

# COLORADO WILDFIRES

Colorado Department of Agriculture - State Veterinarian's Office

Common trauma to animals include:

- Burned eyes, feet, udders, sheaths, and testicles
- Smoke inhalation with lung inflammation and edema
- Trauma can lead to secondary infections

## Livestock Trauma and Burns

Wildfires are currently burning across many areas of Colorado. The impacts of these wildfires are wide-reaching and they include impacts to agriculture and livestock. To see

a map of the current wildfires in Colorado,

visit: [www.colorado.gov/dfpc/current-wildfires](http://www.colorado.gov/dfpc/current-wildfires)

### Local Wildfires as of July 6, 2018

**416 Fire** (La Plata and San Juan counties): 52,778 acres |

#### Livestock handling

- Only experienced livestock handlers should be handling animals during highly stressful events.
- Livestock reactions can range from nervousness to panic to aggressive attempts to escape anyone and anything.
- Traumatic events often leave animals in a heightened state of awareness beyond the time frame of the actual incident.
- Normal handling techniques may be ineffective with livestock who are still traumatized from a recent wildfire; this can be especially true if the wildfires have passed but are still burning within the sensory range of the animal.

#### Assessment for Livestock:

It can be challenging to assess a burned animal because the depth and severity of the burn may be difficult to ascertain; the animal may not appear distressed or in pain. It may take days to two weeks for burns to become apparent, especially those on the hooves.

Reassess on a daily basis! The severity of the burn and the compromise in the health of animals will become apparent. It is difficult to judge burned animals initially, but the burned areas of skin become leather-like and slough in 5-14 days, while systemic signs may worsen. Animals which go off-feed require careful examination for complications.

#### Protection and treatment of livestock from smoke particulates

- Limit exercise if smoke is visible. Don't force livestock to perform activities or exercise that increase the airflow in and out of the lungs. This can trigger bronchoconstriction.
- Provide plenty of fresh water near feeding areas. The consumption of easily accessible water keeps the airways moist and facilitates clearance of inhaled particulate matter. This allows the trachea, bronchi, and bronchioles to remove inhaled particulate material in smoke.
- Limit dust exposure by feeding low or dust-free feeds and sprinkling or misting the livestock holding area. This reduces the particles in dust such as mold, fungi, pollens, and bacteria.
- If livestock is coughing or having difficulty breathing, an examination by a veterinarian is warranted to determine if it is a reactive airway from smoke and dust versus bacterial infection and pneumonia.
- Airway damage resulting from smoke-induced insult may take 4 to 6 weeks to heal. Plan to give livestock enough time to recuperate after the air quality returns to normal. Attempting to move and handle cattle may aggravate the condition, delay the healing process, and compromise the performance of livestock.

#### Livestock triage

Smoke inhalation may lead to cough, labored breathing, and pulmonary edema. Inhalation of hot gases may cause a cough with frothy material discharge from the nose. Lack of appetite or inability to chew along with impaction or other disorders of gastrointestinal tract can be seen when the head and face are burned. Soaking feed with water allows for easier eating.

Burn shock is treated by intravenous fluids, balanced electrolytes, and possibly plasma. Burns may be treated topically with silver sulfadiazine; desitin may be an alternative. Treatment of pain with approved pain medications, such as anti-inflammatories. Antibiotic treatment may be beneficial for deep burns with or without contamination. Keep the wounds as clean as possible; debridement or trimming is difficult with large numbers of affected animals and no sterile hospital setting. Initial burn injuries will continue to progress and may worsen for up to six weeks following the initial injury. Debride dead tissue, treat, and protect exposed areas during healing. Protect the wounds from fly strike with appropriate repellants.

Emergency euthanasia for severely burned animals that are in shock and have a large percentage of burn trauma. Emergency euthanasia includes captive bolt gun, gunshot by firearm, barbiturate overdose (licensed veterinarian only), and in some extreme cases exsanguination and electrocution. See the [AVMA Guidelines on the Euthanasia of Animals](#) for species-specific guidelines.