



## Summer Safety: Fireworks

Summer activities and celebrations are underway with family and friends gathering together to enjoy the warm weather and sunshine. Looking to capitalize on celebratory festivities, roadside fireworks tents filled to the brim with consumer fireworks are being set up through towns across America. While these consumer fireworks may be legal in most states, they are far from safe.

Fireworks are the cause of thousands of injuries every year. **In 2017, 8 people died from fireworks-related injuries.** The majority of these injuries take place between June 16 and July 16 and are the result of not only professional-grade fireworks, but also small firecrackers and sparklers that are often handled by children.

With many large public gatherings canceling this year due to the coronavirus pandemic, including 4th of July fireworks displays, more people may be inclined to put on their own display of professional-grade fireworks. If you choose to use fireworks this summer, be sure to practice the following safety protocols.

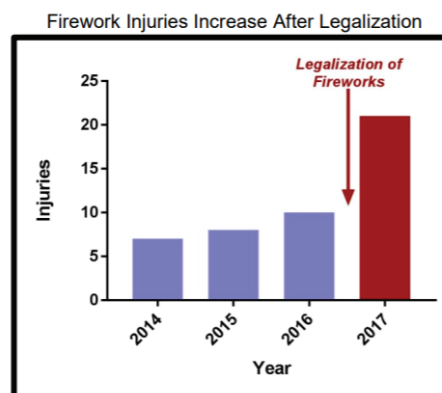
- Young children should never handle fireworks and older children should only handle fireworks under close adult supervision. The majority of fireworks-related injuries happen to children under the age of 18.
- Use fireworks only in clear, open areas that are free of obstructions (houses, trees, people, etc.) or flammable material. Never use fireworks indoors.
- When lighting fireworks, place them on a flat surface before lighting and wear protective eye wear. Never hold lighted fireworks in your hands or point them towards another person.
- Keep a bucket of water nearby when lighting fireworks to fully extinguish them. Before discarding any used or unused fireworks, soak them in water for a few hours.

### Fireworks Injuries Uptick After Legalization

In 2017 a team from The University of Iowa collaborated on a project to study the trends of fireworks-related injuries in Iowa prior to the legalization of consumer fireworks and after their legalization in May 2017. The team included researchers from UIHC Department of Emergency Medicine, in association with the Injury Prevention Research Center and the Department of Surgery. The study found that after the legalization of fireworks in the state, injuries from fireworks more than doubled with injuries being more severe in nature.

[Read more in the brief.](#)

**Additional Info:** [Leave the Fireworks to the Experts; Legal Consumer Fireworks in Iowa Corresponds with a Dramatic Uptick in Injuries; National Fire Protection Association, Fireworks](#)



**Know the Law. Not sure what the laws are for your state? [Find them here.](#)**

## Understanding Heat-Related Illnesses

Summers in the Midwest are often accompanied by hot and humid weather, with July tending to be the hottest month of the season. It's during these summer months that workers are often exposed to prolonged conditions of extreme heat. These conditions put workers at risk of heat stress and can lead to other dangers such as heat rashes, dizziness, and fogged-up safety glasses. Two heat-related illnesses you should be aware of are heat exhaustion and heat stroke.

### Heat Exhaustion:

Occurs when the body loses excessive water and salt. Symptoms can include sweating, pale or moist skin, muscle cramps, weakness or fatigue, dizziness or headache, nausea, vomiting, or increased heart rate. If someone appears to have heat exhaustion, move them to a shaded or air-conditioned area and give them water. You can also apply wet towels to their skin or have them take a cool shower.

### Heat Stroke

Heat stroke is a serious illness and action should be taken right away if someone has the symptoms of heat stroke. Symptoms include body temperature over 103 degrees, flushed, dry skin that is hot to the touch, rapid breathing, signs of altered mental status such as confusion or dizziness, irrational behavior, or even unresponsiveness. Take immediate action by calling 911 and moving the victim to a cool place. While waiting for an ambulance, remove the victim's unnecessary clothing and immediately cool the victim by immersing the victim in cold water up to the neck, using cold wet towels to cover the victim's body, or giving the victim a cool shower.

## Avoiding Heat Stress by Keeping Cool in Hot Weather

- Limit the time spent in heat. Permit workers to rest and take water breaks when they feel heat discomfort.
- Drink plenty of fluids. Provide potable water that is accessible near the work area and encourage workers to hydrate throughout the day. If you are working in the heat for more than 2 hours, drink 8 ounces of water every 15-20 minutes.
- Reduce the metabolic demands of the job; increase the number of workers per task, use tools intended to minimize manual strain, and implement a work buddy system.
- Acclimate workers to the heat by gradually increasing exposure over a period of time. New workers should spend no more than 20% of the usual work time in the heat on day 1. Gradually increase time in the heat over 7-14 days, increasing no more than 20% in a single day. Closely supervise new employees until they are fully acclimatized.



## Have you Tried the OSHA-NIOSH Heat Safety Tool App?

This is a useful resource for planning outdoor work activities based on how hot it feels throughout the day. Featuring real-time heat index and hourly forecasts, specific to your location, as well as occupational safety and health recommendations from OSHA and NIOSH.



**Looking for more resources?** [Learn How to Avoid Heat-Related Illnesses and Death; Extreme Heat; Control of Heat Stress; Stop Sweating Heat Stress](#)



## Hawkeye on Safety is Going Virtual

Join us August 25-27 for a safety event that you don't want to miss! We'll be offering 9 sessions over the 3-day event with sessions each day at 9:00 AM, 11:00 AM, and 2:00 PM. Topics will include Women in Work, Suicide Prevention, Pandemic Preparedness, and more.

There is no cost to attend! This event is completely free courtesy of the Hawkeye on Safety committee and our generous sponsors.

[More information available at hawkeyonsafety.com.](https://hawkeyonsafety.com)

## Business Resources for Navigating COVID-19

For three months, the world has been grappling with a global pandemic. The Novel Coronavirus Disease 2019 (COVID-19) has shaken the way our communities function. Many companies and employees have had to adapt to a new normal, whether working from home or integrating new safety protocols. As states across the US are finding their path to reopening, businesses too must decide how to operate safely, protecting their employees and customers.

### CDC Resuming Business Toolkit

This toolkit includes an introduction sheet for employers, restart readiness checklist, worker protection tool to identify protective measures, and additional resources. Print the list and revisit it as you progress through the stages of reopening. Share infographics with employees as you see fitting for your environment. Infographics can be incorporated into the workplace by posting them in break rooms, hallways, elevators, or bathrooms.

### Total Worker Health Employer Guide

This guide provides practical tips and resources for employers trying to navigate pandemic response strategies. The guide covers topics such as worker well-being, remote worker hazards, essential worker hazards, and return-to-work guidelines.

### OSHA Guidance on Returning to Work

This OSHA guide contains recommendations as well as descriptions of mandatory safety and health standards. Included is information on how to plan for reopening, OSHA standards and required protections, as well as employer frequently asked questions.

## UI Interdisciplinary Research Team to Create PPE That Captures and Kills Viral Pathogens



Heartland Center Director, Patrick O'Shaughnessy, is collaborating with a University of Iowa interdisciplinary research team to produce a filter suitable for PPE that can capture and kill pathogens. The equipment will improve PPE performance and reusability. The team includes engineers from the University of Iowa and the University of Notre Dame.

[Read more about their work here.](#)

## Safety Recommendations for Working From Home

Are you still working from home? Students in the Occupational Safety course at the University of Iowa College of Public Health this spring have provided recommendations that address concerns such as fire safety, hearing protection, and trip and fall hazards. [Read the recommendations.](#)



## Continuing Education Programs

Check out the Heartland Center's online events calendar at [HeartlandERC.org](https://heartlanderc.org) to keep track of our upcoming continuing education events.

Follow the Heartland Center on social media for regular occupational health and safety updates:



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## Additional CDC Resources for COVID-19:

[How to Clean and Disinfect](#)

[Managing Workplace Fatigue](#)

[Coping with Stress](#)