

Woods Safety



"Come on, Ferguson, get back in there and finish the job — this is no time to lose your nerve."

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PPEs

Poisonous plants
and creatures

Hazardous
works

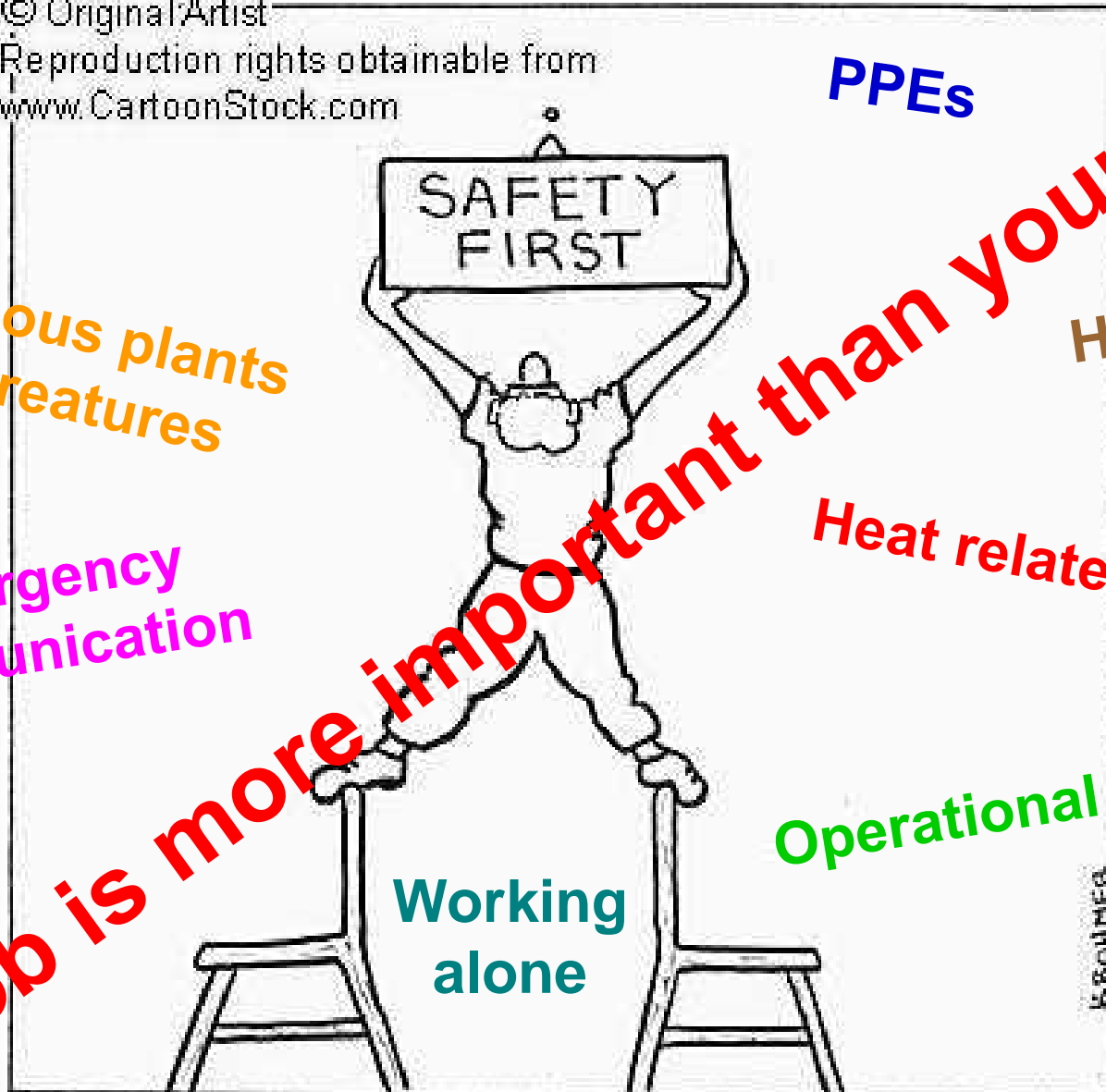
Heat related disease

Operational safety

Working
alone

Emergency
communication

No job is more important than your safety



Poison Plants

Poison ivy (*Toxicodendron radicans*)



Poison oak (*Toxicodendron pubescens*)



Commonly Mistaken Plants

Virginia creeper (*Parthenocissus quinquefolia*)



Blackberry (*Rubus spp.*)



***Three leaflets
let it be!***

Poison Ivy/Oak

Prevention:

- Wear long sleeved shirts, long pants, and gloves
- Apply a pre-treatment cream on the exposed skin

Treatment:

- Within an hour or so, rinse off the oil (urushiol) with cold running water (DO NOT take hot shower)
- Clean the exposed skin with generous amounts of isopropyl (rubbing) alcohol
- Apply treatment cream, e.g., Tecnu[®], on the exposed skin
- For severe reaction, seek medical attention

Tick Related Disease: Lyme Disease

Symptoms:

- Bull's eye rash (7-14 days after)
- General tiredness
- Fever
- Stiff neck
- Muscle aches
- Joint pain

Later Symptoms:

- Arthritis
- Swelling and pain in the joints
- Neurologic abnormalities (aseptic meningitis, facial palsy, motor and sensory, nerve inflammation)
- Inflammation of the brain



Tick Related Disease: Symptoms

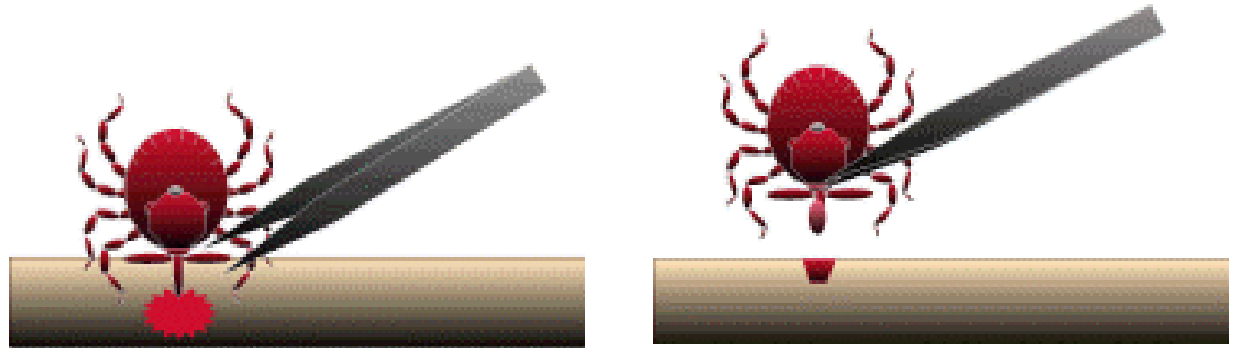
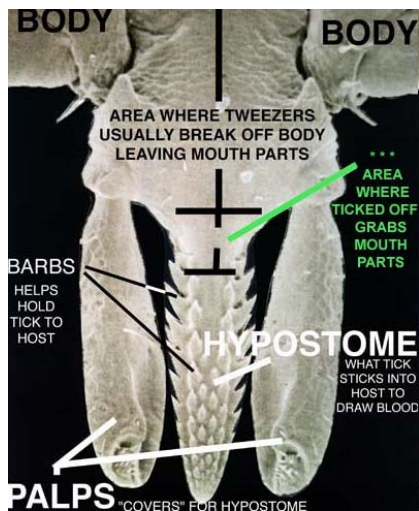
Rocky Mountain Spotted Fever (RMSF):

- Symptoms begin 3-12 days after
- Sudden onset fever
- Severe headache
- With or without rash
- Rash often begins of ankles, wrists palms, and soles of feet



Tick Related Disease: Therapy

- Immediately remove attached ticks using tweezers, grasping as close to the skin as possible
- Keep the detached tick, record date, work location, bite location in your tick log, and verified by supervisor.
- Disinfect the bitten area immediately and wash your hands
- LYMERix™ vaccine is available for Lyme disease
- RMSF is treated with antibiotics (no vaccine is available)

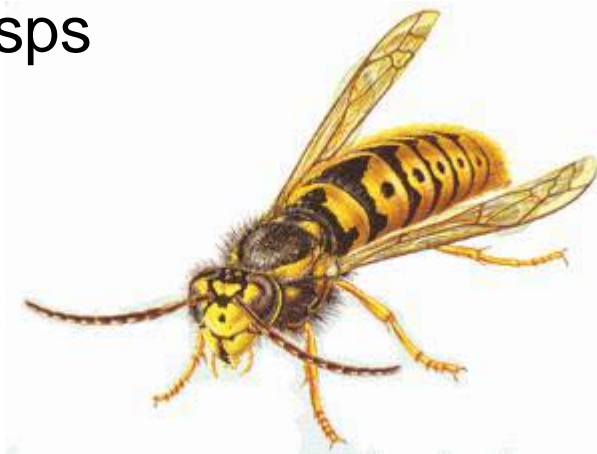


Tick Related Disease: Prevention

- Wear light colored, long sleeved shirts and pants tucked inside socks
- Apply Permanone® on clothing only
- Inspect yourself for ticks after field work
- DEET may repel ticks, but will not kill ticks and does not discourage them from biting

Other Insects Bites

- Bees and wasps
- Fire ants
- Mosquitoes
- Chiggers



Insects Bites: Therapy

For Localized Pain, Redness, and Swelling

- Wash with clean running tap water for several minutes
- Cover the area with a gauze
- Apply ice to reduce pain and swelling
- Consider use of anti-itch medication, e.g., Benadryl®

For Moderate Reaction (bite site reaction spreading > 4 in)

- Remove jewelry and constrictive clothing
- Seek medical attention

If you have a history of hyper sensitivity to insect bites, let instructor (and group members) know.

Venomous Snakebite

Poisonous Snakes

- Pit vipers (rattlesnakes, cottonmouths, and copperheads): Hemotoxin



- Coral snakes: Neurotoxin



Venomous Snakebite: Symptoms

Pit Vipers:

- Double or single fang marks
- Bleeding
- Intense burning pain
- Local swelling
- Whole body effects, including nausea, vomiting, sweating, fever, weakness, numbness, altered mental state, and shock



Venomous Snakebite: Symptoms

Coral Snakes:

- Pain and swelling may be minimal or absent
- Abdominal pain within hours of the bite
- Whole body effects, including nausea, vomiting, sweating, fever, weakness, altered mental state, rapid heartbeat, drooling, difficulty breathing, and/or stoppage of breathing (May be delayed up to 6 hours)



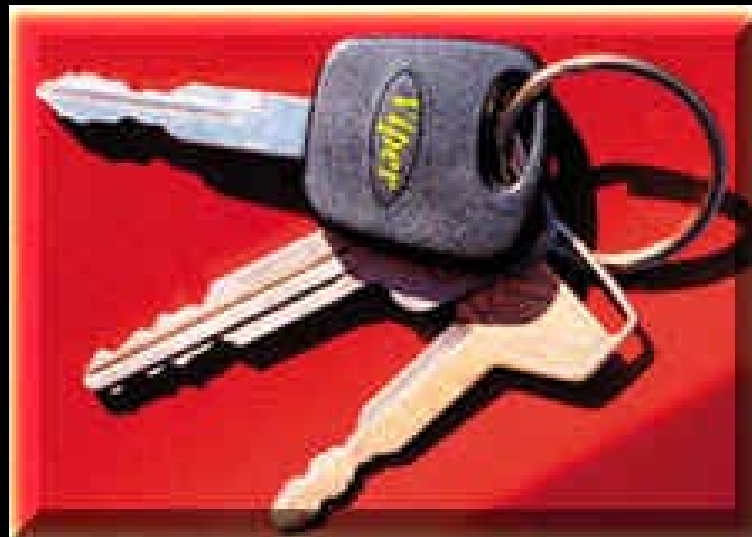
Venomous Snakebite: Primary Care

- Pull snake off
- Identify the snake if you or your partner can
- Get medical attention immediately – DON'T delay
- Remove jewelry and constrictive clothing
- Cover the bite with gauze
- Immobilize bitten area
- Keep it lower than the heart
- Keep the victim warm, reassured, and quiet
- Monitor breathing
- Mark initial time of bite
- Mark extent of the edema every 15 minutes

Venomous Snakebite: Don'ts

- No ice or other cooling agent on the bite.
- No tourniquets.
- No electric shock.
- No incisions in the wound.
- Suction devices are not recommended.
- No eating, drinking, especially alcohol.
- No running or engaging in strenuous activities

Best Snake Bite Kit



Venomous Snakebite: Prevention

- Wear snake leggings
- Watch where you put your hands and feet.
- Exercise good judgment.
- Leave snakes alone, even dead ones.
 - Two-thirds of people bitten in the US saw the snake before being bitten but attempted to kill, collect, or harass it.
 - Don't kill snakes. People are bitten by snakes while trying to kill it.

Snake Identification: Rattlesnakes



Snake Identification: Cottonmouth



Snake Identification: Copperhead



Snake Identification: Coral Snake

REMEMBER: “Red meets yellow kills a fellow.”

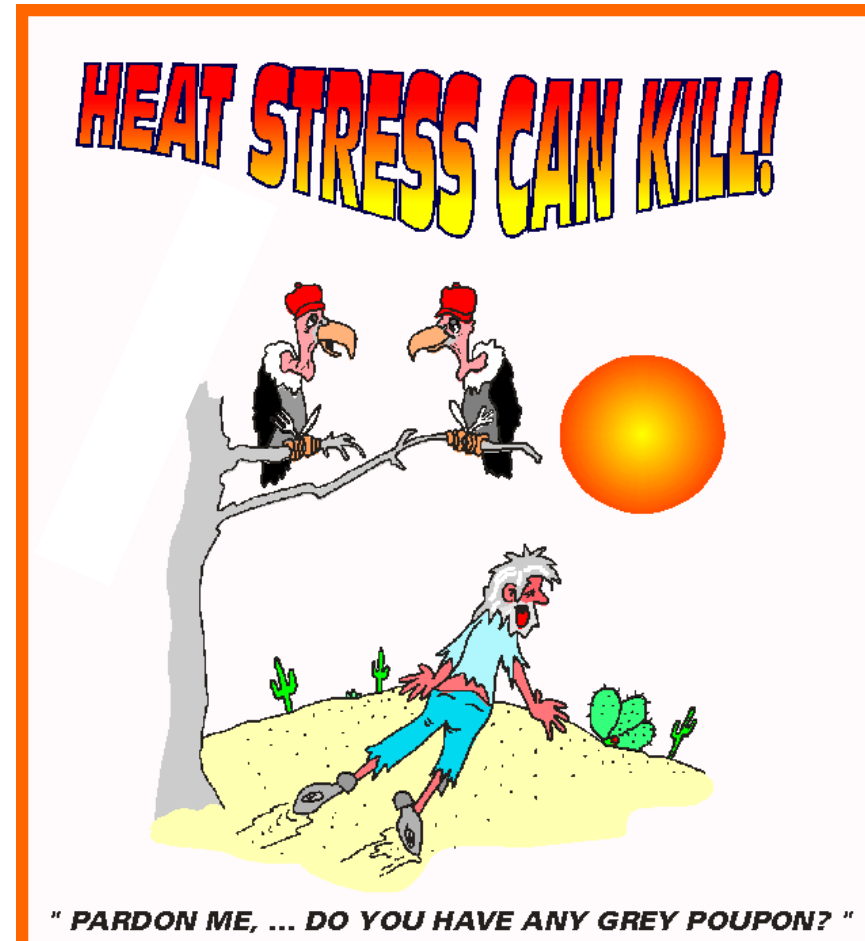
Scarlet Kingsnake



Scarlet snake

Heat Related Disease

- Heat Stress
- Heat Exhaustion
- Heat Stroke
 - Medical emergency



Heat Related Disease: Symptoms

- Heat Stress**
- Mild thirst
 - Impaired work performance (Heat fatigue)
 - Heavy sweating
 - Minor muscle “twitches”

- Heat Exhaustion**
- Moderate thirst
 - Pale, cool and moist skin
 - Heat cramps
 - Headache
 - Nausea and vomiting
 - Weakness and dizziness
 - Feels fainting/collapsing

- Heat Stroke**
- Sever thirst
 - Confusion, hallucinations, and bizarre behavior
 - Hot, red, dry skin
 - Seizure
 - Unconsciousness

Heat Related Disease: First Aid

- Heat Stress

- Take a break
- Drink water (with carbohydrate-electrolyte or salt)

- Heat Exhaustion

- Remove from hot environment
- Loosen or remove excess clothing
- Lie down
- Give cool water or sports drinks
- Apply cool, wet clothes on the skin
- Use fan to lower the body temperature

- Heat Stroke

- Do all above
- Seek medical attention (call 911 or go to emergency room)



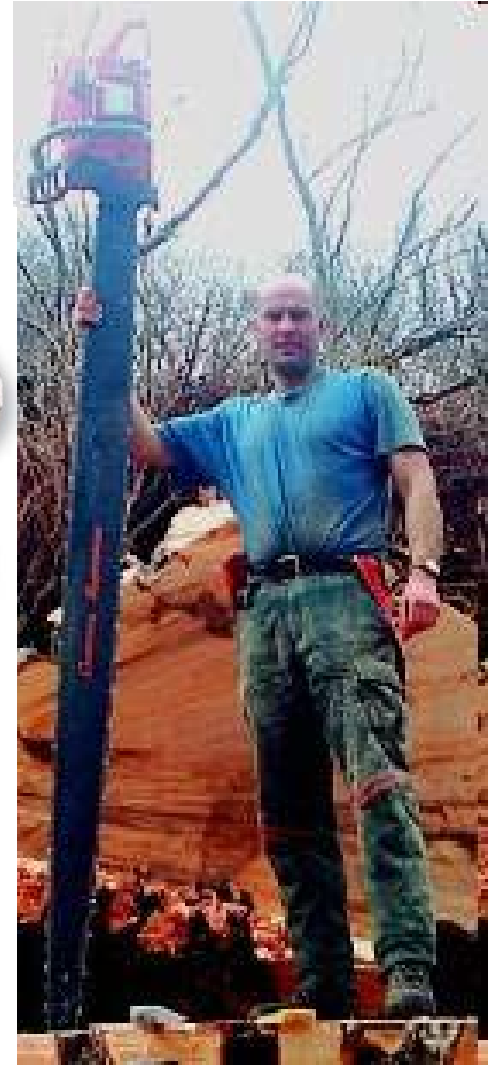
Heat Related Disease: Prevention

1. Always drink plenty of fluids (every 15-20 min.).
2. Take a little salts or drink sports drinks.
3. Keep a careful check on intake and outflow of fluids.
4. Try to schedule all physical outdoor activities for cooler parts of the day.
5. If you use diuretics, weigh yourself daily and report to your doctor if you lose more than 3 pounds daily or 5 pounds in a week.



Common Hazardous Works in Forestry

- Chainsaw use
- Pesticide application
- Prescribed burning
- Other operational safety



Training Requirement

- Chainsaw – E.g., USDA Forest Service chain saw training course
- Pesticide application – Pesticide Applicator Licenses (Florida Statutes Chapter 487: Pesticide Regulation and Safety)
- Prescribed burning – Prescribed burn manager requirement (e.g., FDOF Prescribed Fire Training course) by F.S. Section 590.125

Other Operational Safety

- Working alone (OSHA Standards 29 CFR 1910)
- PPEs (OSHA Standards 29 CFR 1910 Subpart I)
- Hearing conservation (OSHA Standards 29 CFR 1910.95)
- Fall protection (OSHA Standards 29 CFR 1910)
- Lock out / Tag out (OSHA Standards 29 CFR 1910.147)
- CPR and First-Aid (OSHA Standards 29 CFR 1910)

Working Alone

- ✓ Are you and your supervisor familiar with the location, type of work you will perform, and related hazards?
- ✓ Do your buddy (supervisor, co-worker, family, friends, etc.) know the location, time, and type of work you will perform? (Buddy System)
- ✓ Is there a way to contact your buddy or emergency services from the location (cell phone, 2-way radio, etc.)?
- ✓ Do you have access to drinking water and first-aid kits in a field?
- ✓ Do you know where is the closest hospital or emergency services?

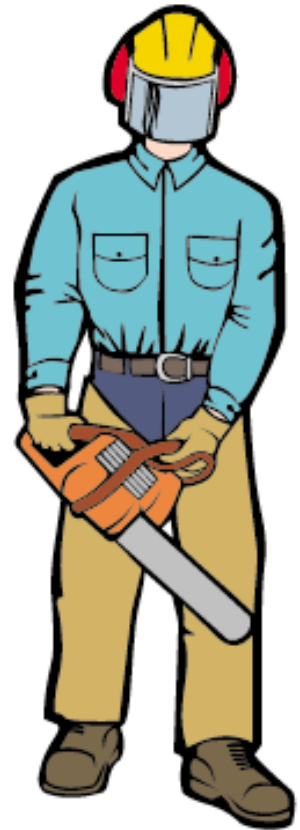


"Don't panic. There's another sign up ahead."



Personal Protective Equipment (PPE)

- Field/work boots with full ankle support (8 inches or taller)
- Heavy long pants
- Head protection, i.e., hat, or hardhat
- Snake chaps
- Safety vest
- Gloves
- Goggles
- Earplugs/muffs
- Respirator
- Etc.



USE THE RIGHT PPE FOR THE JOB.



DO YOU KNOW WHEN AND WHERE TO WEAR PPE?

Hearing Conservation

EFFECT ON PEOPLE	SOUND LEVEL (dBA)	SOUND SOURCE
High	140	Jet engine
Injurious	130	Rivet hammer
-----	120	Pain threshold
Injurious	110	Chain Saw
Irritating	100	Sheet-metal workshop
-----	85	General Standard for 8 hrs
	80	Heavy traffic
	60	Normal conversation
	30	Whispering
-----	0	Hearing threshold

What are the danger signals?

- Do you have to shout to be heard at work?
- Is your hearing dulled after work?
- Do you have ringing in the ears?
- Do you have trouble following a conversation in a crowded place?
- Have your friends or family complained that you have the TV or radio turned up too loudly ?

Fall Protection

Fact:

- Over 100,000 injuries and deaths in the US are attributed to work-related falls in each year.
- Most of fall-related fatalities are preventable (OSHA study).

“All employees, students, volunteers, and contractors working under direct UF supervision must be protected from falling when working on a surface that has an unprotected side or edge, which is 6’ or more above an adjacent lower level.”



Lockout / Tagout

Control of hazardous energy (OSHA 29 CFR 1910.147)

Fact:

- Approximately 3 million workers service equipment and face the greatest risk of injury if lockout/tagout is not properly implemented.
- Proper LO/TO can prevent an approximately 120 fatalities and 50,000 injuries each year.



Severe Bleeding

Exercise

- ✓ **Assess** scene and victim
 - ✓ **Alert** (call 911)
 - ✓ **Attend to the Airway, Breathing, and Circulation**
-
- Cover the wound by gauze
 - Apply firm direct pressure over the wound (victim may can do this for themselves)
 - Reapply additional pads over the first pads when they are soaked, and maintain direct pressure (do not remove the first dressings)
 - Monitor victim until EMS arrives

Eye Injuries

Minor Irritated Eye:

- Rinse the affected eye with a saline solution or tap water
- If you continue to feel pain, cover the eye lightly with a gauze, then seek medical attention

Object Stuck in Eye:

- Cover the eye with foam or paper cup to prevent eye and object movement.
- Lightly cover uninjured eye with gauze.
- Seek medical attention
- DO NOT try to remove the object
- DO NOT rub or apply pressure to the injured eye



Emergency Communication

Minor Injury (Countertop self medication):

1. Treat injury, first
2. Record the date, work place, injury, and treatment in your log, and verified by instructor

Moderate Injury (No emergency medical treatment):

1. Do all above
2. Instructor notify to school
3. Victim notify the family member (parents, spouse, etc.)

Severe Injury (Emergency):

1. Call 911 for EMS and law enforcement authority
2. Instructor notify to school
3. School notify family member and the university EHS

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"Ladies first. Actually, it's safety first. But ladies are definitely a close second."