

Fireworks are an annual tradition for Independence Day in the United States. However, each year there are hundreds of injuries due to fireworks, most often affecting the hands, face and eyes, leading to serious injuries like amputations, burns, and even death. People actively igniting fireworks experience more severe and more frequent injuries than bystanders.¹ Fatalities and injuries from fireworks do not have to be part of the celebration though. Rather than purchase fireworks to use at home, enjoy public firework displays lead by trained pyrotechnic officials and stay safe this 4th of July.² This report describes the burden of firework-related injuries in Montana between 2010 and 2012.

Between 2010 and 2012, there was an average of 42 emergency department visits and 3 hospitalizations a year in Montana for firework-related injuries

Data source: Emergency Department and Hospital Discharge Data

Montana Injury Prevention Program

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Healthy People. Healthy Communities.
Department of Public Health & Human Services

July 3-July 5

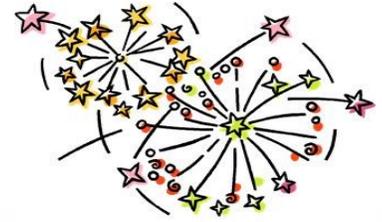
Men

- 66% of hospitalizations related to fireworks either occurred on or within one day of the 4th of July.
- 81% of emergency department visits for firework-related injuries were in July.
- 92% of hospitalization related to fireworks were among men.

18+ years

Hand

- 75% of hospitalizations and 55% of emergency department visits related to fireworks involved a person aged 18 years or older.
- 58% of people hospitalized related to fireworks had a primary injury involving their hand and 29% of those hospitalizations involved an amputation.



How to Stay Safe

Keep your 4th of July celebration fun and safe. Firework-related injuries can be prevented by a few safety steps⁵:

- Attend public firework shows performed by trained pyrotechnic officials instead of lighting your own.
- Parents and caretakers should always closely supervise teens if they are using fireworks.
- Parents should not allow young children to handle or use fireworks.
- Always have water ready if you are shooting fireworks.
- Know your fireworks. Read the caution label before igniting.
- Alcohol and fireworks do not mix.
- Wear safety glasses whenever using fireworks.
- Never relight a “dud” firework. Wait 20 minutes and then soak it in a bucket of water.
- Soak spent fireworks with water before placing them in an outdoor garbage can.
- Avoid using homemade fireworks or illegal explosives: They can kill you!
- Always remain standing while using sparklers.
- Never hold, or light, more than one sparkler at a time.
- Never throw sparklers.
- Teach children not to wave sparklers, or run, while holding sparklers.

Methods

Hospitalization data are from the Montana Hospital Discharge Data System (MHDDS) for 2010-2012 using ICD-9-CM,³ external cause of injury coding (E-coding in MHDDS was incomplete before 2009). Hospital Discharge Data are made available courtesy of the Montana Hospital Association. Emergency Department (ED) Discharge Data are for 2009-2011 and were requested from the Montana Hospital Association's data analyst. A fireworks related injury was defined as a hospitalization or ED discharge with a primary E-code of E923.0.

References

1. See LC, Lo SK. Epidemiology of fireworks injuries: the National Electronic Injury Surveillance System, 1980-1989. *Ann Emerg Med.* 1994 24(1):46-50.
2. Committee on Injury and Poison Prevention. Fireworks related injuries to children. *Pediatrics.* 2001;108:190-191.
3. <http://icd9cm.chrisendres.com/index.php?action=contents>
4. Injury Surveillance Workgroup. Consensus recommendations for using hospital discharge data for injury surveillance. Marietta, GA: Safe States Alliance; 2003.
5. National Council on Fireworks Safety. <http://fireworkssafety.org>