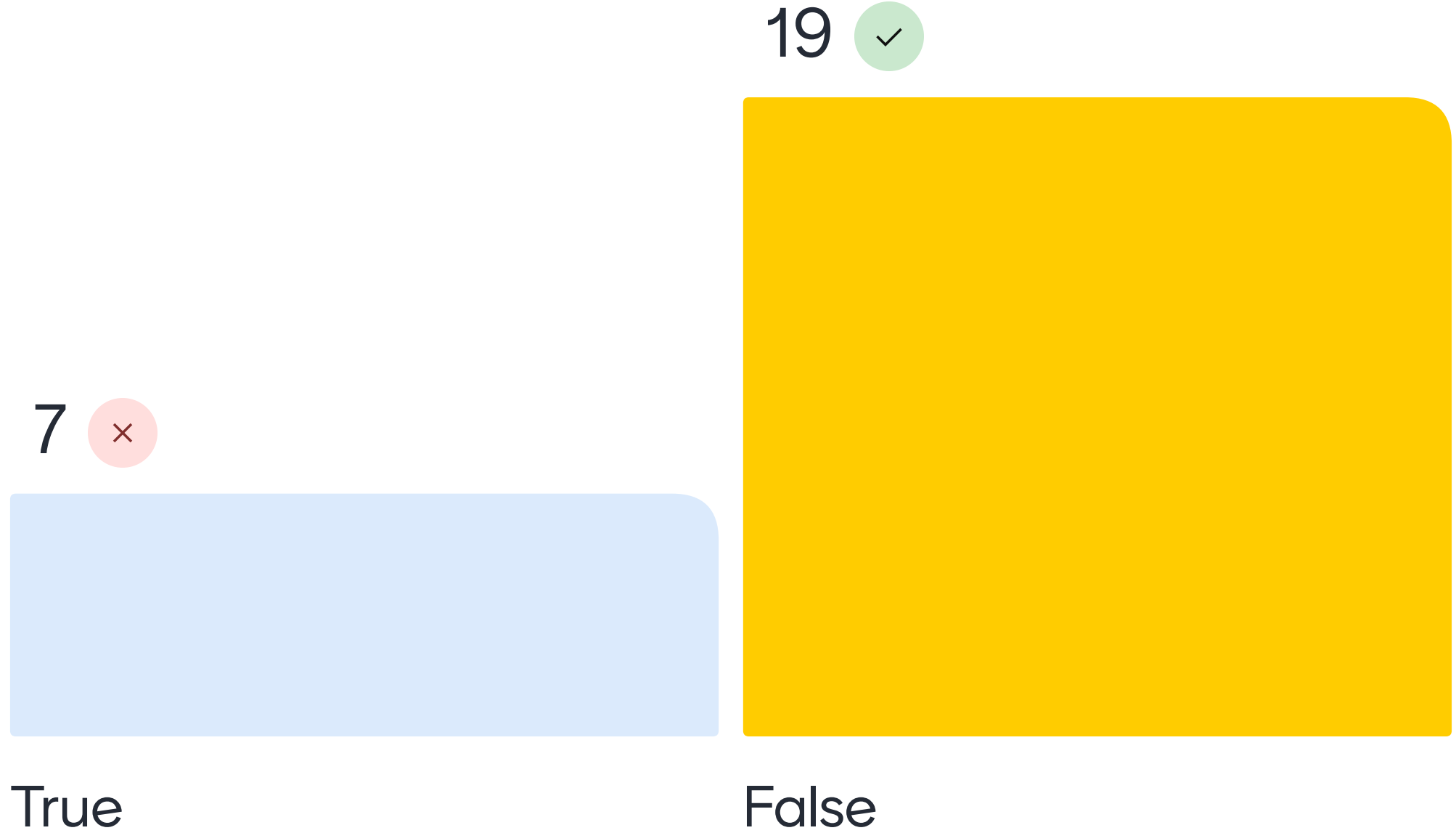
- Tornadoes
- Flash flooding
- Lightning
- Hail



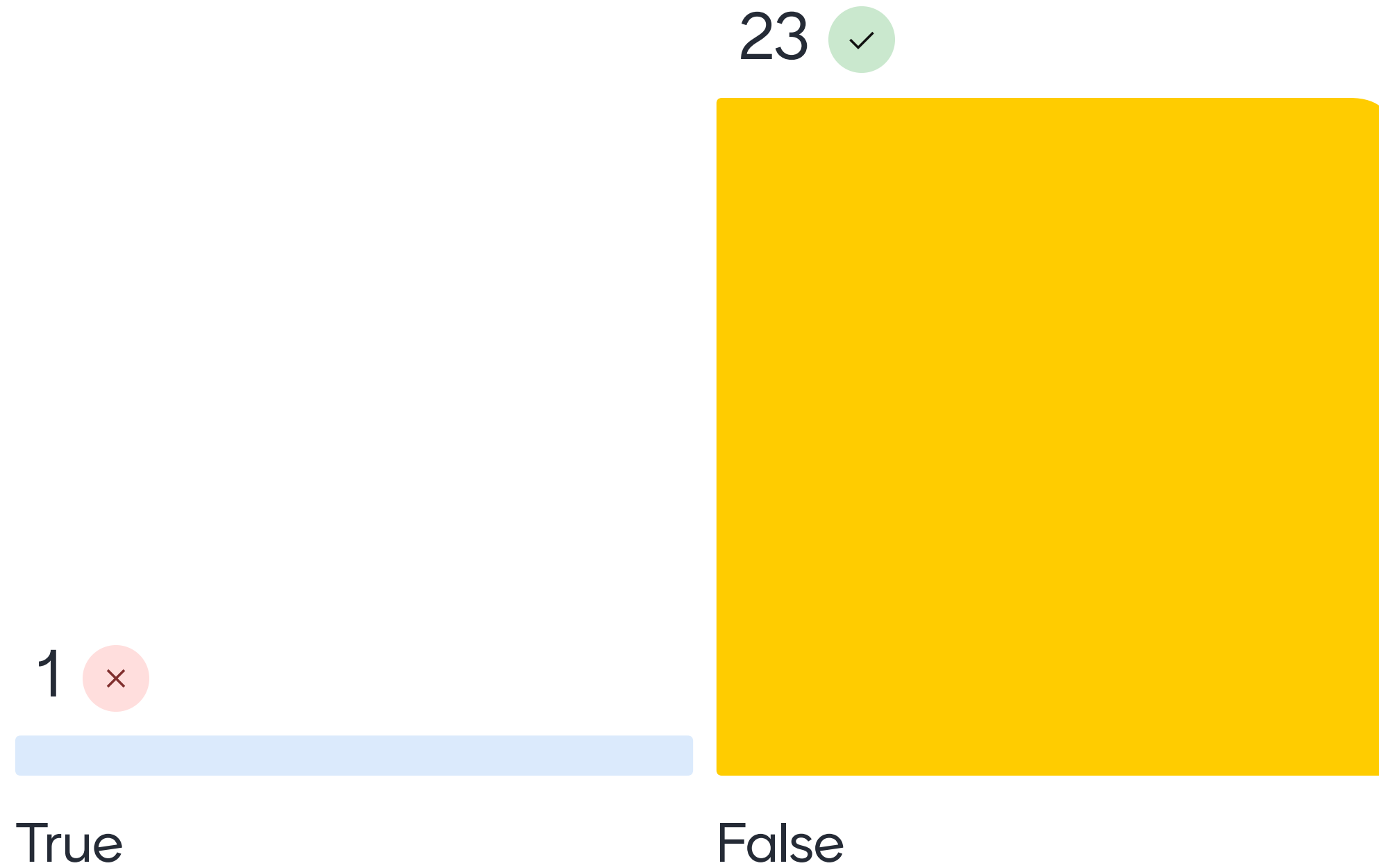
If you're caught outside during a tornado, the safest place is under an overpass



You shouldn't touch someone who has been struck by lightning because you could also be electrocuted



It is safe to drive through moving water if it isn't very deep

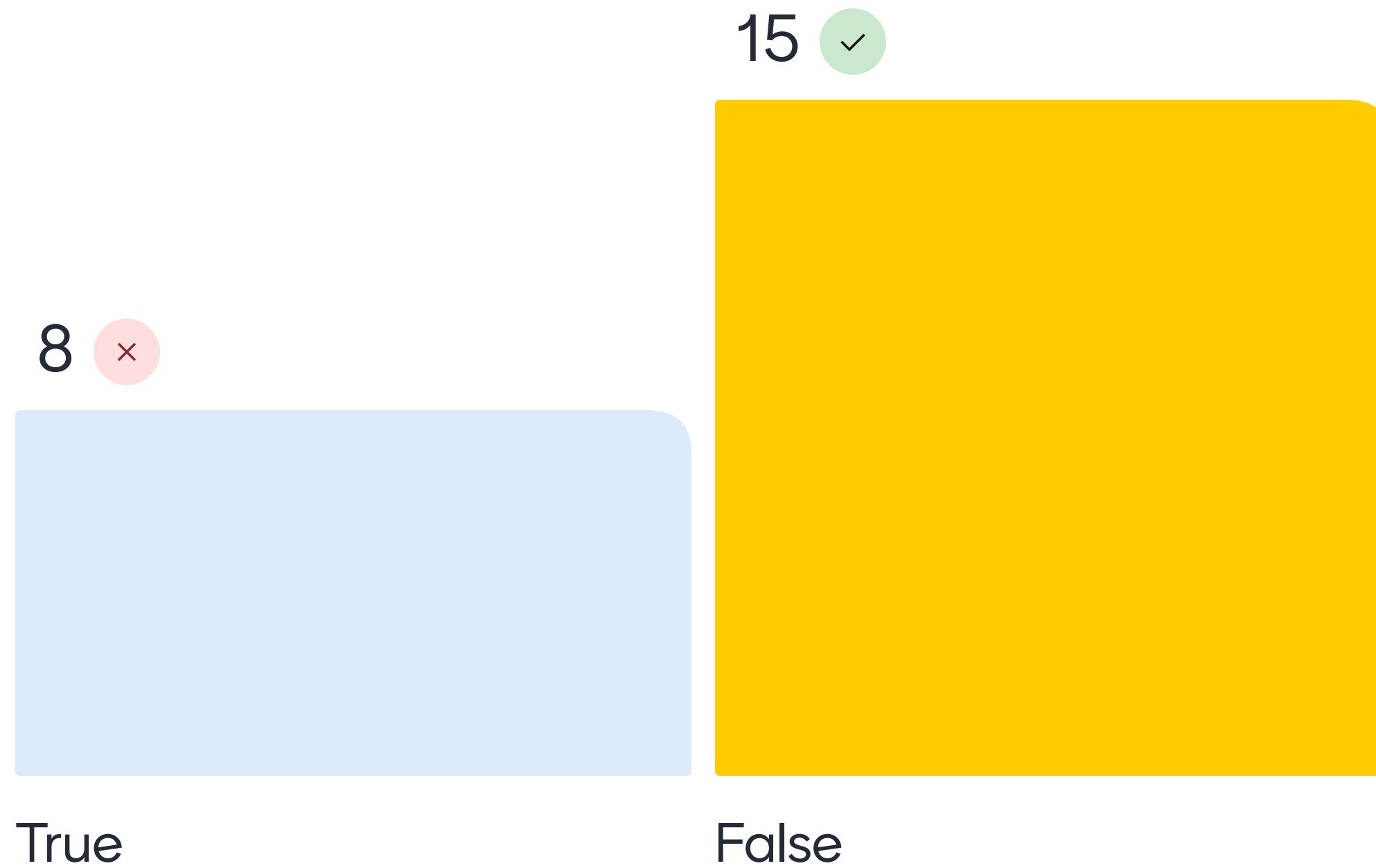


Fire Danger

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A Red Flag warning means that there are active fires in the area



Red Flag Conditions

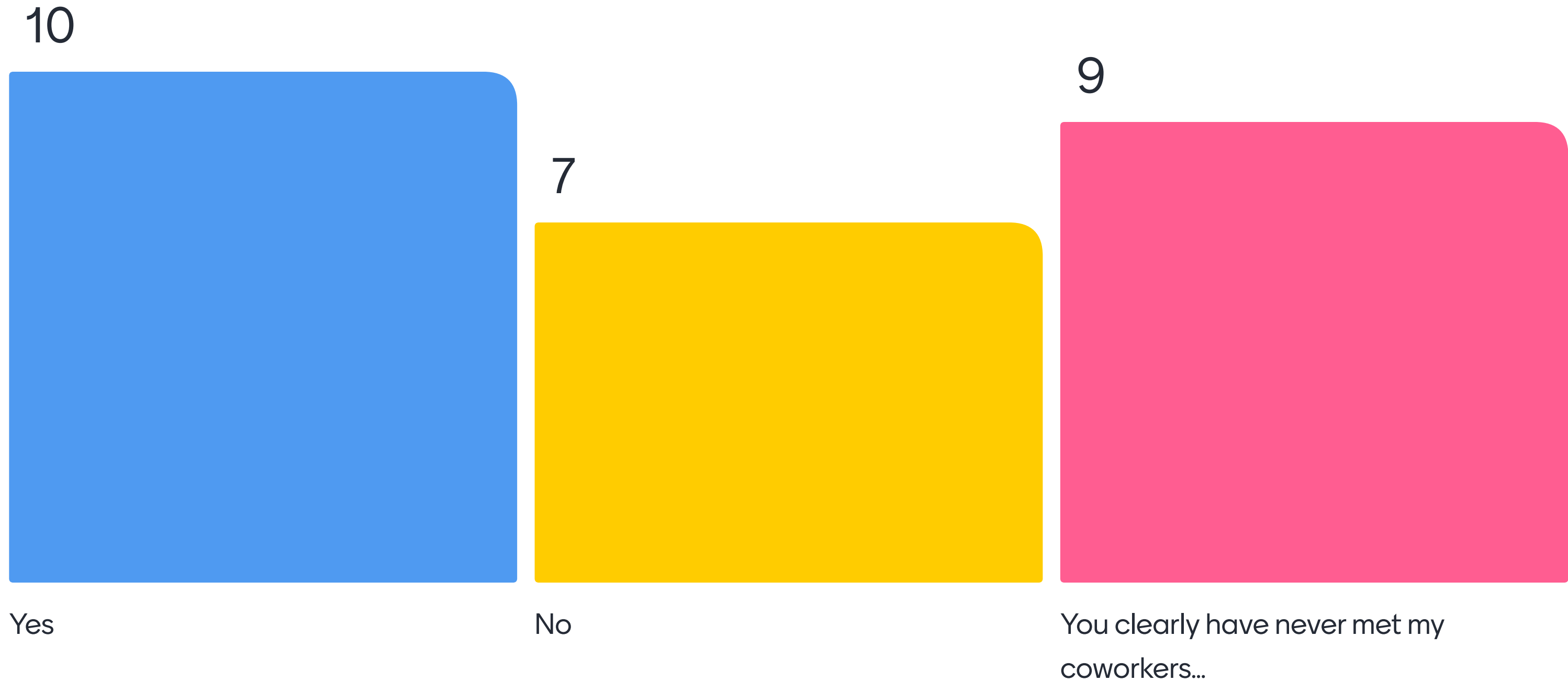
- Strong winds
- Low humidity
- Warm temps
- Expected within the next 24 hours

Equipment Overheating

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My coworkers know what to do if a piece of equipment is overheating



Critters

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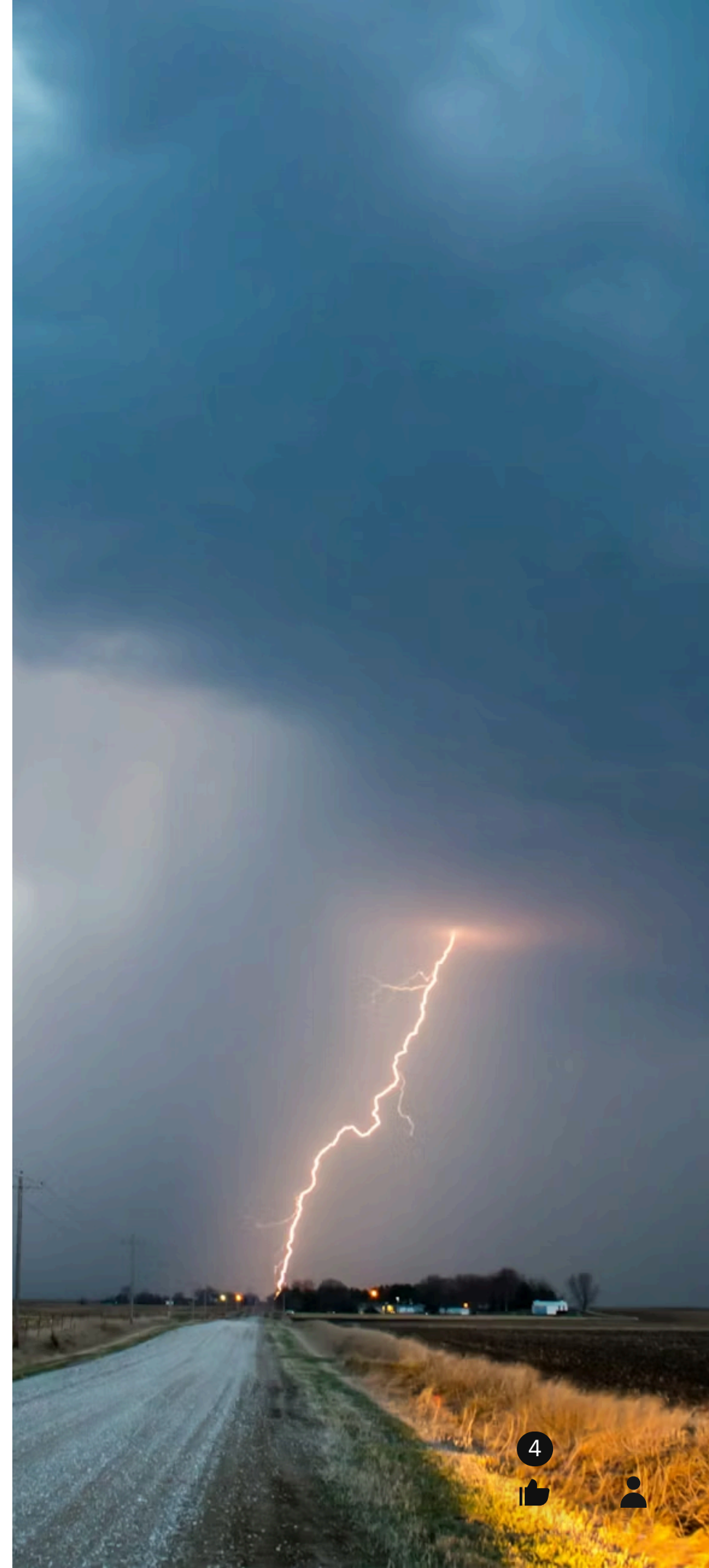


Critters impacting your work

- Mosquitoes
- Ticks
- Wasps & Bees
- Larger critters

National Weather Service

<https://www.weather.gov/safety/>



Questions!

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