



Wek-Wek and Kchinkwehelak Present...

WCA 2025

First Aid

Yerba Buena Lodge



Do's

DO! Check each other constantly

DO! Help each other

DO! Bring adequate clothing

DO! Bring energy bars

DO! Tell someone if not feeling well

DO! Have adequate shelter

Don'ts

DON'T! Use HOT liquids to warm up

DON'T! Rub potential flesh conditions

DON'T! Ignore symptoms

DON'T! Jump in freezing water

DON'T! Stick your tongue to a metal pole

DON'T! Ignore the cold!!!




Wind Chill Chart



		Temperature (°F)																	
		40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
Wind (mph)	Calm	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
	5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52	-57	-63
	10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59	-66	-72
	15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64	-71	-77
	20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-68	-74	-81
	25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71	-78	-84
	30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-73	-80	-87
	35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76	-82	-89
	40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78	-84	-91
	45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93
	50	26	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-81	-88	-95
55	25	18	11	4	-3	-11	-18	-25	-32	-39	-46	-54	-61	-68	-75	-82	-89	-97	
60	25	17	10	3	-4	-11	-19	-26	-33	-40	-48	-55	-62	-69	-76	-84	-91	-98	

Frostbite Times

 30 minutes

 10 minutes

 5 minutes

$$\text{Wind Chill (°F)} = 35.74 + 0.6215T - 35.75(V^{0.16}) + 0.4275T(V^{0.16})$$

Where, T= Air Temperature (°F) V= Wind Speed (mph)

Effective 11/01/01

Hypothermia

Definition: Core Temperature Below Normal

- Doesn't require cold weather
- Inadequate Clothing
- Inadequate Shelter
- Long Exposure to Wind, Dampness, or Cold Temperature
- Evaporative Cooling (Sweat)
- Inadequate Energy Supply (Food, Fluid)



Signs and Symptoms

- Shivering
- Cold Complaints
- Difficulty Speaking
- Fatigue
- Slow Pulse and Respiration
- Poor Motor Control (Stumbling)
- The UMBLES

Hypothermia

Mild Symptoms



loss of motor skills



shivering



decrease in blood
circulation and skin
temperature

Moderate or Severe Symptoms



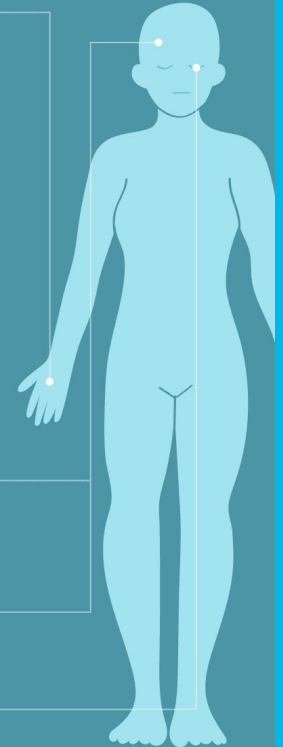
confusion/fatigue



loss of
consciousness



dilated pupils



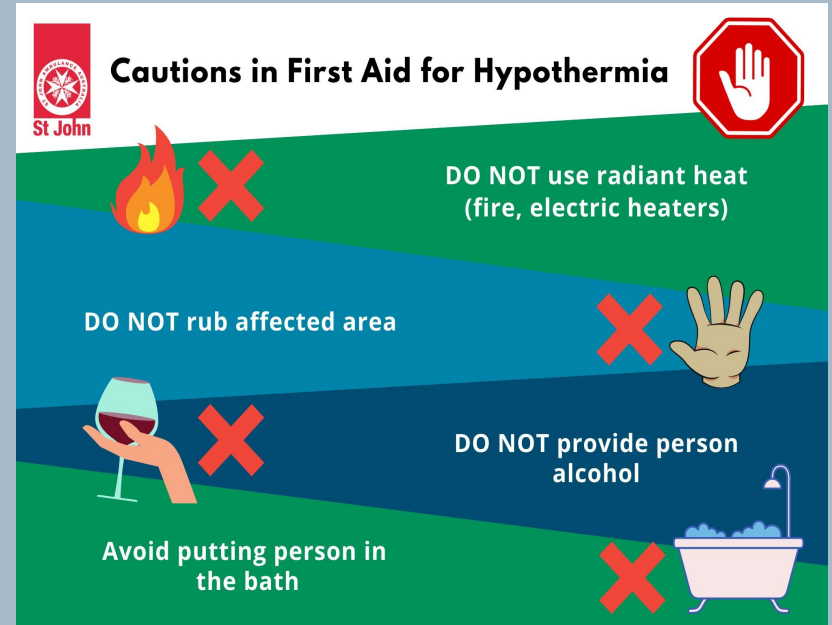
Prevention

- Adequate clothing
- Steady intake of water and food
- Bring high calorie food
- Limited exposure to extreme climate
- Stay dry and keep active
- Check weather before your trip and plan accordingly



Treatment- Hypothermia

- Remove Victim From Cold
- Provide Warm Drink and Snack
- Remove Wet Clothing
- Warm Victim Without Rubbing or Hot Materials (no boiling Water)
- WARM THEM UP SLOWLY



FROSTBITE

SYMPTOMS

- Surface skin damage
- Numb skin
- Loss of feeling

PREVENTION

- Avoiding temperatures below -15°C
- Avoiding moisture
- Layering clothing
- Using warming devices



Signs and Symptoms

- Yellow or Gray Tint to Skin
- Cold, Hard Skin
- Pain or Numbness in Area
- Black Coloration



Prevention

- Proper Clothing and Footwear
- Exercise for Circulation
- Layer Socks
- Check the Weather App
- Handle metal things such as fuel cans with extra care



Treatment- Frostbite/Frostnip

- Thaw Area Slowly, if in non-extreme environment
- Do Not Pop Blisters
- NO RUBBING OR MASSAGING
- Get Victim inside and to medical facility



Trench Foot

Definition: A painful condition of the feet caused by long immersion in cold water

- Cause: Exposure to moist environments
- Temp is generally just above freezing
- Exposure is prolonged (24-48 Hours)



Signs and Symptoms

- Numb Feet or Toes
- Wooden, Stiff Feeling in Feet
- Cold & Gray Flesh
- Pain... so much pain



Prevention

- Constantly Replace Socks
- USE WOOL SOCKS
- Dry Feet Constantly
- Layer Socks
- Use moleskin when you feel blisters starting to form



Treatment- Trench Foot

- Replace Socks Regularly
- Warm Feet with Warm Water Bottle
- Dry Feet With Towel
- DO NOT PUT A HAND WARMER IN YOUR SHOE



Snow Blindness

Definition: A form of photokeratitis that is caused by UV rays reflected off ice and snow

- Cause: Exposure of eyes to Sun
- Can be Direct or Indirect
- Reflection off of Sand, Snow, or Water



Signs and Symptoms

- Gritty Feeling in Eyes
- Redness
- Swelling
- Inability to Open Eyes
- Sensitivity to Light
- Headache



Prevention

WEAR EYE
PROTECTION
AND
USE GOGGLES



Treatment- Snow Blindness

- Remove from Direct Light
- Cool Compress on Eyes
- NO EYE DROPS
- OTC Anti-Inflammatories



Sunburn

Definition: reddening, inflammation, and, blistering and peeling of the skin caused by overexposure to the ultraviolet rays

- Burning Feeling
- Blisters
- Chapped/Irritated Skin or Lips
- Reddening of Skin



Signs and Symptoms

- Burning Feeling
- Blisters
- Chapped/Irritated Skin or Lips
- Reddening of Skin



Prevention

- Use Sunscreen
- Wear Layers
- Wear Sunglasses
- Stay Hydrated
- Use Chapstick



Treatment- Sunburn

- Apply Aloe Vera AFTER Skin Cools
- Reapply Sunblock
- Limit Exposure
- DO NOT POP BLISTERS
- OTC Anti-Inflammatories



Dehydration

Definition: The loss or removal of
water from something

- Cause: Lack of Fluid in Body
- Lack of Fluid Intake
- Excessive Sweating



Signs and Symptoms



EXTREME THIRST



DRY MOUTH



SWOLLEN TONGUE



LESS FREQUENT URINATION



HEADACHE



FATIGUE



BAD BREATH



DIZZINESS



PALPITATIONS

Prevention

DRINK
MORE
WATER

INFOGRAPHICS



DO YOU
REALLY NEED?

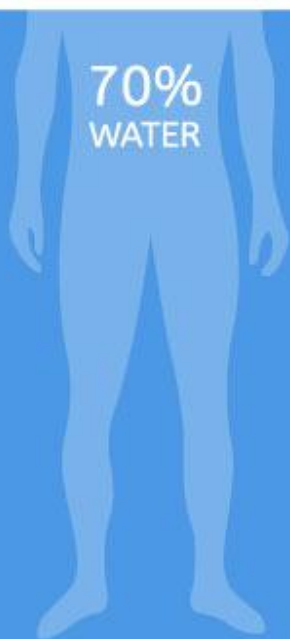


X 30 =



- 94% LYMPH
- 86% LIVER
- 83% BLOOD
- 83% KIDNEYS
- 83% JOINTS
- 80% LUNGS
- 79% HEART
- 75% MUSCLE
- 75% BRAIN
- 64% SKIN
- 22% BONES

70%
WATER



HYDRATING FOODS



Treatment- Dehydration

- Drink more hydrating fluids to replace the ones you have lost
- Replace Electrolytes
- Rest and Relax



Carbon Monoxide Poisoning

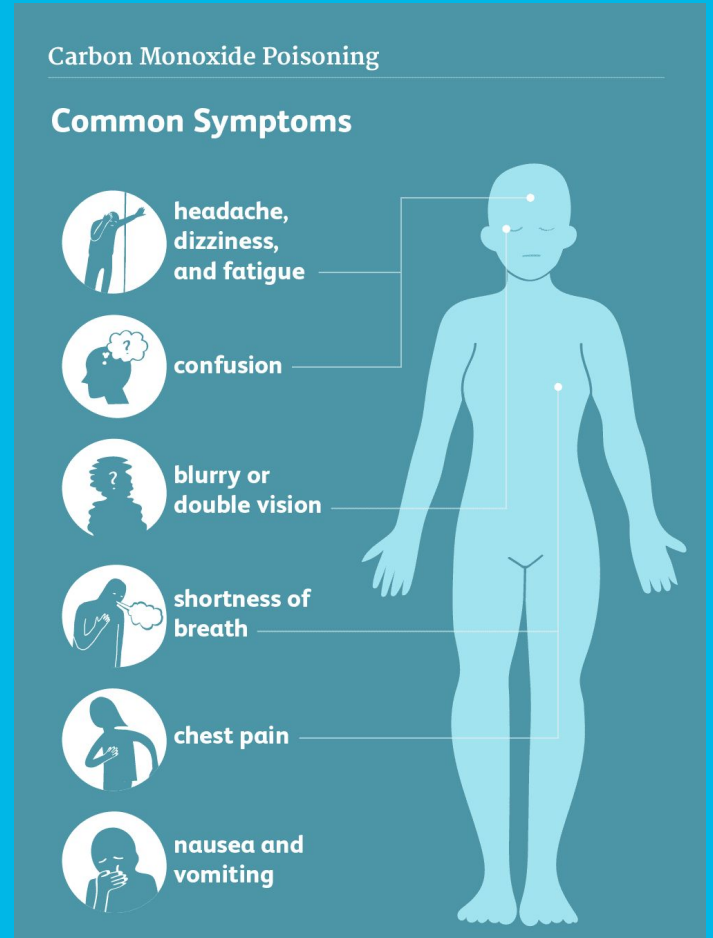
Definition: When carbon monoxide builds up in your bloodstream

- Cause: Inhalation of Carbon Monoxide
- Fuel Burning in an Unventilated Structure



Signs and Symptoms

- Blue tint on Lips
- Blue Tint under Nails
- Cherry Red Face
- Lack of Breathing
- Death



Prevention

- Ventilate All Structures With Stoves and Fuel Burners
- Keep Stoves Out of Tents



Treatment- CO Poisoning

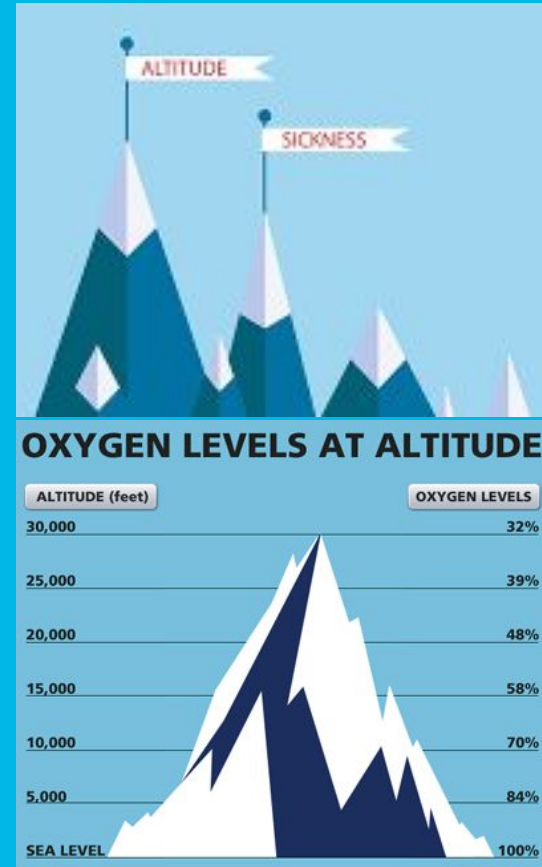
- Remove device from shelter
- Get fresh air
- Rescue breathing may be needed
- GET TO A HOSPITAL



Altitude Sickness

Definition: Illness caused by ascent to a high altitude and the resulting shortage of oxygen

- Cause: Inability to acclimate to new altitude
- Usually starts at 5,000 feet above sea level
- Shortage of oxygen supply in air due to lack of air density



TYPES OF ALTITUDE SICKNESS

ACUTE MOUNTAIN SICKNESS



AMS

SYMPTOMS

- » Fatigue
- » Dizziness
- » Vomiting
- » Lack of sleep
- » Nausea

HIGH ALTITUDE CEREBRAL EDEMA



HACE

SYMPTOMS

- » Severe headache
- » Clumsiness
- » Confusion
- » Drowsiness

HIGH ALTITUDE PULMONARY EDEMA



HAPE

SYMPTOMS

- » Tiredness
- » Fever
- » Coughing
- » Breathlessness

Prevention

- Climb in Altitude
SLOWLY
- Hydrate Regularly
- Make Sure to Break and
Breathe



Treatment- Altitude Sickness

- Get Down Quick!!
- Drink water
- Rest for a while even if sickness lessens
- Breathe deeply
- In extreme cases, contact medical service
- Only use oxygen tanks if you are **TRAINED!**



Summary

- **Make sure to pack for cold weather -**
 - **Layers, warm clothes**
- **Bring plenty of nourishing food**
- **Monitor yourself and companions for any symptoms**
 - **Headaches,**
- **Make sure you can differentiate between different conditions (symptoms may be the same)**
 - **Treatment plans vary based on your condition!**
- **Have an adequate shelter**
- **Stay warm and dry**
- **In extreme cases, seek trained medical care**



Thank You!

Any Questions?

LIST OF PROPS FOR PRESENTATION– Kchinkwehlak

- Nalgene
- Metal Water Bottle
- First Aid Kit
- Windbreaker
- Cold Compress
- Ski Goggles vs Chem Goggles

LIST OF PROPS FOR PRESENTATION- *Wek-Wek*

- Wool Socks
- Cotton Socks
- Cold Compress
- Sunscreen
- High Calorie Snacks