



Linking Data to Action

Parallel Session

Welcome

Moderator:

- Vanessa Mier, Safe Kids Oakland County | Ascension Providence Hospital

Speakers:

- Mark Chandler, Safe Kids Worldwide
- Esther Shaw & Sasha Mintz, National Center for Fatality Review and Prevention



Housekeeping



- There will be time for questions after each presentation
- Don't forget to rate the session and leave feedback in the Sched app at the end!

Linking Data to Action

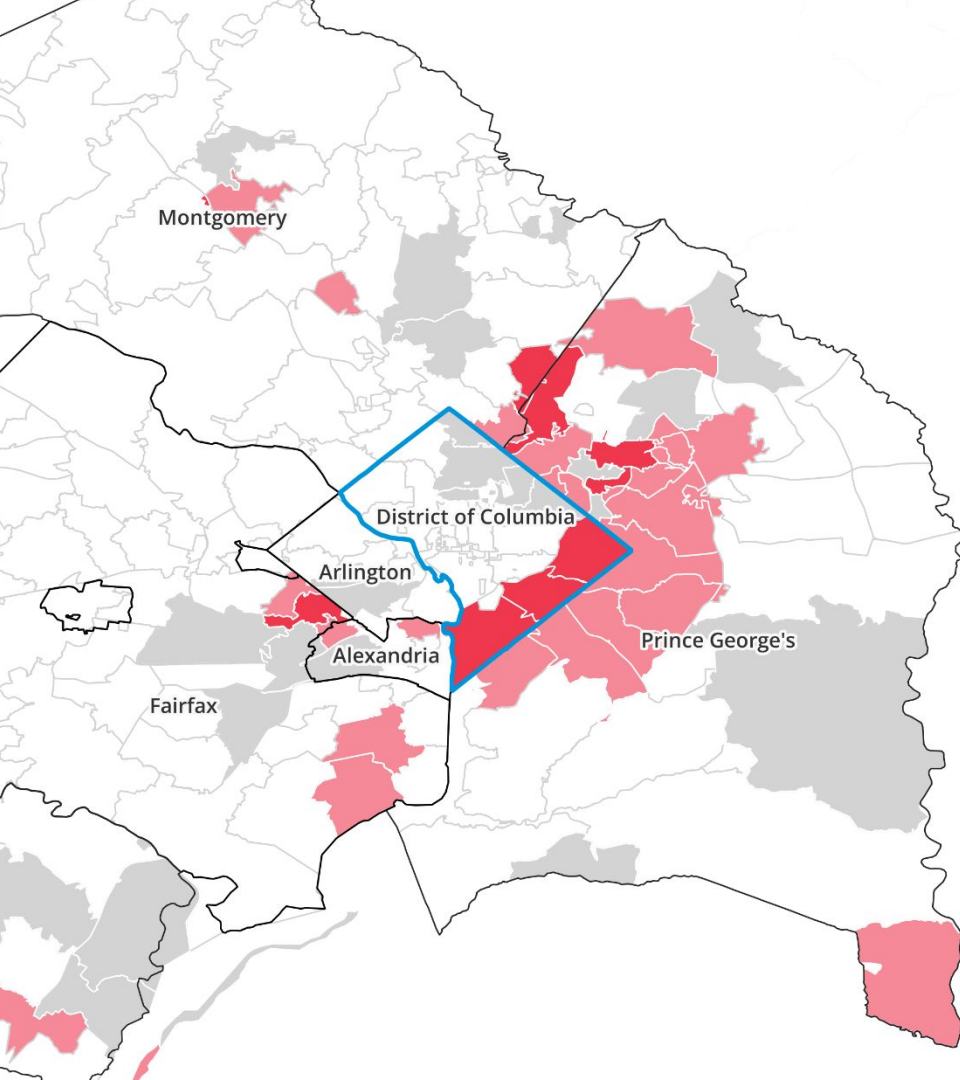
[Click here to add to My Sched.](#)

<http://sched.co/4G5z> [Tweet](#) [Share](#)

Please share your feedback.

We'd love if you would elaborate





Safe Kids Worldwide

Child Safety Index

Mark Chandler

Morag MacKay

Safe Kids Worldwide

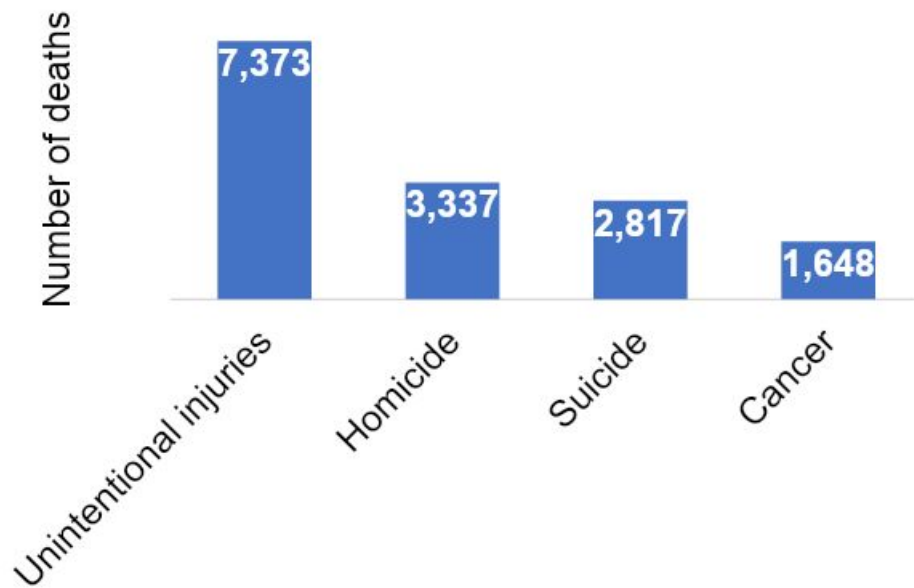
PrevCon 2023

Child Unintentional Injuries

Unintentional injuries (UI) are the leading cause of death among children ages 1 to 19 years in the U.S.

However, risk is unequally distributed by social, demographic, and geographic factors.

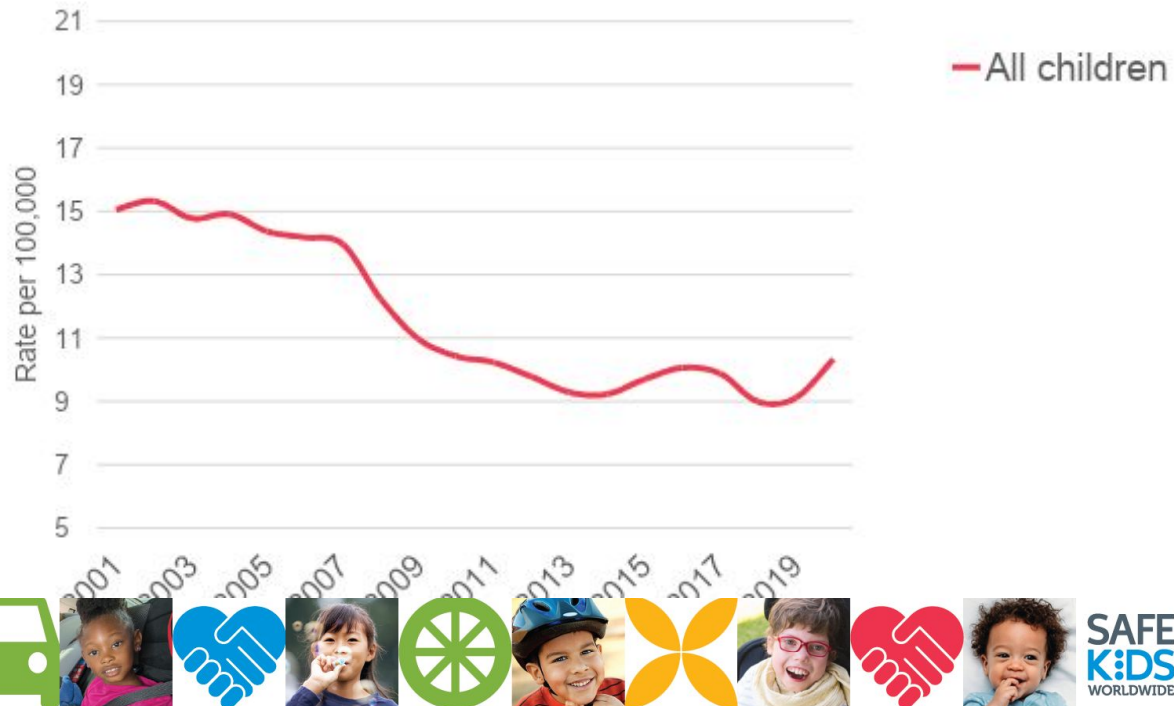
Leading Causes of Death, Ages 1-19 Years, 2020



Child Unintentional Injuries

For example, the fatal UI rate among children has decreased by 32% overall among children since 2001.

Fatal UI Rate by Race and Hispanic Origin, Ages 0-19 years, U.S., 2001-2020

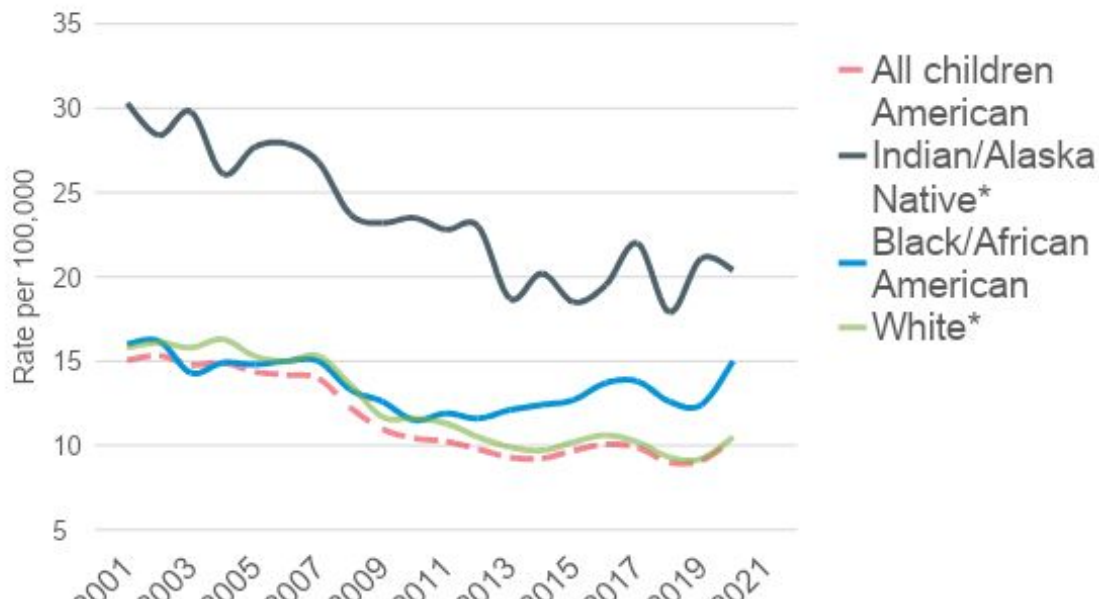


Child Unintentional Injuries

However, disparities still exist by race and ethnicity. The decrease has not been equal for all children.

National fatal UI data are limited in terms exploring social, demographic, and geographic differences in risk.

Fatal UI Rate by Race and Hispanic Origin, Ages 0-19 years, 2001-2020

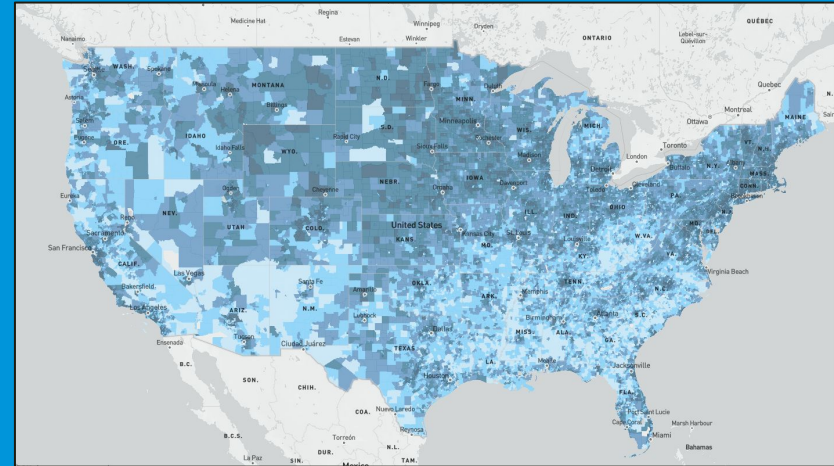


Child Wellbeing Indices

Existing indices have explored and mapped risk factors impacting child wellbeing at small geographic levels:

- The Children Opportunity Index
- The Social Deprivation Index
- The Community Resilience Estimates
- Risk Factors for Children in the US
- At-Risk Conditions of US School-Age Children

These indexes do not measure UI risk specifically.



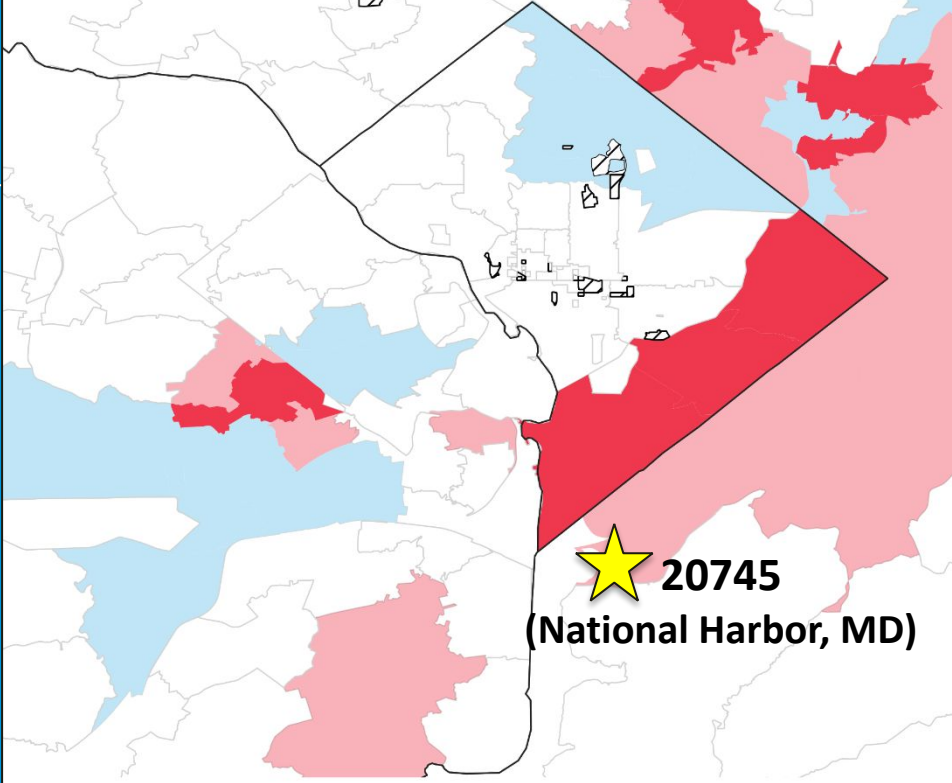
Child Opportunity Index



What is the Child Safety Index?

Safe Kids created the **Child Safety Index (CSI)** to measure the risk of unintentional injury death specifically among children at the ZIP Code Tabulation Area (ZCTA) Level.

Risk scores are weighted by community-level factors known to be associated with increased risk of child injuries.



Child UI Risk Level (ZCTA)

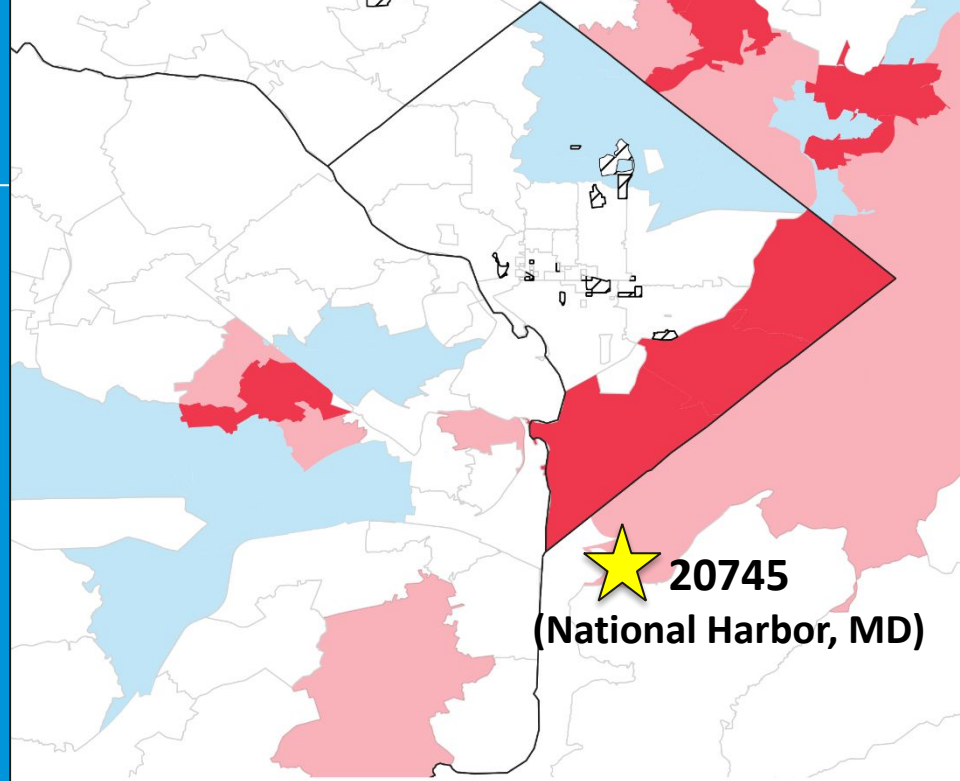
- Very high
- High
- Moderate
- Very low or low
- Score not available



Uses of the Index

Index helps to inform:

1. Strategic expansion of the SKW network;
2. Selection of locations for targeted programming; and
3. Identification locations and populations for formative research to increase SKW's understanding of risk and protective factors in marginalized and underserved groups.



Child UI Risk Level (ZCTA)

Very high

High

Moderate

Very low or low

Score not available



CSI Development Process



Population Characteristics Used for Score Calculation

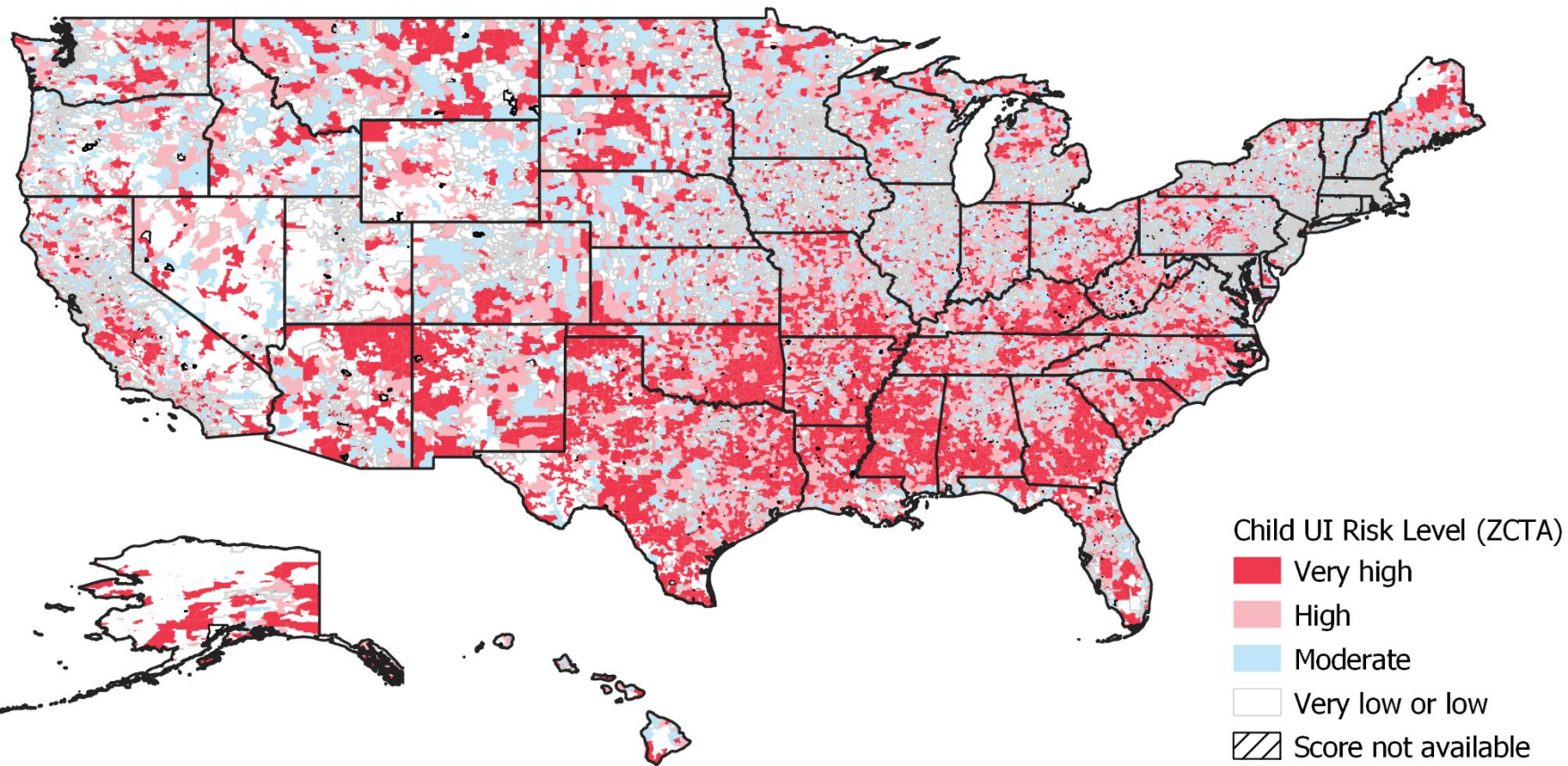
Independent Variable (population %)	Model Coefficient
Black or African American population	4.354
American Indian and Alaska Native population	5.237
Adults with high school or less education	13.772
Grandparents raising grandchildren	9.017
Children in poverty	6.875
Children living in rural (non-metro) areas	1.477
Children with no health insurance coverage	27.212
Crowded households (>1.00 person per unit)	58.273
Households with no internet access	12.001

Population Characteristics Used for Score

Calculation

		Example CSI Risk Score Calculation	
Independent Variable (population %)	Model Coefficient	Population % for 20745 National Harbor, MD	Coefficient multiplied by population %
Black or African American population	4.354	69%	3.009
American Indian and Alaska Native population	5.237	1%	0.031
Adults with high school or less education	13.772	48%	6.639
Grandparents raising grandchildren	9.017	10%	0.917
Children in poverty	6.875	13%	0.860
Children living in rural (non-metro) areas	1.477	0%	0.000
Children with no health insurance coverage	27.212	7%	1.987
Crowded households (>1.00 person per unit)	58.273	3%	2.030
Households with no internet access	12.001	18%	2.220
		Summed risk score <input type="checkbox"/>	17.692
		Risk category <input type="checkbox"/>	High risk

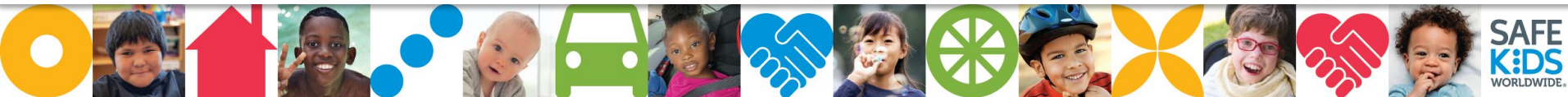
CSI Risk Scores, All ZCTAs



Sociodemographic Characteristics by Risk Level

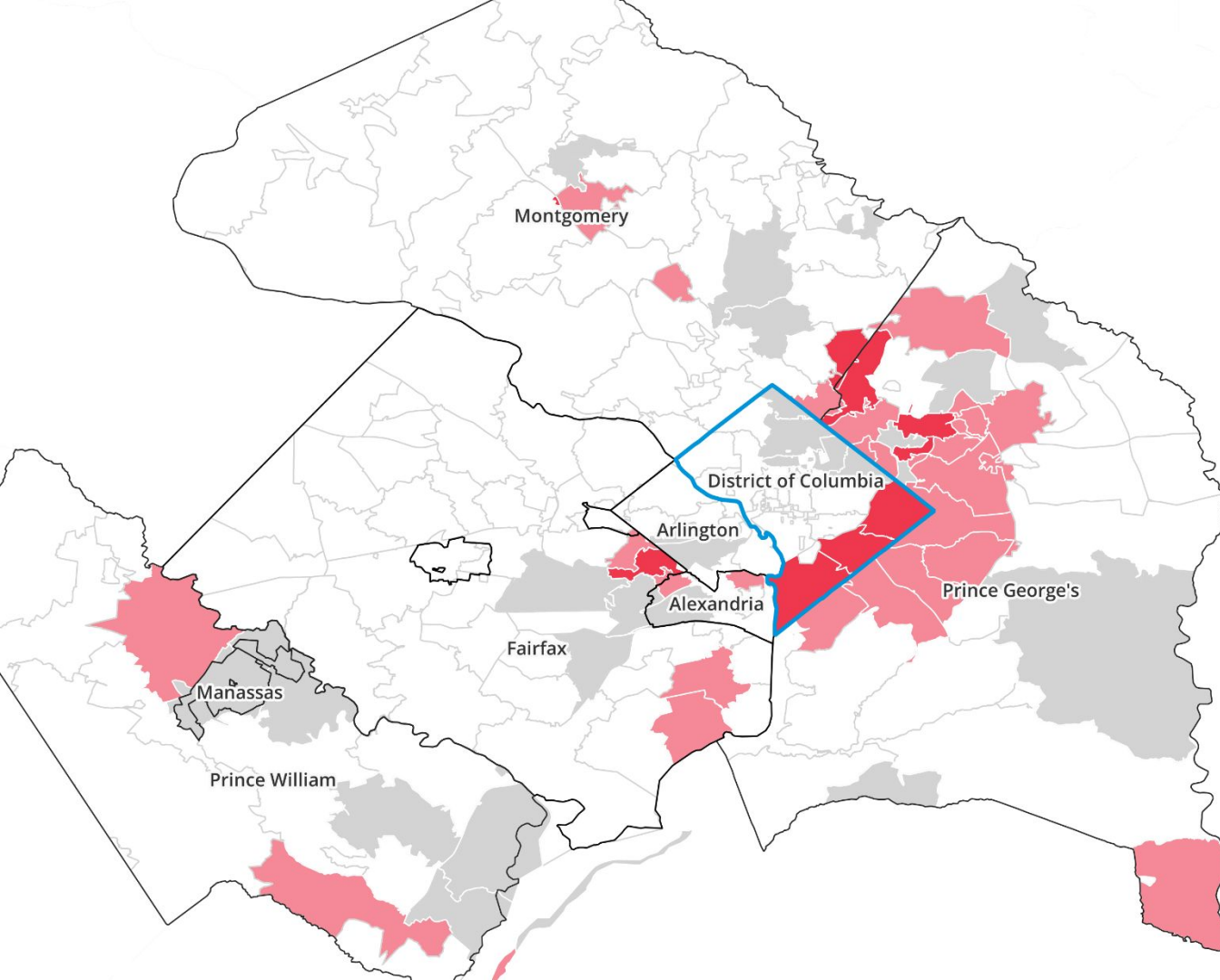
CSI Risk Category	Category ZCTA count	% of children in poverty	% of population high school or less education	% of population Black	% of population AIAN*	% of population Hispanic
Very low	5,788	6%	11%	8%	8%	10%
Low	6,100	12%	18%	14%	13%	15%
Moderate	6,779	19%	22%	19%	16%	18%
High	6,685	26%	24%	27%	21%	22%
Very high	7,469	37%	25%	32%	42%	35%
Total	32,821	100%	100%	100%	100%	100%

*American Indian/Alaska Native



Children's National
Hospital Primary
Service Counties

CSI Risk Level



CNH Primary Counties

199 ZCTAs

32 at Very High
or High Risk

**# of children in Very
High/ High Risk ZCTAs:**

251,590

(21% of total child
population)

Washington DC

CSI Risk Level

- Very High Risk
- High Risk
- Moderate Risk
- Very Low or Low Risk

DC

57 ZCTAs

3 at Very High Risk

**# of children in Very High/
High Risk ZCTAs:**

50,001
(34% of total child
population)

ZCTA: 20019

Very high risk

Select population characteristics

Child population (0-19 years): 18,535

% children in poverty: 40%

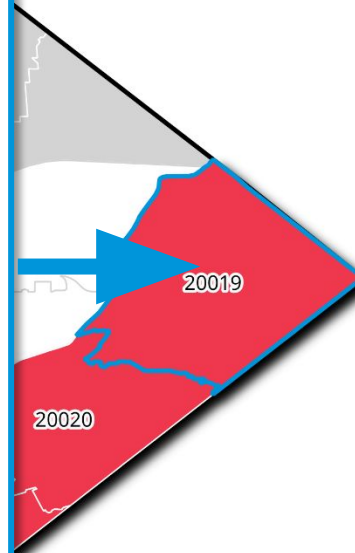
**% population high school education or less
education: 50%**

% population Black: 95%

% population Hispanic: 3%

Safe Kids Coalition:

Safe Kids DC



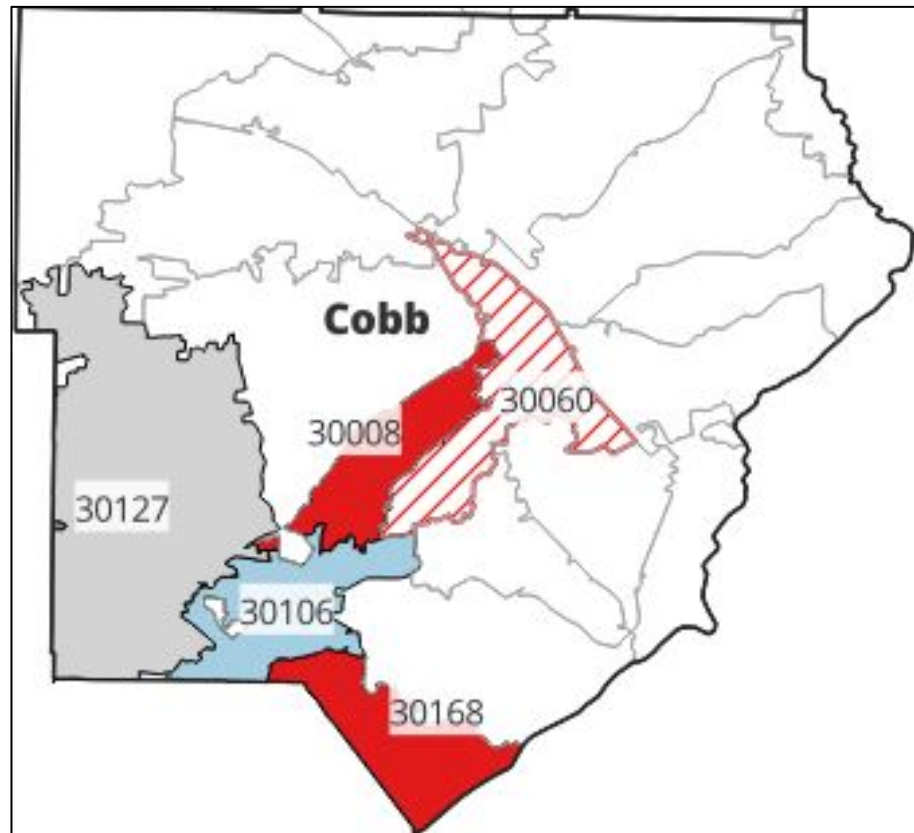
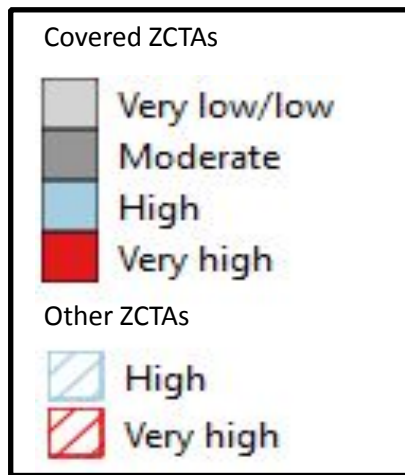
Georgia

SK Cobb Co.

5 ZCTAs covered, 3 (60%) are at high or very high-risk.

The CSI identified 1 additional ZCTA not covered that is at high or very high-risk.

Risk Level



23,986 children living in high or very high-risk ZCTAs currently covered by coalition:

ZCTA	Risk Category	Population 0-19 years	% of children in poverty	% of population high school or less education	% of population Black	% of population AIAN*	% of population Hispanic
30008	Very high	9,924	29%	42%	42%	0%	31%
30106	High	5,997	15%	36%	59%	0%	10%
30127	Low	19,905	8%	29%	43%	0%	10%
30141	Moderate	5,793	8%	37%	28%	0%	7%
30168	Very high	8,065	27%	39%	64%	0%	24%

11,941 children living in other high or very high-risk ZCTAs not covered by coalition:

30060	Very high	11,941	29%	48%	32%	0%	36%
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Potential to reach 35,927 total combined children living in high or very high-risk ZCTAs.

**American Indian/Alaska Native*

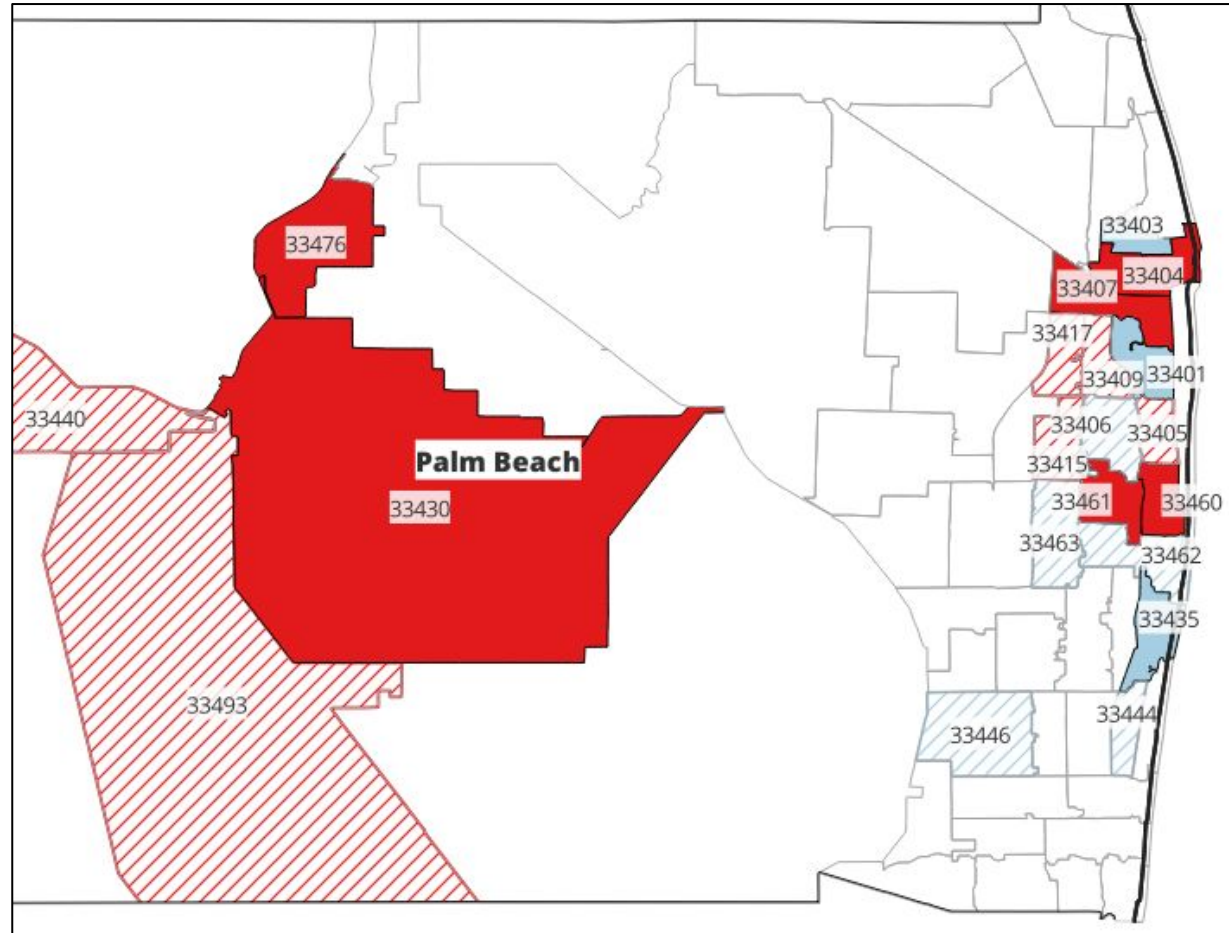
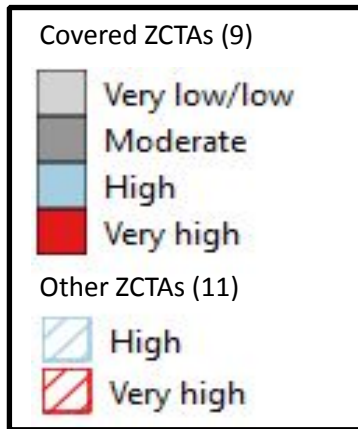
Florida

SK Palm Beach Co.

9 ZCTAs codes covered, 9 (100%) are at high or very high-risk.

The CSI identified 11 additional ZCTAs not covered that are at high or very high-risk.

Risk Level

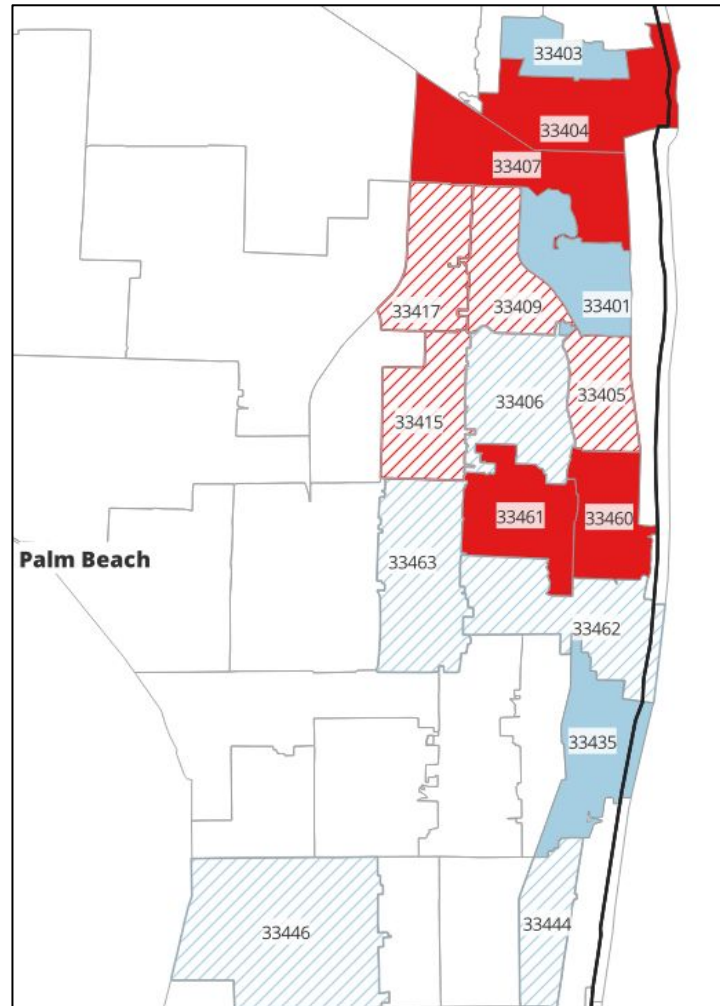
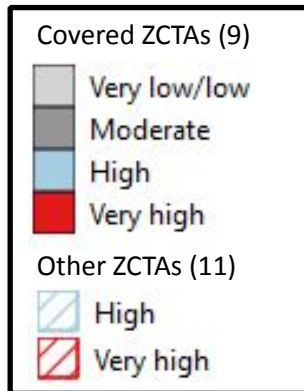


Florida

SK Palm Beach Co.

Zoom of Eastern Palm
Beach County

Risk Level



Next Steps

- Update the index with more recent data:
 - 2021 Census Population data
 - 2012-2021 CDC UI Death rates
- Explore regional
- Develop a data dashboard



Questions?

Mark Chandler, Senior Research Associate, Safe Kids Worldwide
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Map image source: diversitydatakids.org



Center for Fatality Review & Prevention

CHILD DYNAMIC ANALYSIS AND STATISTICS HUB (CHILD DASH) **LINKING DATA TO ACTION**

Telling Stories to Save Lives



KEY FUNDING PARTNER

FEDERAL ACKNOWLEDGEMENT

The National Center is funded in part by Cooperative Agreement Number 2 UG7MC28482-08-00 from the U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB) as part of an award totaling \$5,149,996 annually with 0 percent financed with non-governmental sources. Its contents are solely the responsibility of the authors 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.

Presenters

National Center for Fatality Review and Prevention



Sasha Mintz
Senior Epidemiologist



Esther Shaw
Senior Data Analyst



Overview and Benefits of Child DASH

Introducing Child DASH, the functions it serves, and benefits to using it.



Demonstration of Child DASH

Take a live look at the functionality of Child DASH as a user of the system.



Linking to Action

Highlighting examples of how users of Child DASH can link their data to action.



Future of Child DASH

What's up next for Child DASH?



Q&A

Time for discussion and additional questions



AGENDA



OVERVIEW

What is Child Death Review (CDR)?

Understanding Fatalities to Improve Safety

- Multidisciplinary, community-oriented process that brings together professionals to understand how and why children die.
- Illuminates where systems are successful in working together as well as opportunities for improvement.
- Uncovers disparities in how families are offered resources, access services and navigate



National Fatality Review-Case Reporting System

A National Tool for Child Death Review (CDR) and Fetal and Infant Mortality Review (FIMR) Teams

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.

CDR REPORT FORM

Version 6.0

National Fatality Review Case Reporting System

Data Entry Website: data.ncfrp.org

Phone: 800-656-2434

Email: info@ncfrp.org
ncfrp.org



@nationalcfrp



Overview

What is Child DASH?

- Child DASH is a data visualization website.
- Summarizes information from child death review (CDR) cases that are entered into the National Fatality Review-Case Reporting System (NFR-CRS) from participating states.
- Currently only available to state CDR programs and National Center partners.

The screenshot shows the website's navigation menu at the top with links for Index, Overview, Fire, Drowning, Motor Vehicle, Firearm, Poisoning, Suicide, Child Abuse, Child Neglect, Infant - All Causes, Infant - Sleep-Related, COVID-19, SUID, SDY, and Life Stressors. The main header reads "Child Dynamic Analysis and Statistics Hub (Child DASH): State". Below this is a grid of 14 dark grey buttons, each with a white label: Overview, Suicide, Fire, Child Abuse, Drowning, Child Neglect, Motor Vehicle, Infant - All Causes, Firearm, Infant - Sleep-Related, Poisoning, Deaths during the COVID-19 pandemic, SUID, and Life Stressors.

NATIONAL CFRP
Center for Fatality Review & Prevention

The Child Dynamic Analysis and Statistics Hub (Child DASH) summarizes information from CDR case reviews entered in the National Fatality Review-Case Reporting System (NFR-CRS) from 47 states. The NFR-CRS collects standardized data focused on cause-specific fatalities and individual and environmental risk and protective factors. States and jurisdictions select cases for reviews in different ways. **The data in the NFR-CRS are not population-level statistics.** Rather, they represent detailed information from cases selected for case reviews.

View a short video on using Child DASH <https://vimeo.com/693624101>
The Password is DASH

Equity Statement

Fatality review teams obtain information to provide context on the death of an infant, child, or adolescent. Social factors such as geography, access to education, experience with discrimination, trauma (including historical trauma), and access to physical and behavioral healthcare can contribute to premature mortality. Residential, educational, and occupational segregation impacts access to high-quality education, employment opportunities, healthy foods and physical and behavioral health care. Combined, these structural inequities have long lasting health impacts including adverse birth outcomes, infant mortality, as well as high rates of homicide, gun violence, and motor vehicle deaths. Learn more about fatality review and health equity. <https://www.ncfrc.org/resource-tag/health-equity/>

This dashboard was made possible in part by Cooperative Agreement Numbers UG7MC28482 from the US Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB) as part of an award totaling \$944,745 annually with 0 percent financed with non-governmental sources. Its contents are solely the responsibility of the authors and should not be construed as the official position or policy of, nor should any endorsements be

An Iterative Process

The Making of Child DASH

Implemented August 2021:

- Included 2004-2018 data on national dashboards.
- Launched with an initial set of dashboards: Overview, Child Abuse, Child Neglect, Drowning, Fire/Burn/Electrocution, Firearm, Motor Vehicle, Poisoning, Suicide, Infant All Causes, Infant Sleep-Related.

Implemented July 2022:

- Data Updates: Added data for reviews conducted through 5/11/2022 to state dashboards.
- Dashboard Updates: Added three new dashboards: Sudden Unexpected Infant Death (SUID), Sudden Death in the Young (SDY), and Life Stressors (state-level only).

Phase 1

Phase 2

Phase 3

Phase 4

Implemented March 2022:

- Data Updates: Added 2019 death data to national dashboards; Added data for reviews conducted through 12/31/2021 to state dashboards.
- Dashboard Updates: Added a new dashboard on Deaths During the COVID-19 Pandemic (state-level only).

Implemented July 2023:

- Data Updates: Added 2020 death data to national dashboards; Added data for reviews conducted through the 12/31/2022 to state dashboards.
- Dashboard Updates: Added 5 new dashboards: American Academy of Pediatrics (AAP) Safe Sleep, Housing, Location of Incident, Mental Health, and Substance Use.

Current Dashboards

Up to 20 Dashboards Available Depending on User

Cause of Death (all ages)	Infants	Circumstances
<ul style="list-style-type: none">• Overview• Child Abuse• Child Neglect• Drowning• Fire, Burn, or Electrocution• Firearm• Motor Vehicle• Poisoning• Sudden Death in the Young (SDY)• Suicide	<ul style="list-style-type: none">• AAP Safe Sleep• All Causes• Sleep-Related• Sudden Unexpected Infant Death (SUID)	<ul style="list-style-type: none">• Deaths During the COVID-19 Pandemic (<i>state-level only</i>)• Housing• Life Stressors (<i>state-level only</i>)• Location of Incident• Mental Health• Substance Use



Benefits

Using Child DASH to Inform Prevention

- Dynamic ability allows user to view data in a variety of ways.
- Can be used with partners to inform decision-making. For example:
 - Allocation of resources.
 - Leverage points for prevention policy and programs.
 - Opportunities for data quality improvement.
 - Research directions.



DEMONSTRATION & LINKING TO ACTION



Summary & Next Steps

What is the Future of Child DASH?

- Child DASH is a data visualization website currently available to state CDR programs and national partners.
- Data can be used to inform prevention policy, programs, and research directions.
- A regularly updated Child DASH User Guide is available to users, documenting complexities in the data and aiding interpretation.
- Future directions include developing topic-specific dashboards related to Fetal and Infant Mortality Review (FIMR) and making Child DASH public-facing in some capacity.

□ THANK YOU to our partners at Boulder Insight Group.



QUESTIONS?



CONTACT INFORMATION



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