

An illustration of a laptop and a coffee cup on a desk. The laptop screen shows a large, irregular white shape on a gray background, resembling a splash or a stylized logo. The coffee cup is white with a black handle and a small label that says "COFFEE".

COFFEE BREAK SAFETY: **HEAT STRESS**

SOLVING WORKSITE SAFETY RISKS IN 5 MINUTES OR LESS

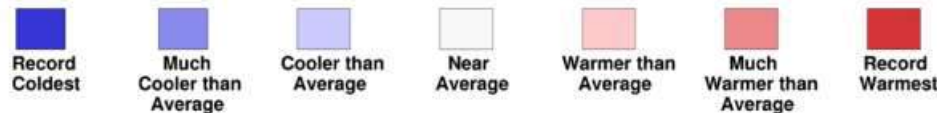
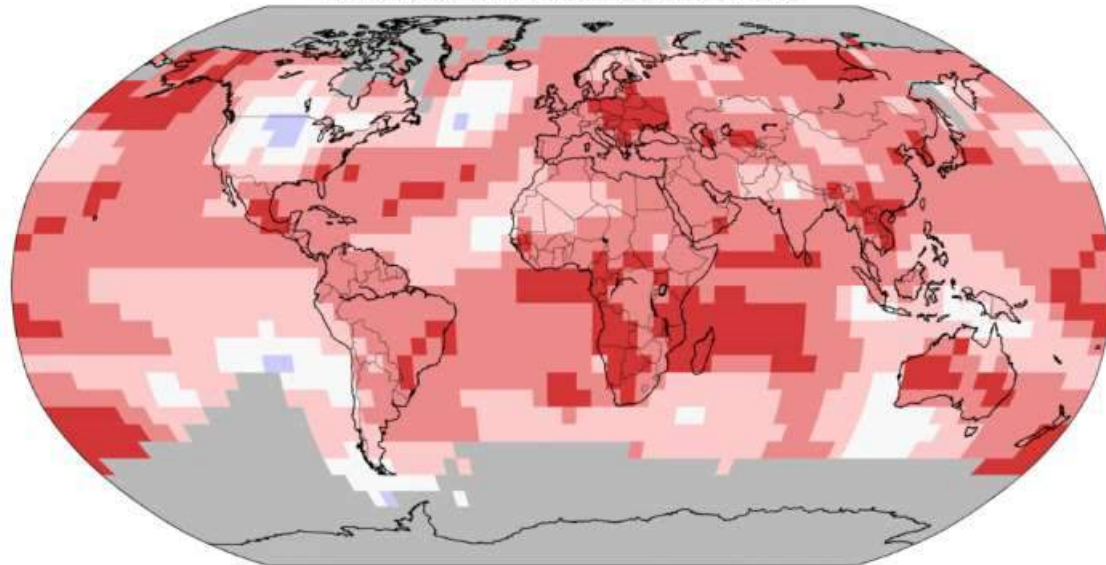
A REAL PROBLEM

GLOBAL TEMPERATURE TREND

Land & Ocean Temperature Percentiles Jan–Dec 2019

NOAA's National Centers for Environmental Information

Data Source: NOAA GlobalTemp v5.0.0–20200108



GHCNM v4.0.1.20200106.q1e

Quick Stats:

- 2019 ranked as 2nd warmest year on record, behind 2016
- 2.07°F / 1.15°C above average

High Annual Temp Regions:

- Central Europe
- Asia
- Australia & New Zealand
- Southern Africa & Madagascar
- North America
- Eastern South America

FACTS

FATALITIES DUE TO ENVIRONMENTAL HEAT

UNITED STATES // 2018

49 OCCUPATIONAL HEAT RELATED
FATALITIES 
37 IN 2017

FROM EXPOSURE TO ENVIRONMENTAL HEAT

IN 2018 **11,240 INJURIES**
3,950 HEAT RELATED INJURIES  OVER LAST 3 YEARS

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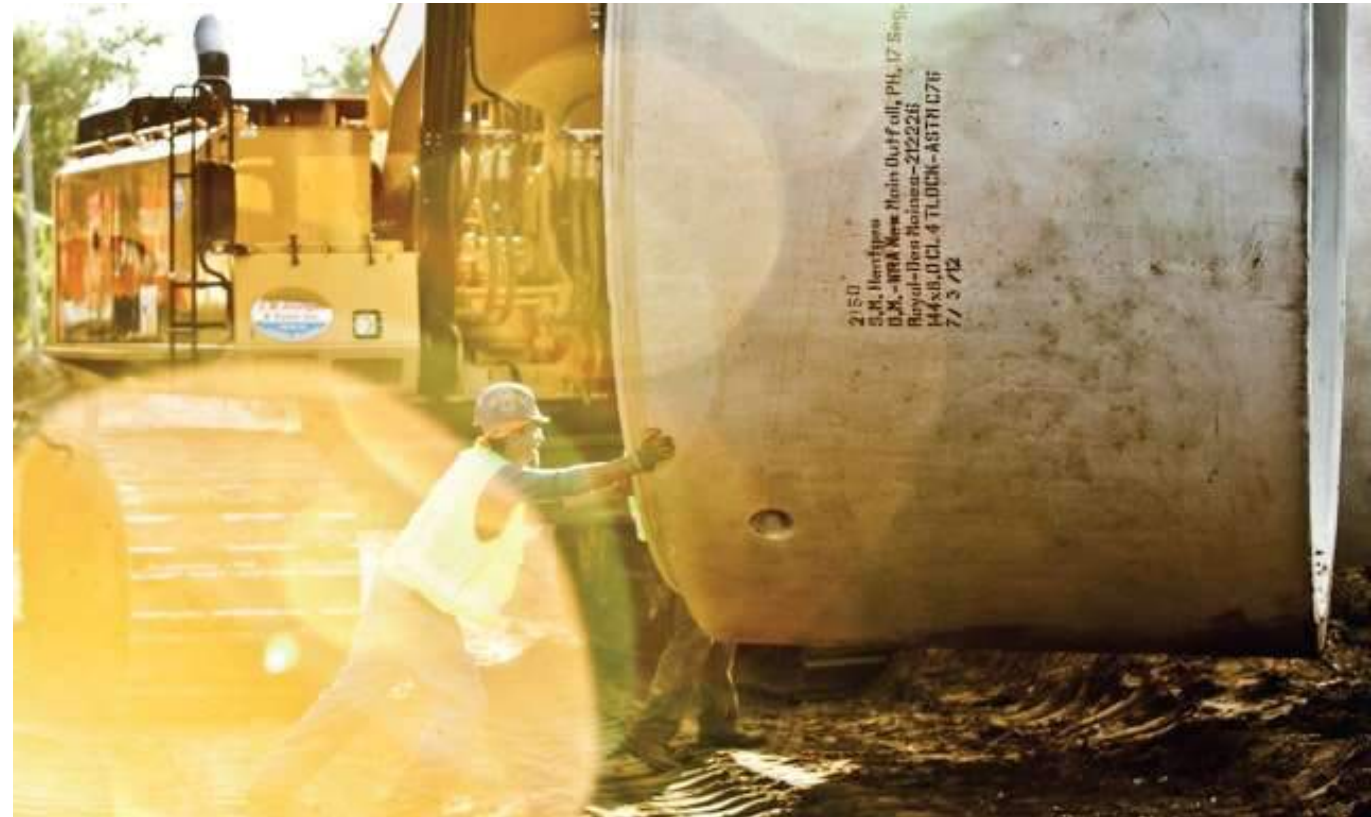


OVERVIEW

DEFINING HEAT STRESS

Ability to control internal body temperature starts to fail.

- Body temps rise above 99.7°F (37.6°C)
- Severe illness occurs when body temperature reaches 104°F (40°C)





HEAT STRESS

WHAT IS A HEAT-RELATED ILLNESS?



Heat-Related Illness (HRI)

- Heat Rash
- Heat Cramps
- Heat Exhaustion
- Heat Stroke

SEVERITY



HEAT STROKE

SIGNS: Pale skin, nausea, vomiting, confusion. Fever 104° or higher.

TREATMENT: Medical emergency. Call 911. Remove heavy clothing. Drink small amounts of water/electrolytes.

PREVENTION: Acclimatization. Drink plenty of water / electrolytes. Medical screening, training, and edu.



HEAT EXHAUSTION

SIGNS: Headaches, weakness, mood change, feeling sick. Extreme sweating, pale clammy skin.

TREATMENT: Move to cool, shaded area and loosen heavy clothing. Drink cool water / electrolytes.

PREVENTION: Acclimatization. Drink plenty of water / electrolytes. Training and education.



HEAT CRAMPS

SIGNS: Painful spasms usually in legs or abdomen. Possibly heavy sweating.

TREATMENT: Apply firm pressure and massage cramped area. Rest in cool place and drink water. Seek medical attention if cramping is severe.

PREVENTION: Adequate water and salt intake. Training and education.



HEAT RASH

SIGNS: Red blister-like eruptions/bumps. Itching sensation.

TREATMENT: Rest in cool place. Allow skin to dry.

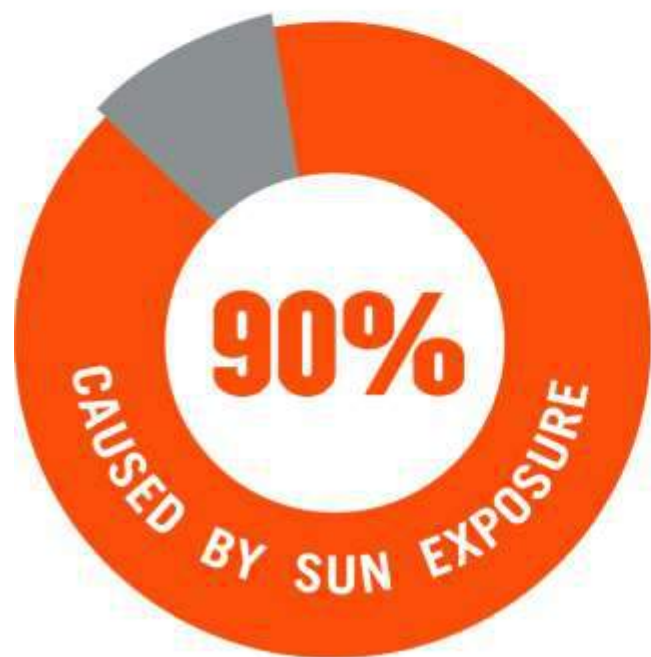
PREVENTION: Shower after working in hot environment. Keep skin dry. Training and education.

A close-up photograph of a construction worker wearing a white hard hat with an orange brim. The hard hat has several stickers: a yellow one with '2015', a white one with 'LUIS', a white one with 'EDUARDO', and a blue one with 'SAFETY ORIENTATION'. The worker is applying white sunscreen to his cheeks with his fingers. He is wearing a green safety vest. The background shows a construction site with rebar and a clear sky.

SKIN PROTECTION

UNITED STATES // 2018

3 MILLION AMERICANS
DIAGNOSED WITH SKIN CANCER



\$8.1 BILLION

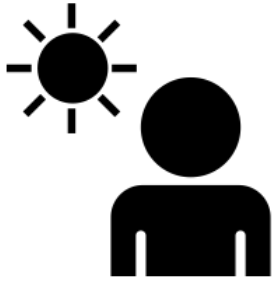
ANNUAL COST OF TREATING
SKIN CANCER IN THE USA

CASES OF SKIN CANCER RISING
10% ANNUALLY



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SUN EXPOSURE

A GROWING DANGER

Outdoors workers are often exposed to harmful UVA/ UVB rays during both summer and winter months. Exposure can be for hours on end, during times when the sun's rays are most intense.

- Outdoor workers are **3.5 times more likely** to develop skin cancer.
- Sun protection PPE helps, but won't block harmful rays from all areas of the body.

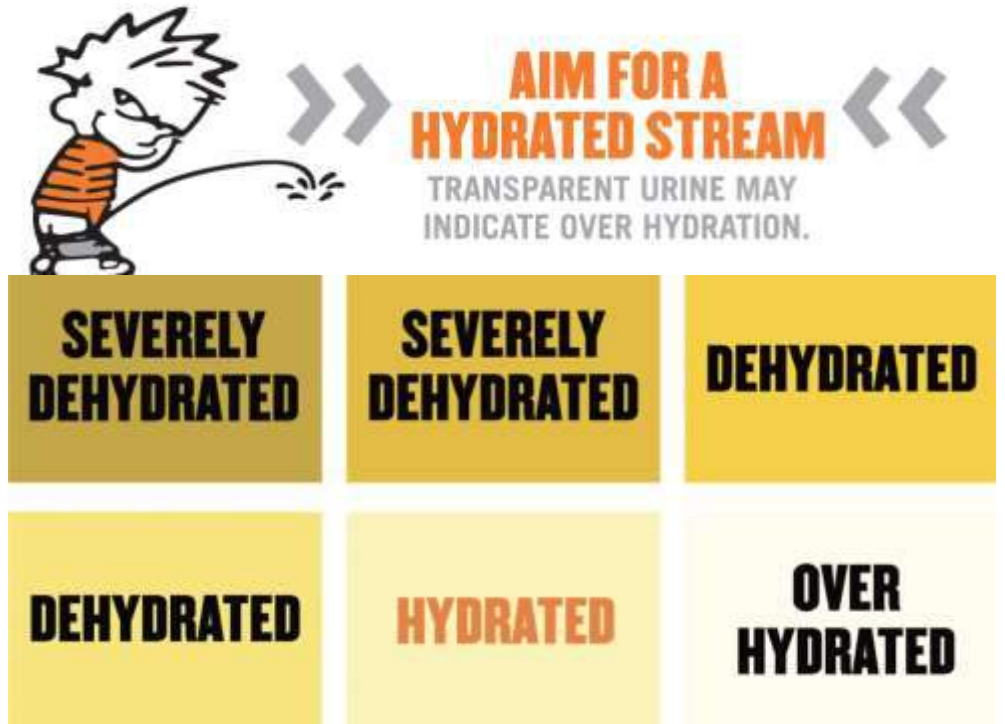


A close-up photograph of a person's head and shoulders. They are wearing a white shirt and a yellow safety vest. A hand is pouring water from a clear plastic container onto their forehead. The person's face is wet, and water is dripping down their cheek. The background is blurred, suggesting an outdoor setting.

HEAT-RELATED ILLNESS IS 100% PREVENTABLE

WATER | REST | SHADE | COOLING PPE | SKIN PROTECTION

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WATER | REST | SHADE | COOLING PPE | SKIN PROTECTION

Workers should always be allowed and encouraged to take a cool-down break in the shade when they need one.

Shaded rest areas should:

- Have access to cool, clean water
- Be properly ventilated
- Accommodate every worker
- Provide an opportunity to check for HRI symptoms
- Be included as part of a preventative work/rest schedule

Temperature (°F)	Light Work Minutes Work/Rest	Moderate Work Minutes Work/Rest	Heavy Work Minutes Work/Rest
90	Normal	Normal	Normal
91	Normal	Normal	Normal
92	Normal	Normal	Normal
93	Normal	Normal	Normal
94	Normal	Normal	Normal
95	Normal	Normal	45/15
96	Normal	Normal	45/15
97	Normal	Normal	40/20
98	Normal	Normal	35/25
99	Normal	Normal	35/25
100	Normal	45/15	30/30
101	Normal	40/20	30/30
102	Normal	35/25	25/35
103	Normal	30/30	20/40



* From NIOSH Criteria for a Recommended Standard, Occupational Exposure to Heat and Hot Environments, <https://www.cdc.gov/niosh/docs/2016-106/pdfs/2016-106.pdf>. **Assumptions:** workers are physically fit, well-rested, fully hydrated, under age 40, and environment has 30% humidity and perceptible air movement.

WATER | REST | SHADE | **COOLING PPE** | SKIN PROTECTION



Cooling PPE is designed to transport moisture, cool pulse points, block sunlight or reduce direct sun exposure.

Cooling PPE examples include:

- Evaporative cooling towels
- Evaporative cooling vests
- Evaporative cooling neck shades
- Evaporative cooling sleeves

WATER | REST | SHADE | COOLING PPE | **SKIN PROTECTION**

UV Index	Description	Recommended Protection	Sun Burn Time
0-2	No danger to the average person	Wearing a Hat and/or Sunglasses is Sufficient.	1 Hour+
3-5	Little risk of harm from unprotected sun exposure	Wear a Hat and Sunglasses. Use SPF 15+ Sunscreen.	40 Minutes
6-7	High risk of harm from unprotected sun exposure	Wear a Hat and Sunglasses. Use SPF 30+ Sunscreen. Cover the Body With Clothing. Avoid the Sun if Possible.	30 Minutes
8-10	Very risk of harm from unprotected sun exposure	Wear a Hat and Sunglasses. Use SPF 30+ Sunscreen. Cover the Body With Clothing. Avoid the Sun if Possible.	20 Minutes
11+	Extreme risk of harm from unprotected sun exposure	Take All Precautions Possible. It is Advised to Stay Indoors.	Less Than 15 Minutes

OSHA'S recommendations for for sun-exposed workers:

- **Cover up** with loose-fitting, long-sleeve shirts and pants
- **Use sunscreen** with an SPF of at least 30
- **Wear a wide brim hat** to protect neck, ears, eyes, forehead, nose and scalp
- **Wear UV-absorbent sunglasses**
- **Limit exposure** – UV rays are most intense between 10 a.m. and 4 p.m.



NEW FOR 2020



HEAT STRESS SOLUTIONS

RELIEF IS CALLING. BETTER PICK UP // WWW.ERGODYNE.COM

VALI // SAFETY GLASSES

Lightweight, single-lens safety glasses meet ANSI and CSA Impact Requirements and blocks 99.9% of harmful UV rays.

6487 // COOLING MULTI-BAND

Soft, durable, performance knit fabric wicks moisture when dry and cools when wet. Also provides UPF 50+ protection from UV rays.

3775L // WATER BOTTLE/CANISTER TRAP - LARGE

Neoprene main material with buckle closure accommodates our 5151, 5152 water bottles or standard 1L bottles/canisters.

6632 // COOLING SKULL CAP

Performance knit fabric provides all the cooling and UPF protection, without all the bulk.

6667 // PVA COOLING VEST

This super-evaporative vest with breathable mesh side panels activates quickly and remains cool for up to 4 hours.

7022 // A2 NITRILE COATED DSX GLOVES

ANSI A2 cut protection gloves are touchscreen capable and offer superior grip in dry handling conditions.

5170 // 17 QT (16L) JOBSITE COOLER

This cooler will keep 18 cans cold for up to 30 hours and holds up to 300 lbs. of seating during breaks.

KREW'D

SPF 50 SUNSCREEN

6352 // 1.5oz LOTION

6354 // 1.5oz STICK

6353 // 5.5oz SPRAY

6351 // 8oz LOTION

6355 // 32oz LOTION



6353

6351

6352

6354

6355



6702

COOLING BANDANA W/
EMBEDDED POLYMERS



5171

48QT (45L) JOBSITE COOLER

EVEN MORE SWEET RELIEF FOR THE HOT & BOTHERED

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REQUEST WORKSITE SURVEY

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