

A photograph of a prescribed fire burning in a field. The fire is bright orange and yellow, with tall flames reaching up. A large plume of white and grey smoke rises from the fire, filling the upper half of the frame. The background shows a hazy, overcast sky and distant hills.

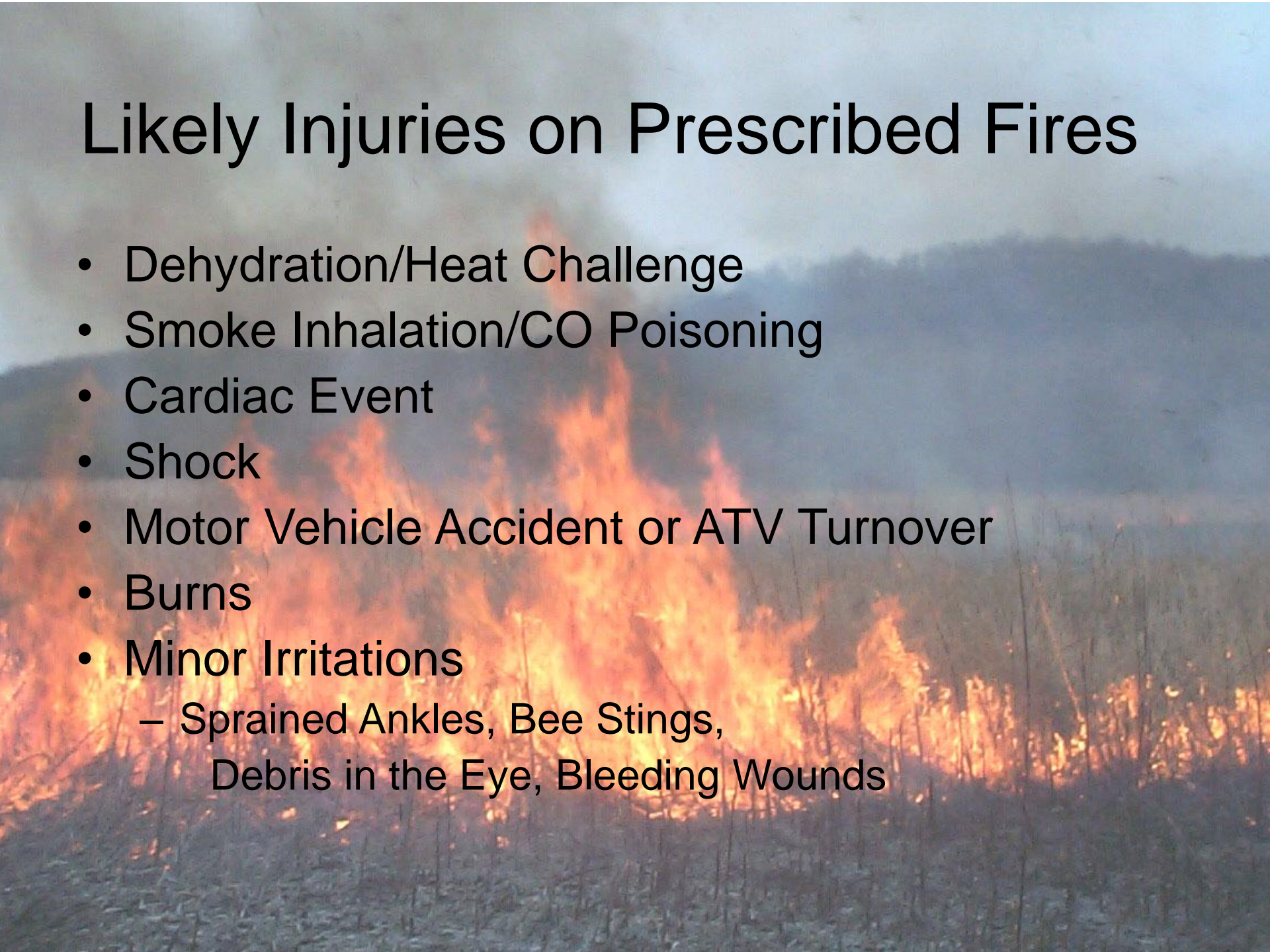
First Aid at Prescribed Burns

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Likely Injuries on Prescribed Fires

- Dehydration/Heat Challenge
- Smoke Inhalation/CO Poisoning
- Cardiac Event
- Shock
- Motor Vehicle Accident or ATV Turnover
- Burns
- Minor Irritations
 - Sprained Ankles, Bee Stings,
Debris in the Eye, Bleeding Wounds



First Steps in an Emergency

- Ensure scene is safe before approaching victim!
- Identify and treat life-threatening emergencies first
- Decide whether additional resources will be needed
- Check for other injuries and prioritize care
- Continue to monitor victim

Life Threatening Conditions

- Unconscious
- Not Breathing
- Difficulty Breathing
- No pulse
- Severe Bleeding
- Signs of Shock
- Late-stage Heat Challenge (“Heat Stroke”)
- Bee-Sting in known allergic victim

Checking for Further Injury

- First, do no further harm!
- Observe: area around victim
position of victim
- Get consent if victim is conscious
- Perform physical exam
- Record Vital Signs
- Obtain SAMPLE History

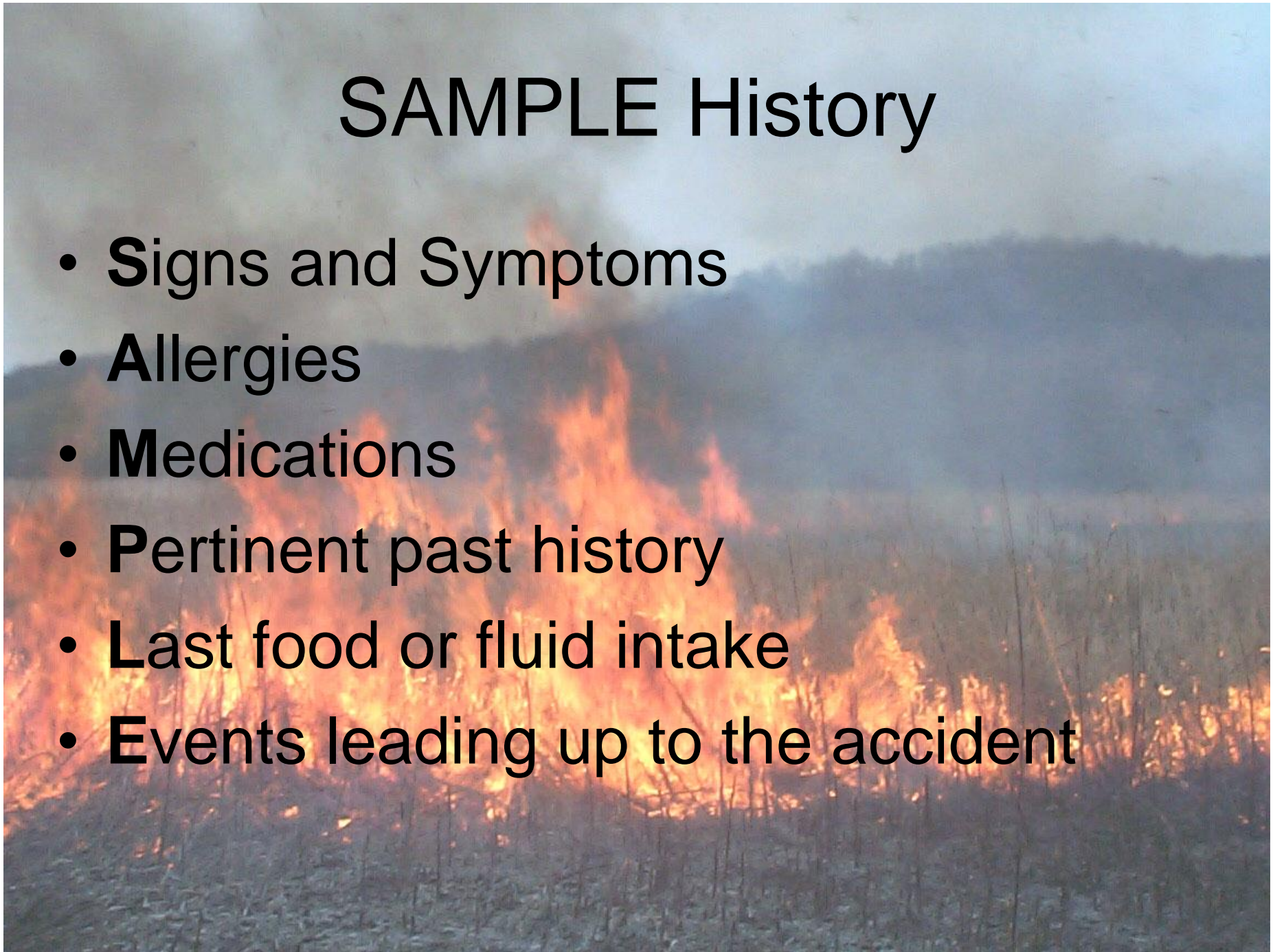
Vital Signs

- Pulse
- Breathing
- Skin Color and Temperature
- Pupil Reactions
- Level of Consciousness (LOC)
- Sensation
- Ability to move



SAMPLE History

- **S**igns and Symptoms
- **A**llergies
- **M**edications
- **P**ertinent past history
- **L**ast food or fluid intake
- **E**vents leading up to the accident

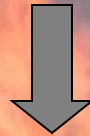


Dehydration/Heat Challenge

Dehydration



Heat Cramps



Heat Exhaustion



Heat Stroke

Dehydration/Heat Cramps

Signs/Symptoms

- Headache
- Fatigue
- Dizziness
- Fainting
- Cramping of large skeletal muscles
(usually legs or abdomen)

First Aid

- PREVENTION!!
- Fluids
- Rest in shade or A/C
- Recovery is normally fairly quick

Heat Exhaustion

Signs/Symptoms

- Excessive sweating
- Skin cool, moist, pale (though red at first)
- Headache worsens
- Dizziness, general weakness
- Fatigue, exhaustion
- Thirst, nausea

First Aid

- Remove to cooler environment (shade, A/C)
- Cool water in small sips
- Full recovery may take up to 24 hours

Heat Stroke

Signs/Symptoms

- Elevated body temp (as high as 106°)
- Hot, red skin (early on, may still be cool and/or pale)
- Sweating stops (early on, may still be moist)
- Deteriorating LOC
- Projectile vomiting
- Unconsciousness

First Aid

This is an immediately life threatening emergency!

- Reduce body temp:
 - dampen and fan skin (watch for shivering)
 - cold packs at armpits and groin
 - small sips of water if pt. conscious enough to protect own airway
- Evacuate to ambulance or hospital by stretcher.

Smoke Inhalation/CO Poisoning

The background of the slide is a photograph of a large fire. Bright orange and yellow flames are visible in the lower half, consuming what appears to be dry grass or brush. Thick, dark grey smoke rises from the fire, filling the upper half of the image and partially obscuring the sky.

Smoke inhalation is the leading cause of fire-related death.

CO poisoning is the leading cause of death in cases of smoke inhalation.

Smoke Inhalation

Signs/Symptoms

- Cough, hoarseness
- SOB
- Increased resp rate
- Eyes red & irritated
- Nostrils &/or nasal passages swollen
- Increased mucous production

First Aid

- Remove from smoky environment
- Humidified air
- O² therapy if available

Carbon Monoxide Poisoning

Signs/Symptoms

- Increased respiratory rate
- Headache, Fatigue
- Nausea, vomiting
- Fatigue

Later Stages:

- Decreasing LOC (agitation, impaired judgment, confusion)
- Chest Pain (esp. in those w/ compromised cardiac health)

First Aid

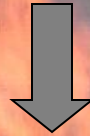
- **CALL 911**
- High dose, humidified O₂ therapy

Cardiac Emergencies

Angina



Cardiac Event



Heart Attack



Cardiac Arrest

Cardiac Event/Heart Attack

Signs/Symptoms

- Persistent chest pain
- SOB
- Changes in heart rate
- Pale, cool, clammy
- Weakness or collapse

First Aid

- Stop activity
- Rest in POC
- **Call 911**
- Assist pt. w/ any meds (e.g. nitroglycerin)
- O₂ if available
- Be prepared to do CPR if cardiac arrest occurs

Shock

Shock is a **circulatory system challenge**, in which the body perceives a shortage of oxygenated blood reaching the vital organs.

The body begins a blood shift from the periphery to the core. Symptoms may mimic ASR (acute stress reaction), but shock is a life threatening emergency!

Can occur with severe bleeding, cardiac emergency, respiratory emergency, or other severe illness or injury.

Shock – Signs/Symptoms

Early Stages

- Pale, cool, clammy
- Restless, agitated
- Increased HR and respiratory rate
- Decreased B/P
- Nausea
- Thirst

Later Stages

- Lethargic, apathetic, unconscious
- Skin is gray, cool & damp
- Weak and irregular HR
- Very rapid & shallow respirations (very late stages – resp very slow)
- Eyes dull and dilated

Shock — First Aid

- Call 911!
- Treat the initial injury
- Support open airway, monitor continuously
- Lay down and elevate feet 12"
- Keep warm
- Nothing to drink

Shock in a Delayed Help Situation

- If patient will be able to get to a hospital within two hours, do not give food or fluids
- If longer, give sips of fluid at rate of no more than 4oz. (1/2 cup) to an adult over a 20-min period.
- Do not give fluids if unconscious, semi-conscious, or if there is a head or abdominal injury

MVA or ATV Turnover

Primary concern = Possible
Head or Spinal Injury

Signs and Symptoms of Head and Spinal Injuries

- Trauma consistent with head/spinal injury
- Problems with breathing and vision
- Bilateral paralysis, numbness or tingling
- Ongoing headache, severe pain/pressure in the head, neck, back
- Nausea and vomiting
- Changes in level of consciousness
- Heavy external bleeding of the head, neck or back
- Bruises behind ears or under eyes
- Blood or other fluid from the ears or nose
- Unusual bumps or depressions on the head or over the spine
- Very slow pulse
- Pupils unequal size, respond unequally to light or moving objects

Spinal Injury – First Aid

- Assess the cause and seriousness
- Keep victim immobile!
- Monitor vital signs
- Evacuate professionally as soon as possible



Burns – First Aid

- Rescuer safety is primary concern!
- Assess severity: Depth of burn &
Rule of Nines
- Remove jewelry
- Cool burn w/ cool water
- Do not use ice or icy-cold water
- Apply antibiotic ointment & dry, sterile dressing
- Watch for shock
- Replace lost fluids

Minor Irritations

Sprained Ankles → RICE

Bee Stings →

- Remove stinger by scraping sideways
- Apply cold for swelling
- Watch for systemic reaction

Debris in Eye → Flush from nose out with affected
eye down

Bleeding Wounds →

- control bleeding with direct pressure
- apply antibiotic ointment and bandage

A photograph of a large fire burning in a field of dry grass. The fire is intense, with bright orange and yellow flames reaching upwards. A thick plume of dark smoke rises from the fire, filling the upper half of the frame. The background shows a hazy, overcast sky and distant hills. The text "ANY OTHERS???" is superimposed in the center of the image.

ANY OTHERS????