

INJURY UPDATE

*A Report to Oklahoma Injury Surveillance Participants**

February 15, 2002

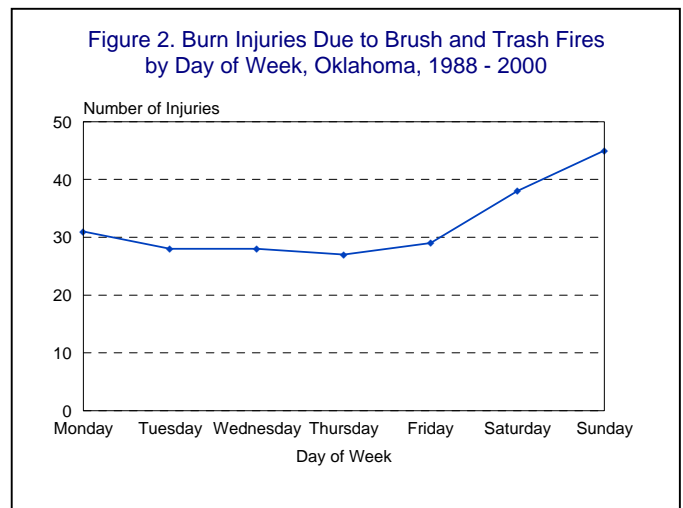
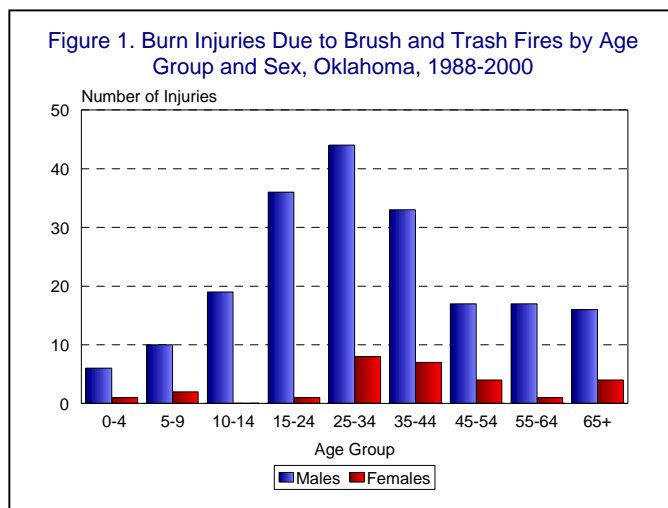
Brush and Trash Fire-Related Injuries in Oklahoma, 1988 - 2000

Fire and burn-related injuries are the fifth leading cause of unintentional injury death in the United States for persons of all ages. In November 1986, the Oklahoma State Department of Health made burn/smoke inhalation injuries that resulted in hospitalization or death a reportable condition. Collection of such information began in September 1987 and has continued since. During the 13-year period 1988 to 2000, 6,029 Oklahomans were hospitalized in a burn center or died as a result of an unintentional burn or smoke inhalation injury. Of these, 226 (including 3 deaths) were due to injuries incurred from a brush or trash fire. This report describes the occurrence and characteristics of brush and trash fire-related injuries.

The majority (57%) of injuries occurred among persons age 15 to 44 with an average age of 35 years (Figure 1). Seventeen percent of injuries occurred among children less than 15 years of age. Males accounted for 88% (198/226) of the injuries, with a 7:1 male to female ratio. Native Americans had the highest average annual injury rate (0.6 per 100,000 population) followed by whites and African Americans (0.5 and 0.4 per 100,000 population, respectively).

Accelerants were used in 87% (196/226) of the brush and trash fires. Gasoline was the most common accelerant used (178/196, 91%). All three persons that died were using gasoline on or around the fire. Other accelerants used included diesel, kerosene, lighter fluids, and propane. Alcohol or drugs contributed to 9% (16/188) of the brush and trash fire injuries and deaths among person 15 years of age and older.

More than one-third (37%) of the injuries occurred on Saturday or Sunday (Figure 2). Thirty-one percent of injuries occurred between 4:00 p.m. and 8:00 p.m. (Figure 3). The majority (88%) of injuries occurred from March through October (Figure 4).



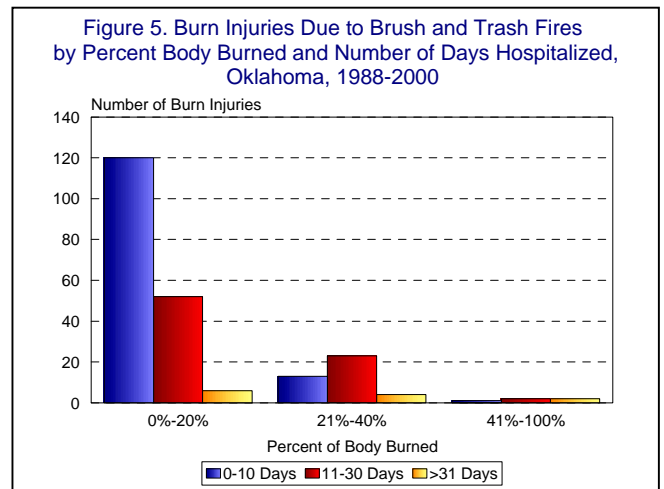
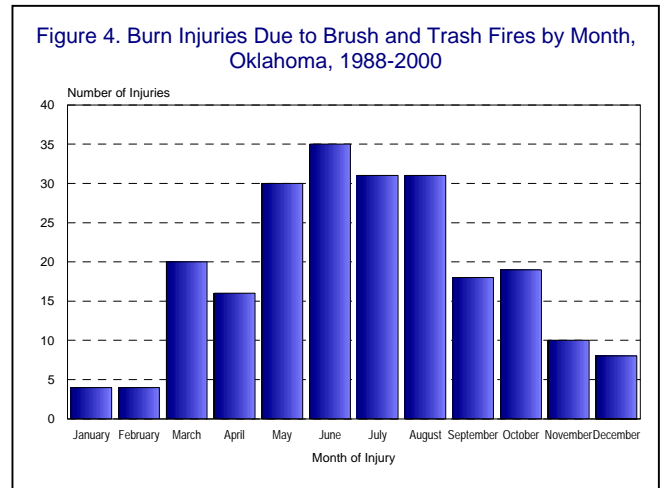
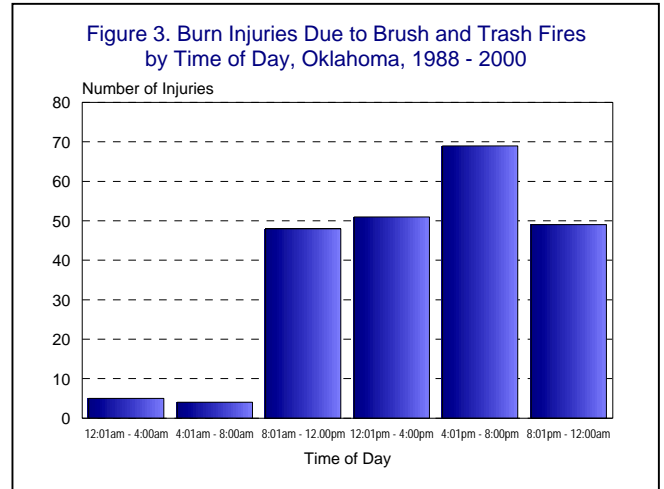
*The INJURY UPDATE is a report produced by the Injury Prevention Service, Oklahoma State Department of Health. Other issues of the INJURY UPDATE may be obtained from the Injury Prevention Service, Oklahoma State Department of Health, 1000 N.E. 10th Street, Oklahoma City, Oklahoma 73117-1299, 405/271-3430 or 1-800-522-0204 (in Oklahoma). INJURY UPDATES and other IPS information is also available at www.health.state.ok.us/program/injury.

Twenty-nine percent (66/226) of injured persons had some portion of their clothing catch fire. Two persons that died had their clothes catch fire and the information was unknown on the third person.

Among survivors, the average length of stay in a burn center was 11 days with a range of 1 to 100 days. Eighty percent (178/223) of survivors were burned on 20% or less of their body. Figure 5 shows the relationship between percentage of the body burned and the length of stay in a hospital. Of the 100 cases with insurance information, 51% had private insurance, 15% Medicare, 11% no insurance, 11% Medicaid, 8% workers' compensation, and 4% had another type insurance.

CASE BRIEFS

- An 80-year old man died of sepsis due to thermal burns received after he fell into a brush fire. His wife stated that he was burning brush on their land. He was hospitalized for 21 days with burns over 18% of his body.
- A 4-year old boy sustained third degree burns and was in the hospital for seven days after his parents were burning brush with gasoline. He got gasoline on his clothes, and the fire ignited them.
- A 38-year old man spent 14 days in the hospital after pouring gasoline on a brush fire. The fire flashed up on him, catching his shirt on fire and burning 35% of his body.
- A 55-year old man was hospitalized for 40 days with burns to both lower extremities. It was reported that he was burning trash while intoxicated.
- A trash fire that exploded because of an aerosol can injured a 10-year old boy and his 7-year old sister. The sister was hospitalized for 22 days with first and second degree burns over 15% of her body. She also suffered from pulmonary insufficiency and anemia as a result of the fire. Her brother was treated and released at a local hospital.
- A 75-year old man died from burns received after he poured gasoline on a brush fire. He was hospitalized for 14 days with burns over 44% of his body.



PREVENTION

Injuries related to brush and trash fires take their toll on quality of life and medical costs. These injuries can be prevented by following these tips.



Instead of burning brush and trash, haul brush to a local landfill and bag trash and deposit it in a trash receptacle.



Do not burn brush or trash using an accelerant such as gasoline.



Do not put articles that have the potential to explode into fires. Dispose of these objects as recommended on the label.



Do not allow children to burn brush or trash or to play around burning fires.



While tending a fire, do not wear clothes that are loose fitting. Loose fitting clothes can hang over the fire and are more susceptible to catching fire. Make sure that clothing does not have gasoline or other accelerants on it.



Never burn brush or trash while intoxicated or impaired in any way. Alcohol impairs the senses and reduces reaction time so one is unable to take quick and appropriate action if a fire should get out of hand.



Do not burn brush or trash when the ground is excessively dry. Adhere to state administered burn bans. Be sure there is a source of water easily accessible to put it out if needed.

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