

# Burn Injuries among Roofers

June 2009

## Oklahoma Occupational Safety and Health Surveillance Program

Roofing contractors are among the most hazardous industries. Since liquid tar is hot and slick, roofers are at high risk of slips, falls, burns, and hazardous materials exposure. A total of 105 roofers died or were hospitalized in Oklahoma burn centers from work-related burn injuries from 1988 to 2006. Burns may cause serious physical pain, psychological trauma, and economic loss.

- A 16-year-old male was carrying two buckets of hot tar when he tripped while climbing onto a roof. Hot tar splashed on both of his arms. He was hospitalized for nine days with partial thickness burns over 5% of his arms and a small portion of his body.
- A 26-year-old female slipped and fell on a roof covered with hot tar. She suffered partial thickness burns over 10% of her body and third degree burns over 5.5% of her body. She was treated in the burn center for 26 days.
- A 31-year-old male was measuring a residential roof. He unintentionally touched a 2,000-volt power line while climbing a ladder and subsequently fell to the ground. He was

taken to the emergency room and pronounced dead.

- A 40-year-old male was sprayed with hot tar when a pipe on a tar pump broke. He suffered partial thickness burns over 2.5% of his hands and third degree burns over 1% of his hands. He was hospitalized for 13 days.
- A 41-year-old male was walking backward along a 20-foot roof with a hot tar dispenser that allowed tar to drip onto the roof. When he reached the edge of the roof, he lost his balance and fell backwards. The dispenser got stuck on the roof, but tilted down, pouring tar on the victim as he fell. He had multiple fractures along with a grade 3 liver laceration and 15% of his total body surface area burned. He died three weeks later in the hospital.



**Contact Information**  
**Oklahoma State**  
**Department of Health,**  
**Injury Prevention**  
**Service**  
**1000 N.E. 10th**  
**Street, Oklahoma City,**  
**OK 73117**  
**405-271-3430 or**  
**1-800-522-0204**

## *SAFETY RECOMMENDATIONS*

- **Ensure that workers receive workplace safety and first aid trainings before beginning work.**
- **Clean debris on the ground and from the roof to prevent slips, trips, and falls.**
- **Wear heat-resistant gloves, safety goggles, long sleeved cotton shirts, long pants, and sturdy non-slip shoes.**
- **Use a pump to directly transfer hot tar from the ground to the roof.**
- **If only a bucket can be used to transfer hot tar, use a hoist and ensure no one stands near or below a hoisted hot bucket; a bucket should not be filled more than three-fourths full with hot tar.**
- **If a hot tar burn occurs, cool the hot tar with sufficient amounts of clean low-pressure water immediately and do not attempt to remove the tar at the incident scene.**
- **Seek emergency medical treatment immediately.**

**The Oklahoma Occupational Safety and Health Surveillance Program collects statewide information on 19 occupational health conditions in order to develop and inform occupational injury and illness prevention programs. Oklahoma's occupational surveillance system is a research program of the National Institute for Occupational Safety and Health.**

**For detailed reports, please go to the Occupational Injuries section at:**  
<http://ips.health.ok.gov>