

# PEDIATRIC READINESS PROGRAM EDUCATION SESSION



THIS ACTIVITY HAS BEEN PLANNED AND IMPLEMENTED IN ACCORDANCE WITH THE ACCREDITATION REQUIREMENTS AND POLICIES OF THE ACCREDITATION COUNCIL FOR CONTINUING MEDICAL EDUCATION (ACCME) THROUGH THE JOINT PROVIDERSHIP OF LEGACY HEALTH AND OREGON EMERGENCY MEDICAL SERVICES FOR CHILDREN.

LEGACY HEALTH DESIGNATES THIS LIVE ACTIVITY FOR A MAXIMUM OF 1.0 *AMA PRA CATEGORY 1 CREDIT(S)*<sup>™</sup>. PHYSICIANS SHOULD CLAIM ONLY THE CREDIT COMMENSURATE WITH THE EXTENT OF THEIR PARTICIPATION IN THE ACTIVITY.



# THE OLD EPIDEMICS NEVER GO AWAY: ADDRESSING THE EPIDEMIC OF UNINTENTIONAL INJURY AMONG CHILDREN





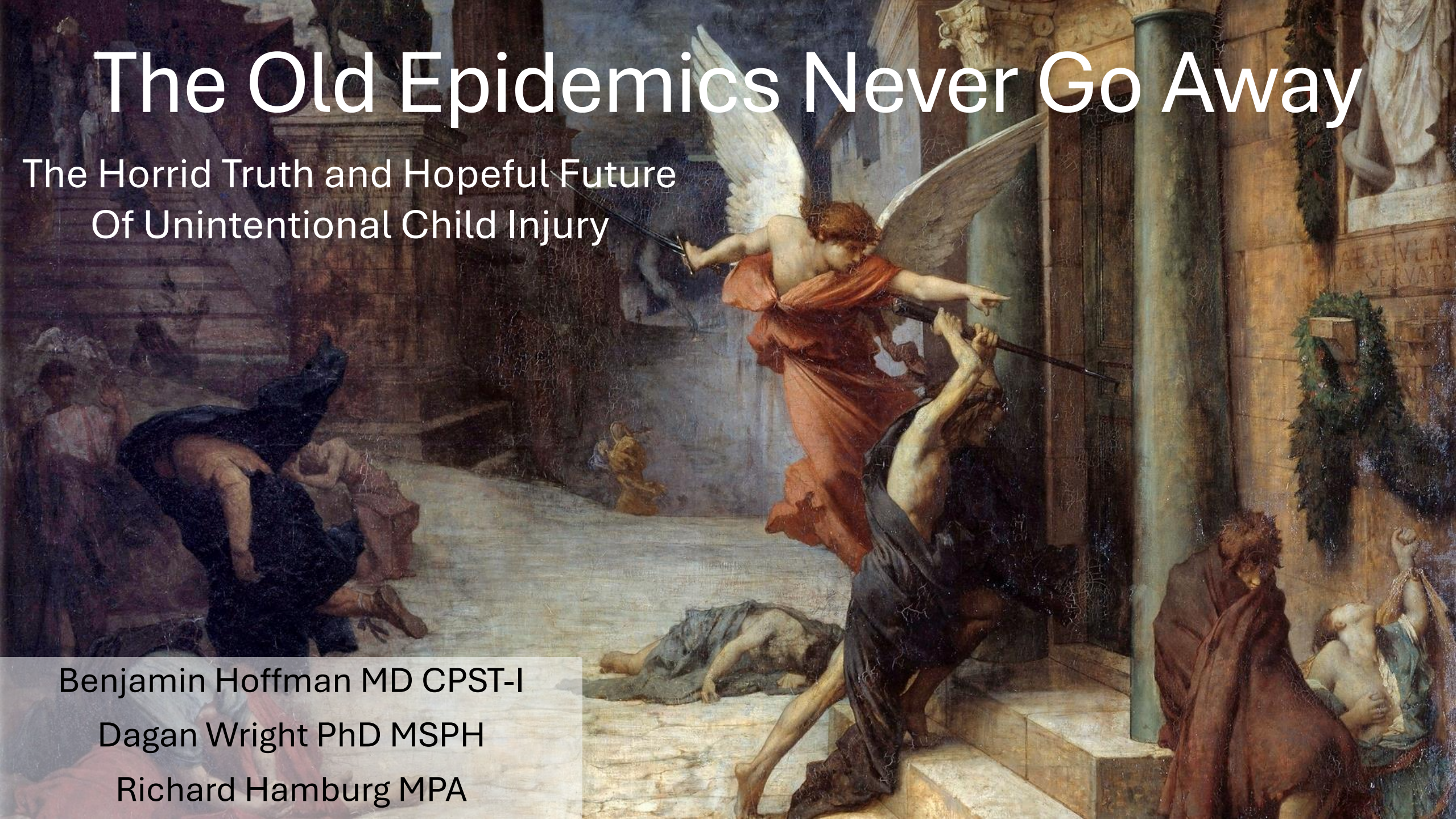
# The Old Epidemics Never Go Away

The Horrid Truth and Hopeful Future  
Of Unintentional Child Injury

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Dagan Wright PhD MSPH

Richard Hamburg MPA





## CME DISCLOSURE

None of the planners and faculty for this educational activity have relevant financial relationship(s) to disclose with ineligible companies whose primary business is producing, marketing, selling, reselling, or distributing healthcare products used by or on patients.















**“If a disease were  
killing our children  
in the proportions  
that injuries are,  
people would be  
outraged and  
demand that this  
killer be stopped.”**

**C. Everett Koop MD**  
**Former US Surgeon General**







Andrew Dr

STOP

STOP

217

ALBUQUERQUE PUBLIC SCHOOLS

217



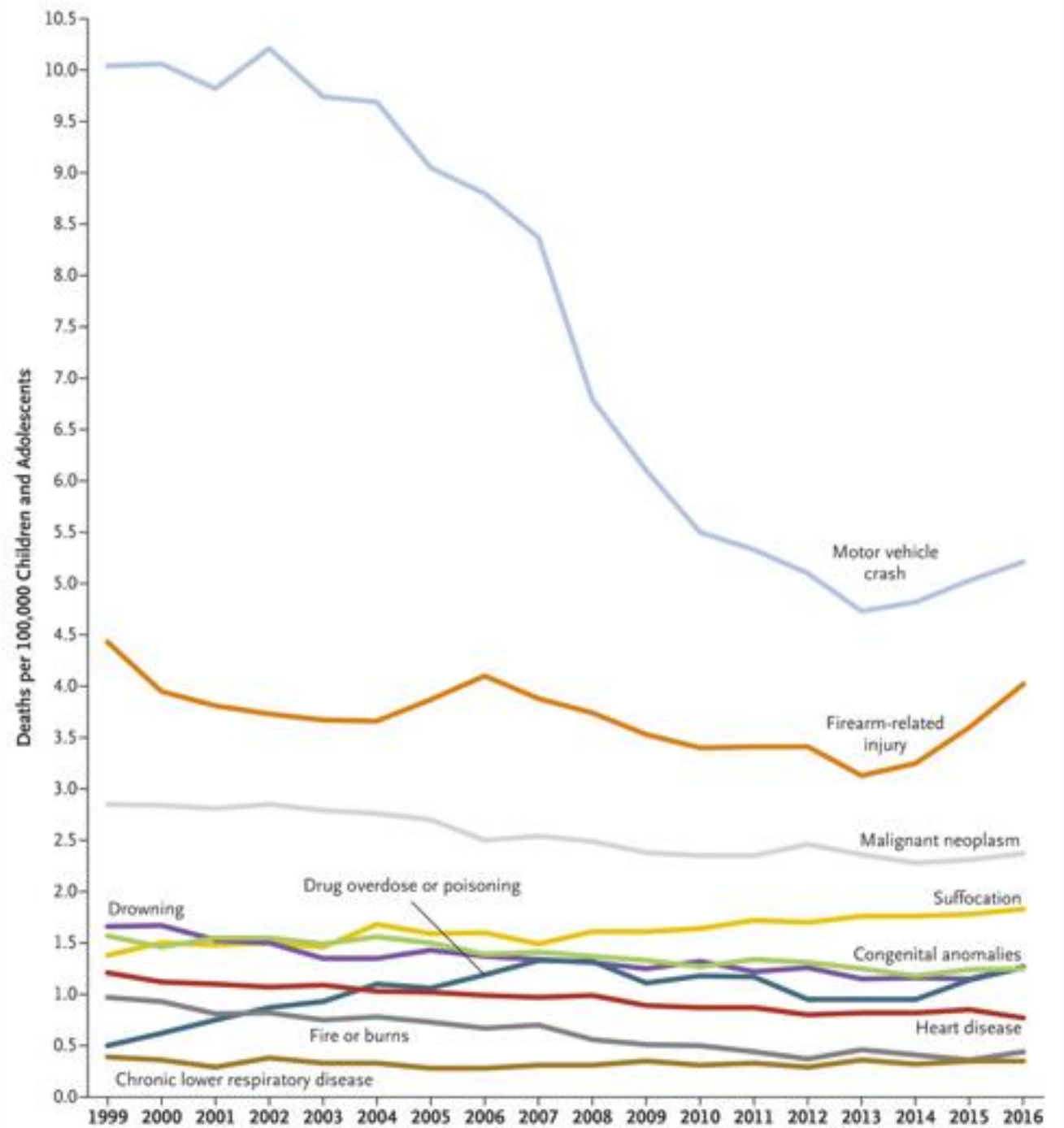
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# OBJECTIVES

- List the leading causes of child mortality in the US.
- Define advocacy as it applies to injury prevention.
- Discuss opportunities to engage in injury prevention at the community and policy change levels.



# What Kills Kids in the U.S.?

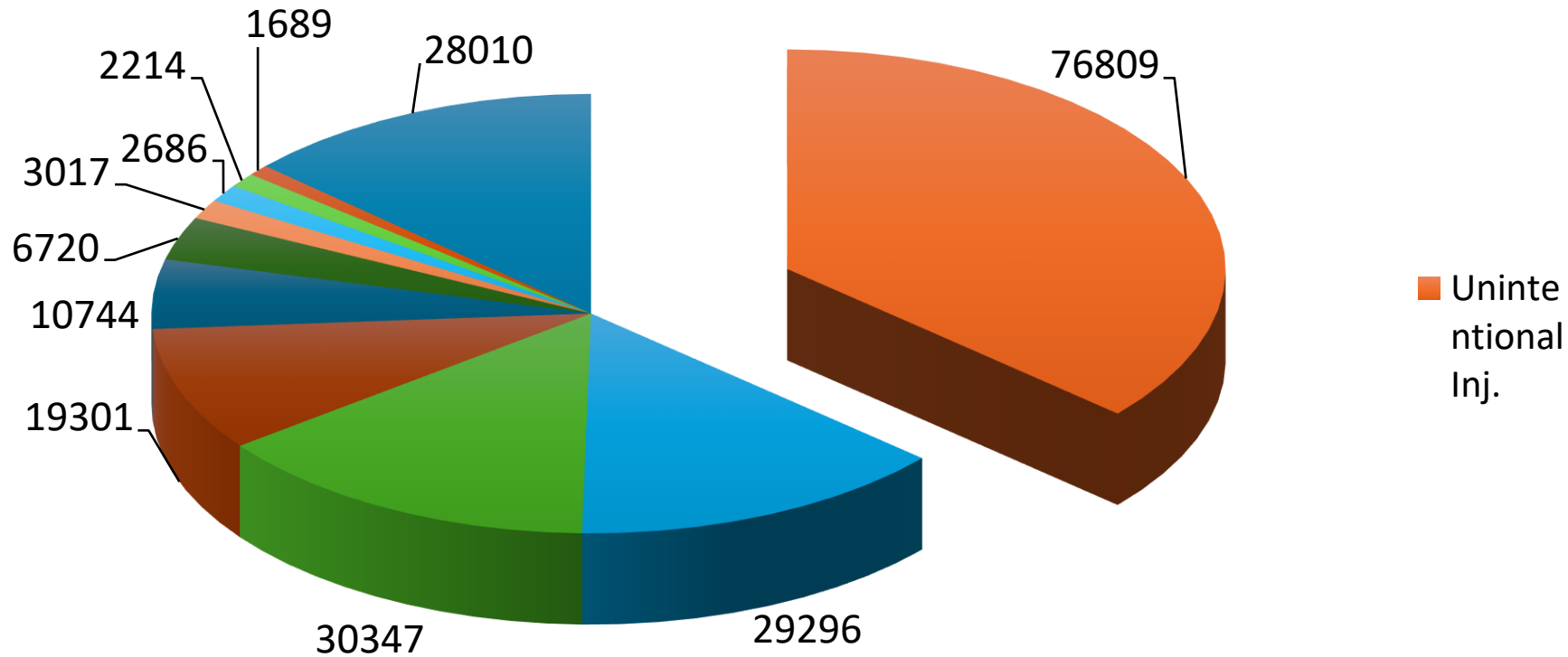




# Leading Causes of Death for Children and Youth 2012-2022

	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>
1	Congenital Anomalies 4,005	<u>Unintentional Injury</u> 1,375	<u>Unintentional Injury</u> 884	<u>Unintentional Injury</u> 814	<u>Unintentional Injury</u> 4,937
2	Short Gestation 2,922	Congenital Anomalies 426	Malignant Neoplasms 387	<u>Suicide</u> 481	<u>Homicide</u> 2,648
3	SIDS 1,445	<u>Homicide</u> 275	Congenital Anomalies 210	Malignant Neoplasms 483	<u>Suicide</u> 2,156
4	<u>Unintentional Injury</u> 1,391	Malignant Neoplasms 269	<u>Homicide</u> 187	<u>Homicide</u> 338	Malignant Neoplasms 663
5	Maternal Pregnancy Comp. 1,141	Influenza & Pneumonia 142	Heart Disease 77	Congenital Anomalies 192	Heart Disease 285
6	Bacterial Sepsis 621	Heart Disease 131	Influenza & Pneumonia 67	Heart Disease 96	Congenital Anomalies 223
7	Placenta Cord Membranes 569	Septicemia 68	Septicemia 52	Cerebrovascular 66	Chronic Low. Respiratory Disease 88
8	Respiratory Distress 449	Perinatal Period 54	Chronic Low. Respiratory Disease 46	Chronic Low. Respiratory Disease 58	Diabetes Mellitus 73

# Top 10 Causes of Death

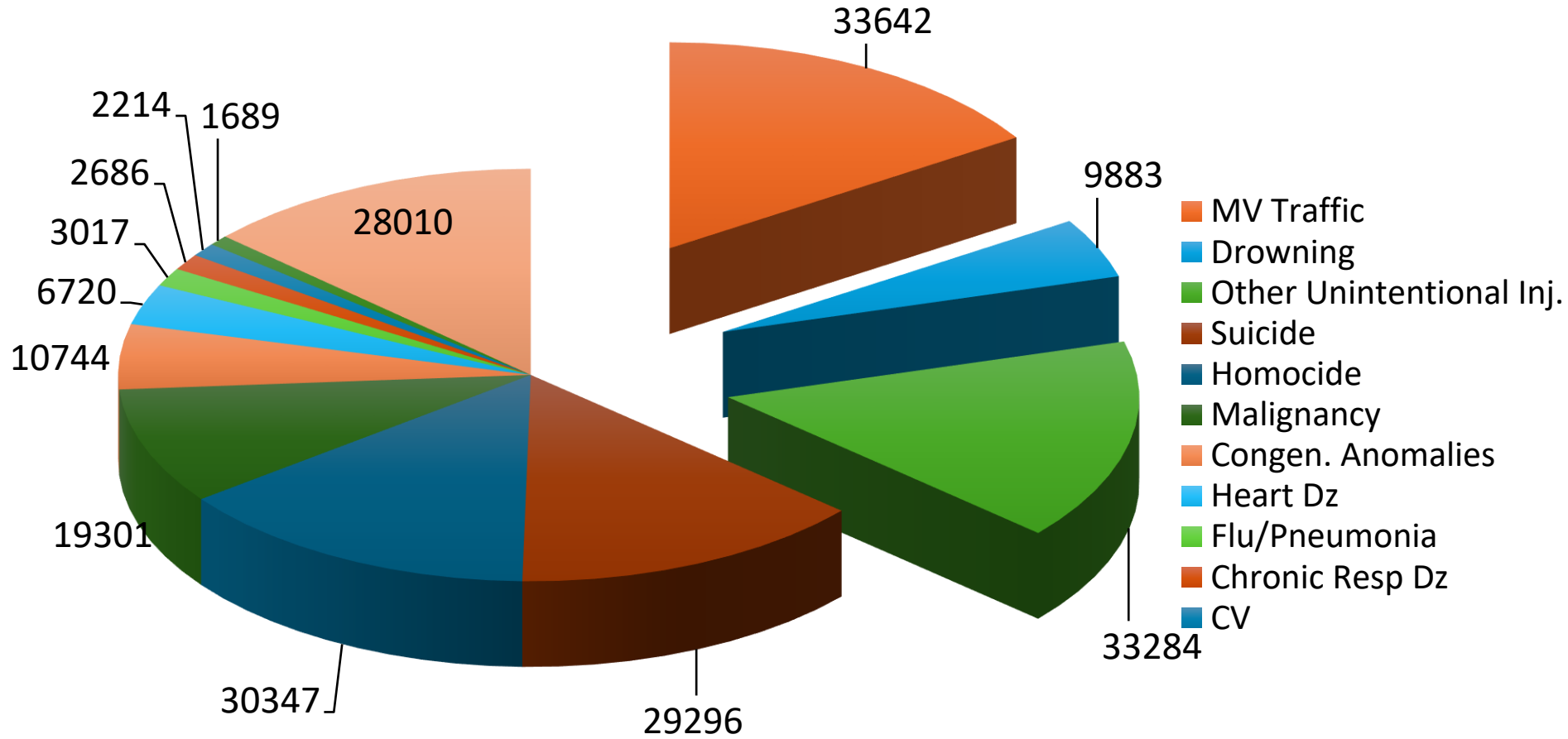


Deaths 1-19 year 2013-2023

1-19	
1	Unintentional Injury 76,809
2	Homicide 30,147
3	Suicide 29,296
4	Malignant Neoplasms 19,301
5	Congenital Anomalies 10,744
6	Heart Disease 6,720
7	Influenza & Pneumonia 3,017
8	Chronic Low. Respiratory Disease 2,686
9	Cerebrovascular 2,214
10	Septicemia 1,689



# Top 10 Causes of Death



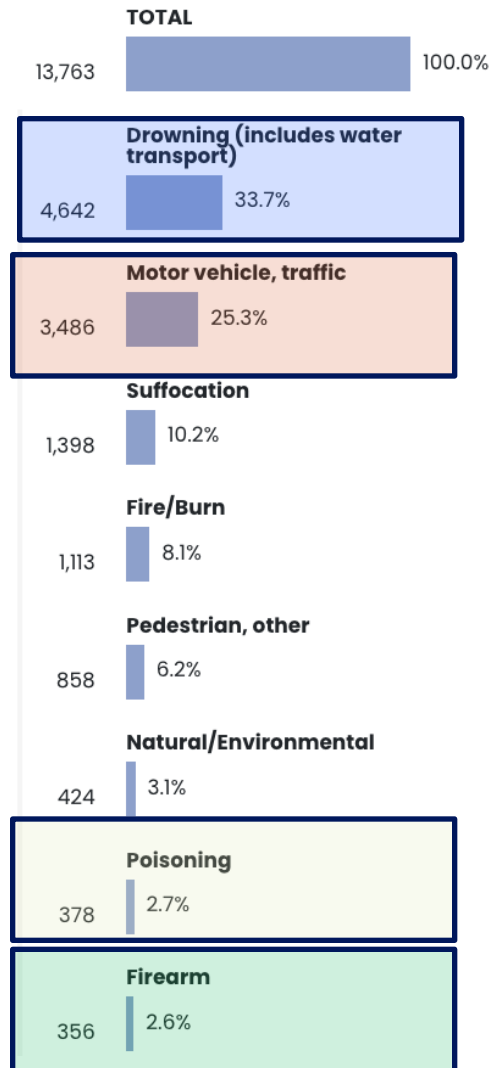
Deaths 1-18 year 2013-2023

1-19	
1	Unintentional Injury 76,809
2	Homicide 30,147
3	Suicide 29,296
4	Malignant Neoplasms 19,301
5	Congenital Anomalies 10,744
6	Heart Disease 6,720
7	Influenza & Pneumonia 3,017
8	Chronic Low. Respiratory Disease 2,686
9	Cerebrovascular 2,214
10	Septicemia 1,689

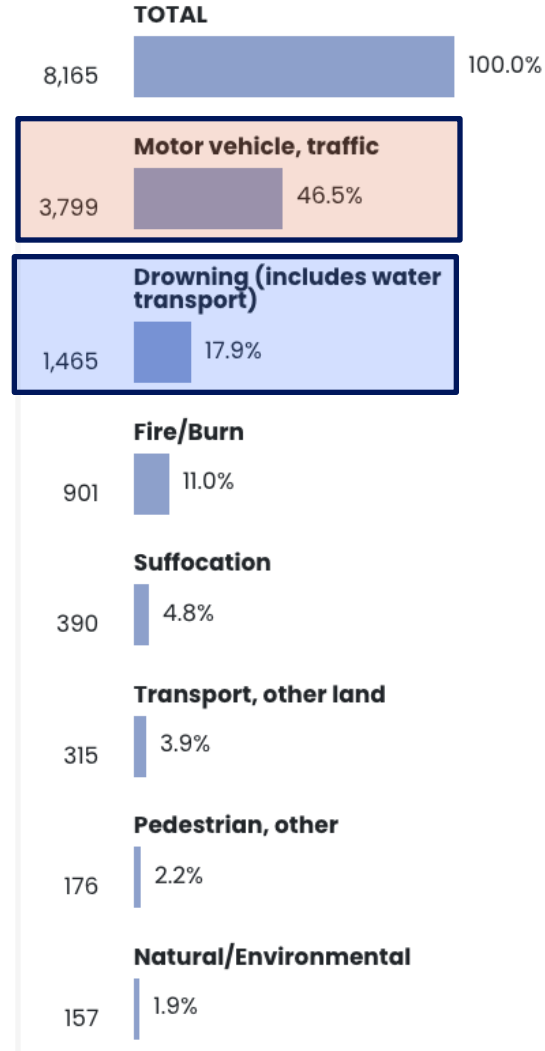
# Leading Causes of Death by Age Group: Unintentional Injury

## 2012-2022

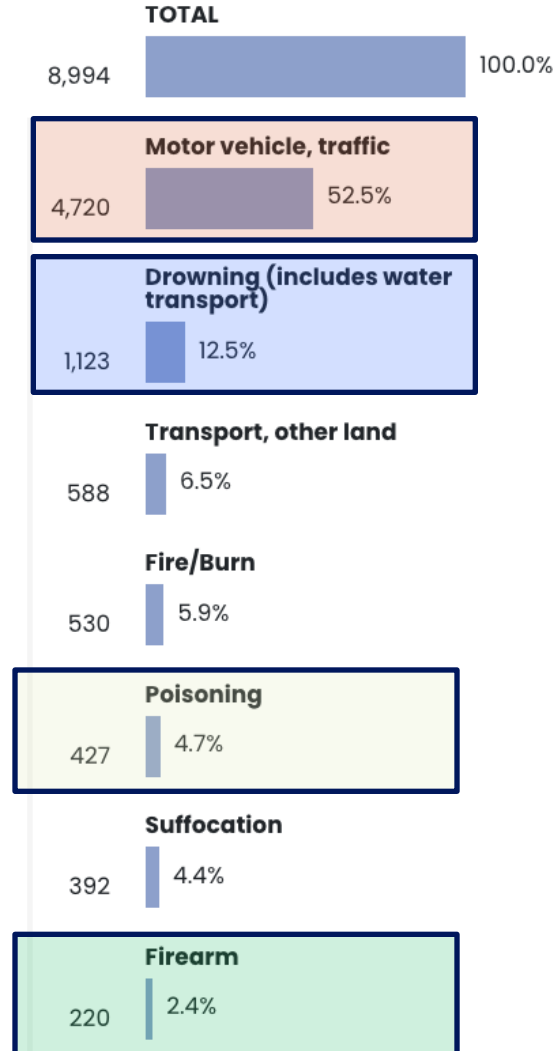
### 1-4 years



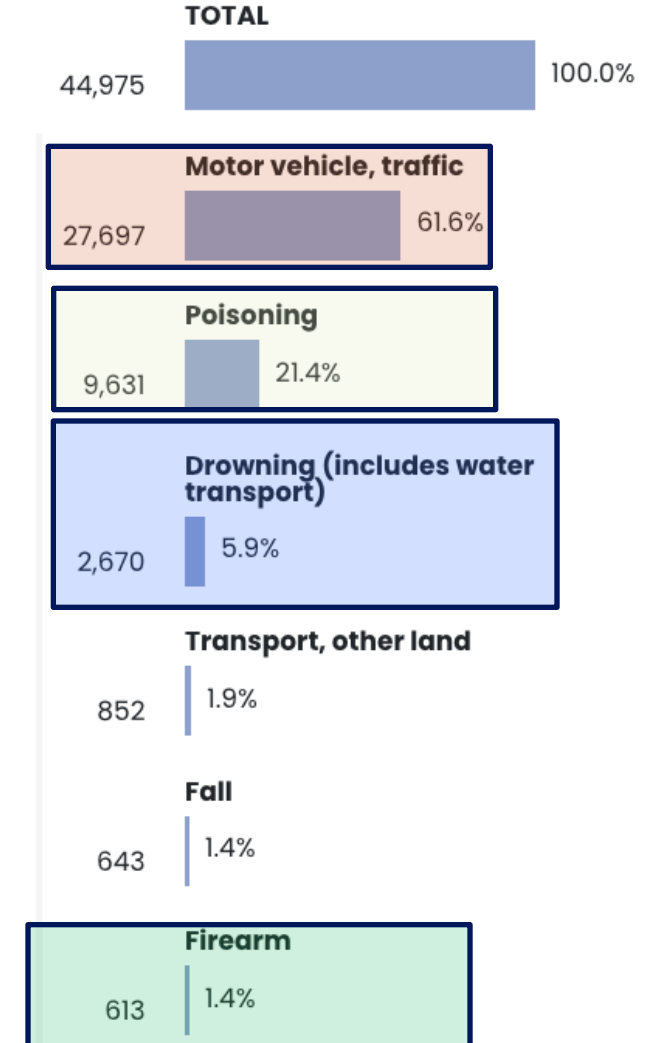
### 5-9 years



### 10-14 years

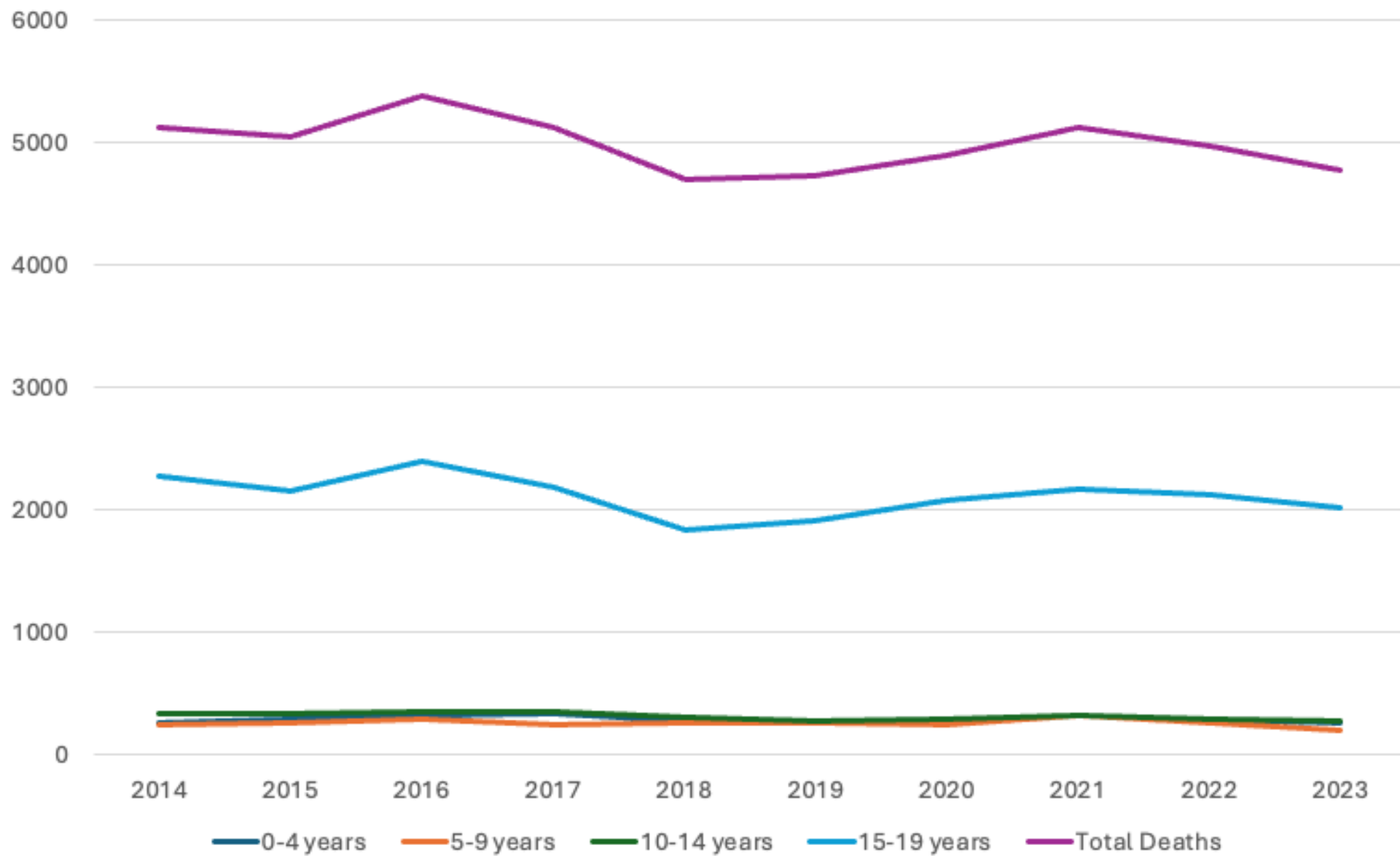


### 15-19 years





## Annual Motor Vehicle Occupant Deaths





47 School Busses of Youth  
Die in Car Crashes  
Every Year



# Not All Kids Ride Restrained

## 2021-2023

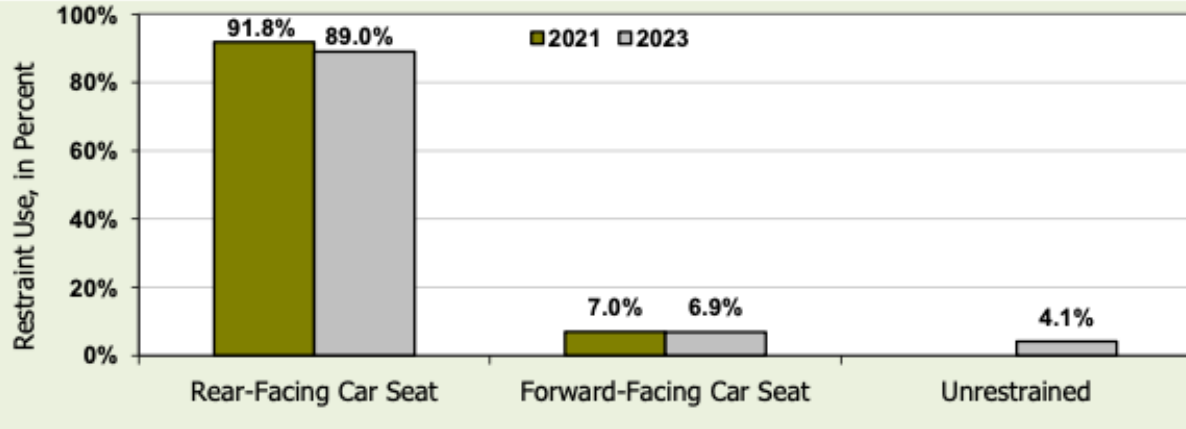


Figure 5. Restraint Use for Children Under Age 1

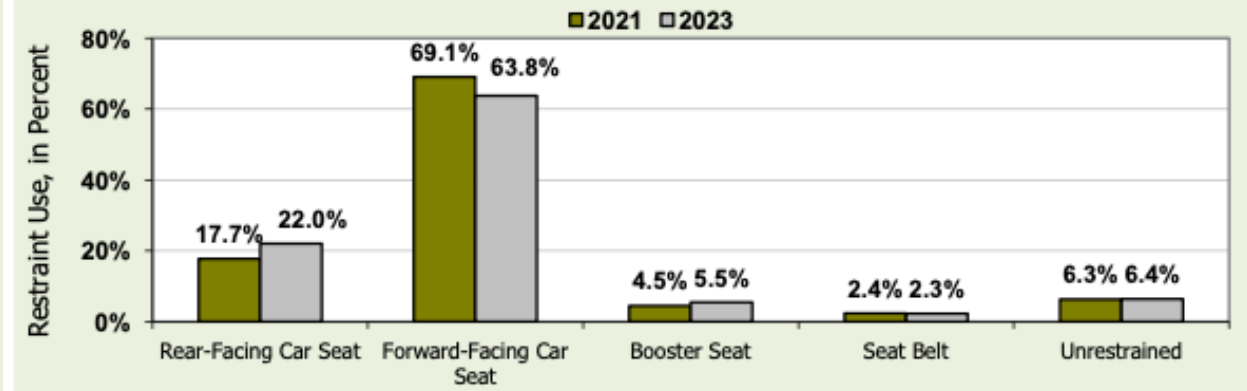


Figure 6. Restraint Use for Children 1 to 3 Years Old

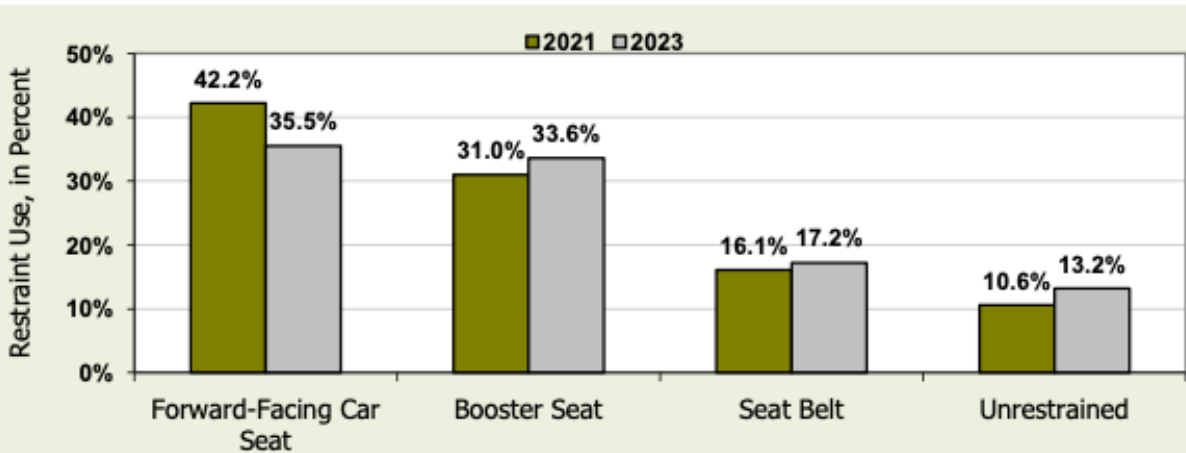


Figure 2. Restraint Use for Children 4 to 7 Years Old

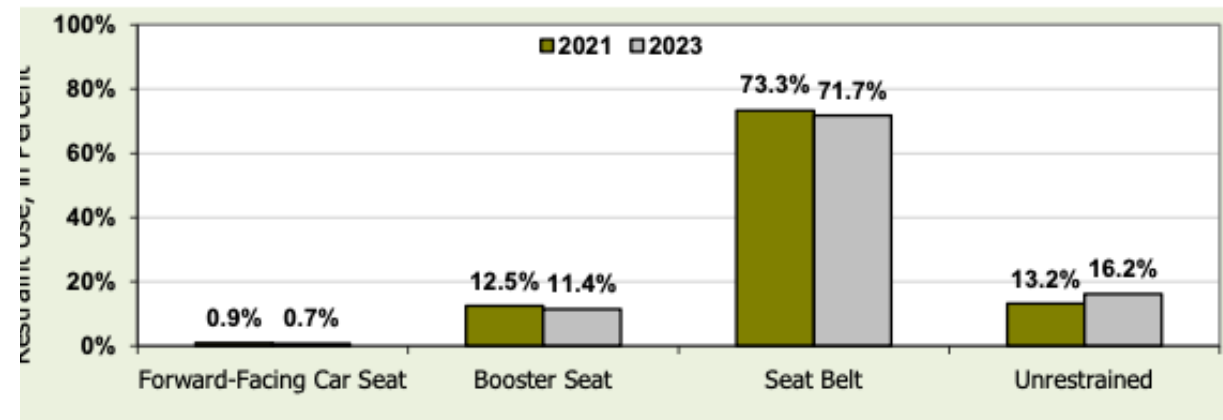
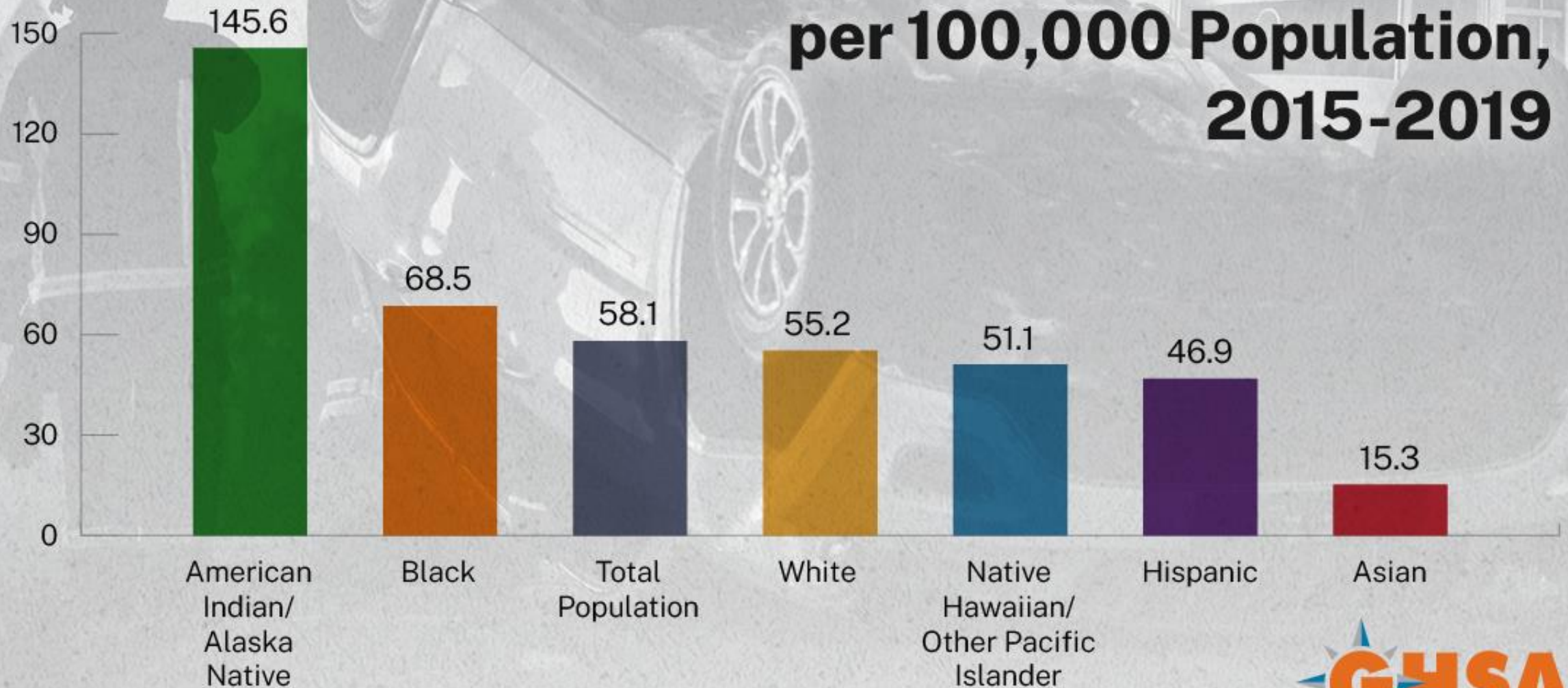


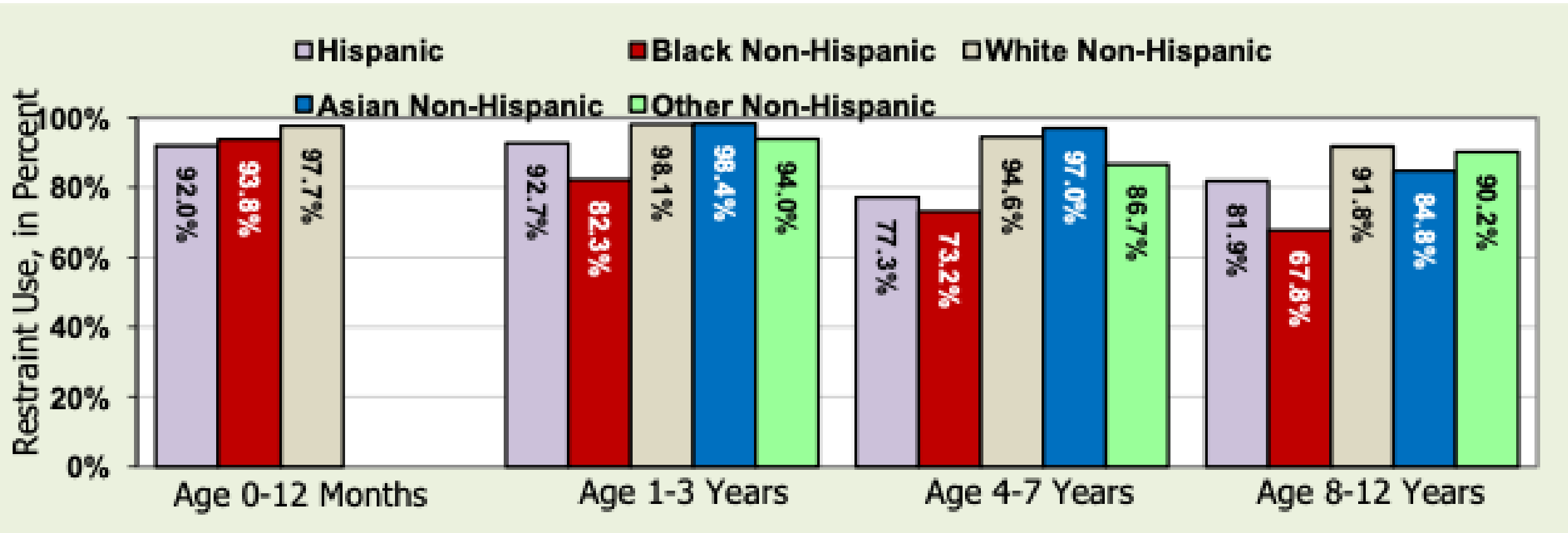
Figure 7. Restraint Use for Children 8 to 12 Years Old



# Total U.S. Traffic Deaths per 100,000 Population, 2015-2019



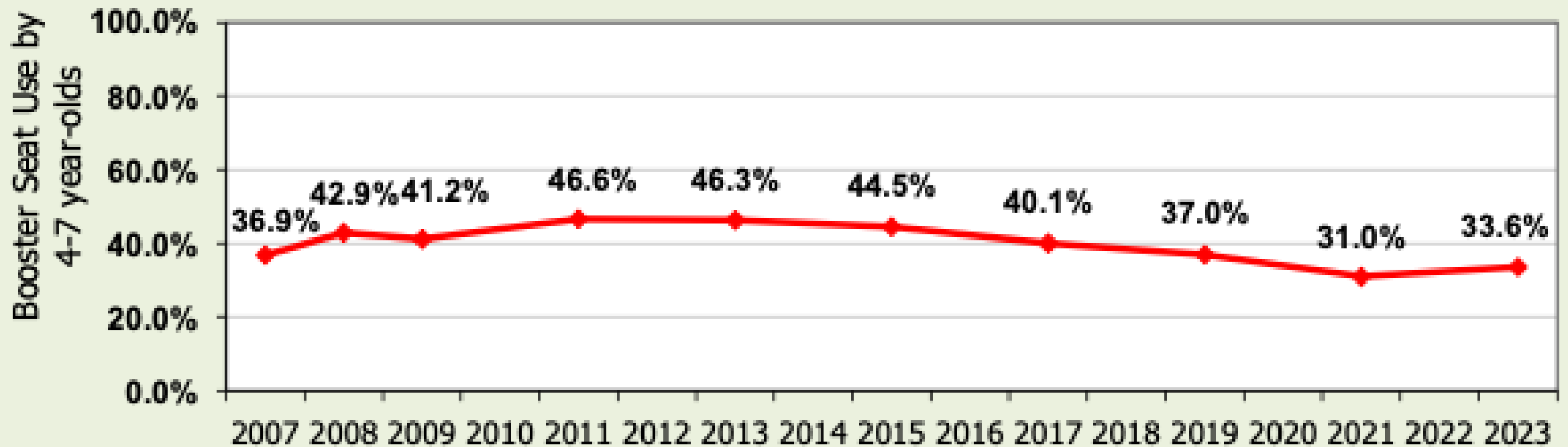
# Black and Brown Kids Are Less Likely To Be Restrained



*Figure 14. Child Restraint Use by Race and Ethnicity*



# Use rates are not getting better

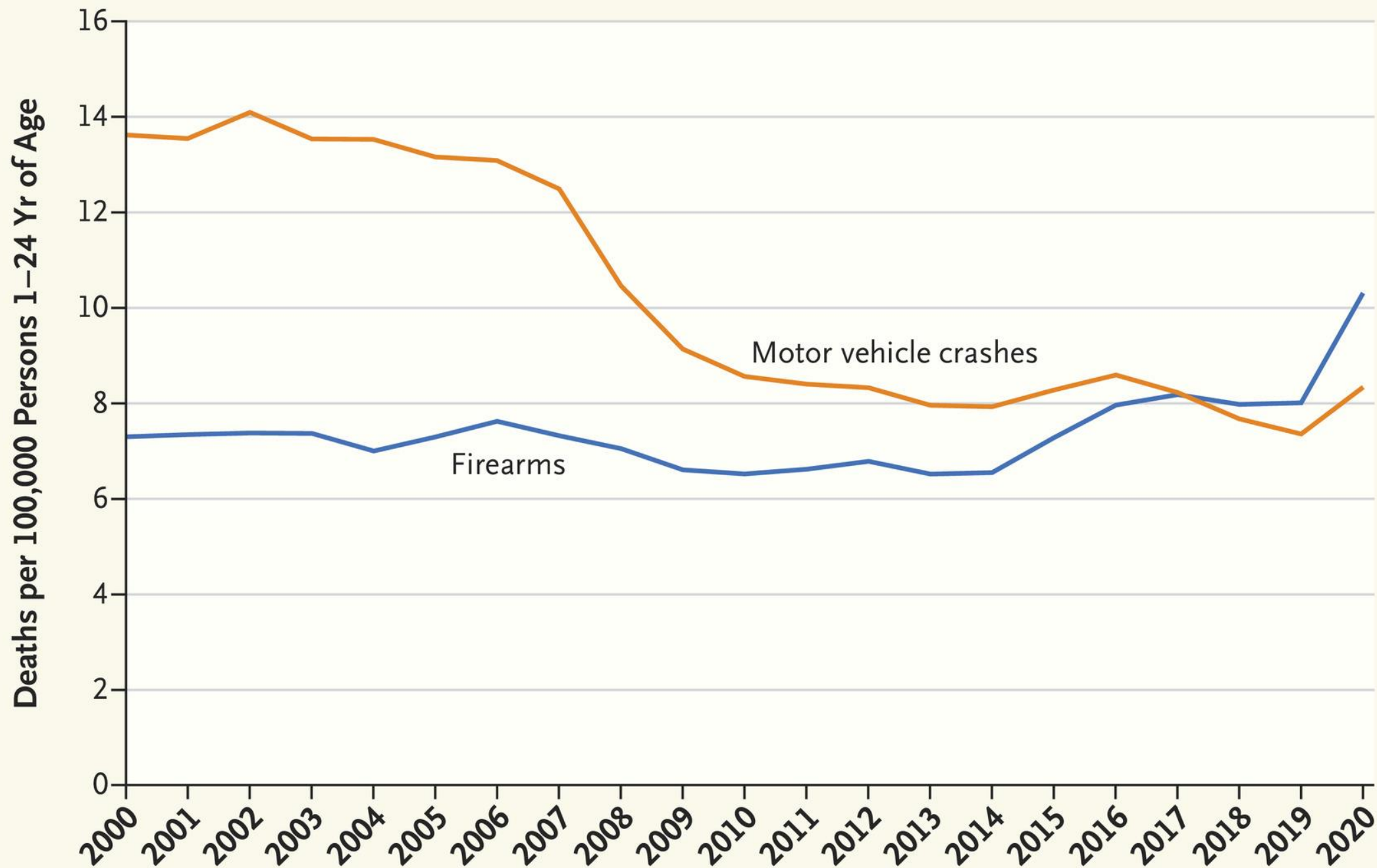


*Figure 1. Booster Seat Use Among 4- to 7-Year-Old Children, National Estimates*

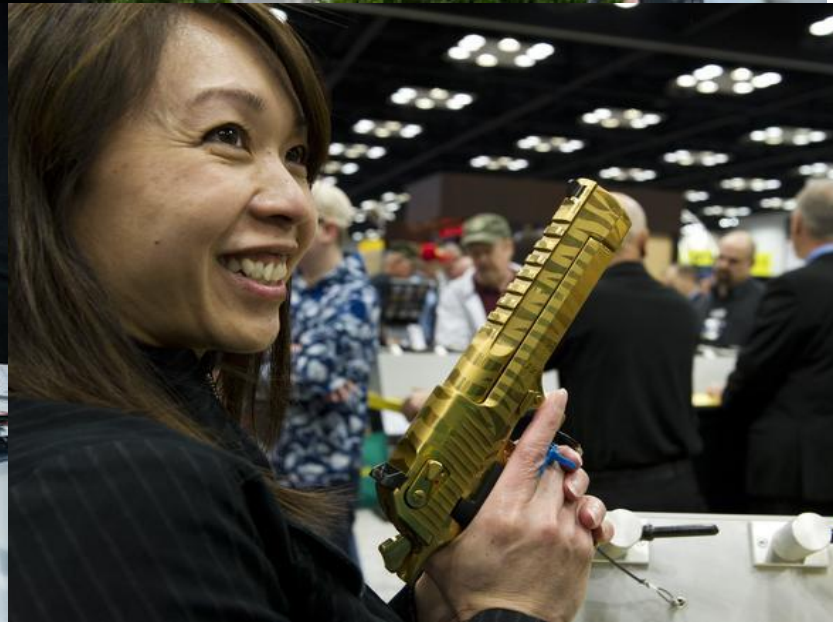


40 % of kids who  
die in car crashes  
are totally  
unrestrained





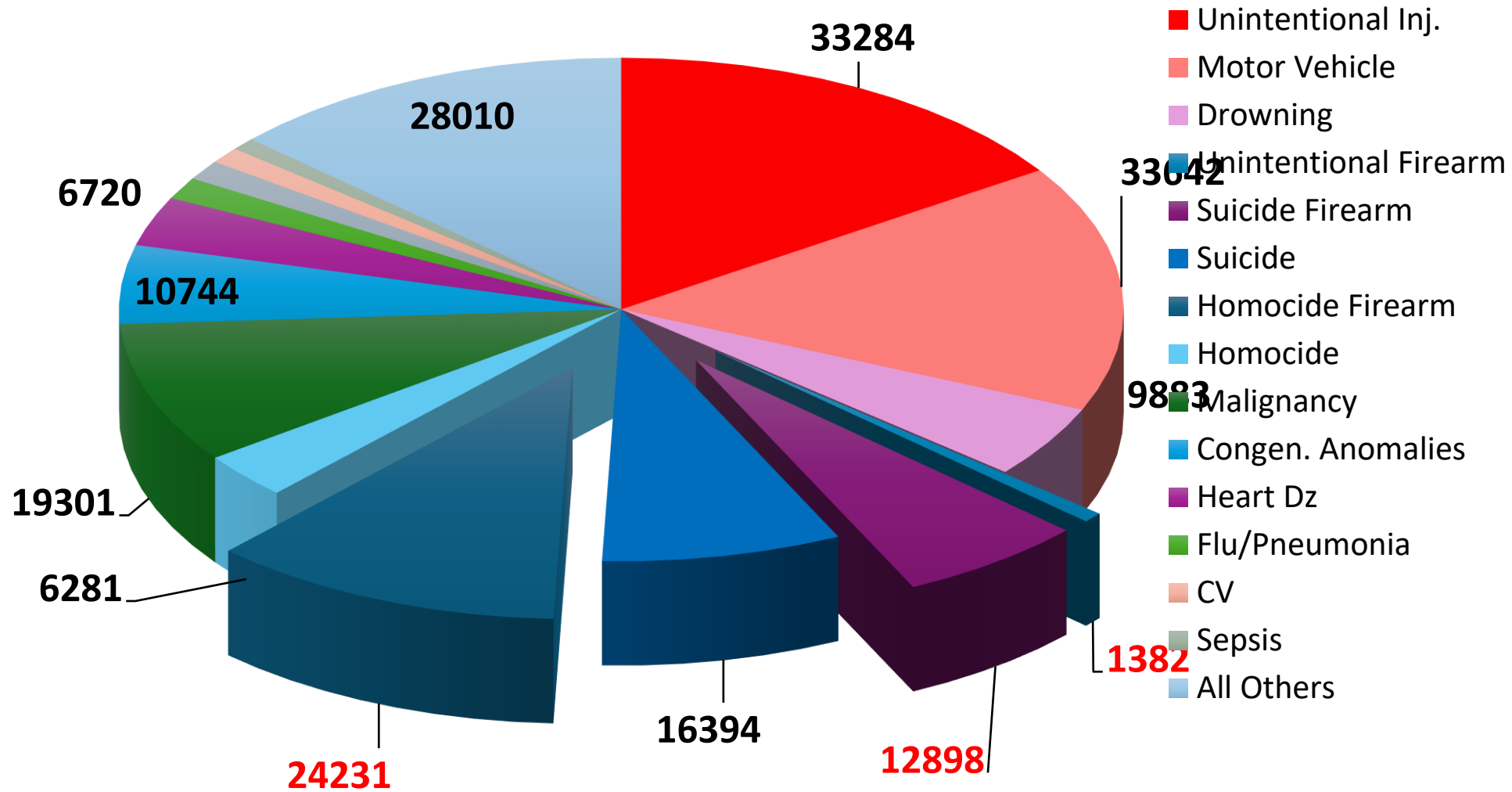






# All Firearm Deaths 2013-2023

## 1-19 Years

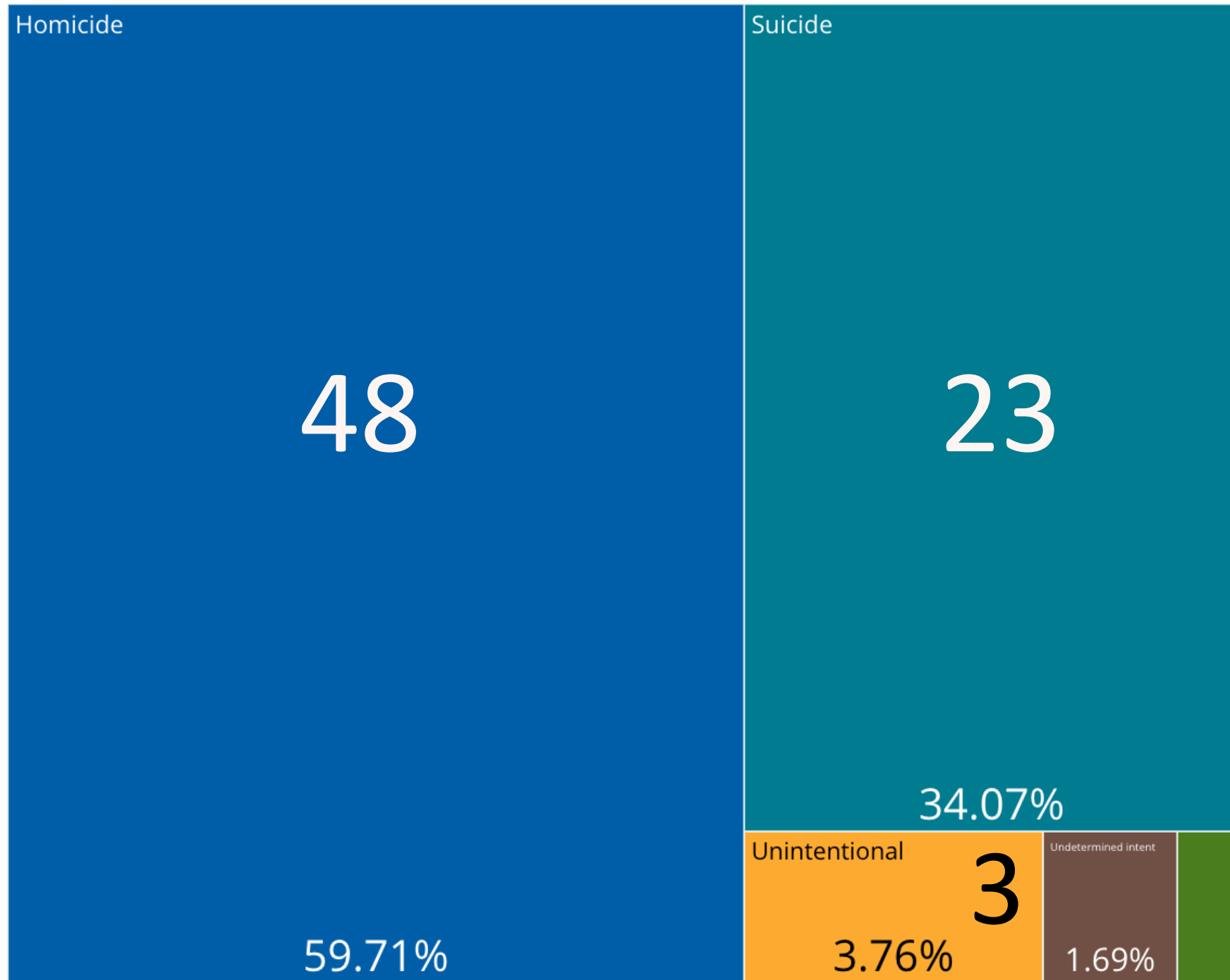


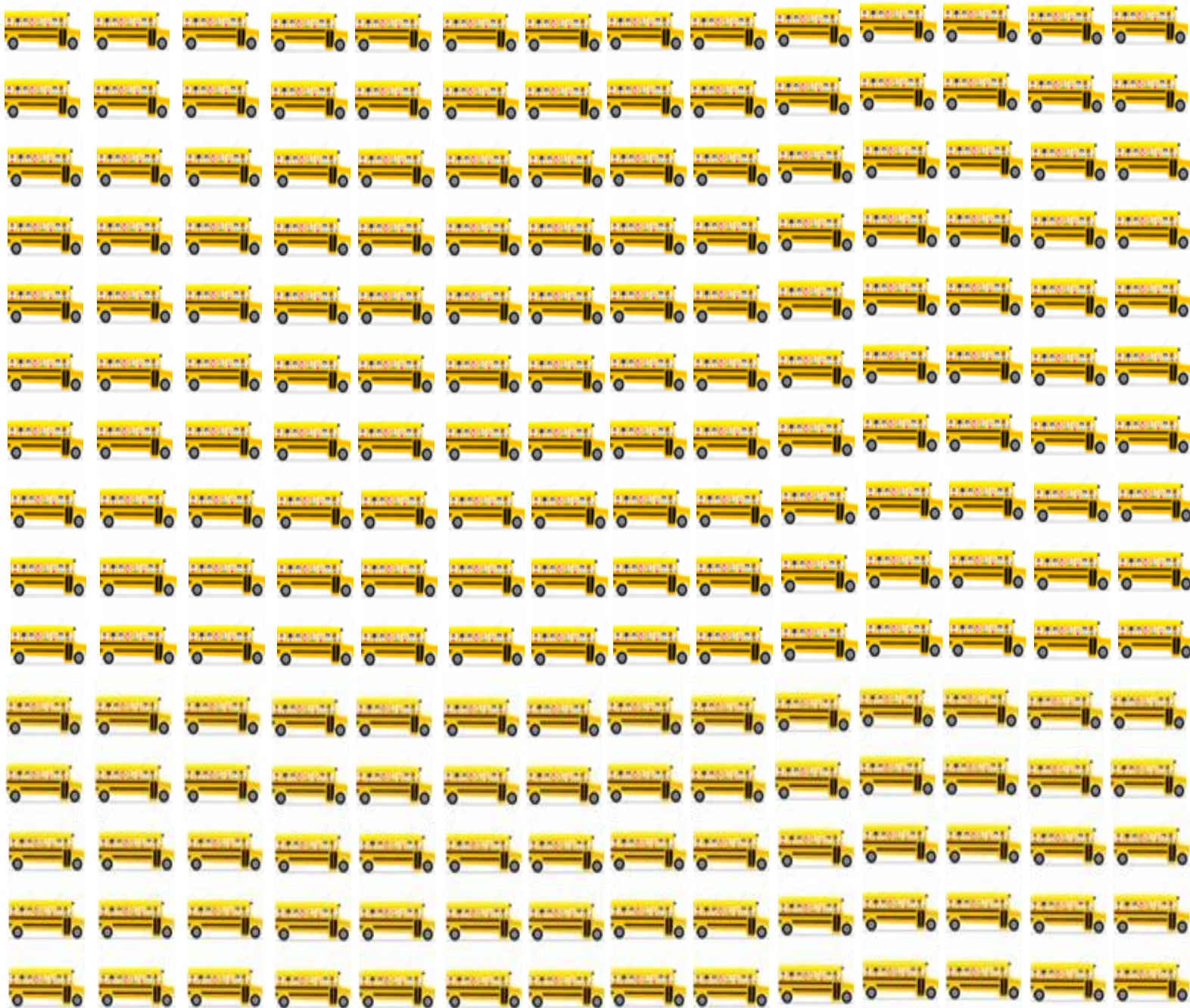
1-18	
1	Unintentional Injury 61,322
2	Suicide 22,369
3	Homicide 22,173
4	Malignant Neoplasms 18,017
5	Congenital Anomalies 10,289
6	Heart Disease 5,847
7	Influenza & Pneumonia 2,740
8	Chronic Low. Respiratory Disease 2,492
9	Cerebrovascular 2,035
10	Septicemia 1,517



# 68 Children and Youth Die By Gun Every Week

Ages 1-19 years,  
2012-2022





210 School Busses  
of Youth  
Die By Gun  
Every Year

**40% of US  
households  
have at least 1  
firearm**





30 Million  
Children Live  
In Homes  
With At Least  
1 Firearm



Almost 5 Million Children Live In Homes Where  
Firearms Are Unlocked and Loaded



# 3 Ways Kids Die From Guns



# Did You Know?

## Firearm Safety Tip #1

### CABLE LOCKS:

Prevents a firearm from being loaded and fired.



## Firearm Safety Tip #2

### GUN CASE:

Storage solution to secure, conceal, protect and legally transport a firearm.



## Firearm Safety Tip #3

### LOCK BOX:

Provides reliable protection for firearms.



## Firearm Safety Tip #4

### FULL SIZE GUN SAFE:

Allows you to store multiple firearms in one place.



Department of Defense  
Connect to Protect: Support is Within Reach

# SUICIDE PREVENTION MONTH



# Locking storage

## Firearms

People who die from accidental shooting were more than three times as likely to live in a home with a firearm.<sup>1</sup> If you, or someone in your household, owns a firearm, let us help make sure it is locked up safely.



### Combination safe

7"W x 7.5"H x 3"D

16 gauge steel housing is durable and pry resistant. Includes 4 foot steel security cable.

**\$25**



### Quick access safe

10"W x 5"H x 12"D

Programmable touch pad with backup keys. Quick access spring-loaded door

**\$95**



### Biometric safe

14"W x 10"H x 10"D

Solid steel. Stores up to fingerprints. Tamper indicator and Interior light

**\$85**



### Combination trigger lock

For transportation, adding an additional level of safety, and/or larger firearms unable to be kept in a safe

**\$10**



### Cable lock

For use as a temporary or backup safety measure; does not replace a firearm safe. Up to 5 per household

**Free**



# BAD GUY WITH A GUN

HOW TO SURVIVE THE ATTACK OF AN ACTIVE SHOOTER



WRITINGS OF PURPOSE AND INTENT BY

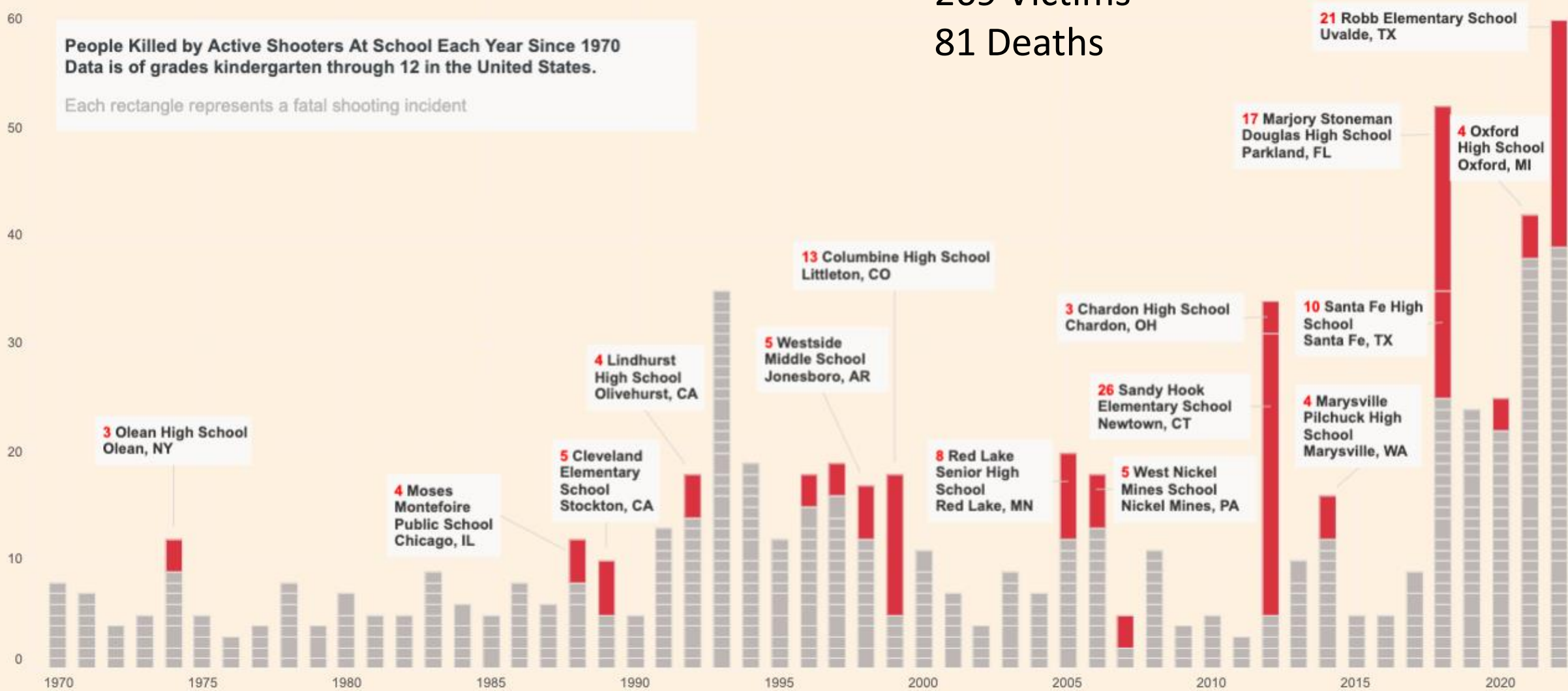
ERNEST EMERSON





Fatal School Shootings

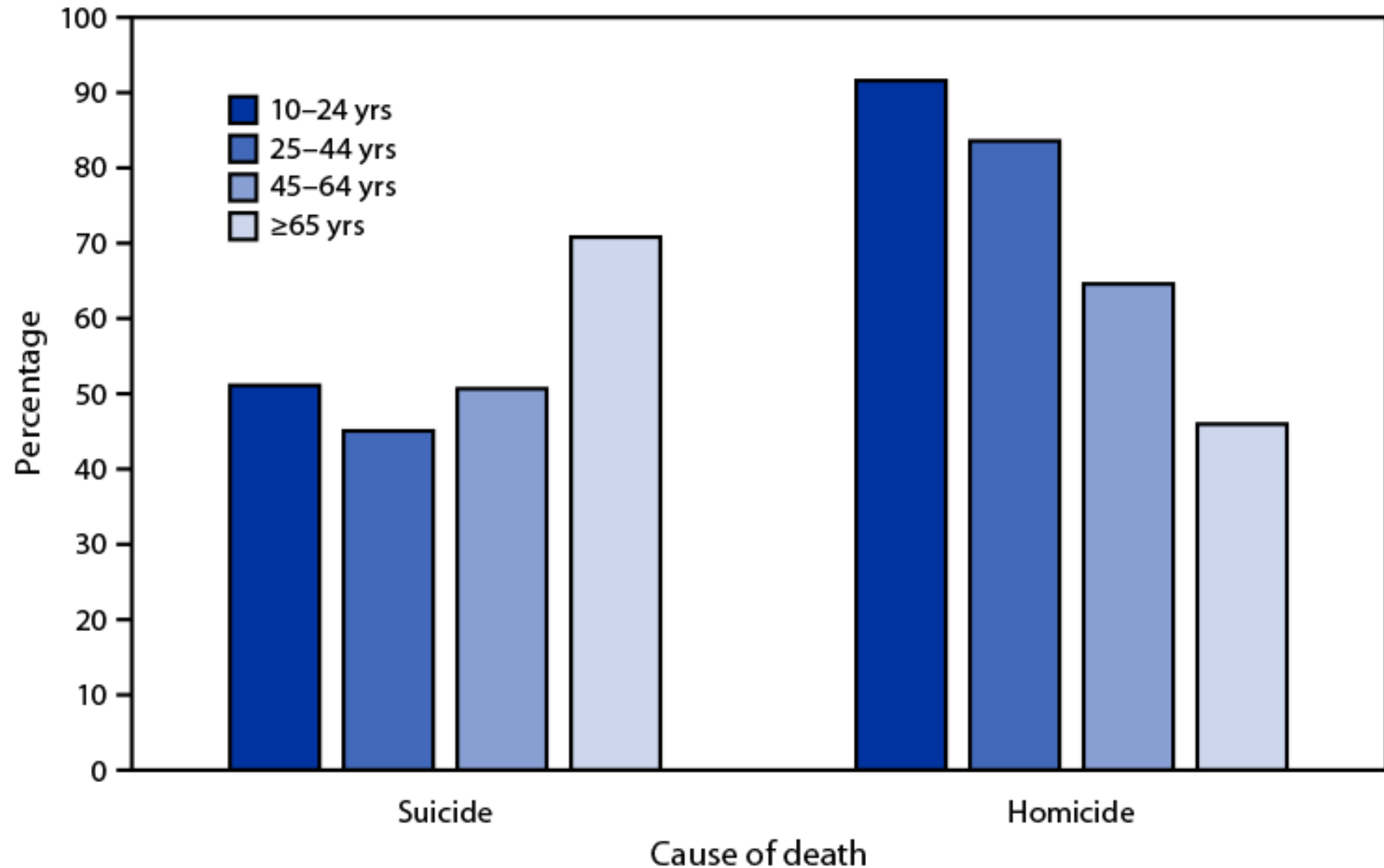
United States, number of fatalities from school shootings



Source: Riedman, David. "K-12 School Shooting Database" (2022). 02.Nov.2022 | Inspired by The Economist | Created by Stephen Muraguri

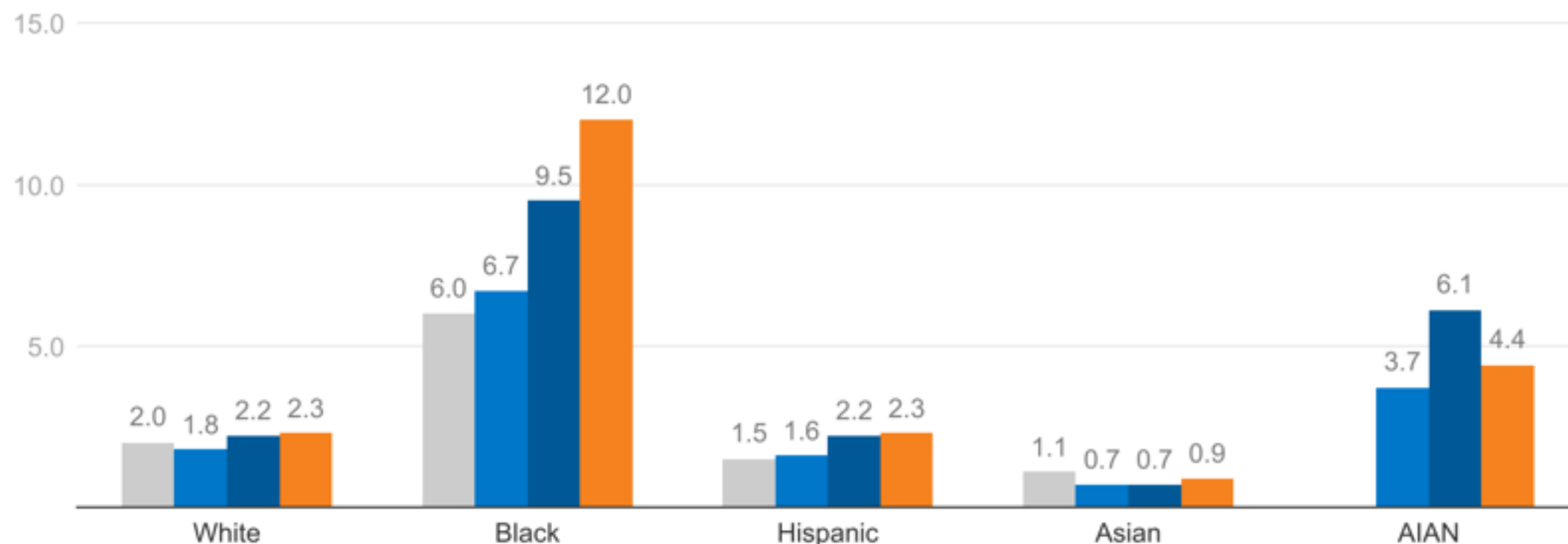


# Most Suicide and Homicide Deaths for Kids are by GUN



## Firearm-Related Death Rates for Children and Adolescents by Race/Ethnicity, 2018-2021

■ 2018 ■ 2019 ■ 2020 ■ 2021

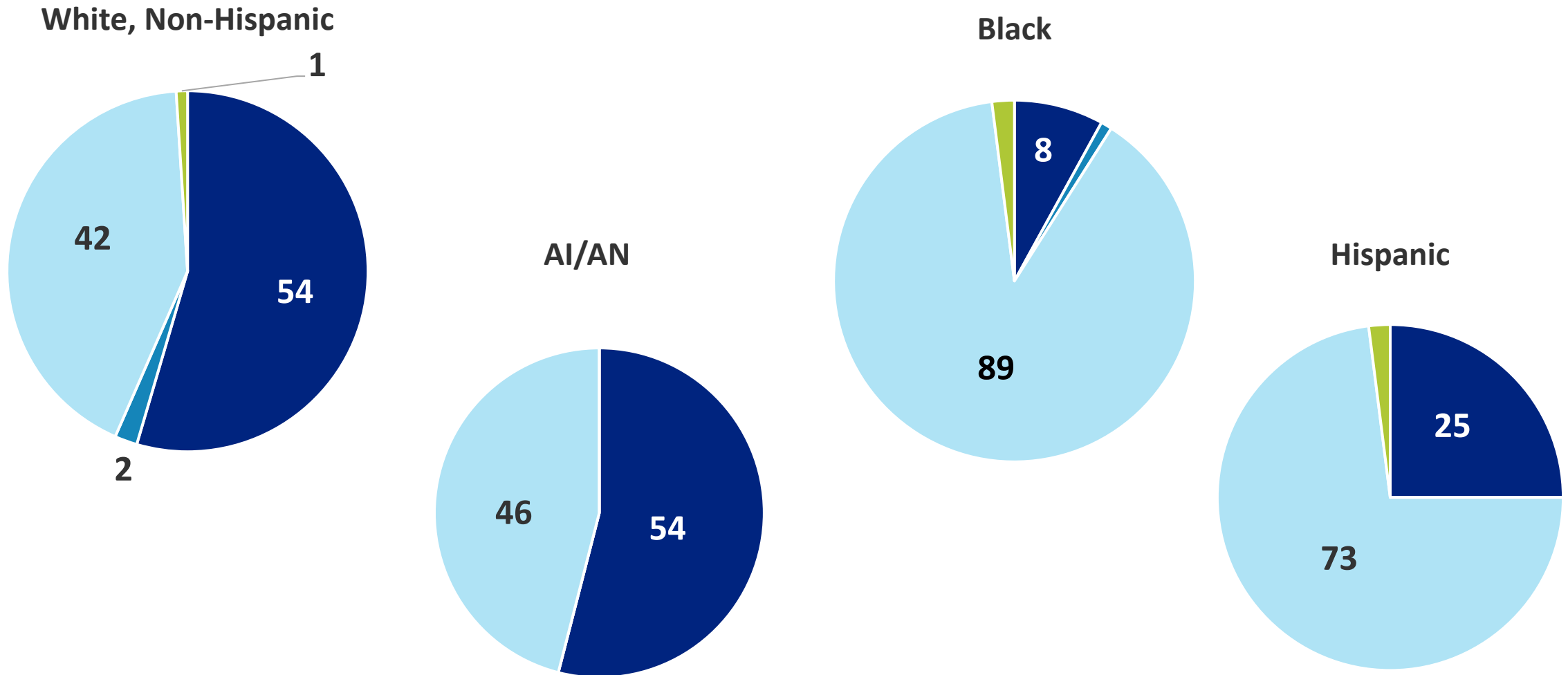


NOTE: Rates from 2021 reflect provisional data. Rates are per 100,000 children and adolescents ages 17 and below. Causes of death attributable to firearm mortality include ICD-10 Codes W32-W34, X72-X74, X93-X95, Y22-Y24, and Y35.0. AIAN refers to American Indian and Alaska Native people. AIAN data for 2018 was unavailable. Persons of Hispanic origin may be of any race but are categorized as Hispanic for this analysis; other groups are non-Hispanic. Persons of more than one race are not included in the data.

SOURCE: KFF analysis of CDC Wonder Online Database - Provisional Mortality Statistics, 2018-2021

**KFF**

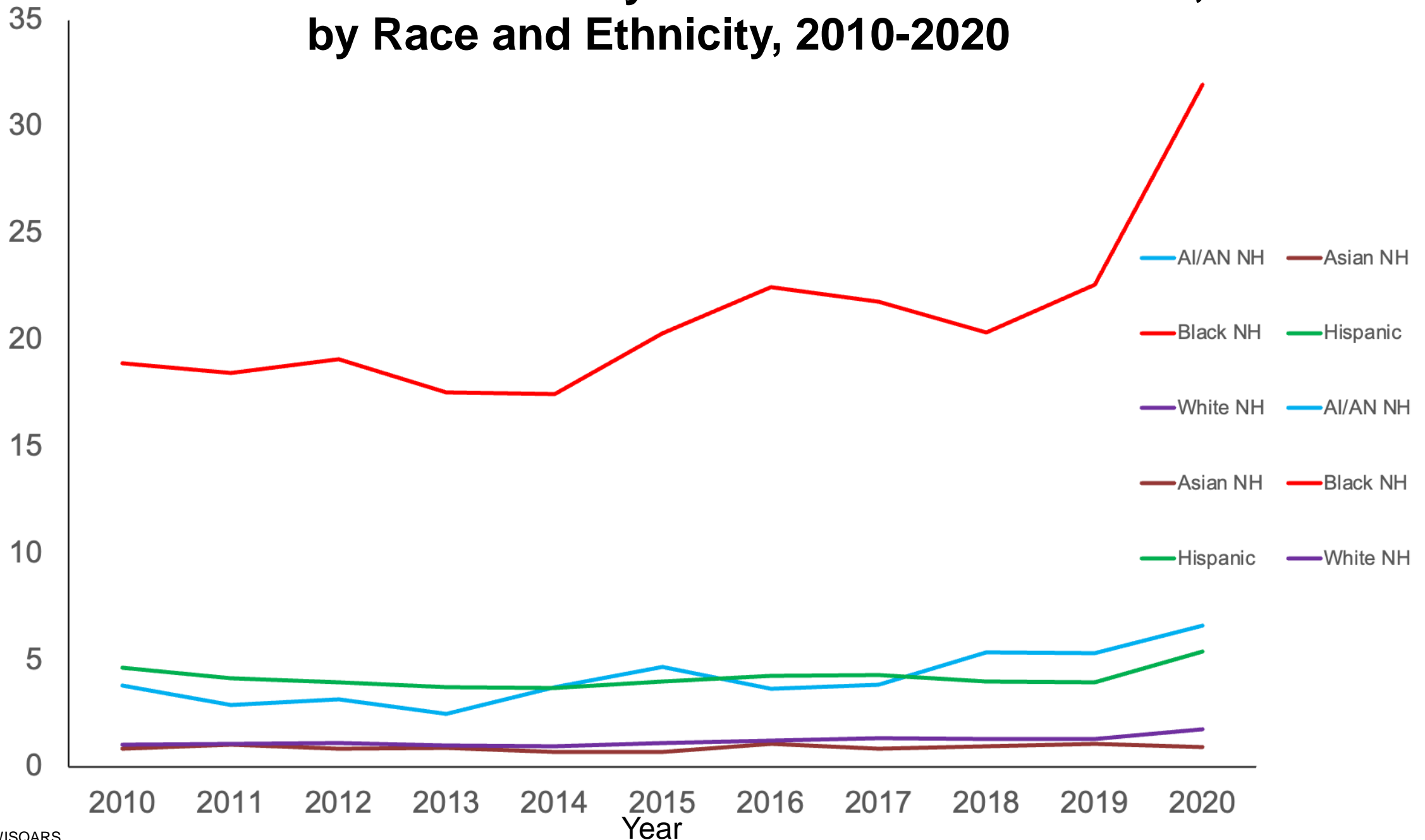
# Intent of Firearm Deaths Among US Teenagers by Race/Ethnicity, Ages 15-19, 2016-2021





# Homicide Firearm Fatality Rate in Youth 5 -24 Years, by Race and Ethnicity, 2010-2020

Fatality  
Rate  
Per  
100,000







● Philadelphia

## Shootings Remain High in Philly, But City-Funded Violence Interruption Shows Promise

A recent study found that a Philadelphia program can reduce shootings among participants by about half.

By **Mensah M. Dean** • Mar 14, 2023



## Addressing violence: Project Ujima

### What is Project Ujima?

Project Ujima is a community program that helps victims of violence and provides services at Children's Wisconsin, your home, and the community.

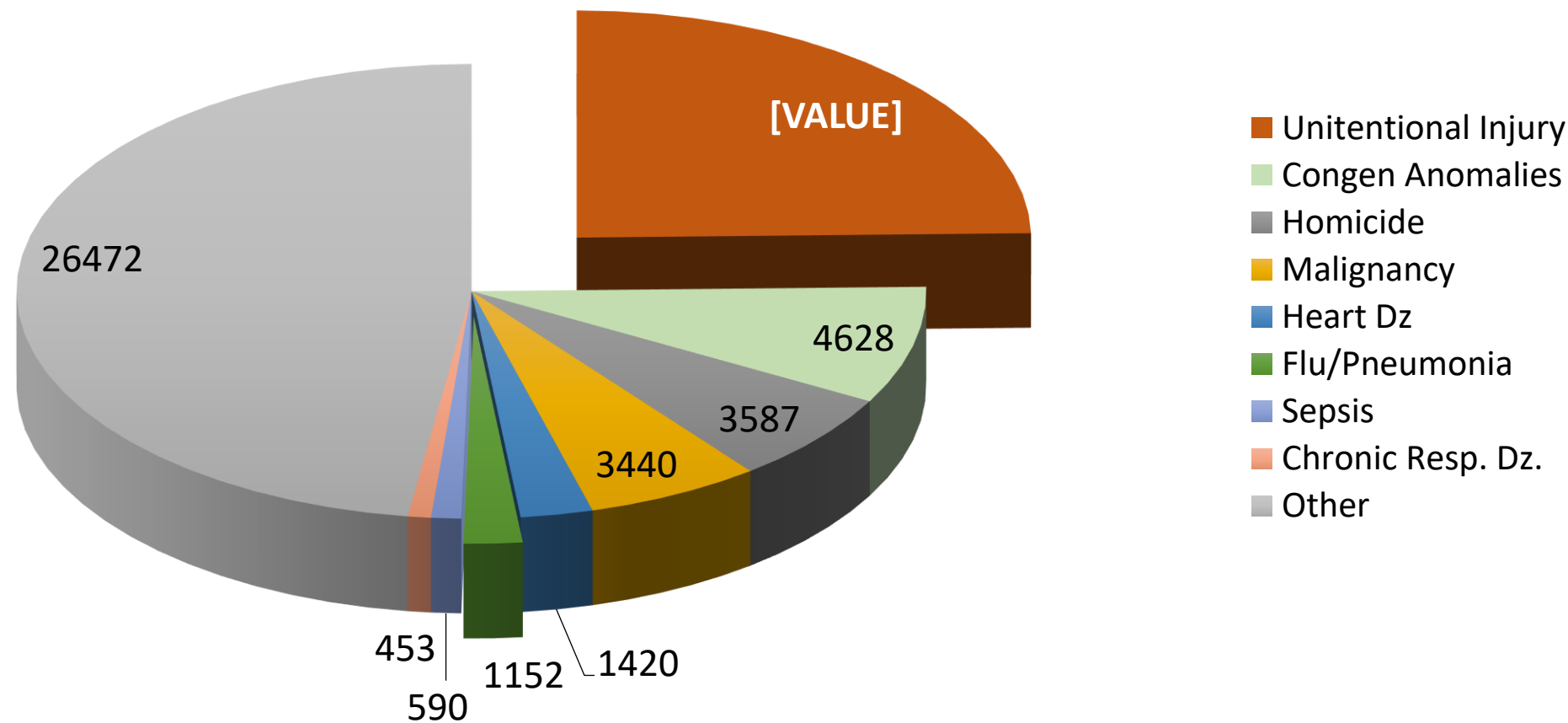
Project Ujima works to stop the cycle of violence through crisis intervention and case management, social and emotional support, youth development and mentoring, mental health, and medical services.

Project Ujima is a voluntary program working with both youth and adult victims of violence and there is no cost for the services.





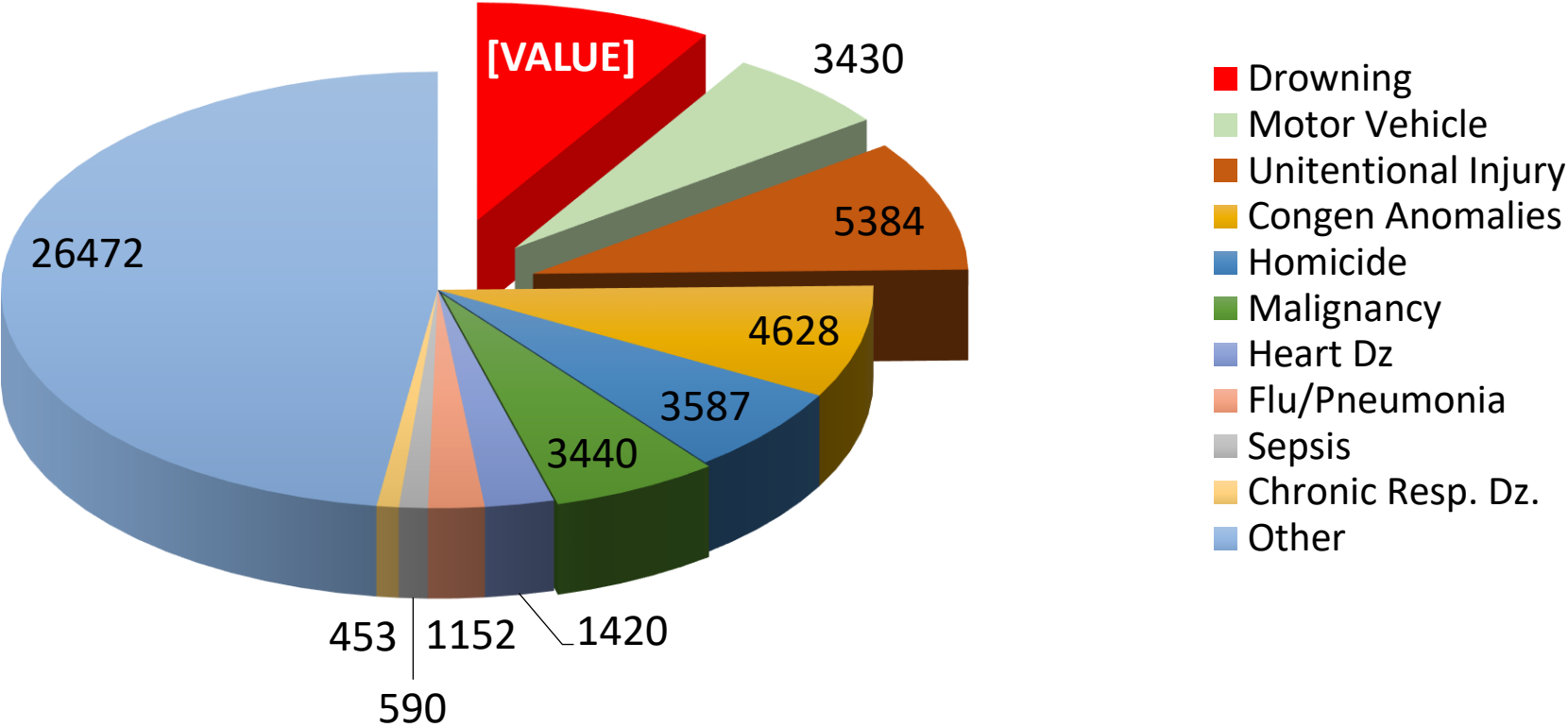
# Deaths 1-4 years 2013-2023



CDC WISQARS

1-4	
1	Unintentional Injury 13,685
2	Congenital Anomalies 4,628
3	Homicide 3,587
4	Malignant Neoplasms 3,440
5	Heart Disease 1,420
6	Influenza & Pneumonia 1,152
7	Perinatal Period 592
8	Septicemia 590
9	Cerebrovascular 541
10	Chronic Low. Respiratory Disease 453

# Deaths 1-4 years 2013-2023



1-4	
1	Unintentional Injury 13,685
2	Congenital Anomalies 4,628
3	Homicide 3,587
4	Malignant Neoplasms 3,440
5	Heart Disease 1,420
6	Influenza & Pneumonia 1,152
7	Perinatal Period 592
8	Septicemia 590
9	Cerebrovascular 541
10	Chronic Low. Respiratory Disease 453





**18 children per week**  
**9 aged 1-4 years**

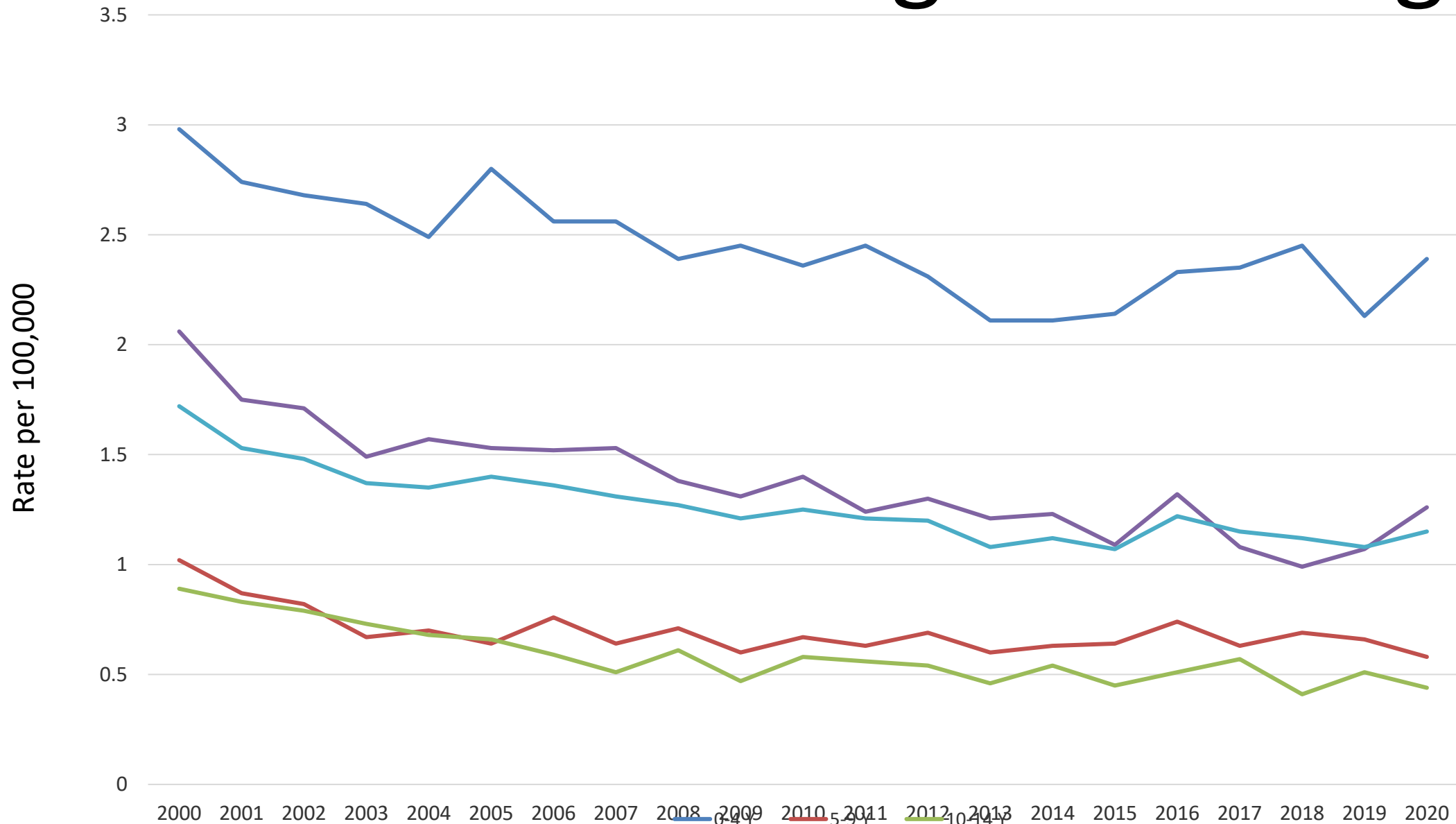






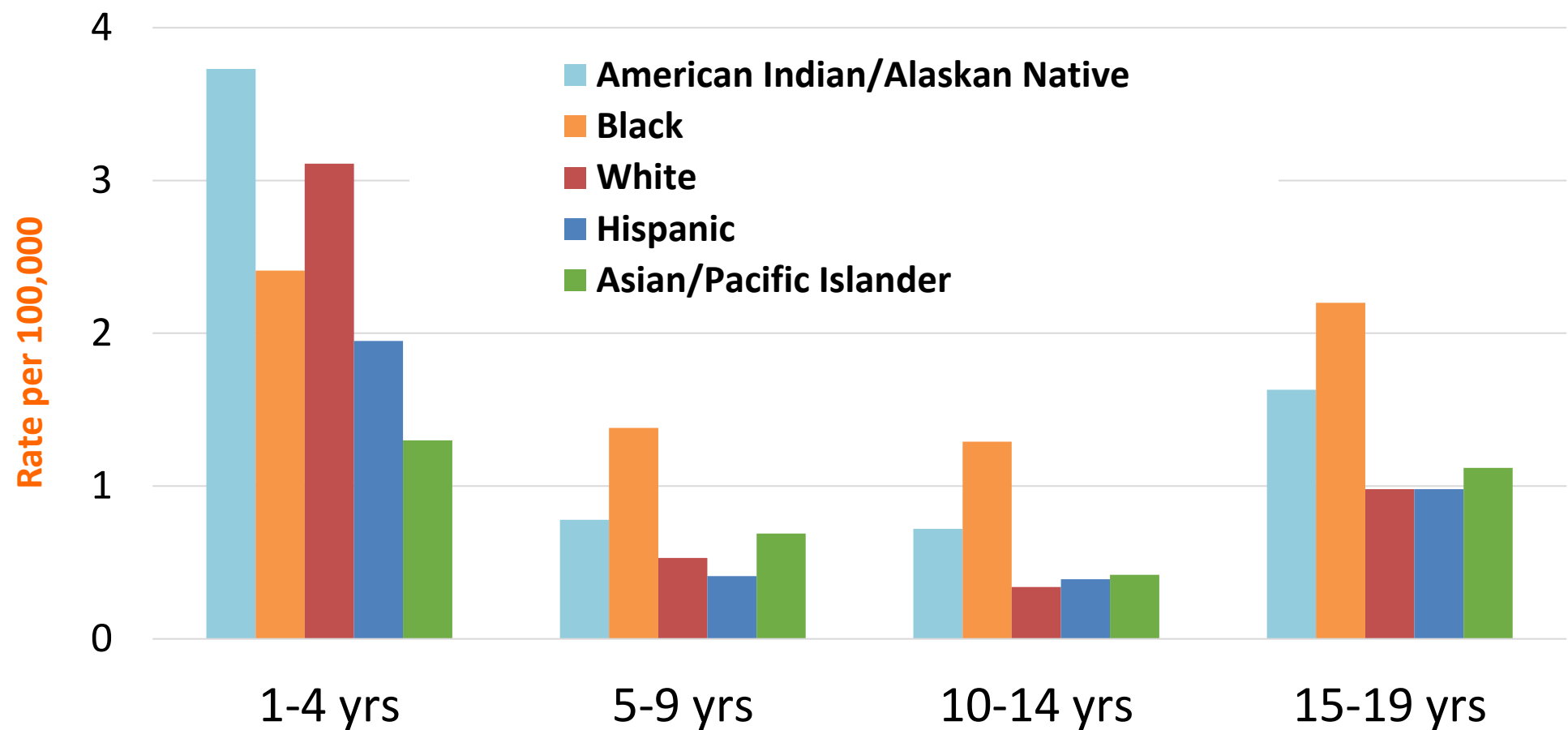
16 School busses  
of Youth  
DROWN  
Every Year

# We Are Not Making Much Progress





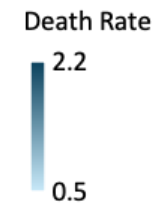
# Black and Brown Kids Drown at Much Higher Rates



Source: AAP analysis of National Center for Injury Prevention and Control/CDC WISQARS™  
(Web-based Injury Statistics Query and Reporting System), April 2019.

Note: American Indian/Alaskan Native, Black, White, and Asian/Pacific Islander refer to those who identify as non-Hispanic.

## US Child (Ages 0-19) Unintentional Drowning Death Rates (per 100,000 Children) by State, 2012-2018 Annualized Average



Source: NCHS National Vital Statistics System for number of deaths; US Census Bureau for population estimates.

Retrieved from CDC/WISQARS [Fatal Injury Mapping](#).

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN®



Age Group	Number of Deaths	Population***	Crude Rate
00-04	422	8,677,939	4.86
05-09	66	8,566,475	0.77
10-14	27	8,682,822	0.31
15-19	117	8,642,607	1.35
Total	<b>632</b>	<b>34,569,843</b>	<b>1.83</b>



Age Group	Number of Deaths	Population***	Crude Rate
00-04	553	27,401,912	2.02
05-09	115	27,684,619	0.42
10-14	70	27,999,803	0.25
15-19	197	29,185,044	0.68
Total	<b>935</b>	<b>112,271,378</b>	<b>0.83</b>

Age Group	Number of Deaths	Population***	Crude Rate
00-04	111	4,609,295	2.41
05-09	32	4,711,346	0.68
10-14	48	4,868,424	0.99
15-19	143	4,986,717	2.87
Total	<b>334</b>	<b>19,175,782</b>	<b>1.74</b>

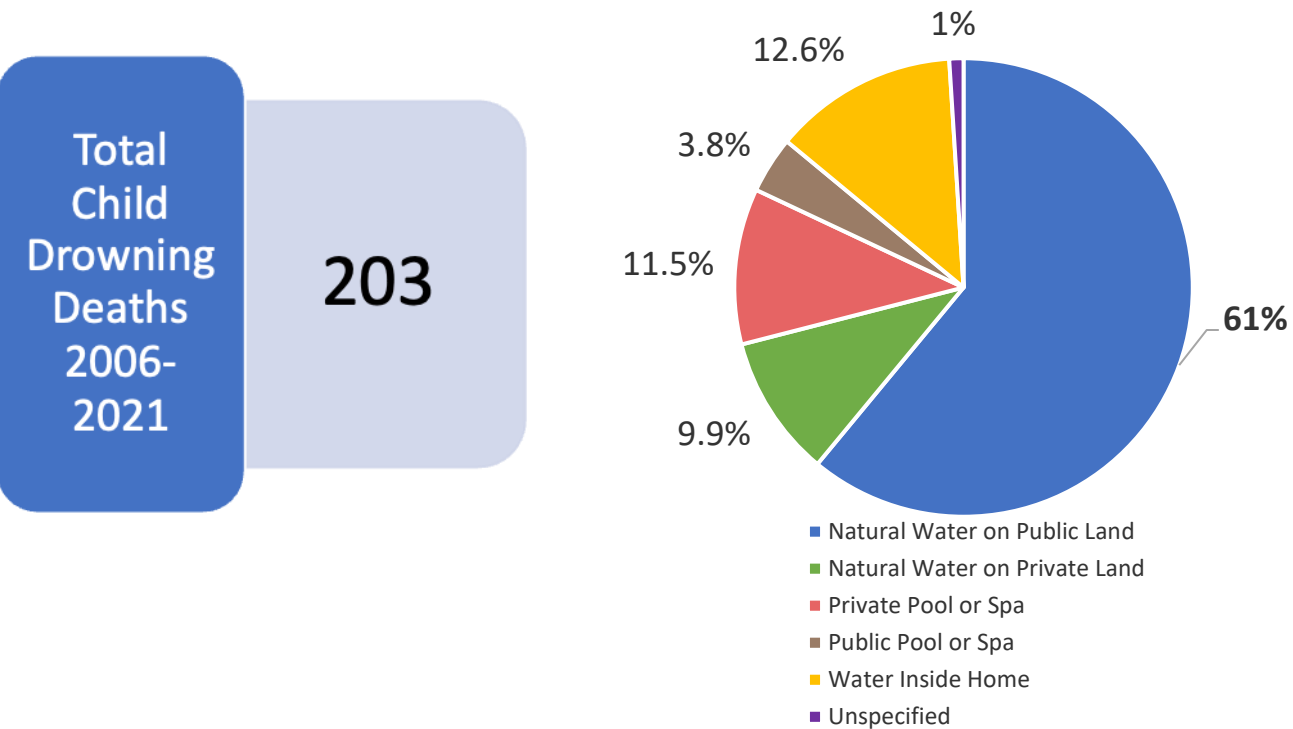


Age Group	Number of Deaths	Population***	Crude Rate
00-04	30	1,031,047	2.91
05-09	24	1,015,166	2.36
10-14	23	1,053,162	2.18
15-19	35	1,023,426	3.42
Total	<b>112</b>	<b>4,122,801</b>	<b>2.72</b>

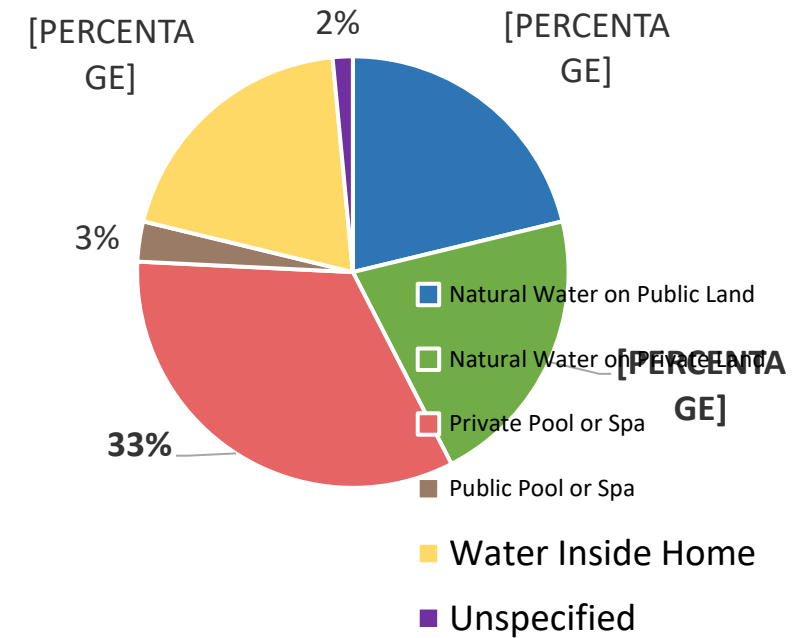


# Results

**Most Drowning Deaths in Oregon Under Age 18 Occur in Natural Water on Public Land**



**Oregon Children Ages 0-4 Drown Most Often in Water on Private Land**



## All Child Drowning Deaths in Oregon

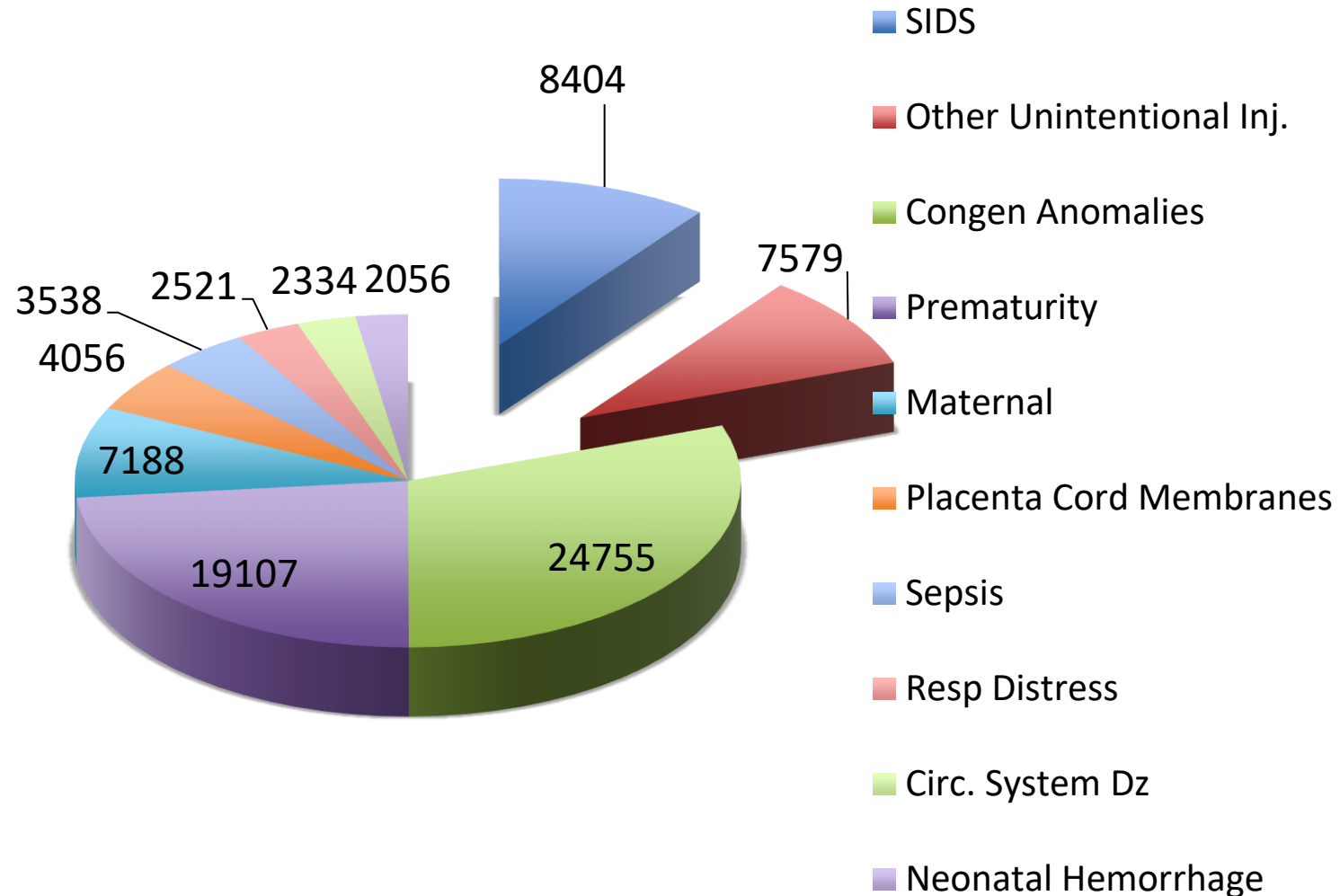
Population	Rate Per 100,000
White Children	19.55
Children of Color*	27.56
<b>Relative Risk</b>	<b>1.41</b>

## Natural Water on Public Land

Population	Rate Per 100,000
White Children	9.91
Children of Color*	19.43
<b>Relative Risk</b>	<b>1.96</b>

\*Children of color includes Hispanic, Black, Pacific Islander, American Indian/Alaskan Native, Asian, 2 or more races, or other race.

# Deaths 0-1 year 2018-2023

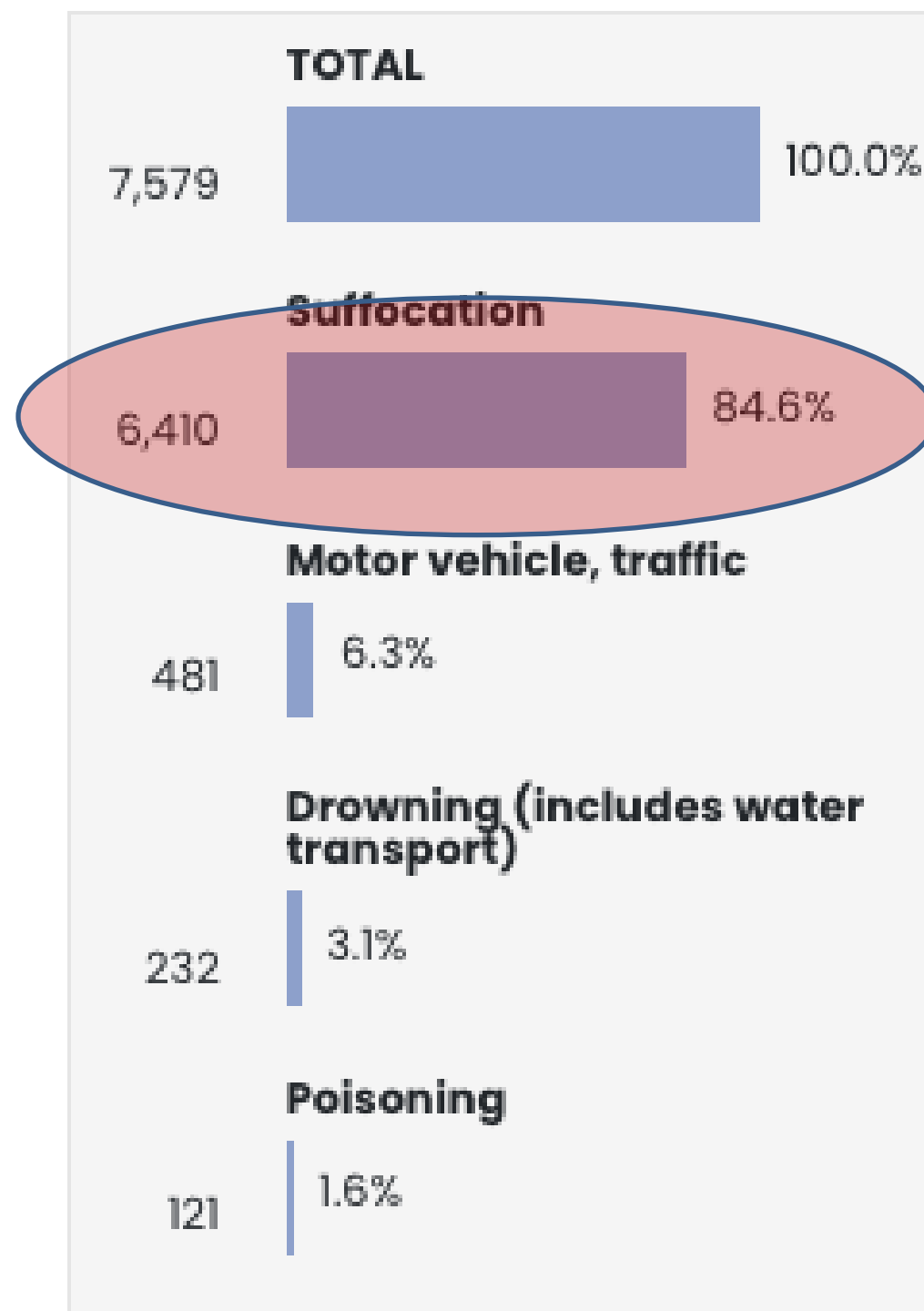




# 10 Leading Causes of Death, United States

2018 to 2023, All Deaths with drilldown to ICD codes, All Sexes, All Races, All Ethnicities

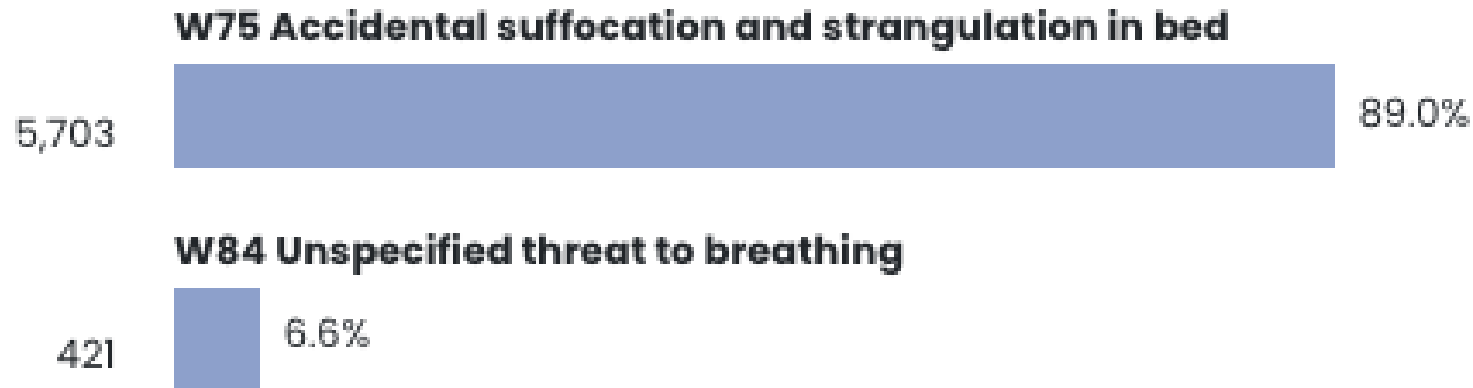
	<1	1-4
1	Congenital Anomalies 24,755	Unintentional Injury 7,390
2	Short Gestation 19,017	Congenital Anomalies 2,461
3	SIDS 8,404	Homicide 1,875
4	Unintentional Injury 7,579	Malignant Neoplasms 1,735
5	Maternal Pregnancy Comp. 7,188	Heart Disease 710
6	Placenta Cord Membranes 4,056	Influenza & Pneumonia 646
7	Bacterial Sepsis 3,538	Perinatal Period 357



# Suffocation

## #1 Leading Cause of Death

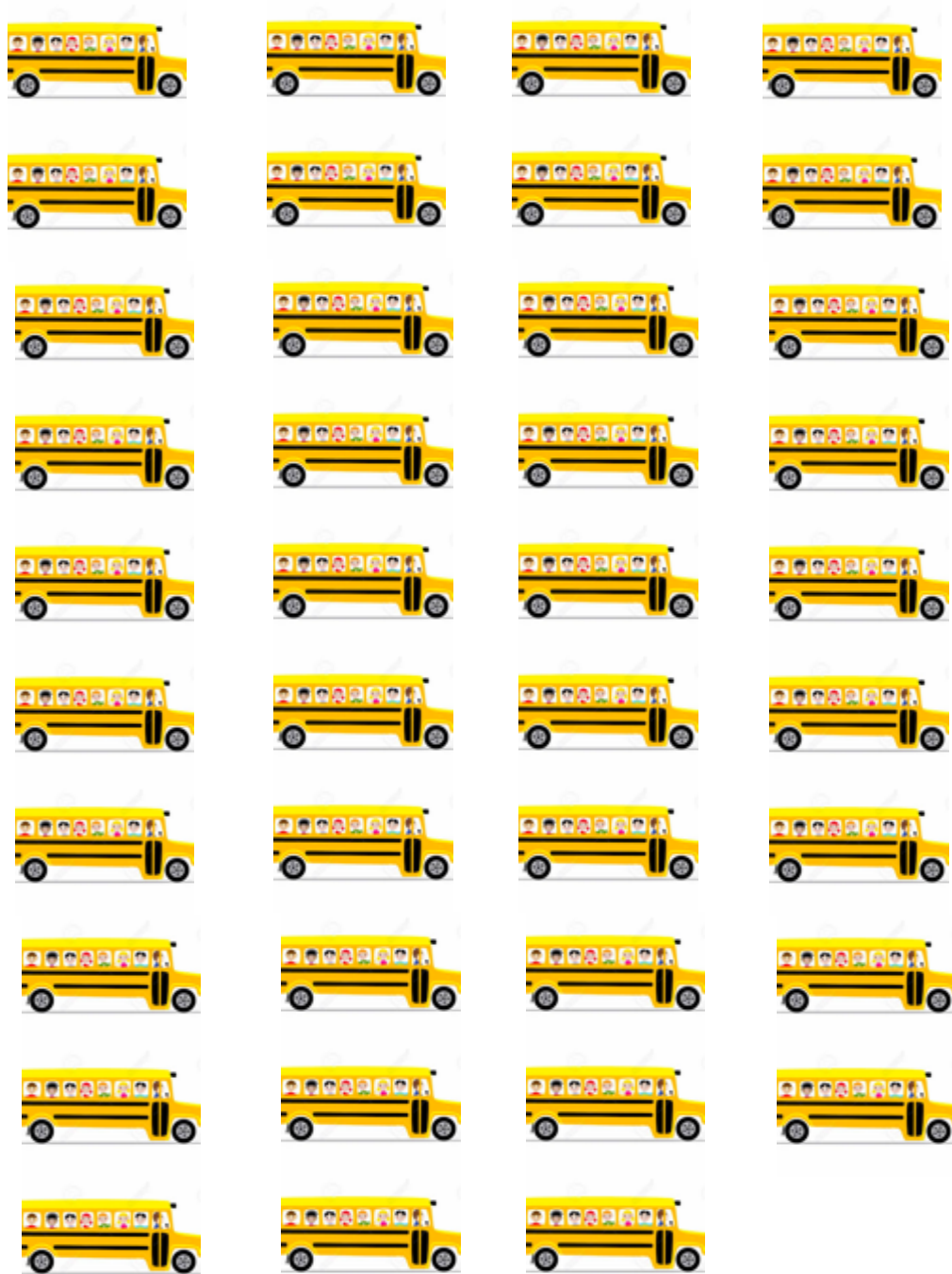
2018 to 2023, All Sexes, All Races



**75% of Unintentional Injury Deaths among infants were sleep-related suffocation/strangulation**





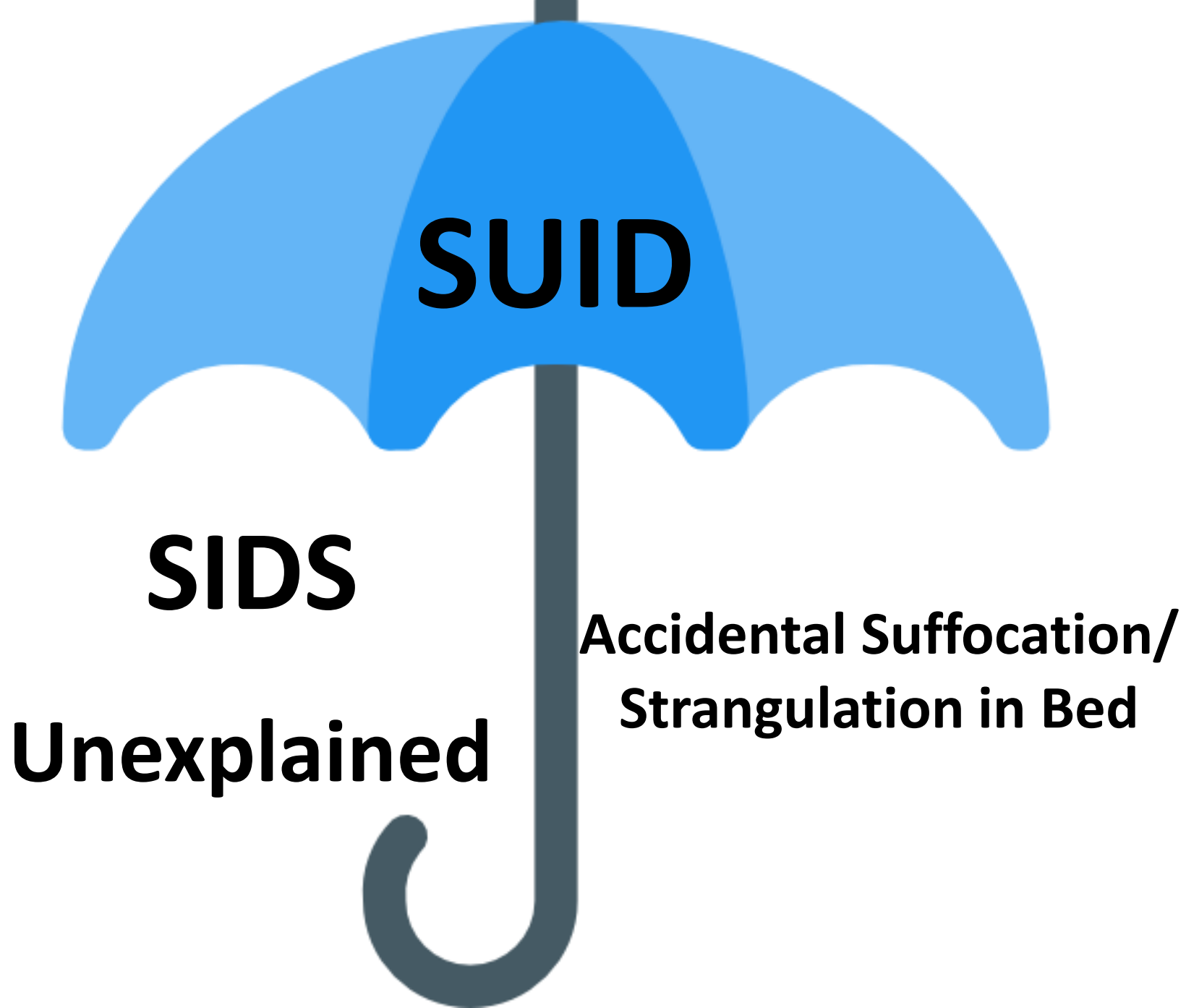


39 School busses  
of infants  
DIE IN THEIR  
SLEEP  
Every Year



## What is SUID?

**SUID (Sudden Unexpected Infant Death) is when infants die suddenly of no immediately obvious cause.**



**SUID**

**SIDS**

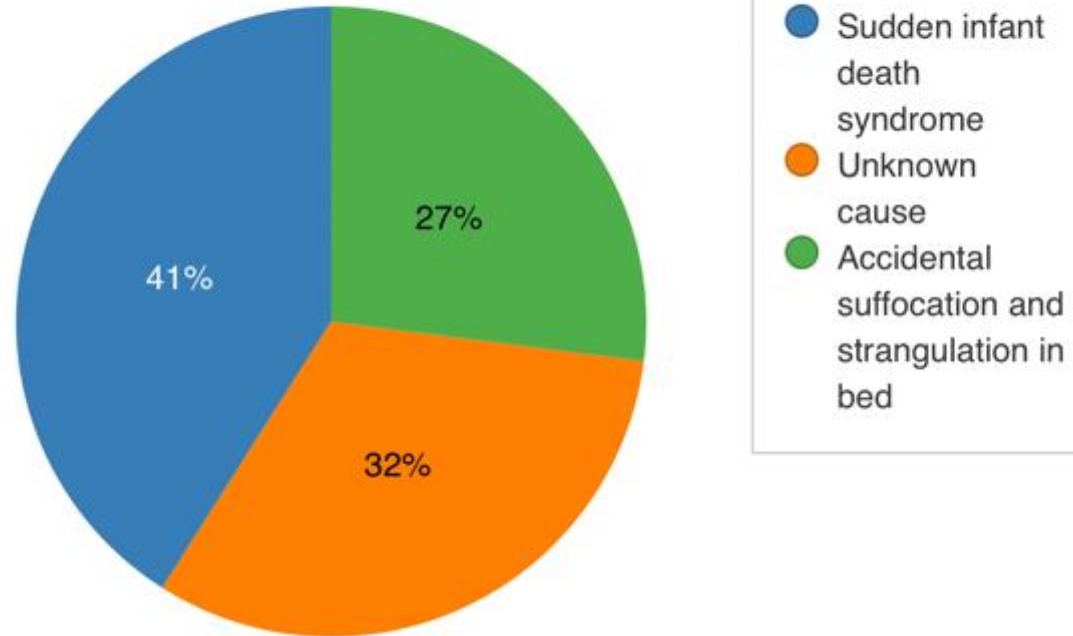
**Unexplained**

**Accidental Suffocation/  
Strangulation in Bed**



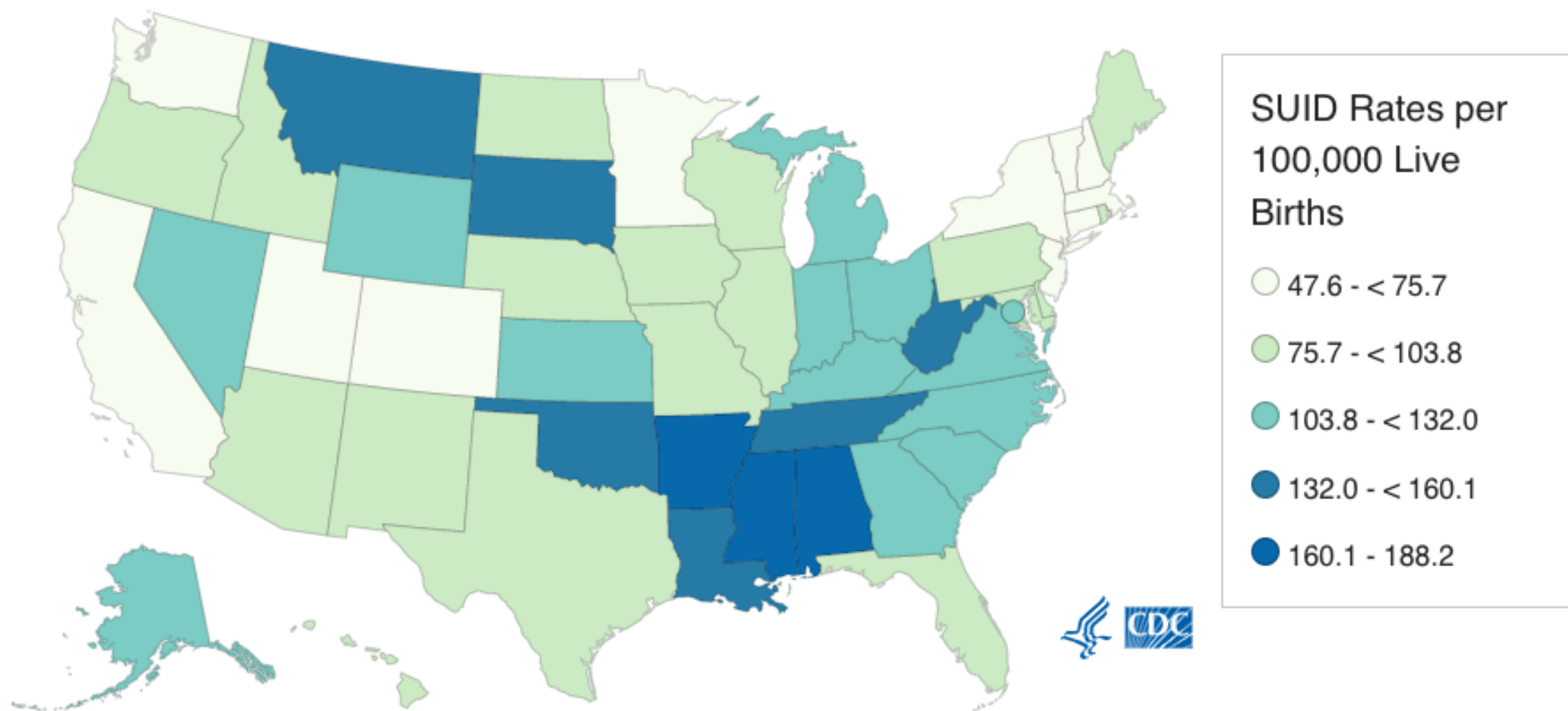
# Most Cases of SUID are SIDS

Breakdown of Sudden Unexpected Infant Deaths by Cause, 2020



Percentage	
Sudden infant death syndrome	41%
Unknown cause	32%
Accidental suffocation and strangulation in bed	27%

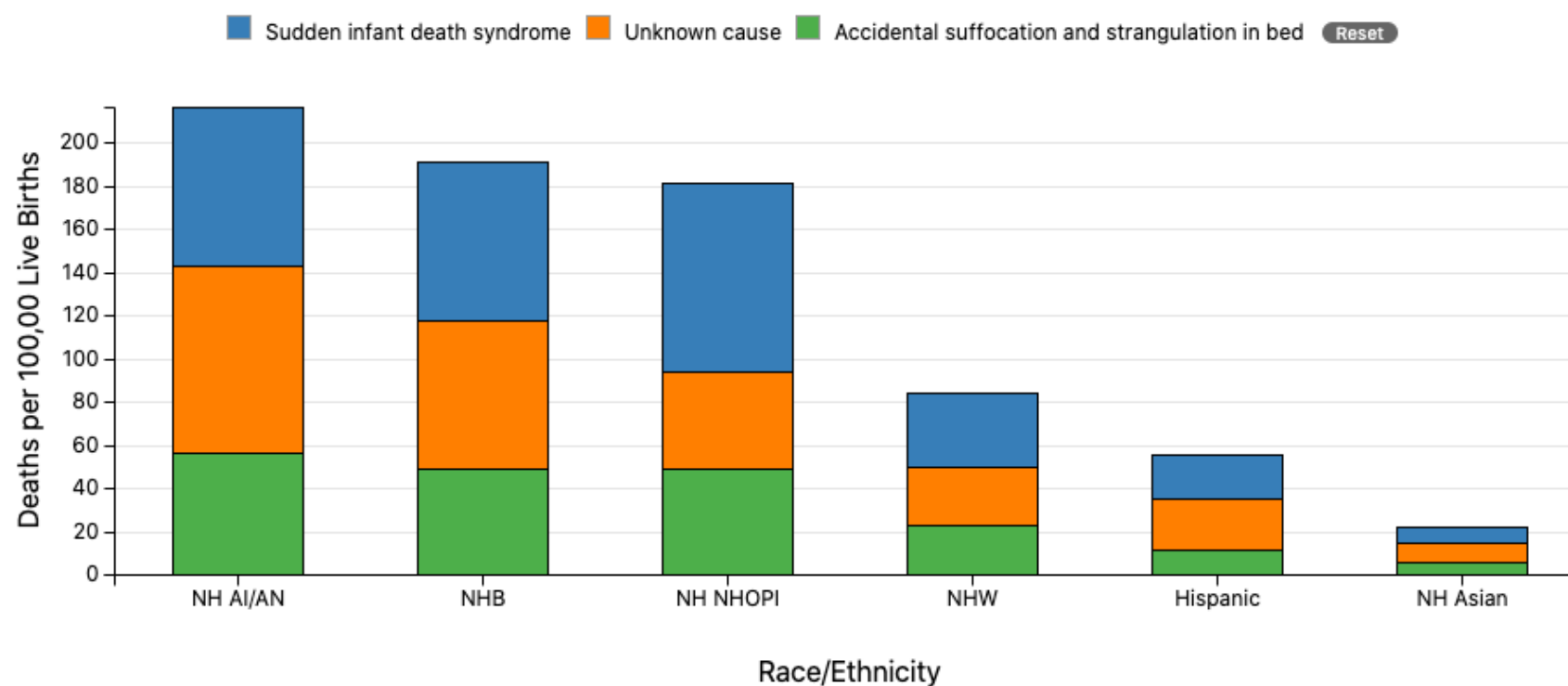
## SUID Rates by State, 2016–2020



Source: CDC

# Children of Color have much higher risks

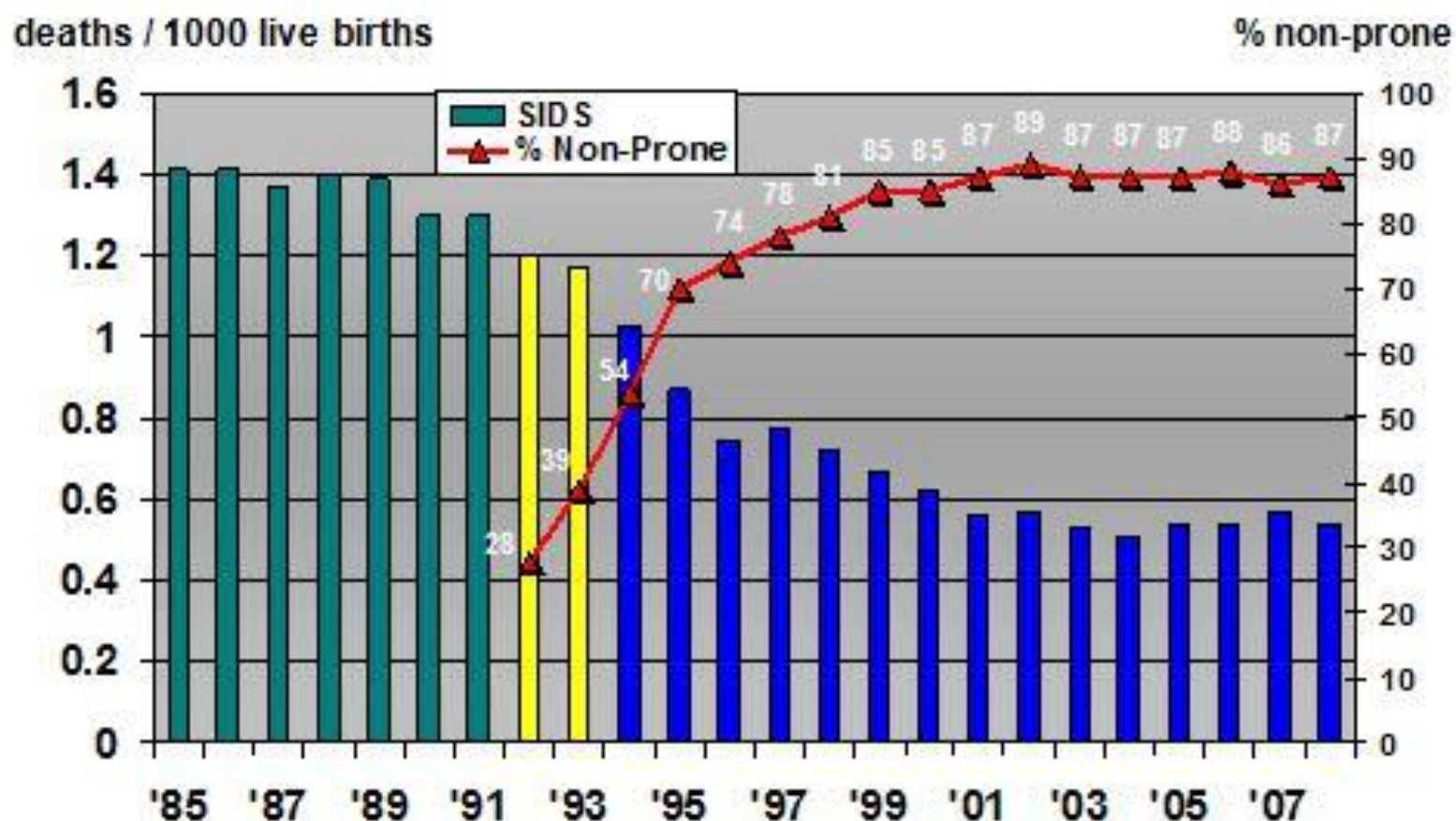
Sudden Unexpected Infant Death by Race/Ethnicity, 2015-2019



NH AI/AN = Non-Hispanic American Indian/Alaska Native; NHB = Non-Hispanic Black; NH NHOPI = Non-Hispanic Native Hawaiian/Other Pacific Islander; NHW = Non-Hispanic White; NH Asian = Non-Hispanic Asian



# SIDS Rate and Sleep Position U.S. Infants 1985 - 2008



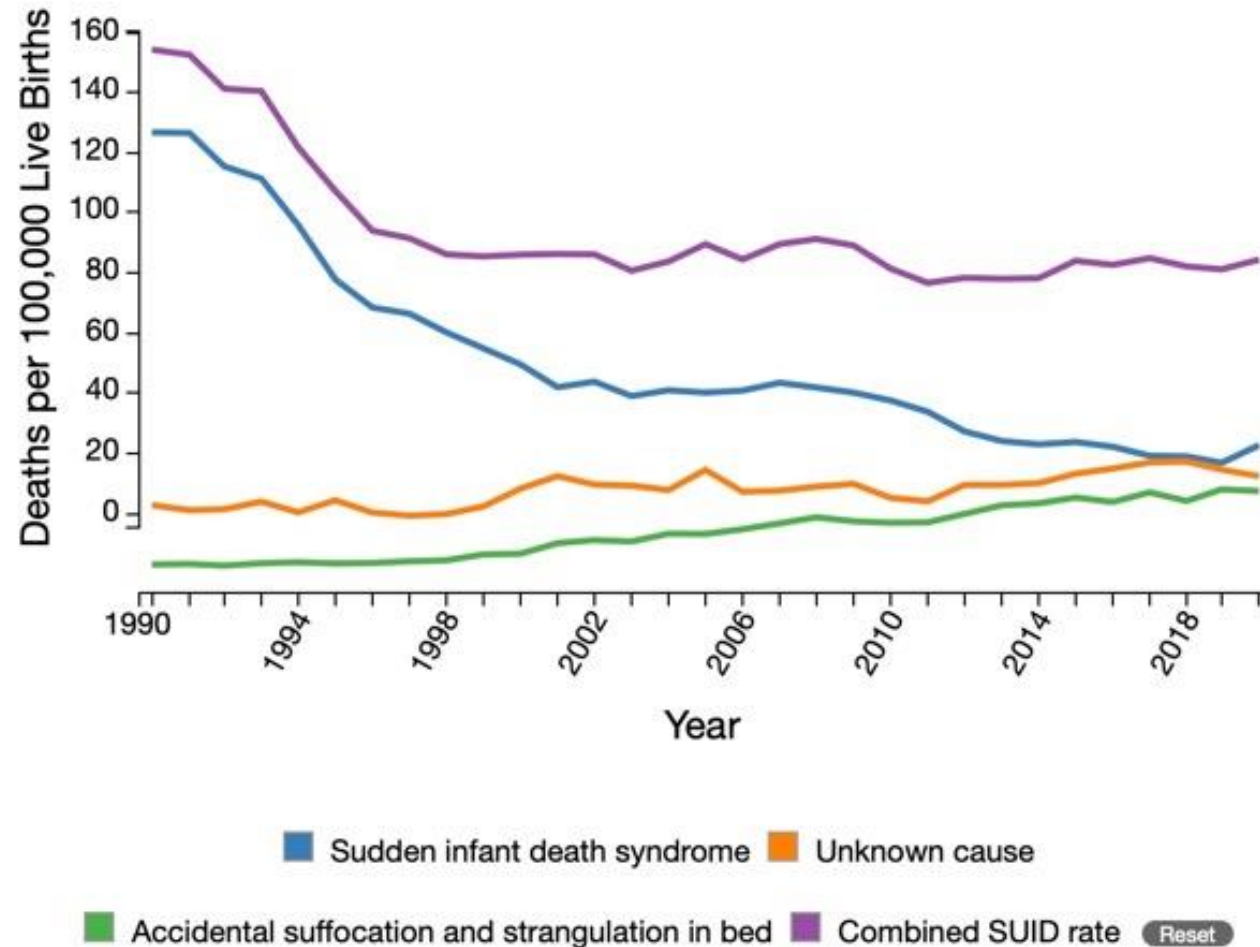
Sleep Position Source: NICHD  
NISP Household Survey  
SIDS Rate Source: National  
Center for Health Statistics, CDC  
Updated 05/08/2011

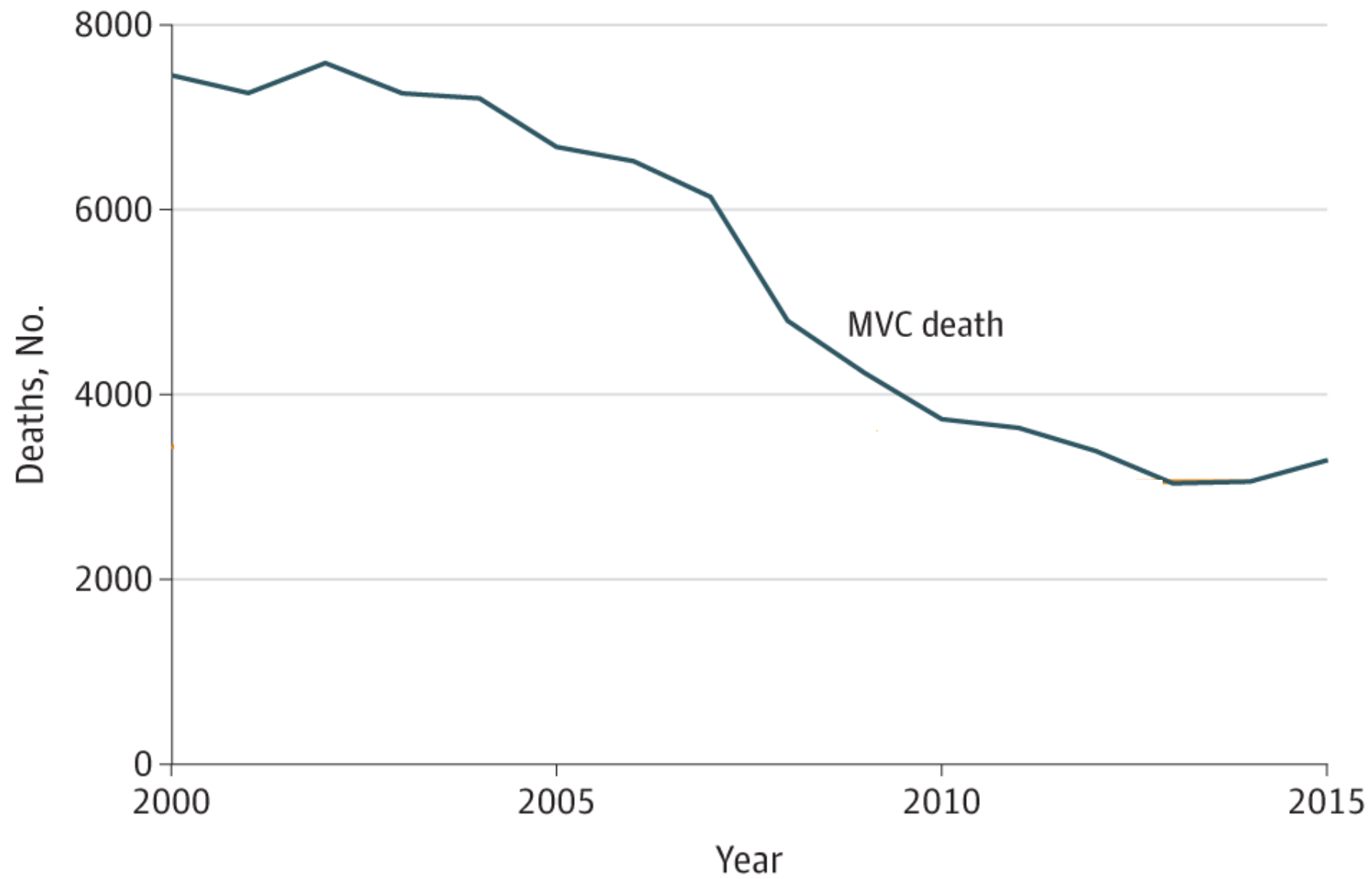
• [AAP SIDS Statement 1992](#)

• [Back to Sleep Campaign 1994](#)

# SUID Rates Have Not Declined in the Past 2 Decades

Trends in Sudden Unexpected Infant Death by Cause, 1990–2020









**Dead Men Tell No Tales**



## CDR Purpose, Principles, and Objectives

*This section outlines the foundational elements that underlie the CDR process—its purpose, principles and objectives; its core functions; criteria for excellence; and the role of team members.*

The purpose of CDR is that a comprehensive and multidisciplinary review of child deaths will lead to a better understanding of how and why children die. These findings are used to catalyze action to prevent other deaths, ultimately improving the health and safety of communities, families, and children.

The CDR process affords communities the opportunity to acknowledge the ways in which personal, community, or systems-level biases affect members of the community and explore and understand health disparities-preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by disadvantaged populations.<sup>1</sup>

# How Does CDR Work?

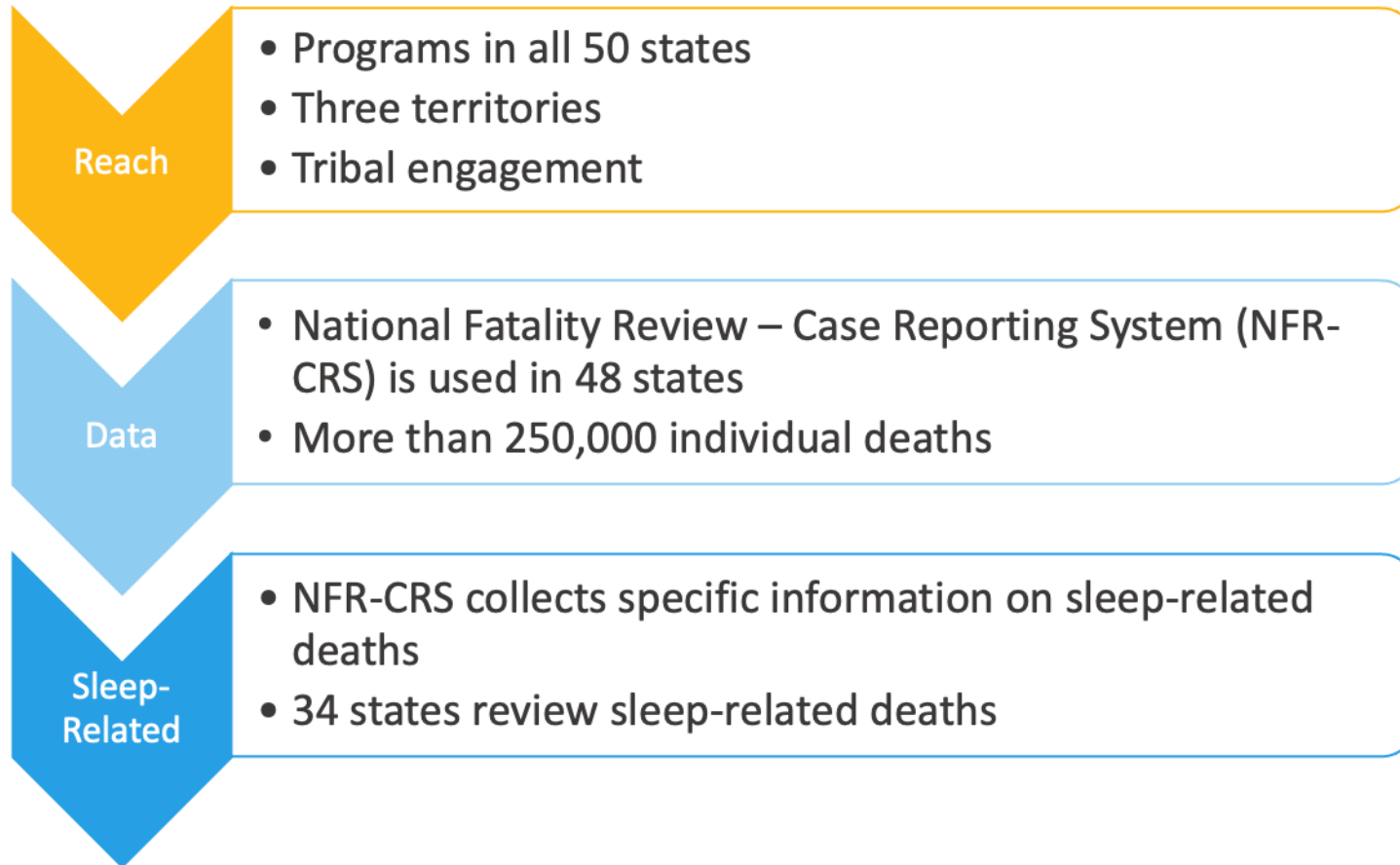
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# CDR in the United States

Profile Assessment 2024



# National Fatality Review- Case Reporting System

A National Tool for CDR and FIMR Teams

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The purpose of NFR-CRS is to systematically collect, analyze, and report comprehensive fatality review data that includes:

- Information about the fetus, infant or child and their family, supervisor at the time of the incident and person responsible (when applicable)
- Services needed, provided, or referred
- Risk and protective factors
- Findings and recommendations
- Factors affecting the quality of the review meeting

## CDR REPORT FORM

*Version 6.0*

### National Fatality Review Case Reporting System

Data Entry Website: [data.ncfrp.org](http://data.ncfrp.org)

Phone: 800-656-2434

Email: [info@ncfrp.org](mailto:info@ncfrp.org)

[ncfrp.org](http://ncfrp.org)



@nationalcfrp



# NFR-CRS Utilization

There are currently 48 states using NFR-CRS

- 48 use NFR-CRS for CDR
- 20 use NFR-CRS for FIMR

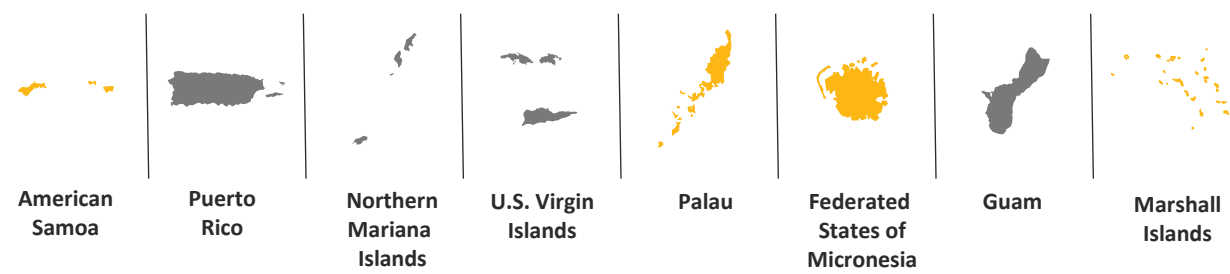
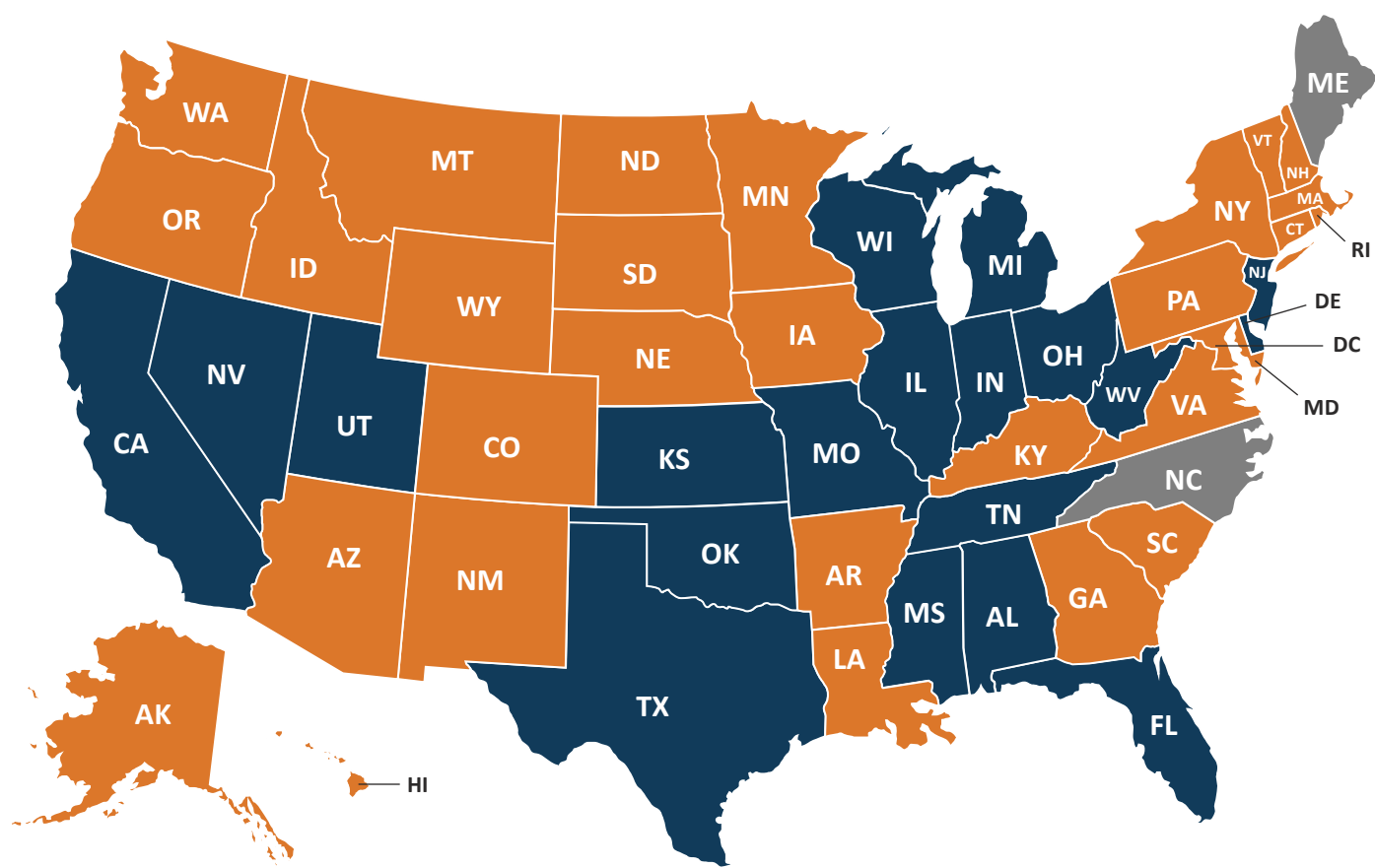
Each state uses NFR-CRS differently. Some have comprehensive reviews whereas others may only use NFR-CRS in one jurisdiction.

Jurisdiction Using NFR-CRS for CDR

Jurisdiction Using NFR-CRS for CDR and FIMR

Jurisdiction Not Using NFR-CRS

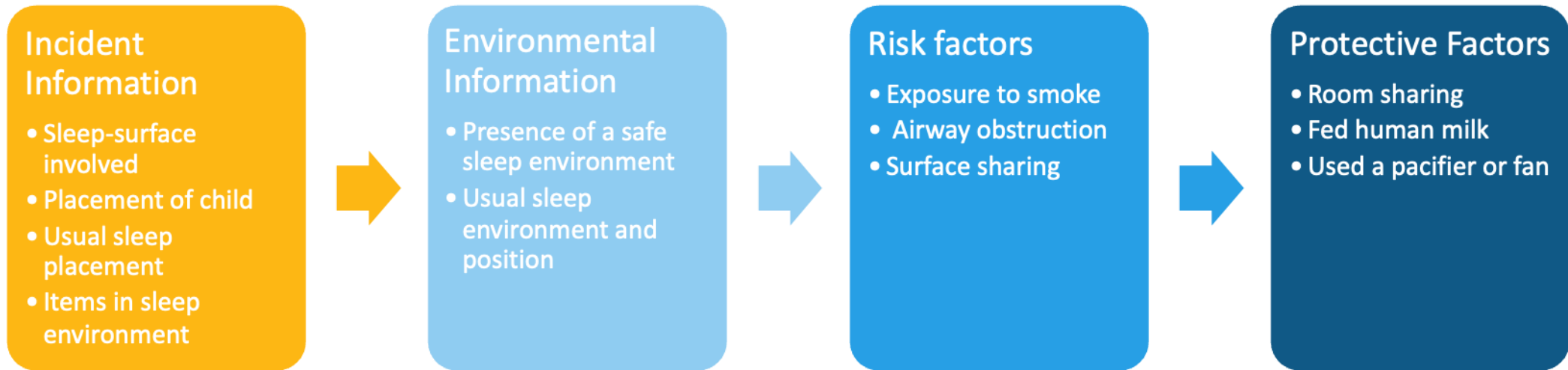
Jurisdiction Without Fatality Review





# Sleep-Related Data Fields

NFR-CRS Section I2





## Individual Change

Comprehensive education provided in many states. Additionally, materials have been translated into additional languages, infographics have been created, and sleep-environments have been provided to families.



## Community Change

Partnerships with community and family organizations to promote safe sleep. Identifying key partners to change narratives around safe sleep (e.g., maternal grandparents, clergy, or childcare providers).



## Environmental Change

Addressing soft bedding or bed sharing as a risk factor for sleep-related deaths. Providing safe sleep (or additional safe sleep) environments to families in need.



## Agency Policy Change

Changing policies to allow for more nimbleness in distribution of sleep environments to account for housing instability. Improving the quality and consistency of death scene investigations.



## Legislative Policy Change

Contributing to the passage of comprehensive family medical leave. Expanding safe haven laws. Funding CDR or FIMR programs.



**PREVENTION EXAMPLES**

# SPECIFIC EXAMPLES

## SAFER SLEEP IN PRACTICE



### **SOUTH DAKOTA**

- Developed an MCH Safe Sleep Action Plan
- Launched For Baby's Sake website
- Created social media posts
- Established a data dashboard



### **COOK COUNTY - CPASS**

- Enhanced data collection through SUID grant
- Identified family experiences and barriers
- Cross walked SUID data with community events to focus prevention



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# The Injury Equity Framework — Establishing a Unified Approach for Addressing Inequities

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