

Cold Safety Awareness - Presenter Bio: Dr. Elijah Wasson



Dr. Elijah Wasson is a Californian by way of Texas.

He attended the University of California at San Francisco Medical School. He trained in internal medicine at University of California Los Angeles. He spent several years training future doctors as faculty at UCLA before transitioning to private medicine.

Dr. Wasson has spent the last several years as a practicing internist in the Burbank California community. He works for Facey Medical Group, an independent physician group affiliated with Providence Health Care.

When not practicing medicine, Dr. Wasson enjoys coaching youth soccer teams, mountain biking, and exploring the great open spaces of the American West.

Cold Safety Awareness – Resources Page

- IATSE Training Trust Fund: <https://www.iatsetrainingtrust.org/>
- OSHA - Winter Weather Webpage: <https://www.osha.gov/winter-weather>
- OSHA Stop Falls Campaign: <https://www.osha.gov/stop-falls>
- CCOHS - OSH Fact Sheets - Cold Environments – Working in the Cold:
https://www.ccohs.ca/oshanswers/phys_agents/cold_working.html
- Act Safe BC, Working in Cold Weather Video:
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- Safe Work Manitoba – Cold Weather Hazards in Film and Media Production:
https://www.safemanitoba.com/Resources/Pages/ST_ColdFilmMediaProduction_21SWMB.aspx
- Safe Work Manitoba – Slips, Trips, and Falls:
<https://www.safemanitoba.com/topics/Pages/Slips-Trips-and-Falls.aspx>



Cold Safety Awareness

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Handouts

1. Dr. Elijah Wasson Presenter Bio
2. Cold Safety Resources
3. Cold Safety Presentation Slides





Dr. Elijah Wasson

Internal Medicine, Burbank California
Facey Medical Group
A Providence Health Affiliate

Welcome

Objectives

- Recognize cold-related illness/injury and degrees of severity
- Review first aid management of cold-related illness
- Identify ways to prevent and protect against cold-related illness
- Discuss cold-adjacent injuries such as slips, trips, and falls



Scenario 1: Hypothermia

Quinn is an experienced sports broadcast technician who has worked in the craft for nearly 35 years. Throughout the years, Quinn has worked in almost every weather condition imaginable and has never run into trouble. One night, while working an outdoor event in below freezing temperatures with heavy wind gusts, Quinn starts to feel unwell. Quinn begins to shiver more than usual and fumble with their equipment. This is unusual, and Quinn's coworkers quickly realize that something is wrong.



Quinn is moved to a warm place and emergency services are contacted. At the hospital, Quinn is diagnosed with hypothermia. The Doctor explains that Quinn's age, and the fact that they are a diabetic, may have contributed to the episode.

Hypothermia

- Drop of Core Body Temperature
- It's physics
- Body Heat is Cell Metabolism
- Nml Body Temp (37 C or 98.6 F)
- How Heat is lost:
 - Radiation (works in a vacuum)
 - Conduction (interface contact)
 - Convection (contact that moves)

Escalating symptoms:

- Shivering (warning)
- RED FLAGS (core temp is dropping):
 - Mild confusion but functional
 - Reducing level of consciousness
 - Shivering may or may not stop
 - Loss of Consciousness



Welcome to the Frozen Tundra

Real World Tips

Jan 2022 NFL Game was 7 degrees,
- 4 wind chill.

80,000 fans watched it



Tips from The “Pros”

- Insulation is about trapping still air (fleece and wool)
- Technical wick away later (polypropylene or smart wool)
- Layers (more trapped air), 3 or 4
- Defeat wind and wet (outer shell that is wind proof)
- Head (Thick Hat and a Hood)
- Neck: Scarf or Neck/Face Gaiter (wool/fleece)
- 2-3 layers on the legs, wind proof if you got it, wick skin layer
- Eyes: avoid stinging wind
- FEET: the most important of all and often neglected

Happy Feet

- DON'T Forget Conduction (soles, what are you standing on)
- Thick soled winter boots – Gore Tex
- Consider insole
- Wool socks (bring extra)
- +/- polypropylene layers
- Watch where you stand (conductors)!
- Cold Core = Cold hands and feet
- Size up for the Cold, too tight is BAD
- Stand on an insulator



First Aid for Hypothermia


Warm place, no wind

Remove wet things

Insulate them (capture their heat)

Warm bath, not hot

Emergency – another body with them under the blanket

A Sherpa climber is in the foreground, wearing a red and black jacket, a grey beanie, and a yellow oxygen mask. A large orange oxygen tank is on their back. In the background, a long line of climbers is ascending a steep, snow-covered mountain slope under a clear blue sky.

Work Like a Sherpa

- Slow and steady, Avoid sweating
- Mini breaks but often

Scenario 2: Clothing and Frostbite

Terry always feels warm, especially while working, and opts to wear as few layers as possible. One winter, on an extremely cold day, while working an outdoor performance, she forgets to bring a pair of gloves but shrugs it off thinking “I’m always too warm at work anyway.”

As the event goes on, the weather gets colder. Terry goes to the warming tent, but when a coworker says, “Hey look who’s here! The person who’s never cold,” she gets embarrassed and quickly leaves. A few hours into the shift, Terry’s fingers begin to feel numb and prickly, and her skin begins to look white and waxy. Terry heads back to the heated tent to warm-up, and it is there that another coworker notices her fingers. The coworker urges Terry to seek medical attention, because this looks like the beginning stages of frostbite.



Frostbite – frozen tissue

- Frost Nip – reversible numbness on rewarming (WARNING)
- Convection and conduction again (wind, metal, exposed skin, water)
- Progression
 - Pale and numb
 - Large Blisters (on rewarming)
 - Bloody Smaller Blisters with Black skin
 - Deep to Muscle and Bone – “mummification”





Conduction and Convection



Risk Factors for Frost Bite

Co-existing Hypothermia

Patient Factors

- Diabetes, CV disease, smokers, alcohol use

Environmental Factors

- Wind, wet, metal, skin exposure, time

Locations

- Fingers, toes, ears, nose, cheeks, chin

First Aid



- Get to a warm and protected place
- Remove wet clothing
- Try not to walk on damaged feet, if must do not thaw first
- Rewarm gently (warm water bath, passive)
 - Avoid high heat, hot water, friction warming
- PAIN – thawing is painful, strong pain meds often needed
- Delay thawing until definitive rescue

Scenario 3: Slips, Trips, and Falls

Andy is a costumer for an episodic television show. One day, while shooting on location, it begins to snow. Andy is not really worried about the weather, because he brought the appropriate clothing and most of his work is in the truck.

At some point during the shift, Andy has to leave the truck in a rush, to bring an important piece of jewelry to the set. While exiting the truck, Andy slips on the steps that are slick with ice, and lands on his wrist. Afterwards, Andy can't move his wrist and has to go to the hospital to get X-rays. Andy is worried that if his wrist is broken, he will be out of work for weeks.





IATSE Safety Hotline

(844) 422-9273

844-IA-AWARE



Questions?



IATSE ENTERTAINMENT & EXHIBITION INDUSTRIES
TRAINING TRUST FUND
PROVIDING TRAINING OPPORTUNITIES FOR THE IATSE WORKFORCE

Interested in learning more about Safety and Health hazards in your workplace?

Sign-up for **TTF Safety First!** through the IATSE Training Trust Fund. The **TTF Safety First!** curriculum has 20 online safety modules to choose from, including a 45-minute Hazard Identification & Safety in the Work Environment course.

For more information, visit:

<https://www.iatsetrainingtrust.org/safetyfirst>

Special Thanks To...

IATSE Broadcast Department

IATSE Local 13

IATSE Local 745

IATSE Local 764

IATSE Local 849

IATSE Local 856



Thank You!



Providence St. Joseph Medical Center:
<https://www.providence.org/locations/saint-joseph-medical-center>



IATSE Entertainment & Exhibition Industries
Training Trust Fund:
<https://www.iatsetrainingtrust.org/>

TTF Safety First! Curriculum:
<https://www.iatsetrainingtrust.org/safetyfirst>

Providence St. Joseph Health Regions and Hospitals

Alaska

- Providence Alaska Medical Center – Anchorage
- Providence Valdez Medical Center – Valdez
- Providence Seward Medical Center – Seward
- Providence Kodiak Island Medical Center – Kodiak island

California

- Providence St. Joseph Hospital – Eureka
- Providence Redwood Memorial Hospital – Fortuna
- Healdsburg Hospital – Healdsburg
- Providence Santa Rosa Memorial Hospital – Santa Rosa
- Providence Queen of the Valley Medical Center – Napa
- Providence St. Mary Medical Center – Apple Valley
- Providence Holy Cross Medical Center – Mission Hills
- Providence Cedars-Sinai Tarzana Medical Center – Tarzana
- Providence Saint Joseph Medical Center – Burbank
- Providence Saint John's Health Center – Santa Monica
- Providence St. Jude Medical Center – Fullerton
- Providence Little Company of Mary Medical Center – Torrance
- Providence Little Company of Mary Medical Center – San Pedro
- Providence St. Joseph Hospital Orange – Orange
- Providence Mission Hospital Laguna Beach – Laguna Beach

Montana

- Providence St. Patrick Hospital – Missoula
- Providence St. Joseph Medical Center – Polson

New Mexico

- Hobbs Hospital – Hobbs

Oregon

- Providence Hood River Memorial Hospital – Hood River
- Providence Medford Medical Center – Medford
- Providence Milwaukie Hospital – Milwaukie
- Providence Portland Medical Center – Portland
- Providence Seaside Hospital – Seaside
- Providence St. Vincent Medical Center – Portland
- Providence Willamette Falls Medical Center – Oregon City

Washington

- Providence Sacred Heart Medical Center – Spokane
- Providence Sacred Heart Children's Hospital – Spokane
- Providence St. Luke's Rehabilitation Medical Center – Spokane
- Providence Holy Family Hospital – Spokane
- Providence St. Mary Medical Center – Walla Walla
- Kadlec Regional Medical Center – Richland
- Providence St. Joseph's Hospital – Chewelah
- Providence Mount Carmel Hospital – Colville
- Providence Regional – Medical Center – Everett
- Providence St. Peter Hospital – Olympia
- Providence Centralia Hospital – Centralia

Texas

- Covenant Medical Center – Lubbock
- Covenant Health Levelland – Levelland
- Covenant Health Plainview – Plainview
- Covenant Specialty Hospital – Lubbock
- Covenant Children's Hospital – Lubbock

To find a doctor in your state, call (907) 212-5121 or visit our website at
www.providence.org/services/primary-care

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