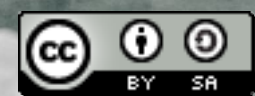


Basic Survival

Priorities?



The “Rule” of 3s (What kills you)

- 3 seconds to get off the “X”
- 30 seconds to stop your own arterial bleed
- 3 minutes without air
- 3 hours without shelter (harsh environment)
- 24-48 hours without sleep
- 3 days without water (weather & shelter...)
- 3 weeks without food (with all the above)

There is HUGE variability

Priorities

- Positive Mental Attitude
- Get off the “X” (about 3 seconds)
- Air – about 3 minutes
- Shelter – about 3 hours (harsh environment)
- Rest
- Signals
- Water – about 3 days
- Food – about 3 weeks

Positive Mental Attitude

- Forget the promise that you'd be home for dinner tonight.
- Focus on survival priorities.
- Understand how you deal with isolation.
- Expect initial panic on realizing you are lost.

It's all about what you “go out the door” with
(in your head and on your person.)

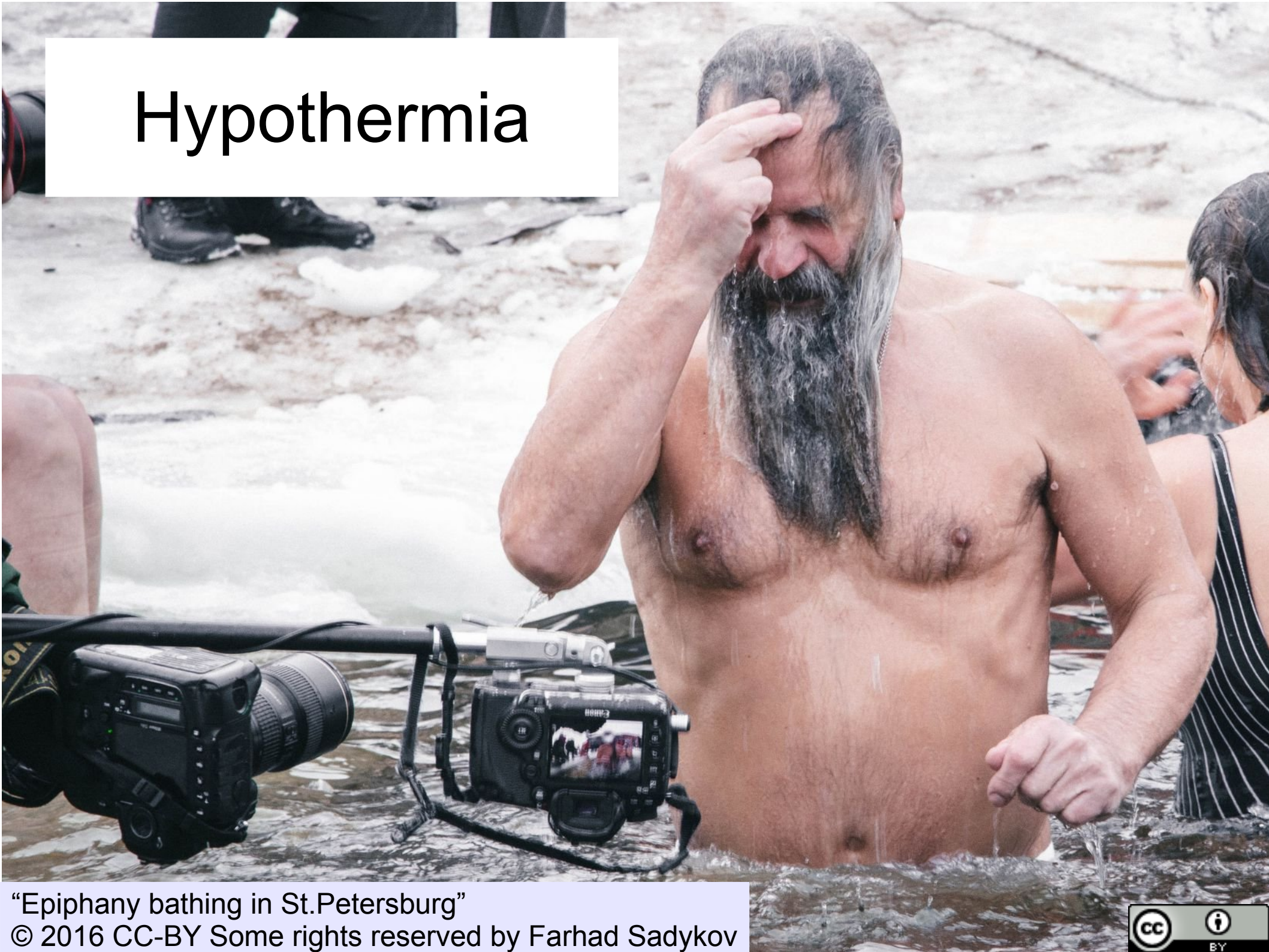
Talk it through

- Out loud
- To yourself, to a squirrel...
- Out loud

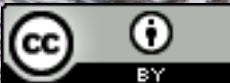
PSAR Messages

- Hug-A-Tree
 - Hug-A-Tree (stay in one place)
 - Make Yourself Big (visible)
 - Bright (reflective)
 - Unusual (straight lines, threes)
- BSA: STOP
 - Stop
 - Think (stay put, stay together, conserve energy)
 - Observe
 - Plan
 - (First Aid, Shelter, Fire, Signal, Water (don't worry about food))

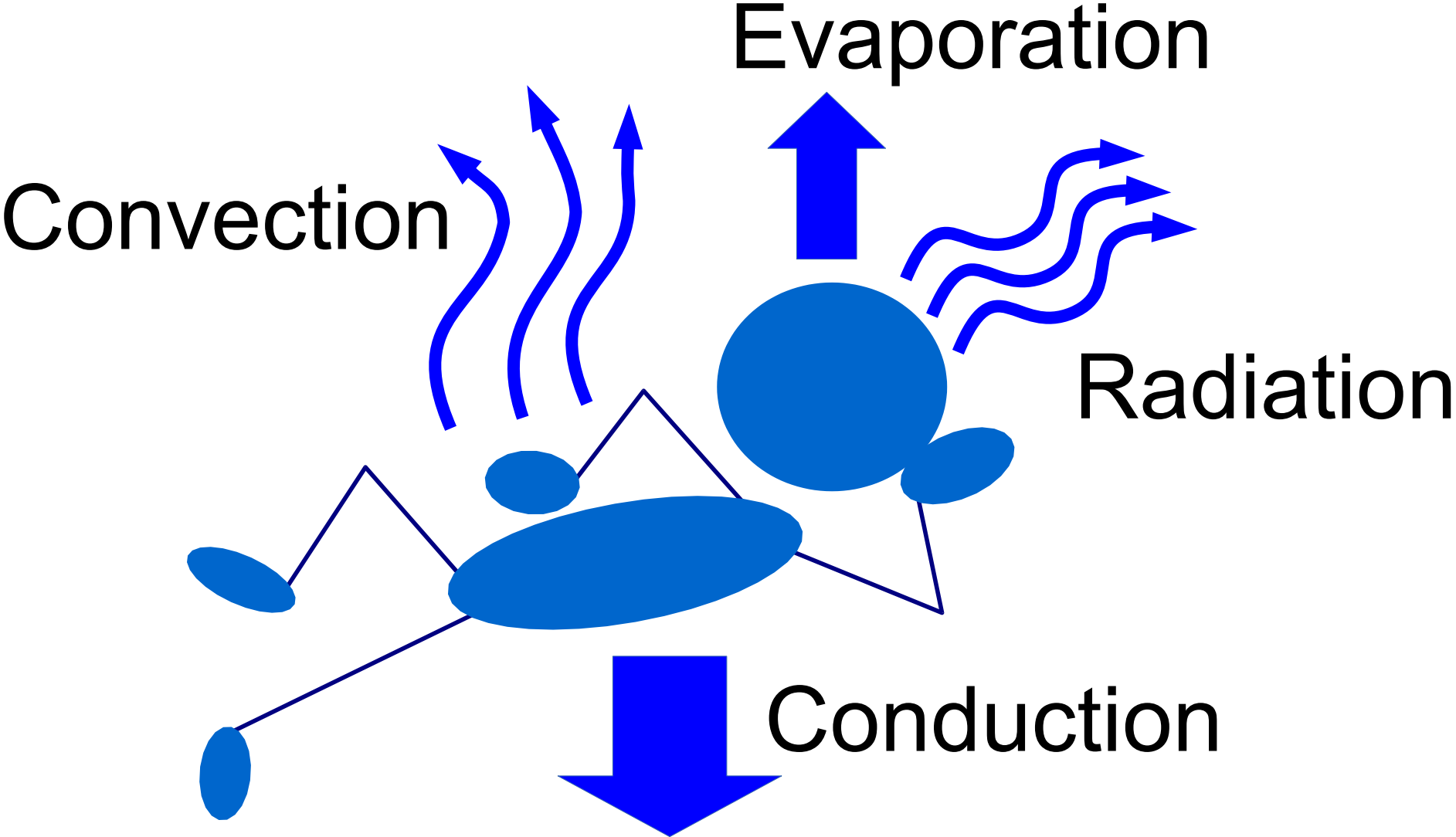
Hypothermia



“Epiphany bathing in St.Petersburg”
© 2016 CC-BY Some rights reserved by Farhad Sadykov

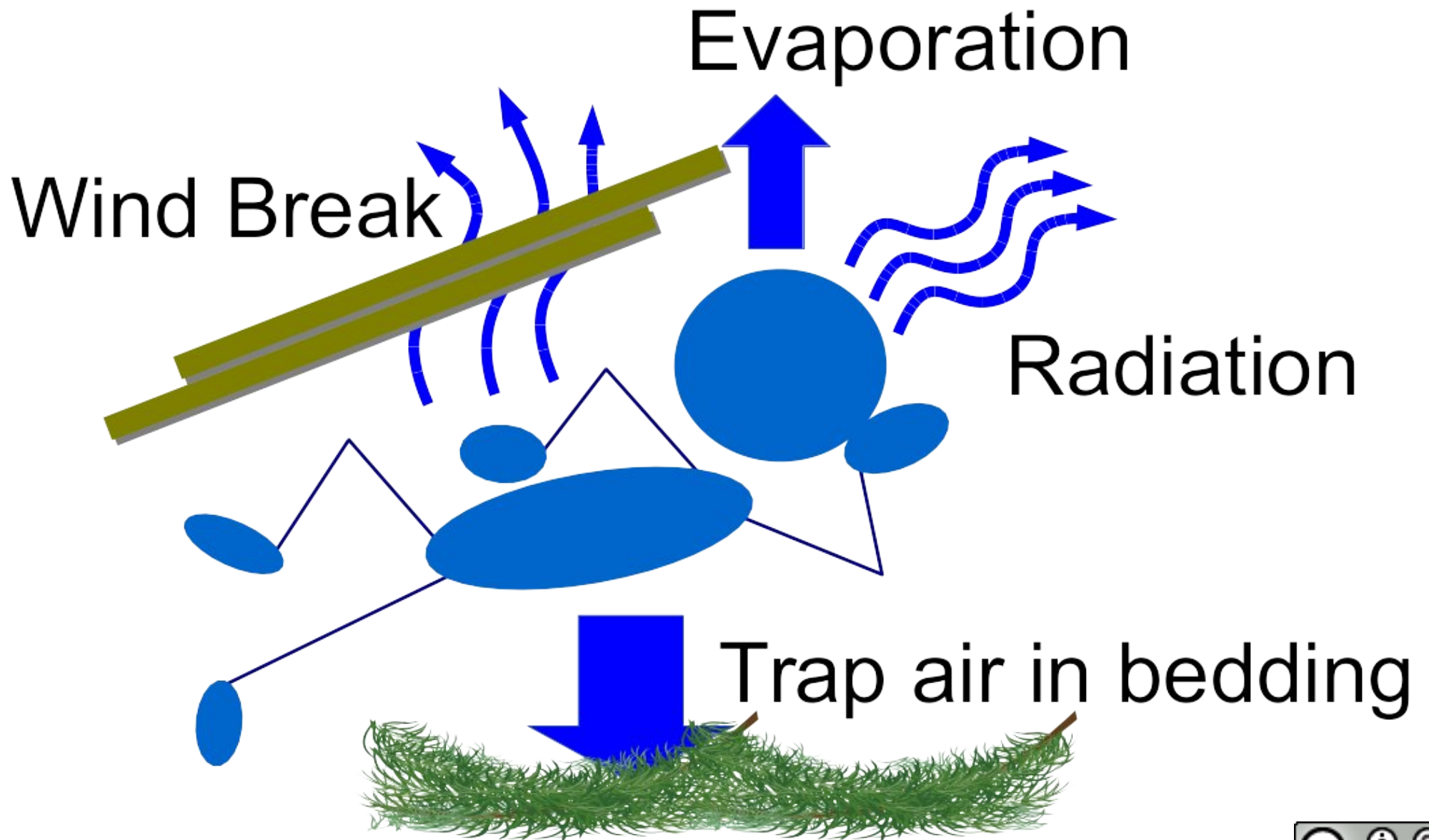


Heat Loss



Shelter

Heat Loss



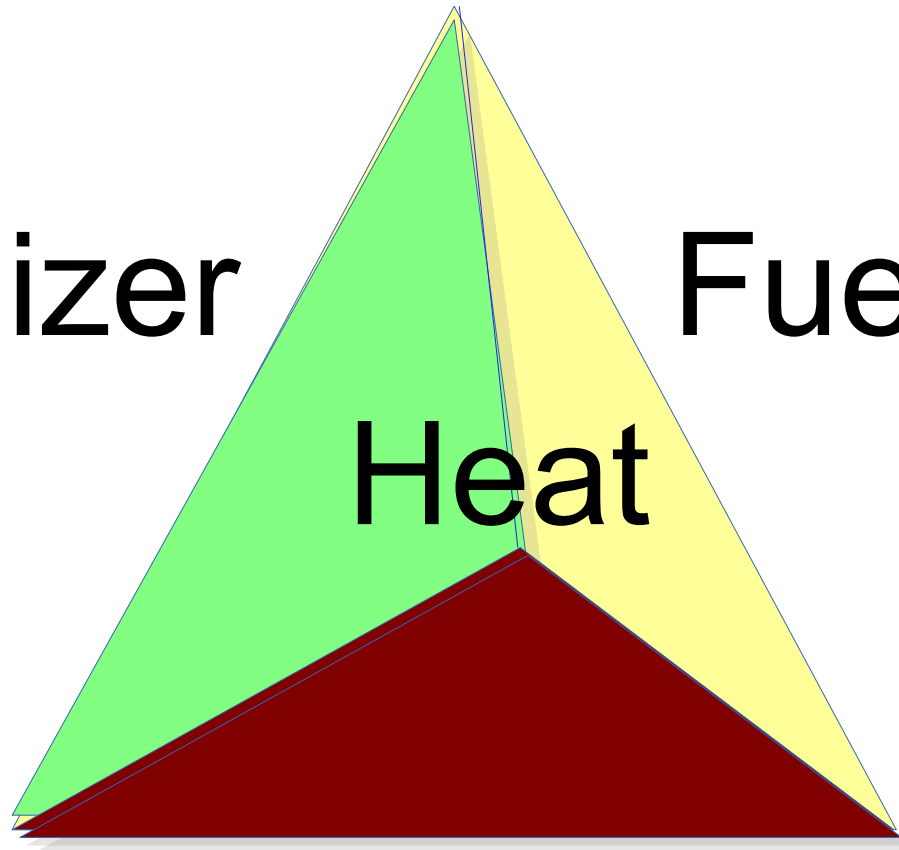


Oxidizer

Fuel

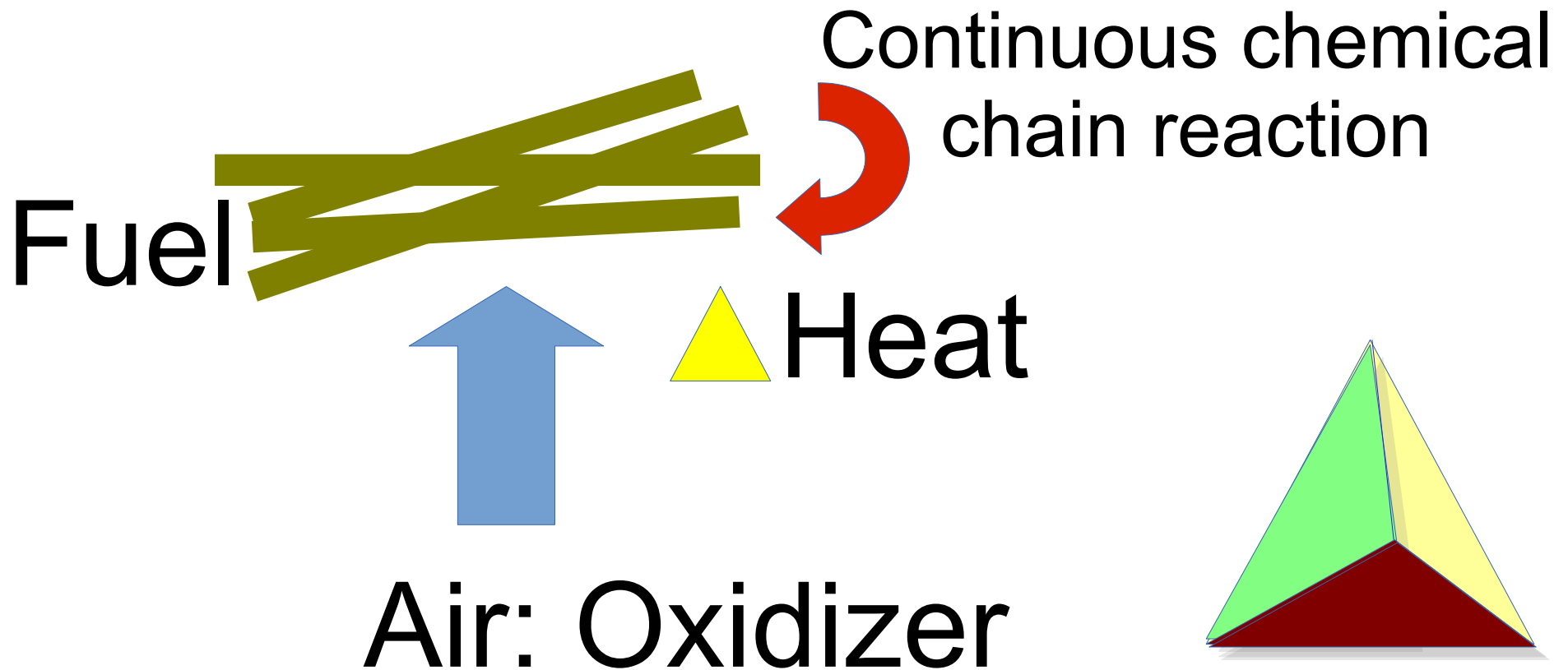
Heat

Continuous chemical
chain reaction





Fire building



Preparation

- What kind of fire do you want/need?
 - Heat (warmth, morale?)
 - Signal (heat, smoke, light)
 - Cooking, heating water?
- Plan the location (what's above and below).
- Gather Materials
 - Tinder
 - Kindling
 - Fuel
 - Ignition





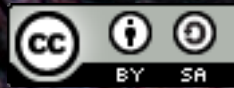


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DoD photo by Senior Airman Jonathan Snyder, U.S. Air Force. (Released)





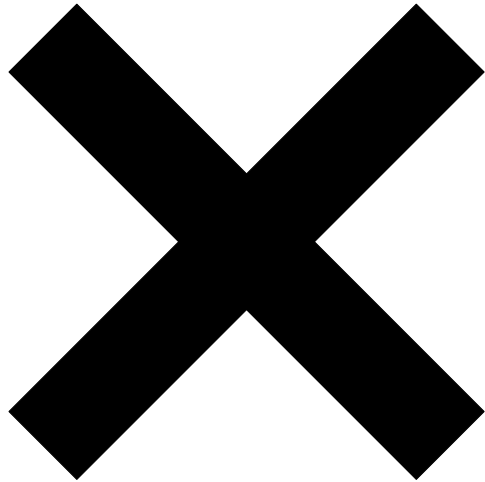
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Signals

3-4 feet

20 feet



20 feet

Require Medical Assistance



Require Assistance

Audience & Methods

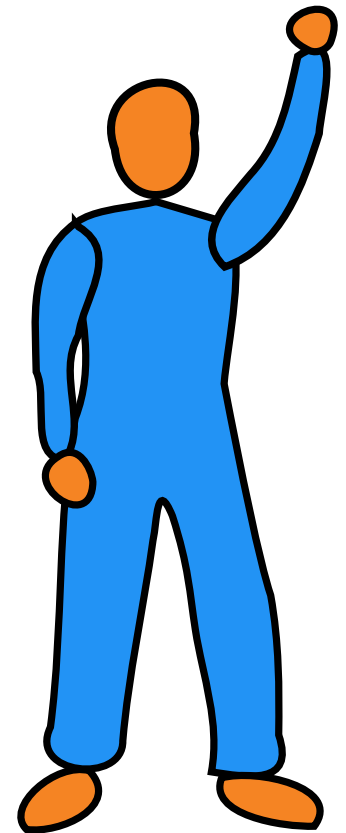
- Flashlights
- Strobe Light (flasher)
- Mirrors
- Sound: whistle
- Smoke
- Radios



- Amateur Radio Wilderness Protocol (2m calling frequency for 5 minutes after each hour)
- Satellite (PLB, ELT, Phone)
- Rescue laser beacon



Signals
Ground to Air
Realtime



Require Medical
Assistance

All OK

Audience: Ground Searchers

- Make your shelter findable
 - Trash, Flag lines, Disturbance Lines
- Sound: Whistle, Gunshots
 - Distress: Sets of three, Response: Two whistle blasts
- Smoke
- Flashlights
- Strobe Light (flasher)
- Mirrors
- Radios
- Rescue laser beacon

Water



Potable (drinkable) water

- Boil
- Distill
- Filter
- Chemically treat it
- UV treat it



Improvise



Improvise: Think Function

Trash Bags have many uses



Snow Shelters: Think Lazy

- Maximum (useable) space for Minimal Effort
- Insulation between you and the snow
- Small entrance
- Cold air sump



10 people X 3 hours
= 30 person hours
4 shovels
2 snow saws
Holds ~ 6 people



Snow Cave

Shelf for
Candle



Sleeping
Platform

Cold Air Sump



3 people X 3 hours
= 9 person hours
3 shovels
0 snow saws
Holds ~ 8 people







“Snow Cave -25C outside, +5C inside...”
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Tree Well



Equipment: What to carry?

- What you can count on is what you have:
 - in your head
 - on your person.

The “Rule” of 3s (What kills you)

- 3 seconds
- 3 minutes
- 3 hours without shelter (harsh environment)
- (24-48 hours without sleep, function degrades)
- 3 days without water (weather & shelter...)
- 3 weeks without food (with all the above)

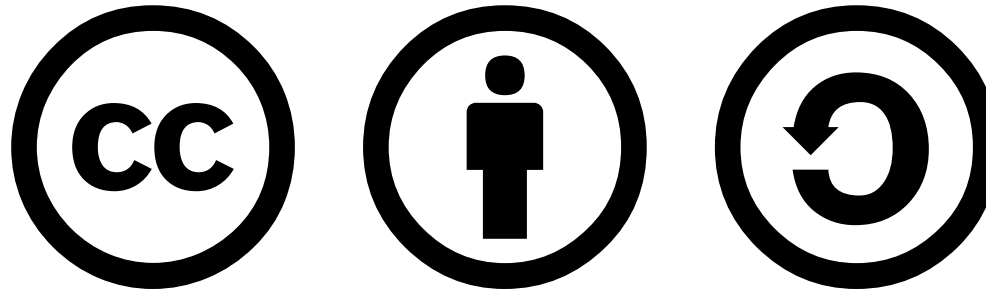
STOP

- Stop, Think, Observe,
- Plan
 - First Aid
 - Shelter
 - Fire
 - Signals
 - (Sleep)
 - Water
 - Don't worry about food.



Food

- We don't physically need food for the plausible (local) “lost in the woods” events
- BUT it sure helps on the psychological front
- And it makes a HUGE difference in your ability to keep working (and think rationally)!
- Hot drinks
- High caloric content in low volume & weight



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