

# National Center for Injury Prevention and Control

## Year-in-Review Highlights 2024



Injury is the **leading cause of death and hospitalizations** for Americans in the first half of life.<sup>1</sup>



More Americans ages 1-44 die from injuries and violence—**overdose, suicide, motor vehicle crashes, drowning, and homicide**—than from any other cause.<sup>1</sup>



Together, injuries and violence cost the U.S. more than **\$4 trillion** yearly.<sup>2</sup>

CDC's National Center for Injury Prevention and Control (NCIPC) uses the same data-driven approaches to reduce injury and violence that public health has used to protect people from infectious diseases over the last century.

**More than 80% of NCIPC's \$761 million goes straight to communities to support locally driven, evidence-based injury prevention work.**

With its world-class data, expert guidance, emergency response capabilities, and funding to state and local jurisdictions, NCIPC offers public health services no other federal agency does. Here's a look back at some of the Injury Center's top achievements in 2024.

### Steep Reductions in Overdose Deaths

NCIPC continues to fund and support states and communities in year five of the [Overdose Data to Action \(OD2A\) program](#). We are investing in communities, guiding prevention efforts (e.g., where to target naloxone distribution), supporting drug-free schools through programs like Drug-Free Communities, and publishing guidance for programs shown to work. We are proud to coordinate closely with other federal agencies and are seeing the clear results of these ongoing efforts and investments. CDC's most recent provisional data predict a 16.9% decline in national overdose deaths for the 12-month period ending July 2024, compared to the same time stretch 12 months earlier. This follows years of increasing overdose deaths and continues the welcome decline in fatal overdoses that has been seen monthly since September 2023. In total, 45 states are seeing decreases.

## Emergency Response

NCIPC scientists provide technical assistance to states, communities, and tribal nations every day at no cost to jurisdictions. In addition, NCIPC provided emergency, on-the-ground expertise and sent teams to six states and one tribal nation this year after these partners requested more NCIPC help to combat local injury or violence emergencies, like overdose surges or suicide clusters. As two examples, NCIPC experts:

- Assisted the Allegany County and Garrett County Health Departments in Maryland with an investigation of a potential increase in child maltreatment. The team studied data to identify patterns of child maltreatment and highlighted opportunities for the state to increase use of targeted, evidence-based prevention strategies.
- Assisted the city of Chicago with an exploration of the impact of medetomidine, a potent sedative not approved for human use, in the illegal drug supply. Medetomidine was identified in cases where fentanyl was also used, indicating that the drug was contaminating the illegal fentanyl supply. The team identified a unique pattern of symptoms in medetomidine overdose patients presenting at emergency departments and generated clinician alerts to enable rapid diagnosis and treatment.

## Better, Faster Overdose Data

NCIPC operates world-class data systems that keep the country, and the federal government, at the cutting edge of the quickly evolving overdose epidemic. These systems allow clinicians to treat patients effectively and allow state and local health departments to quickly adjust their on-the-ground education and response activities.

In 2024, NCIPC significantly improved the timeliness of overdose data available to federal partners, states, local communities, tribal nations, and the general public. Improvements ensure funded jurisdictions have access to emergency department overdose data in near real-time and help communities select and focus the most effective interventions. For example, data in NCIPC's [Drug Overdose Surveillance and Epidemiology dashboard](#) helps communities decide where to distribute naloxone. Preliminary monthly drug overdose death data in NCIPC's [State Unintentional Drug Overdose Reporting System dashboard](#) allows communities to identify new trends in overdoses by drug class within 4-5 months.

## New National Strategy for Suicide Prevention

In 2024, CDC and SAMHSA co-led development of a new National Strategy for Suicide Prevention. This strategy presents a comprehensive, 10-year, whole-of-society approach to suicide prevention and is designed to drive significant change and save lives. NCIPC:

- Serves as the source of an extensive number of data sources used to monitor, analyze, and respond to trends in suicide and suicidal behaviors.
- Advances understanding of suicide risk and protective factors through data science and use of new data sources.
- Provides technical assistance to states, tribes, communities, territories, and other parts of the federal government on suicide tracking and the use of data to identify trends in suicide and inform prevention.

This year, for example, NCIPC:



- Released a [Vital Signs on suicide](#) which found that suicide rates were 26% lower in counties with the highest health insurance coverage, 44% lower in counties where the most homes have broadband internet access, and 13% lower in counties with the most household income (compared to counties with the lowest levels of these factors).
- Developed and promoted a toolkit for evaluating suicide prevention activities in Veteran-serving organizations across the country to help build effective community-based programs and services for Veterans and their families.
- Launched a data challenge to help researchers better understand and prevent youth suicides.

## Drowning Vital Signs

In 2024, NCIPC published the first ever [Vital Signs on Drowning](#), which explored how increased access to basic swimming and water safety skills training can save lives. Drowning deaths are on the rise in the United States: Over 4,500 people died due to drowning each year from 2020-2022, and drowning remains the leading cause of death for children ages 1 to 4 in this country. New CDC data showed that more than one-half of U.S. adults (54.7%) have never had a water safety or swim lesson.

The call to action that swim lessons save lives—a critical one for young families—hit the airwaves in May, generating nearly 4,000 news articles, more than 2,700 TV broadcasts, and substantial other web and social media coverage which collectively reached millions of Americans.

## Preventing Adverse Childhood Experiences

NCIPC has decades of experience leading national efforts to prevent adverse childhood experiences (ACEs), potentially traumatic events that occur in childhood (e.g., experiencing violence, abuse, or neglect; witnessing violence; or having a family member attempt or die by suicide). CDC pioneered the original ACEs research in the 1990s and has been a critical leader in the field ever since. NCIPC staff are the leading national experts on the effects of childhood adversity on child and adult health and well-being, including on chronic health problems, mental health problems, substance misuse, and reduced educational and occupational achievement. We know that preventing ACEs has the potential to reduce many of the leading causes of death, such as heart disease, cancer, respiratory disease, diabetes, and suicide. As one example, eliminating ACEs would eliminate an estimated 44% of adult depression diagnoses.

This year, NCIPC and the Administration for Children and Families (ACF) newly collaborated to host two large webinars, alongside the American Academy of Pediatrics, Prevent Child Abuse America, and parent advocates. The webinars enhanced over 7,000 participants' understanding of evidence-based strategies for both preventing ACEs and promoting positive childhood experiences (PCEs) as the new school year began.

## Coordinating CDC's Mental Health-Related Work

CDC established the Behavioral Health Coordinating Unit (BHCU), inspired by a vision of One CDC working together to advance our shared commitment to optimal mental health for all people. BHCU is administratively based in NCIPC and focuses on advancing cross-CDC coordination and increasing public and partner awareness of the public health approach to mental health. In early 2024, BHCU released the first agency-wide [Mental Health Strategy](#), based on a larger Mental Health Framework that CDC co-developed with partners—Association of State and Territorial Health Officials, the Center for Law and Social Policy, and Mental Health America—which was released in October 2023. BHCU also relaunched CDC's [mental health website](#) in October 2024 to feature updated, consolidated content on mental health while also elevating and linking to relevant mental health efforts across CDC.

## NVDRS turns 21!

In 2003, to better understand the circumstances around violent deaths, including suicides, NCIPC introduced the National Violent Death Reporting System (NVDRS). NVDRS is the only state-based system to collect information from frontline investigators like law enforcement, coroners, and medical examiners. Data collection began with just six participating states and has expanded incrementally over time. Today, NCIPC provides NVDRS funding to all 50 states, the District of Columbia, and Puerto Rico.

The richness of NVDRS data help researchers and decision-makers understand and tailor injury and violence prevention efforts. In 2024, scientists used NVDRS data in a JAMA study, [Youth Suicide and Preceding Mental Health Diagnosis](#), which found that the majority (59%) of youth who died by suicide had no previously documented mental health diagnosis. This highlights the need for comprehensive youth suicide prevention strategies, including early identification of mental health concerns and increased access to mental health services.

## NCIPC's 2024 MMWRs

The Morbidity and Mortality Weekly Report (MMWR) series is the agency's primary vehicle for scientific publication of timely, reliable, authoritative, accurate, objective, and useful public health information and recommendations.

This year, the Morbidity and Mortality Weekly Report (MMWR) highlighted NCIPC experts' work more than 25 times, including:

[Detection of Illegally Manufactured Fentanyl and Carfentanil in Drug Overdose Deaths – United States, 2021–2024](#). This publication found that although rare, overdose deaths with carfentanil detected increased about seven-fold from 2023 to 2024. Carfentanil is a fentanyl analog more than 100 times more potent than fentanyl. Researchers recommended that overdose prevention efforts that address the widespread presence of illegally manufactured fentanyl (including carfentanil) might result in lasting reductions in overdose deaths across the United States.

[Firearm Storage Behaviors – Behavioral Risk Factor Surveillance System, Eight States, 2021–2022](#).

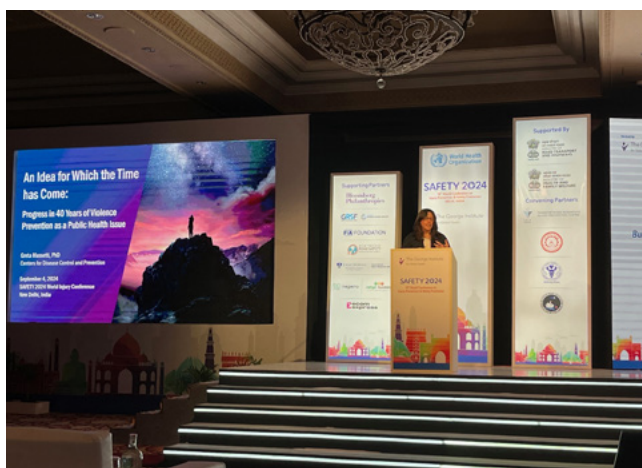
Among adults with a loaded firearm *and* a child or adolescent age 17 years or younger in the home, 25%–41% reported that a loaded firearm was kept unlocked. Variability in firearm storage practices highlighted the importance of local data and presents opportunities to tailor prevention efforts to specific population groups to reduce risk for firearm handling by children without adult supervision.

[Adverse Childhood Experiences and Health Conditions and Risk Behaviors Among High School Students – Youth Risk Behavior Survey, United States, 2023](#).

This study was the first to present self-reported, nationally representative estimates of ACEs among U.S. high school students. In the past, data on ACEs among adolescents in the U.S. have primarily been collected through parents' reports and have not included important violence-related ACEs, including physical, sexual, and emotional abuse. Authors recommended that timely, adolescent-reported data on ACEs is needed to better tailor prevention strategies.



Center Director Dr. Allison Arwady speaks at the Naloxone Saturation Policy Academy over the summer.



Principal Deputy Director Dr. Greta Massetti presents at the World Safety Conference in New Delhi, India