

Objectives

- Identify the signs and symptoms of anaphylaxis and envenomation and their management in the wilderness environment
- Demonstrate understanding of wound care and advanced hemorrhage control techniques (pressure dressing/tourniquet use) in the wilderness environment

Objectives

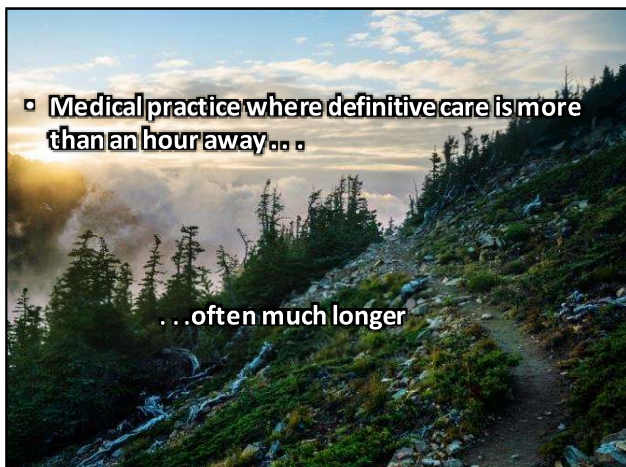
- Identify musculoskeletal emergencies (fractures/dislocations) and their treatment (immobilization/reduction) in the wilderness environment





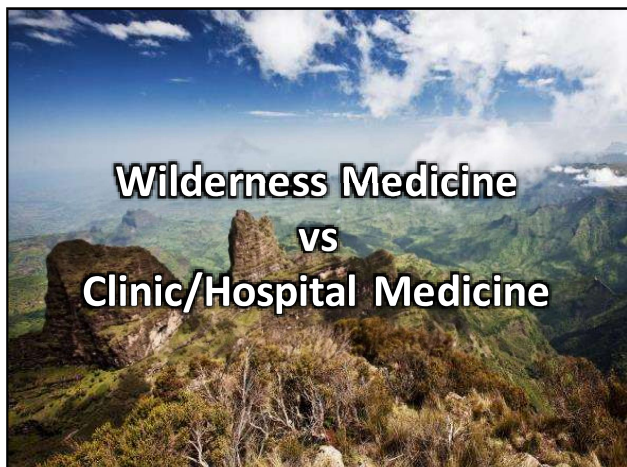














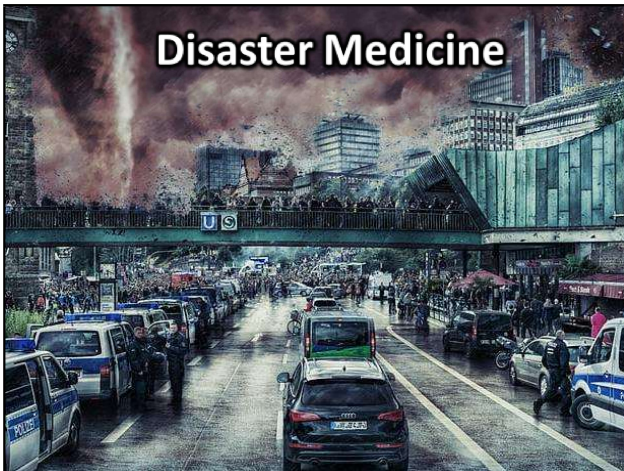


























Patient Assessment

- Scene safety
- CPR
- ATLS
- ABC
- CBA
- MARCH

M	A	R	C	H
Massive Bleeding	Airway	Respirations	Circulation	Head / Hypothermia



TraumaMonkeys.com



Scene Safety

- Rescuer/Team safety is paramount
- Scenes can evolve...
- How rapid? How safe?
- Equipment/resources?

ATLS

- Resources?
- Effective outside hospital?
- Treatment Priorities?

Airway
Breathing
Circulation
Disability
Exposure

MARCH




- Shift in priorities
- "Condensed" evaluation
- Environmental factors

M-A-R-C-H
Massive Bleeding
Airway
Respirations
Circulation
Head / Hypothermia

TraumaForLegs.com

HEENT

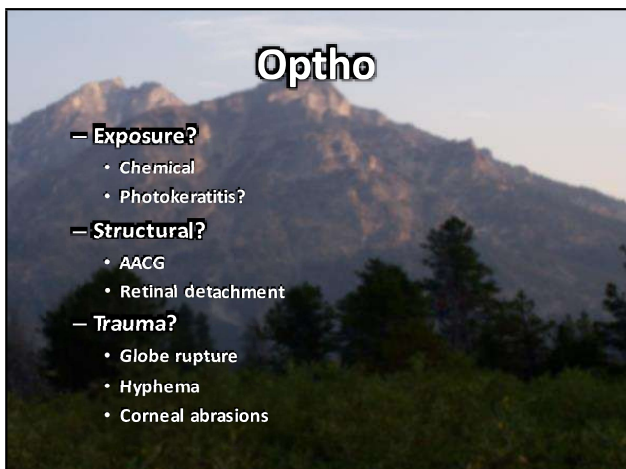
- Ophtho
- Dental
- Medications
- Evac



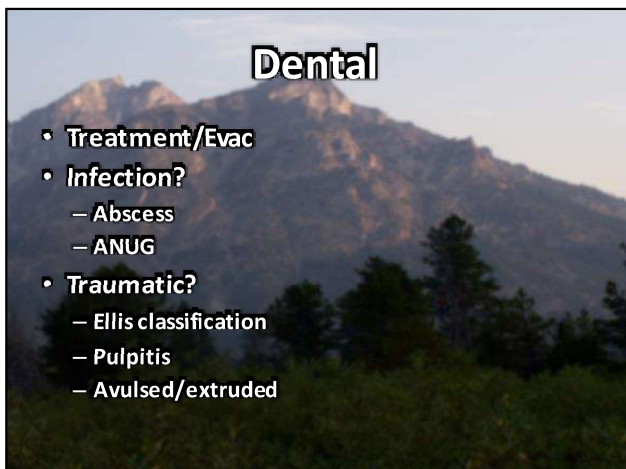
Optho

- Treatment/Evac....
- Topical anesthetic excellent diagnostic and therapeutic modality



Optho

- Exposure?
 - Chemical
 - Photokeratitis?
- Structural?
 - AACG
 - Retinal detachment
- Trauma?
 - Globe rupture
 - Hyphema
 - Corneal abrasions






Dental

- Treatment/Evac
- Infection?
 - Abscess
 - ANUG
- Traumatic?
 - Ellis classification
 - Pulpitis
 - Avulsed/extruded

Bites and Stings

- Envenomation
- Anaphylaxis
- Treatment
- Prevention



Envenomation

- **Crotalid vs Elapid**
 - Majority of envenomation in NA crotalid
 - Field management:
 - Stabilize, evacuate.
 - Don't cut, extract or apply tourniquet.....

Envenomation

- **Latrodectus**
- **Loxocles**
 - Field treatment:
 - Stabilize, evacuate
 - Benzos with Latrodectus??

Envenomation

- **Hymenoptera**
 - **Anaphylaxis**
 - Identify
 - Treat aggressively
 - Epi, steroids, diphenhydramine, H2 blockers, albuterol....
 - Evacuate

Hemorrhage control

- **Detection**
- **Direct pressure**
- **Devices: quick clot/tourniquets**



Massive Hemorrhage

- **Terminal process**
- **Treatment priority**
- **Identify**
- **Direct pressure**
- **Topical hemostats**
- **Tourniquet**
- **Pelvic binders**
- **Evacuate**







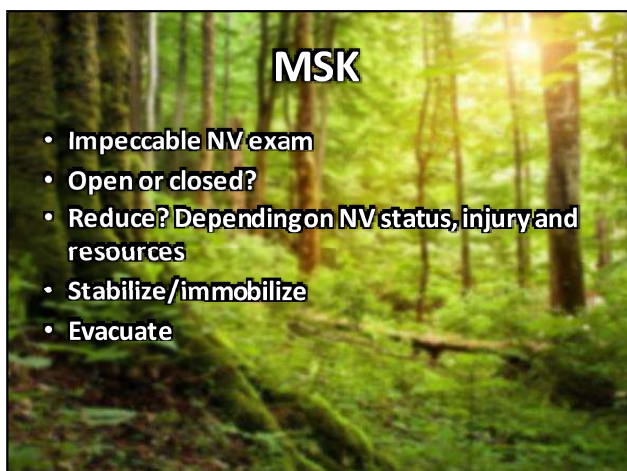
MSK/Ortho

- Diagnosis
- Reductions
- Splinting
- Evacuation



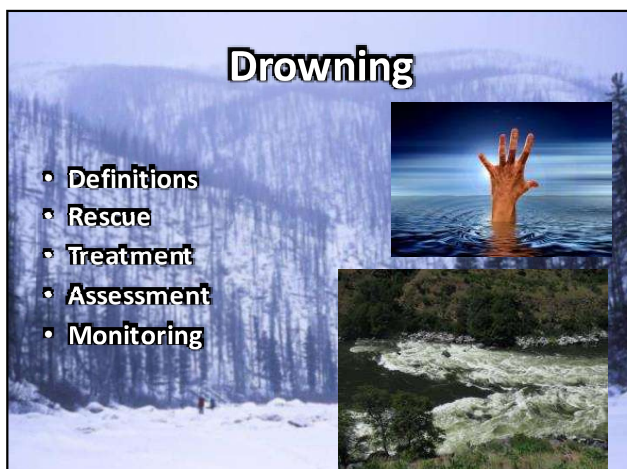
MSK

- Impeccable NV exam
- Open or closed?
- Reduce? Depending on NV status, injury and resources
- Stabilize/immobilize
- Evacuate



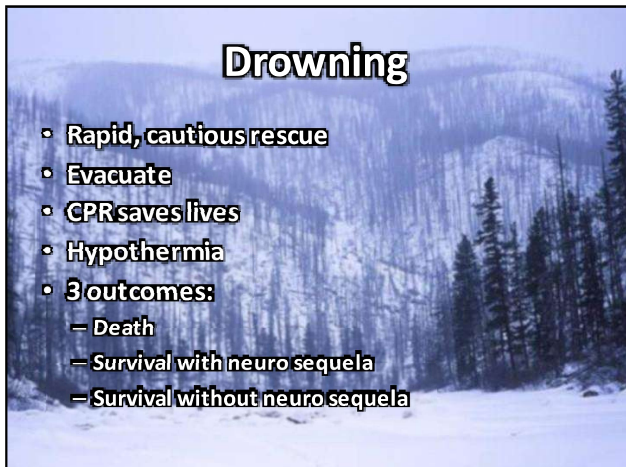
Drowning

- Definitions
- Rescue
- Treatment
- Assessment
- Monitoring



Drowning

- Rapid, cautious rescue
- Evacuate
- CPR saves lives
- Hypothermia
- 3 outcomes:
 - Death
 - Survival with neuro sequela
 - Survival without neuro sequela



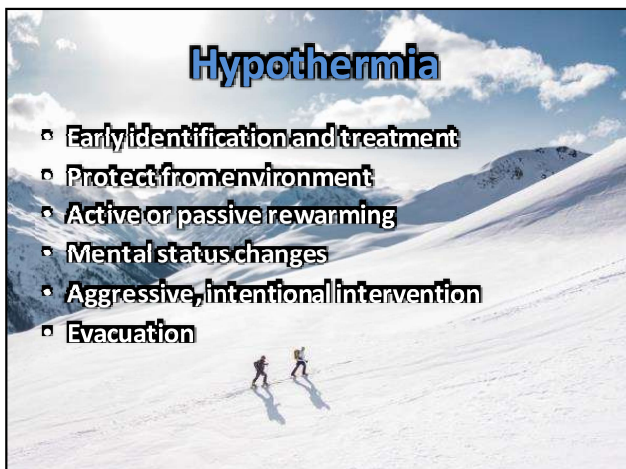
Environmental Emergencies

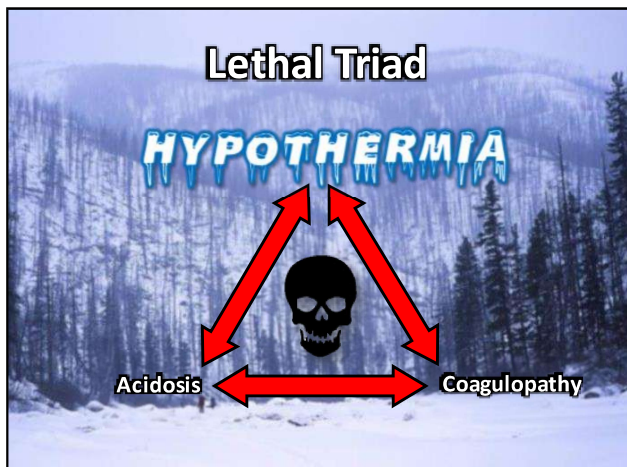
- Hypothermia
- Hyperthermia
- Identification
- Diagnosis
- Treatment
- Evacuation



Hypothermia

- Early identification and treatment
- Protect from environment
- Active or passive rewarming
- Mental status changes
- Aggressive, intentional intervention
- Evacuation





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- Hyperthermia**
- Early identification and treatment
 - Protect from environment
 - Active cooling
 - Mental status changes
 - Aggressive, intentional intervention
 - Evacuation
- The slide features a background image of a mountain range under a clear sky.

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- Wound Management**
- Assessment
 - Irrigation
 - Close or not?
 - Closure techniques
 - ABX?
 - Evacuation
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- The slide includes a background image of a sunlit forest. In the bottom right corner, there is a small inset photograph of a man in a blue shirt and red gear, smiling and giving a thumbs up in a wooded area.

Wound Management

- Evaluation
 - Exploration?
- Irrigation, irrigation, irrigation
- Closure? Risk vs benefit
- ABX?
- Closure techniques, suture, staple, skin adhesives, steri-strips
- Wound protection
- Evacuate complex wounds

Medical Kits

- Size
- Medications
- Suited to expedition
- Communication
- Supplies
- Transportation



Medical kits

- No "standard" kit
- Modularized kits effective
- Remember communication
- Transportation
- Access
- Make sure other folks know where it is
- Only bring things you can use

























