



# Warm-up: 11/5/14

1. What defines an ATC's legal duty?
2. Differentiate between malfeasance and nonfeasance. What is another name for the two?
3. How do you perform good risk management?
4. What can risk management prevent?
5. What three things can an ATC do to legally protect themselves?

# Today's Agenda: 11/5/14

1. Students will complete warm-up.
2. Last two groups will present promotion of safety skits.
3. **TO: What weather concerns are ATCs responsible for?**
3. Edmodo Response

# 1. Hypothermia

- ✚ Abnormally low body temperature
- ✚ Cold weather a factor in all outdoor sports
- ✚ Many outdoor sports do not provide/allow clothes necessary for warmth
- ✚ Weather becomes a factor in injury susceptibility

## 2. Wind Chill Factor

- ✦ Low temperatures accentuated by wind
  - ~ Pose major problems for athletes
- ✦ Dampness increases risk of hypothermia
  - ~ 50° air temperature tolerable, 50° water temperature intolerable
- ✦ Combination of all three create large risks for athletes

# Body's Response

- ✦ Rate of exrs drops as muscular fatigue sets in
  - ~ Body heat loss to env'r't exceeds metabolic heat protection, resulting in definite impairment of neuromuscular responses and exhaustion
- ✦ Small drop in body core temp can induce shivering

# Body Response cont'd

- ✦ Shivering ceases below a body temp of 85-90°F
- ✦ Death is imminent if core temp rises to 107° or drops between 77-85°

# 3. Cold Disorders

- ✦ Frostnip

- ✦ Frostbite

- ✦ Replace fluids is just as important as in heat illness.

  - ~ decrease in blood volume = less fluid available to heat the tissues

# A. Frostnip

- ✦ Involves ears, nose, cheeks, chin, fingers, and toes
- ✦ Occurs during high wind, severe cold or both
- ✦ Skin appears firm, cold, and painless that may peel or blister in 24-72 hours.
- ✦ TX: firm sustained pressure of hand (no rubbing), blowing hot breath on spot



## B. Frostbite (Superficial)

- ✦ Involves only the skin and subcutaneous tissue
- ✦ Skin appears pale, hard, cold and waxy
- ✦ Re-warmth causes feelings of numbness, stinging and burning.
- ✦ Can be painful for a number of weeks

# Frostbite (Deep)

- ⚠️ Serious, indicates tissues are frozen
- ⚠️ Requires hospitalization
- ⚠️ Tissue is initially cold, hard, pale or white and numb.
- ⚠️ Rapid re-warming required
- ⚠️ During re-warming tissue becomes blotchy, red swollen, and extremely painful.
- ⚠️ Injury can become gangrenous, causing loss of tissue

# Prevention of Hypothermia

- ✦ Gear apparel for the weather
- ✦ Clothing should not restrict movement and permit free passage of body heat and sweat
- ✦ Layer clothing, better to have more than not enough
- ✦ Warm-up suits

## 4. Sun Exposure

- Overexposure to sun is a frequent occurrence in sports
- Rarely do athletes or medical staff put sunscreen on or enough sunscreen

# Sunscreens

- ✦ **Sun Protection Factor (SPF)**~ effectiveness of a sunscreen to absorb the sun's burn-inducing radiation
- ✦ SPF of 6 means athlete can be exposed to sun 6 times longer than if unprotected before redness occurs
- ✦ Needed most between March and November and 10 a.m. to 4 p.m.
- ✦ Apply 15-30 minutes before exposure and even under clothes



# Risks of Sun Exposure



## Sunburn

~1<sup>st</sup> degree

~2<sup>nd</sup> degree

~3<sup>rd</sup> degree



## Skin Cancer

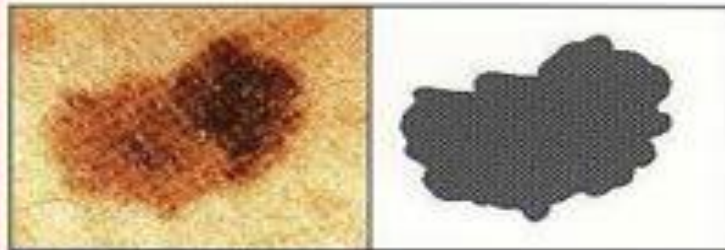
# 5. Skin Cancer

- ☼ Most common of all cancers
- ☼ 1/5<sup>th</sup> of Americans will get Skin Cancer at some time
- ☼ UVA Rays penetrate deepest into skin
  - ~ NOT blocked by most sunscreens or glass
- ☼ UVB Rays cause most sunburns
  - ~Blocked by some sunscreens and most glass
- ☼ UVC Rays are mostly absorbed in the ozone

# Skin Cancer Signs

## LOOK FOR DANGER SIGNS IN PIGMENTED LESIONS OF THE SKIN

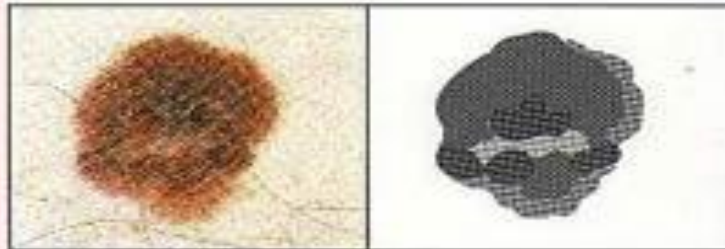
Consult your dermatologist immediately if  
any of your moles or pigmented spots exhibits:



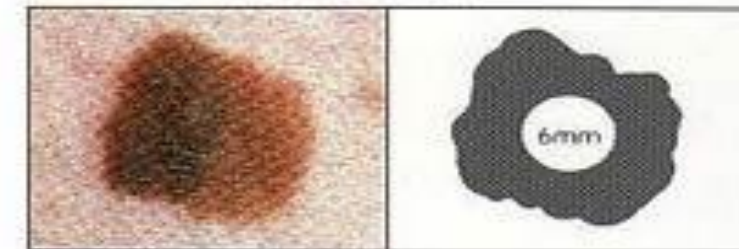
**A** Asymmetry-one half unlike the other half.



**B** Border irregular-scalloped or poorly circumscribed border.



**C** Color varied from one area to another; shades of tan and brown; black; sometimes white, red or blue.



**D** Diameter larger than 6mm as a rule (diameter of pencil eraser).



## 6. Thunderstorms

- ⚡ Lightning is #2 cause of death by weather phenomena
  - About 110 deaths/yr
- ⚡ Chain of command should be developed to monitor weather
- ⚡ Safety place should be available
  - If not avoid trees, poles, standing water, or metal bleachers

# Flash-to-Bang Method

- ✦ Estimate of how far away lightning is
- ✦ At sight of lightning, count each sec that passes until thunder is heard
  - Divide number by five to calculate the number of miles away the storm is
- ✦ Flash-to-Bang = 30 seconds there is inherent danger
- ✦ Flash-to-Bang = 15 seconds everyone should leave the field immediately
- ✦ 30 minutes should pass w/out lightning before RTP