UNINTENTIONAL FIRE AND BURN PREVENTION RESOURCE GUIDE







MAY 2025

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under the Child and Adolescent Injury and Violence Prevention Resource Centers Cooperative Agreement (U49MC28422) for \$5,000,000 with 0 percent financed with non-governmental sources. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

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Introduction



Fires and burns are the fifth leading cause of unintentional injury-related deaths to infants, children, and adolescents ages <1-19 in the U.S.¹ Nearly 300 U.S. infants, children, and adolescents die² and about 80,000 are treated and released from emergency departments (ED) per year for nonfatal, unintentional fire or burn injuries.³ Thermal (from flames or hot surface), scald (from hot liquids or steam), and chemical (caustics) burns are the most common type of burns, accounting for approximately 90% of burns in this population. ⁴

While deaths and nonfatal injuries from fires and burns have decreased over the past 20 years,⁵ there are still far too many occurrences. Proven prevention practices that can reduce the risk of fire and burn include properly installing and maintaining smoke alarms and fire sprinklers, having and practicing an escape plan in the event of a fire, cooking with care, and maintaining a safe hot water temperature.

The Children's Safety Network has produced this resource guide to provide useful fire and burn prevention resources to help state, jurisdiction, and local health departments and their partners expand and enhance their prevention efforts. This resource guide is divided into five sections: Organizations, Prevention Resources, Legislation, Publications, and Data Sources. The resources included in this guide are not meant to be comprehensive, nor are the listings intended as endorsements.

¹ Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS) Leading Causes of Death [online]. (2025) [data from 2023] Available from URL: https://wisqars.cdc.gov/.

² Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS) Fatal Injury Reports [online]. (2025) [data from 2021-2023] Available from URL: https://wisgars.cdc.gov/.

³ Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS) Nonfatal Injury Reports [online]. (2025) [data from 2021-2023] Available from URL: https://wisqars.cdc.gov/.

⁴ Hoffman et al. (2025). Nonfatal Hospital-Treated Pediatric and Adolescent Burn Analysis in the United States: A 2019-2022 National Electronic Injury Surveillance System Analysis. Burns, 107455.

⁵ Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS) Fatal Injury Reports [online]. (2025) [data from 2021-2023] Available from URL: https://wisqars.cdc.gov/.

Organizations

American Burn Association (ABA) http://ameriburn.org/

National Fire Protection Association (NFPA) http://www.nfpa.org

U.S. Fire Administration (USFA) http://www.usfa.fema.gov

Prevention Resources

Burn and Scald Prevention Tips | Safe Kids Worldwide

https://www.safekids.org/tip/burns-and-scalds-prevention-tips

Burn Prevention, First Aid and Calling 911 | USFA

https://www.usfa.fema.gov/prevention/life-safety-hazards/burns-first-aid-911/

Burn Prevention Resources | ABA http://ameriburn.org/prevention/prevention-r esources/

National Fire Protection Association (NFPA) Resources

http://www.nfpa.org

Community Tool Kits

Fire Prevention Week

Burn Awareness Safety Tips

Educational Messaging

Put a Freeze on Winter Fires

Safety Tip Sheets

Sparky the Fire Dog Children's Resources

<u>Sparky School House Educator</u> Resources

U.S. Experience with Sprinklers

Holiday Fire Safety Tips

Cooking Safety for All | ABA

https://ameriburn.org/wp-content/uploads/2018/12/cobranded_aba119_burnprevention-cookingall_113018-1.pdf

Fire is Everyone's Fight | USFA

https://www.usfa.fema.gov/prevention/fief/index.html

Fire Safety | National Safety Council

https://www.nsc.org/home-safety/safety-topics/emergency-preparedness/fire

Fire Safety | US Consumer Product Safety Commission

https://www.cpsc.gov/Safety-Education/Safety-Education-Centers/Fire-Safety-Information-Centers

Fire Safety for Children | USFA https://www.usfa.fema.gov/prevention/home-fires/ at-risk-audiences/children/

Home Fire Sprinkler Week | Home Fire Sprinkler Coalition

https://homefiresprinkler.org/

Injury Prevention: What Works? A Summary of Cost- Outcome Analysis for Injury Prevention Programs | Children's Safety Network https://www.childrenssafetynetwork.org/sites/defa ult/files/InjuryPrevention-WhatWorks.pdf

National Burn Awareness Week | ABA http://ameriburn.org/prevention/burn-awarenessweek/

Partnering with Schools for Child Safety Education | Children's Safety Network https://www.childrenssafetynetwork.org/events/sta te-technical-assistance-webinar-10-march-20-20 25-partnering-schools-child-safety

Prepare and Protect Your Home | National Interagency Fire Center https://www.nifc.gov/fire-information/fire-preventi on-education-mitigation/wildfire-mitigation/home

Scald | ABA

https://ameriburn.org/advocacy-and-prevention/burn-awareness-week/scald/

Smoke Alarms | USFA

https://www.usfa.fema.gov/prevention/home-fires/prepare-for-fire/smoke-alarms/index.html

Start Safe: Fire Resources for Parents | Safe Kids Worldwide https://www.safekids.org/start-safe-fire-resources-parents

Legislation

Fire Safety Laws and Legislation by Category and State | First Alert https://www.firstalert.com/us/en/legislation/

2024 Directory of State Requirements for Public Fireworks Displays and State Laws for Consumer Fireworks | American Pyrotechnics Association https://www.americanpyro.com/state-law-directory

Selected State and Local Resources

FDNY Smart | New York City Fire Department

http://www.fdnysmart.org

"Fire Is..." | New Jersey Fire **Prevention and Protection**

http://www.nifiresafety.com

S.A.F.E. Program | Massachusetts **Department of Fire Services**

https://www.mass.gov/service-deta ils/student-awareness-of-fire-educ ation-safe

San José Junior Fire Safety | San José Fire Department

https://www.youtube.com/playlist?l ist=PLmUwQPdQ9mvxJGtuACrwzL 4ouRRUcXQeY

Publications

Adolescents With and Without Head and Neck Burns: Comparison of Long-Term Outcomes in the Burn Model System National Database | Burns (2021)

Wang BB, Patel KF, Wolfe AE, Wiechman S, McMullen K, Gibran NS, Kowalske K, Meyer WJ, Kazis LE, Ryan CM, Schneider JC

https://pmc.ncbi.nlm.nih.gov/articles/PMC8526620/

Adolescent Vaping-Associated Trauma in the Western United States | The Journal of Surgical Research (2022)

Russell KW, Katz MG, Phillips RC, Kelley-Quon LI, Acker SN, Shahi N, Lee JH, Fialkowski EA, Nacharaju D, Smith CA, Jensen AR, Mueller CM, Padilla BE, Ignacio RC, Ourshalimian S, Wang KS, Ostlie DJ, Fenton SJ, Kastenberg ZJ, Western Pediatric Surgery Research Consortium https://pubmed.ncbi.nlm.nih.gov/35395565/

Age-Based Characteristics of Pediatric Burn Injuries from Outdoor Recreational Fires | Journal of Burn Care & Research (2020)

Trotter Z, Foster K, Khetarpal S, Sinha M https://pubmed.ncbi.nlm.nih.gov/32364606/

Burn Care for Children | Pediatrics in Review (2018) Sheridan RL

https://publications.aap.org/pediatricsinreview/article-abstract/39/6/273/35200/Burn-Care-for-Children?redirectedFrom=fulltext

Characteristics and Trends of Pediatric Firepit Burns: Insights for Prevention and Safety | World Journal of Pediatric Surgery (2024)

Fazal M, Chidiac C, Ahmad R, Issa O, Hodgman E, Garcia AV

https://wjps.bmj.com/content/7/1/e000700

Children Ages One to Four Are Disproportionally Affected by Chemical Burns in a Cross-Sectional Analysis of NEISS 2012–2021 | Burns (2023) Oulee A, Waldrop I, Mendoza R, Onyekonwu C, Plurad DS, Sheets NW

https://www.sciencedirect.com/science/article/pii/S0305417923000463?via%3Dihub



Children Younger Than 18 Years
Treated for Nonfatal Burns in US
Emergency Departments | Clinical
Pediatrics (2019)
Mitchell M, Kistamgari S, Chounthirath
T, McKenzie LB, Smith GA
https://journals.sagepub.com/doi/10.11
77/0009922819884568

Craniofacial and Neck Burns in the Pediatric Population | Burns (2020) Othman S, Sethi HK, Cohn JE, Shokri T, Davis WJ III

https://www.sciencedirect.com/science/article/abs/pii/S0305417920300589?via%3Dihub



Evaluating Effects of Burn Injury Characteristics on Quality of Life in Pediatric Burn Patients and Caregivers | Burns (2023)

Patterson KN, Beyene TJ, Lehman K, VerLee SN, Schwartz D, Fabia R, Thakkar RK https://www.sciencedirect.com/science/article/abs/pii/S0305417923000116?via%3Dihub

Fire Pit-Related Burn Injuries in Children and Adolescents | Journal of Burn Care & Research (2019)

Flaherty MR, Sheridan

https://academic.oup.com/jbcr/article/40/6/943/5530375

Intoxication and Flame Burn Injuries in Young Adults in the United States | Journal of Burn Care & Research (2019)

Palilonis MA, Amanullah S, Gjelsvik A, Schlichting

LE, Cioffi WG, Harrington DT, Vivier PM

https://academic.oup.com/jbcr/article/40/4/392/5426664

Neighborhood Child Opportunity is Associated with Hospital Length of Stay Following Pediatric Burn Injury | Burns (2024)

Akinkuotu AC, Burkbauer L, Phillips MR, Gallaher J, Williams FN, McLean SE, Charles AG https://www.sciencedirect.com/science/article/abs/pii/S0305417924001128?via%3Dihub

Nonfatal Hospital-Treated Pediatric and Adolescent Burn Cases in the United States: A 2019–2022 National Electronic Injury Surveillance System Analysis | Burns (2025) Hoffman RK, Lawrence BA, Ali B, Leonardo J, Miller TR https://doi.org/10.1016/j.burns.2025.107455

Pediatric Burn Injuries: Risk Factors for Increased Mortality | The Journal of Surgical Research (2024)

Koenig SM, Deng L, Onwubiko C, Beierle EA, Russell RT https://pubmed.ncbi.nlm.nih.gov/39089134/

Pediatric Scald Injuries Sustained from Instant Soup and Noodle Products | Clinical Pediatrics (2021)

Allen CE, Figueroa J, Agarwal M, Little WK. https://pubmed.ncbi.nlm.nih.gov/32715751/

Retrospective Analysis of Burn Injuries in Children with Autism Spectrum Disorder | Journal of Autism and Developmental Disorders (2024)

Mazur LE, Even KM, Krawiec C

https://pubmed.ncbi.nlm.nih.gov/38607476/

Running Water While Bathing is a Risk Factor for Pediatric Scald Burns | Burns (2023) Moser WJ, Bilka KR, Vrouwe SQ, Glick JC, Ramaiah V https://www.sciencedirect.com/science/article/abs/pii/S030541792300058X?via%3Dihub

The Psychological Impact of Paediatric Burn Injuries: A Systematic Review | BMC Public Health (2021)

Woolard A, Hill NTM, McQueen M, Martin L, Milroy H, Wood FM, Bullman I, Lin A https://pmc.ncbi.nlm.nih.gov/articles/PMC8670283/

Update on the Management of Burns in Paediatrics | BJA Education (2020) Suman A, Owen J

https://www.bjaed.org/article/S2058-5349(20)30001-9/fulltext



Data Sources

Burn Research Dataset | ABA http://ameriburn.org/research/burn-dataset/

Healthcare Cost and Utilization Project (HCUP) Databases | Agency for Healthcare Research and Quality

https://www.ahrq.gov/data/hcup/index.html

National Electronic Injury Surveillance System (NEISS) | US Consumer Product Safety Commission

https://www.cpsc.gov/Research--Statistics/NEISS-Injury-Data

National Fire Incident Reporting System (NFIRS) | Federal Emergency Management Agency (FEMA)

https://www.usfa.gov/statistics/data-sets/

National Hospital Care Survey (NHCS) | Centers for Disease Control and Prevention (CDC) https://www.cdc.gov/nchs/nhcs/

National Trauma Data Bank (NTDB) | American College of Surgeons https://www.facs.org/quality-programs/trauma/tqp/center-programs/ntdb

Web-based Injury Statistics Query and Reporting System (WISQARS) | CDC https://www.cdc.gov/injury/wisqars/index.html

Wide-Ranging ONline Data for Epidemiologic Research (WONDER) | CDC https://wonder.cdc.gov/



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facebook.com/childrenssafetynetwork

LinkedIn:

linkedin.com/company/childrens-safety-network

X/Twitter:

twitter.com/ChildrensSafety

YouTube:

youtube.com/@ChildrensSafetyNetwork

Newsletter:

go.edc.org/CSNNewsletter





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