

# Maternal and Child Health Strategies to Improve Outcomes in Rural Arizona

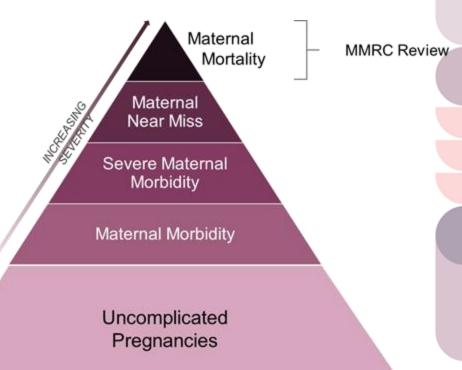
Presentation for the Arizona Rural Health Conference

June 5 2024



## **Arizona Maternal Mortality Review Program**

- Established by the Arizona Senate Bill 1121 on April 2011. Review of cases began July 2011.
- Awarded CDC's Enhancing Reviews and Surveillance to Eliminate Maternal Mortality (ERASE MM) in 2019
- Multidisciplinary team (i.e., MMRC)
   reviews cases of maternal mortality to
   identify preventative factors and
   produce recommendations for
   systems level changes.
- Currently reviewing 2021 deaths

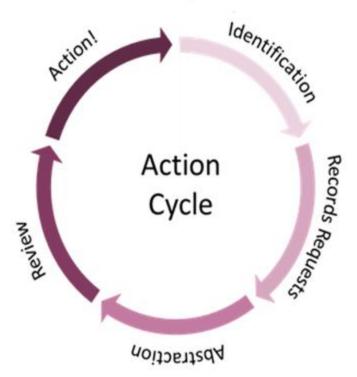




## Review to Action Cycle

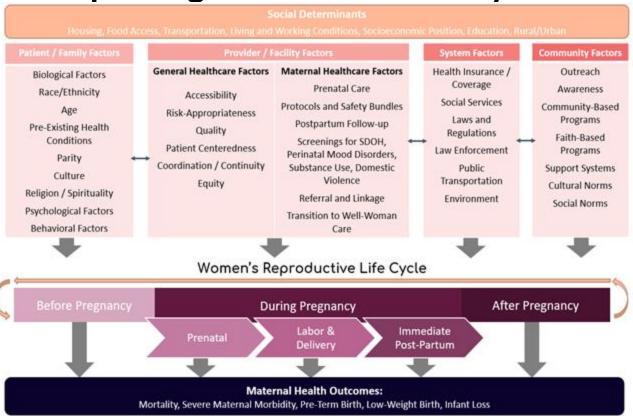
For every death, the MMRC aims to answer the following questions:

- Was the death pregnancy-related?
- What was the underlying cause of death?
- What are the contributing factors to the death?
- Was the death preventable?
- What specific and feasible actions might have changed the course of events (e.g., recommendations)?





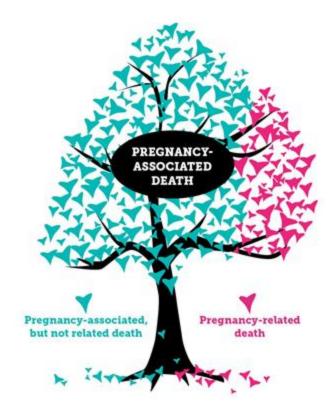
#### **Factors Impacting Maternal Mortality and Morbidity**



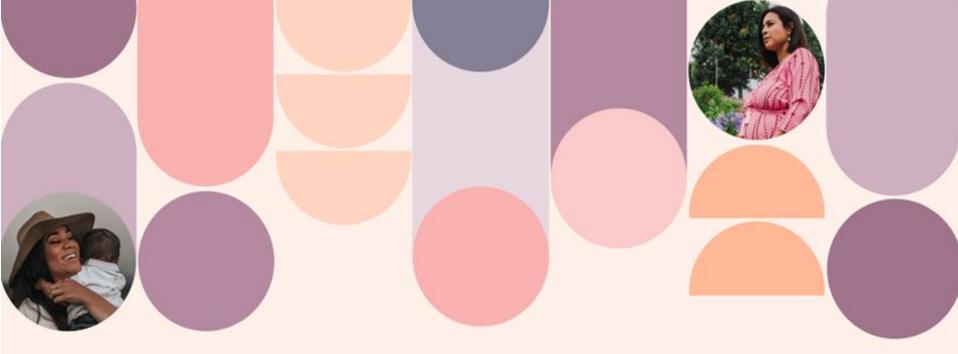


## **Maternal Mortality Terms**

- **Pregnancy-associated death:** A death that occurs during or within one year of pregnancy regardless of the outcome, duration, or site of the pregnancy.
- Pregnancy-related death: A death that occurs during or within one year of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy.
- Pregnancy-associated but NOT related death: A
  death that occurs during or within on year of
  pregnancy from a cause that is not related to
  pregnancy.

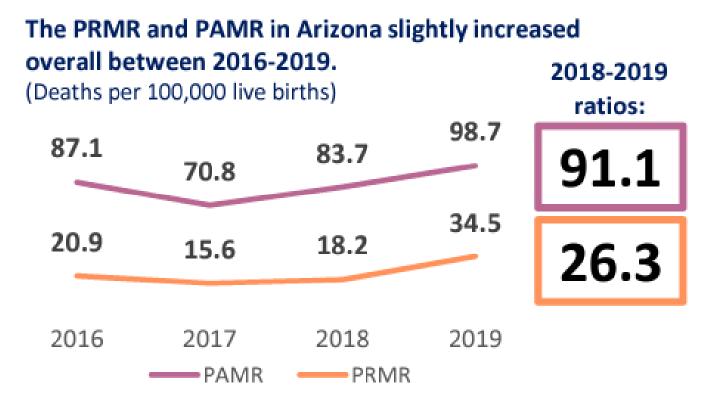






## Maternal Mortality (MM) Key Findings

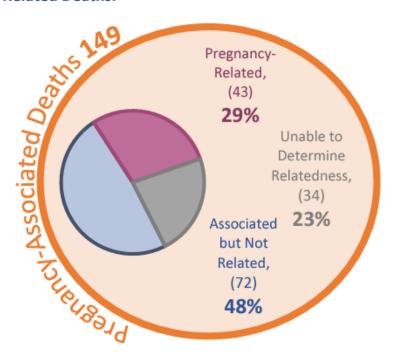




<sup>\*2016-2017</sup> data includes maternal deaths ages 15-49 years; 2018-2019 data includes maternal deaths ages 10-60 years.



Three (3) out of every 10 deaths of women within 365 days of pregnancy were determined to be Pregnancy-Related Deaths.



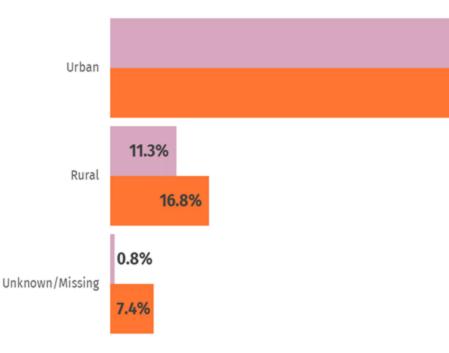
The Pregnancy-Associated Mortality Ratio in the Northern and Western Region of Arizona were the highest in the state. (Deaths per 100,000 live births)





## MM by Maternal Residence

Percent of Live Births to Women 15-49 Years of Age
 Percent of Pregnancy-Associated Deaths



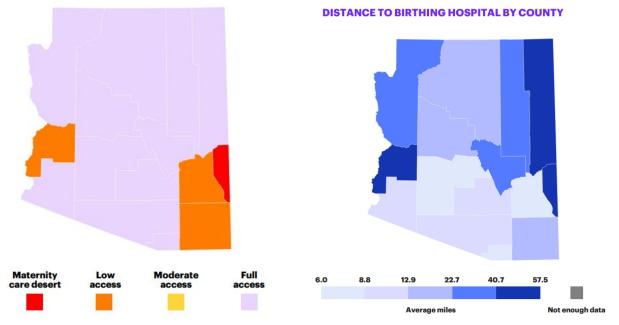
**Urban:** Maricopa, Pima, Pinal, Yuma **Rural:** Apache, Cochise, Gila, Graham, Greenlee, La Paz, Mohave, Navajo, Santa Cruz, Yavapai

87.9%

75.8%

	PAMR	PRMR	
Urban	81.5	39.0	
Rural	149.9	74.9	

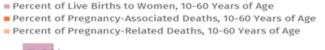


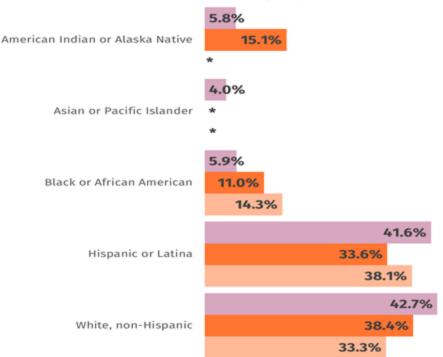


#### Definitions of maternity care deserts and access to maternity care

<b>D</b> efinitions	Maternity care deserts	Low access to maternity care	Moderate access to maternity care	Full access to maternity care*
Hospitals and birth centers offering obstetric care	zero	<2	<2	≥2
Obstetric Providers (obstetrician, family physician <sup>†</sup> , CNM/CM per 10,000 Births)	zero	<60	<60	≥60
Proportion of women 18-64 without health insurance	any	≥10%	<10%	any

## MM by Maternal Race and Ethnicity





American Indian/Alaska Native women exprienced the highest Pregnancy-Associated Mortality Ratio. (Deaths per 100,000 live births)

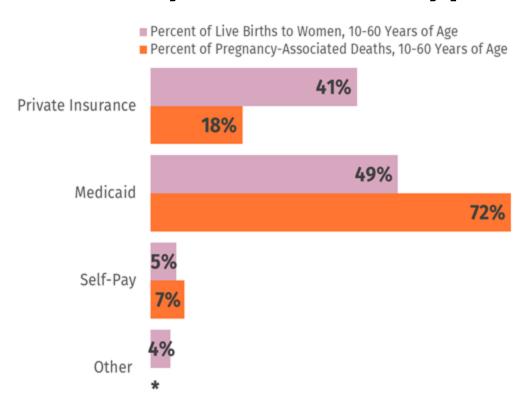


<sup>\*</sup>Suppressed due to figures less than 6.

(Misclassification bias may be present for cases &/or live births with multiple racial/ethinic identities. Please interpret data with caution.)

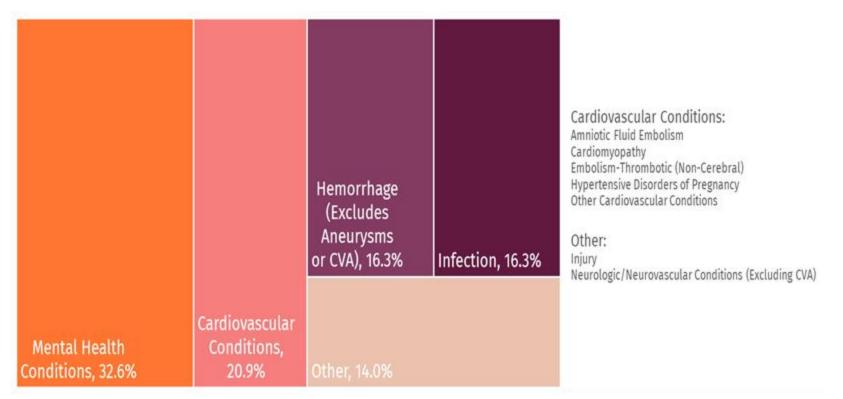


#### MM by Insurance Type





## MM by Primary Underlying Cause of Death





## MM by Preventability and Timing of Death

Pregnant

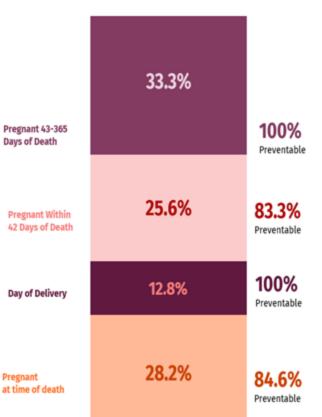
MMRC Reviewed **Pregnancy-Related** Deaths in Arizona of Persons 10-60 Years Old, 2018-2019 (n=43)

90.7% Of all Pregnancy-Related Deaths were Preventable

Among All Preventable Pregnancy-Related Deaths:

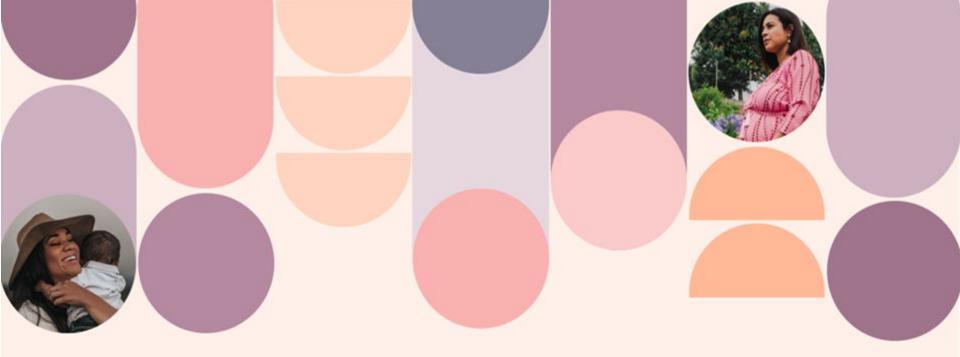


<sup>\*</sup> Suppressed value <6





<sup>^</sup> Unable to Determine, 4.5%



## Recommendations to Improve Maternal Health Outcomes



## **MMRC's Top Recommendations**

- 1. Establish continuity of care to ensure timely care coordination between appropriate **healthcare providers** (on or offsite) and wraparound services for the family to address social determinants of health.
- 2. Increase adoption of trauma- and culturally-informed practices for providers... includes the appropriate level of support, navigation, counseling and dialogue with patients and their families.
- 3. Increase access to high quality mental and behavioral health services and resources that are affordable, trauma-informed, and supportive of the family unit.
- 4. **Expand insurance coverage** to provide adequate, timely, and value-based reimbursement mechanisms for the range of maternal health services beyond one year postpartum. (Ramirez et al., 2024)

## **MMRC's Top Recommendations**

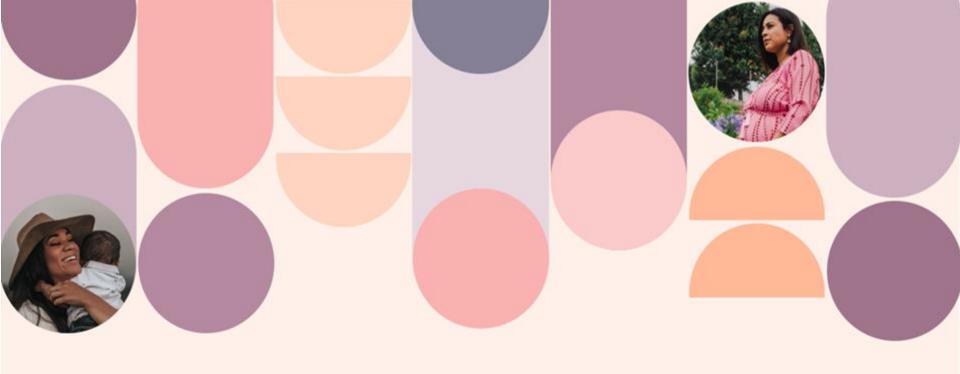
- 5. **Ensure providers in all settings are screening pregnant persons and their partners** before, during, and after pregnancy or adoption for Domestic Violence, Mental Illness, Substance Use Disorder, and Adverse Childhood Experiences.
- 6. **Increase provider education about the perinatal period...** by securing funding for and requiring or incentivizing participation in continuing education classes.
- 7. **Improve access to the full range of reproductive health services** including contraceptives.
- 8. **Ensure facilities have adequate infrastructure, protocols, and procedures** to improve readiness, prevention, recognition and response to obstetric emergencies.

#### **Additional MMRC Recommendation**

Improve access to healthcare for people of reproductive age including prenatal and postpartum care, mental and behavioral health care, emergency care, specialty care, and Substance Use Disorder treatment.

Strategies to improve access to healthcare:

- Increase the number of culturally-congruent providers in underserved areas
- Ensure the affordability and accessibility of prescription medications
- Expand options for healthcare delivery (e.g., mobile units, group care, telehealth, birth centers)
- Improve broadband and cell phone coverage across the state
- Address underlying barriers through case management



## For more information...



## How to get involved in Arizona's MMRC

- Email <u>aubrianna.perez@azdhs.gov</u> to indicate your interest
- Submit your application by June 26<sup>th</sup> 2024
- Applicants will be notified by July 1<sup>st</sup>
- Virtual orientation in July
- In-person meeting July 25<sup>th</sup> & 26<sup>th</sup>
- Virtual monthly meetings on 1<sup>st</sup> or 2<sup>nd</sup> Monday of the month
   7:45am-11:15am
- Associate member primary role: inform recommendations!



Arizona Maternal Mortality Reports and Infographics

- Maternal Mortality in Arizona, 2018-2019
- Maternal Mental Health and Substance Use Related Deaths in Arizona, 2016-2018
- Maternal Mortality and Severe Maternal
   Morbidity in Arizona, 2016-2019



maternalhealth@azdhs.gov http://azdhs.gov/maternalhealth



#### **National MMRC Data**

- Pregnancy-Related Deaths: Data from Maternal Mortality Review Committees in 38 U.S. States, 2020 https://www.cdc.gov/maternal-mortality/php/data-research/2020-mmrc.html
- Pregnancy-Related Deaths: Data from Maternal Mortality Review Committees in 36 US States, 2017-2019
   <a href="https://www.cdc.gov/reproductivehealth/maternal-mortality/erase-mm/data-mmrc.html">https://www.cdc.gov/reproductivehealth/maternal-mortality/erase-mm/data-mmrc.html</a>
- Pregnancy-Related Deaths Among American Indian or Alaska Native Persons: Data from Maternal Mortality Review Committees in 36 US States, 2017-2019
   <a href="https://www.cdc.gov/reproductivehealth/maternal-mortality/erase-mm/data-mmrc-aian.html">https://www.cdc.gov/reproductivehealth/maternal-mortality/erase-mm/data-mmrc-aian.html</a>
- Circumstances Contributing to Pregnancy-Related Deaths: Data from Maternal Mortality Review Committees in 36 US States, 2017-2019 <a href="https://www.cdc.gov/reproductivehealth/maternal-mortality/erase-mm/data-mmrc-circumstances.html">https://www.cdc.gov/reproductivehealth/maternal-mortality/erase-mm/data-mmrc-circumstances.html</a>



#### Resources

## **Arizona Perinatal Psychiatry Access Line**

APAL is a statewide perinatal psychiatry access line. We assist **medical providers** in caring for their pregnant and postpartum patients with mental health and substance use disorders.

Perinatal psychiatrists are available by phone, **Monday-Friday, from 8:30 a.m.-4:30 p.m.**, to answer provider questions and review treatment options.

Call 888-290-1336

#### **National Maternal Mental Health Hotline**

1-833-TLC-MAMA (1-833-852-6262)



4222





Resources are available if you're a mother struggling with substance use disorder.



"I feel agitated and on edge all the time."

#### **Know the Signs**

Maternal Mental Health Conditions can happen to anyone. If you're not feeling like yourself, reach out to your doctor or call or text the National Maternal Mental Health Hotline:

1-833-9-HELPAMOMS.



1.800.944.4773



psidirectory.com/arizona

CERTIFICATION IN PERINATAL MENTAL HEALTH





ARIZONA DEPARTMENT OF HEALTH SERVICES

#### References

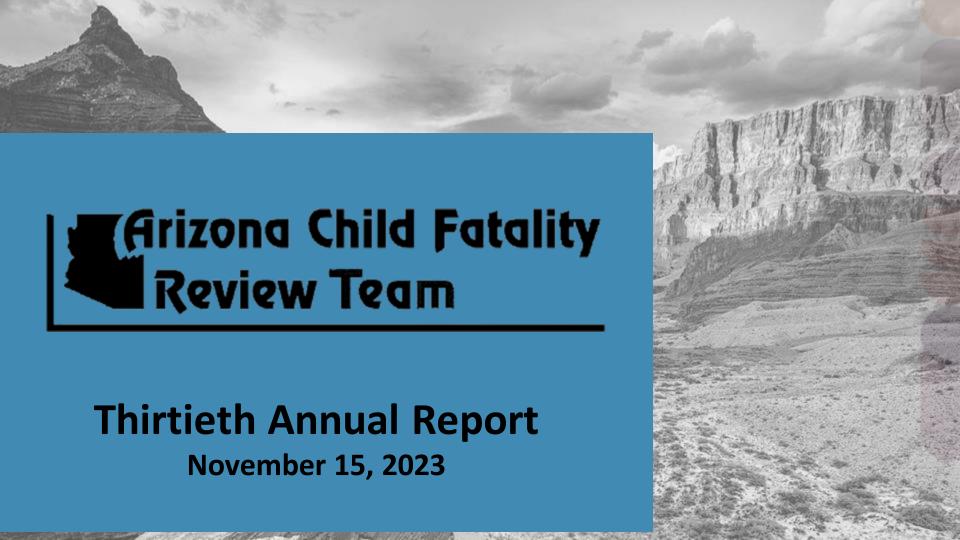
Fontenot, J, Lucas, R, Stoneburner, A, Brigance, C, Hubbard, K, Jones, E, Mishkin, K. Where You Live Matters: Maternity Care Deserts and the Crisis of Access and Equity in Arizona. March of Dimes. 2023.

Ramirez, GM, Davidson, S, Perez, A, Glidden, M, Rubio, V, Rouamba, A, Celaya, M. Maternal Mortality in Arizona, 2018-2019. Phoenix, AZ: Arizona Department of Health Services; 2024.

Trost SL, Busacker A, Leonard M, et al. Pregnancy-Related Deaths: Data from Maternal Mortality Review Committees in 38 U.S. States, 2020. Centers for Disease Control and Prevention, U.S. Department of Health and Human Services; 2024

Trost SL, Beauregard J, Njie F, et al. Pregnancy-Related Deaths: Data from Maternal Mortality Review Committees in 36 US States, 2017-2019. Atlanta, GA: Centers for Disease Control and Prevention, US Department of Health and Human Services; 2022.







The unexpected death of a child is a tragedy and a devastating loss for family, friends and the greater community. Despite the heartbreak, a child's death can bring a small measure of meaning to other children at risk when it is carefully examined to better understand **how** and **why** it happened with the intent to **prevent** future deaths and **improve** the health and safety of all children.

It is with deepest sympathy and respect that we dedicate the work of the CFRP, local review teams, and the state team to the memory of those children and families represented in the data.

Content Warning: Today's presentation contains material that might be difficult to discuss.

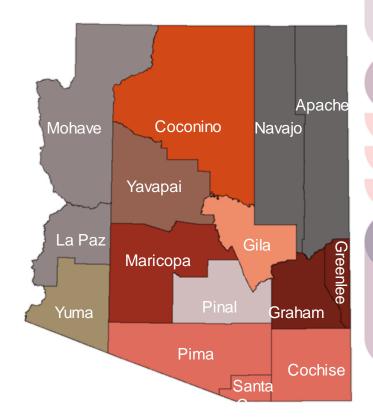


## Review Team

Legislation was passed in 1993 (A.R.S. § 36-342, 36-3501) authorizing the creation of the CFR Program.

The Arizona Child Fatality Review (CFR) Program was established to review all possible factors surrounding a child's death.

The program's mission is to reduce preventable child fatalities in Arizona through a systematic, multi-disciplinary, multi-agency, and multi-modality review process. Prevention strategies, interdisciplinary training, community-based education, and data-driven recommendations are derived from the annual report to aid legislation and public policy.





\*Same color in map = Same review team

#### **Preventability**

A child's death is considered preventable if the community (education, legislation, etc.) or an individual could reasonably have done something that would have changed the circumstances that led to the child's death.

#### Prevention Recommendation Process

#### Local Review Team

Summary Findings and recommendations are mined for each review team across all child deaths.

#### Literature Review

The Program reviews summary findings and local recommednations to conduct a specialized literature reivew to identify evidence-based recommendations.

#### State Review Team

The State Review Team reviews recommendations from the local review teams and literature review. The State Team can add, amend, or replace recommendations.

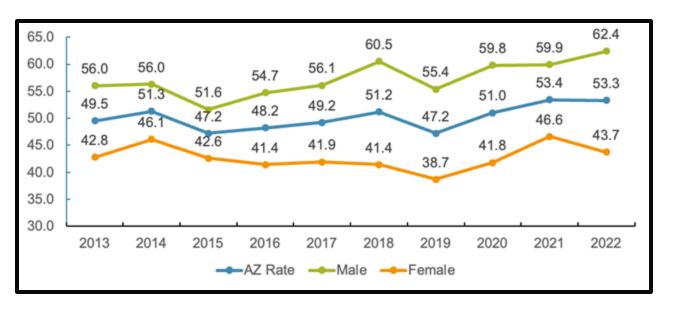
#### Final Set of Prevention Recommendations

Prior to publication an internal review of the final set of recommendations is done for clarity and relevance.



#### 875 Child Deaths in 2022

#### 45% of Child Deaths were Preventable





#### Number and Percentage of Deaths among Children by Residency

Residency	Number	Percent
Arizona Urban Counties	724	83%
Arizona Rural Counties	124	14%
Out of State	27	3%



Top 5 Leading Causes of Death by Age Group, Ages 0-17 Years, Arizona, 2022

	1	2	3	4	5
<b>0-27 Days</b> Prematurity (n = 187)		Congenital Anomaly (n = 70)	Cardiovascular (n = 16)	Other Perinatal Condition (n = 13)	Other Medical Condition (n = 8)
28 Days - <1 Year Suffocation (n = 164) (n = 55)		Congenital Anomaly (n = 27)	Prematurity (n = 19)	Undetermined (n = 15)	Cardiovascular (n = 13)
1-4 years (n = 101)	Drowning (n = 24)	Motor Vehicle Crash (n = 10)	Congenital Anomaly (n = 8)	Poisoning (n = 8)	Cancer (n = 7)
5-9 Years (n = 53)	Motor Vehicle Crash (n = 16)	Cancer (n = 8)	Neurological/ Seizure Disorder (n = 7)	Firearm Injury (n < 6)	Congenital Anomaly (n < 6)
<b>10-14 Years</b> (n = <b>76</b> ) Motor Vehicle Crass (n = 18)		Firearm Injury (n = 9)	Cancer (n = 8)	Neurological/ Seizure Disorder (n = 7)	Poisoning & Congenital Anomaly (n < 6)
15-17 Years (n = 166)	Firearm Injury (n = 44)	Motor Vehicle Crash (n = 32)	Poisoning (n = 28)	Strangulation (n = 17)	Cancer (n = 15)
All Deaths (N = 875)	Prematurity (n = 208)	Congenital Anomaly (n = 115)	Motor Vehicle Crash (n = 81)	Suffocation (n = 61)	Firearm Injury (n = 59)

## Leading Risk Factors of Infant Death by Urban/Rural, Less than 1 Year of Age, Arizona and Out of State, 2022

Infant Deaths (n = 479)	Low Birthweight (63%)	Poverty (59%)	Parent Substance Use History (20%)	Maternal Infection (14%)	Exposure to Substances in Utero (12%)
Rural (n = 73)	Poverty (66%)	Low Birthweight (53%)	Parent Substance Use History (40%)	Maternal Infection (29%)	Exposure to Substances in Utero (25%)
Urban (n = 406)	Low Birthweight (64%)	Poverty (57%)	Parent Substance Use History (17%)	Unsafe Sleep Environment (14%)	CPS History with Family (14%)
Location	Lea 1	ading Risk Facto 2	ors of Infant Death, Less 3	than 1 Year of A	ge* 5

<sup>\*</sup>More than one risk factor may have been identified for each death.



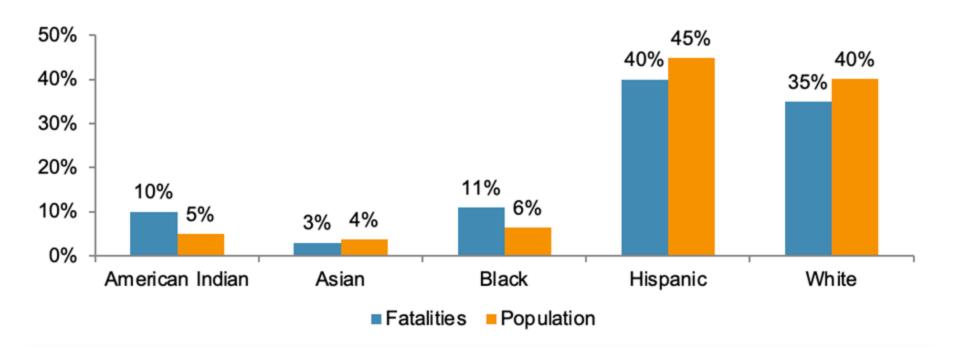
## Leading Risk Factors of Child Death by Urban/Rural, Ages 1-17 years, Arizona and Out of State, 2022

Location	46	Leading Risk F	(C)		
	1	2	3	4	5
Urban (n = 335)	Chronic Condition (47%)	CPS History with Family (44%)	Substance Use (30%)	History of Trauma/ Violence (27%)	Parent Substance Use History (25%)
Rural (n = 61)	Chronic Condition (41%)	Child Relationships (36%)	CPS History with Family (34%)	Poverty (33%)	Parent Substance Use History (33%)
Ages 1-17 Deaths (n = 396)	Chronic Condition (46%)	CPS History with Family (42%)	Substance Use (30%)	History of Trauma/ Violence (27%)	Parent Substance Use History (26%)

<sup>\*</sup>More than one risk factor may have been identified for each death.

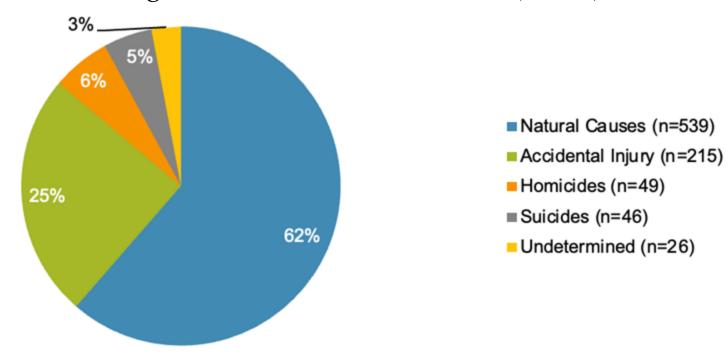


## Percentage of Deaths among Children by Race/Ethnicity, Compared to the Population, Ages 0-17 Years, Arizona, 2022 (n=875)





## Number and Percentage of Deaths among Children by Manner of Death, Ages 0-17 Years, Arizona, 2022 (n=875)





### Manners and Causes of Death



### Prematurity Deaths

#	There were 208 prematurity deaths in 2022, 24% of all child deaths.
<b>↓</b> ↑	The prematurity death rate increased 1% from 26.0 deaths per 1,000 premature births in 2021 to 26.3 deaths per 1,000 premature births in 2022.
Z	12% of prematurity deaths were preventable.
<u>  =                                   </u>	#1 Cause: Prematurity (n=182). #2 Cause: Perinatal Condition (n=26).
Q.D	Of the prematurity deaths, 62% were male and 38% were female.
	Black and Hispanic children were disproportionately affected. Black children made up 14% of prematurity deaths but only 8% of the premature population. Additionally, Hispanic children made up 47% of prematurity deaths but only made up 42% of premature births.
$\triangle$	#1 Risk Factor: Poverty (57%). #2 Risk Factor: Premature Rupture of Membranes (PROM) (37%). #3 Risk Factor: Preterm Labor (23%).



#### Infectious Disease-Related Deaths

#	There were 87 infectious disease-related deaths in 2022, 10% of all child deaths.
Z	21% of infectious disease-related deaths were preventable.
<u>»</u>	#1 Cause: Other Infections (n=32) #2 Cause: COVID-19 (n=17) #3 Cause: Prematurity (n=17)
9.XO	Of the infectious disease-related deaths, 54% were male and 46% were female.
Age	56% of infectious disease-related deaths occurred in infants (less than 1 year of age).
	American Indian children were disproportionately affected. American Indian children made up 16% of infectious disease-related deaths but only 5% of the total population.
$\triangle$	#1 Risk Factor: Poverty (47%). #2 Risk Factor: Chronic Disability/Illness (36%). #3 Risk Factor: Maternal Infection (26%).



### Congenital Syphilis Deaths

Nationally, congenital syphilis-related deaths have increased 464% since 2001 with 220 congenital syphilis-related stillborn and infant deaths in 2021.

In Arizona, the CFRP identified 11 cases with congenital syphilis, nine of which were related to death. This is a much higher number than previous years (n < 6). The Arizona Congenital Syphilis mortality rate was 0.12 deaths per 1,000 live births in 2022.



### Sudden Unexpected Infant Death (SUID)

6% of the live birth population. Similarly, American Indian children made up 14% of SUIDs but only 5% of the live

in

only

Sudden Onexpected Infant Death (501D)		
#	There were 74 SUIDs in 2022, 8% of all child deaths.	
<b>↓</b> ↑	The SUID rate increased 13% from 0.82 deaths per 1,000 live births in 2021 to 0.92 deaths per 1,000 live births in 2022.	
S	96% of SUIDs were preventable.	
<u>»</u>	#1 Cause: Suffocation (n=58). #2 Cause: Undetermined causes (n=15). #3 Cause: Other Causes (n<6)	
$Q_{\infty}^{\times}$	Of the SUIDs, 61% were male and 39% were female.	
Age	7% of SUIDs occurred in neonates (infants less than 28 days). 93% of SUIDs occurred in post-neonates (infants 28 days and older but less than 1 year of age).	
ΔÎΔ	Black and American Indian children were disproportionately affected. Black children made up 14% of SUIDs but	

#1 Risk Factor: Unsafe Sleep Environment (n=72)
#2 Risk Factor: Objects in Sleep Environment (n=62)
#3 Risk Factor: Unsafe Sleep Location (n=59)

birth population.

### Suicides

#	There were 46 suicides in 2022, 5% of all child deaths.
<b>↓</b> ↑	The suicide death rate increased 0.6% from 5.9 deaths per 100,000 children, aged 10-17, in 2021, to 5.9 per 100,000 children, aged 10-17, in 2022.
Z	100% of suicides were preventable.
<u>                                      </u>	#1 Cause: Strangulation (n=21) #2 Cause: Firearm Injury (n=16) #3 Cause: Poisoning (n=7)
9.00	Of the suicides, 69% were male and 31% were female.*
Age	82% of suicides occurred in children ages 15-17 years.*
	White children were disproportionately affected. White children made up 49% of suicides but only 41% of the total population.*
<u> </u>	#1 Risk Factor: Recent Warning Signs (80%) #2 Risk Factor: Child Relationship Issues (70%) #3 Risk Factor: Child's Mental Health/Substance Use Disorder (59%)



### Drowning Deaths

#	There were 30 drowning deaths, 3% of all child deaths.
<b>↓</b> ↑	The drowning death rate decreased 33% from 2.7 deaths per 100,000 children in 2021 to 1.8 deaths per 100,000 children in 2022.
Z	100% of drowning deaths were preventable.
<u>~~</u>	Of the drowning deaths, 67% were male and 33% were female.
Age	83% of drowning deaths occured in children less than 5 years of age.
	Black children were disproportionately affected Black children made up 27% of drowning deaths but only 6% of the total population.
$\triangle$	#1 Risk Factor: Lack of Supervision (97%). #2 Risk Factor: Unable to Swim (57%). #3 Risk Factor: Lack of Pool Barrier (43%).

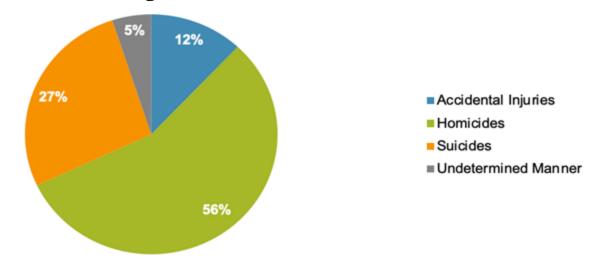


### Firearm Injury Deaths

#	There were 59 firearm injury deaths in 2022, 7% of all child deaths.
<b>↓</b> ↑	The firearm injury death rate increased 4% from 3.5 deaths per 100,000 children in 2021 to 3.6 deaths per 100,000 children in 2022.
S	100% of firearm injury deaths were preventable.
930	Of the firearm injury deaths, 81% were male and 19% were female.
Age	75% of firearm injury deaths occurred in children ages 15-17 years.
	Black and American Indian children were disproportionately affected. Black children made up 14% of firearm injury deaths but only 6% of the total population. Similarly, American Indian children made up 10% of firearm injury deaths but only 5% of the total population.
$\triangle$	#1 Risk Factor: Access to Firearms (100%). #2 Risk Factor: Firearm not Stored Properly (66%). #3 Risk Factor: CPS History with Family (63%).



### Percentage of Firearm Injury Deaths among Children by Manner of Death, Ages 0-17 Years, Arizona, 2022 (n=59)



Location*	Number	Percent
Child's Home	24	41%
Other Location (i.e., roads, sidewalks, etc.)	24	41%
Friend/Relative Home	12	20%
*More than one location may have been identified for e	each death	

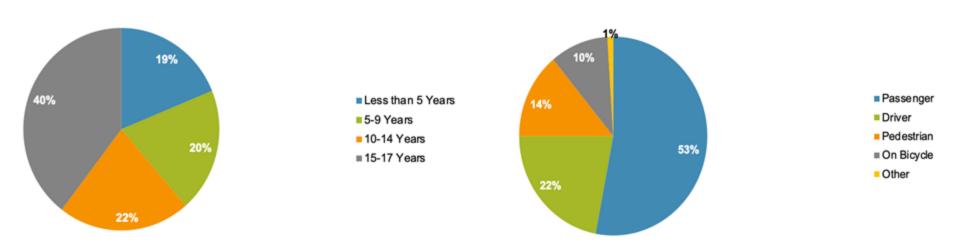


### Motor Vehicle Crash (MVC) Related-Deaths

#	There were 81 MVC related-deaths in 2022, 9% of all child deaths.
<b>↓</b> ↑	The MVC related-death rate increased 11% from 4.5 deaths per 100,000 children in 2021 to 4.9 deaths per 100,000 children in 2022.
S	100% of MVC related-deaths were preventable.
90	Of the MVC related-deaths, 64% were male and 36% were female.
Age	40% of MVC deaths occured in children ages 15-17 years.
	American Indian children were disproportionately affected. American Indian children made up 15% of MVC related-deaths but only 5% of the total population.
$\triangle$	#1 Risk Factor: Lack of Restraint (51%). #2 Risk Factor: Family History of Maltreatment (38%). #3 Risk Factor: Reckless Driving (37%).



Percentage of Motor Vehicle Crash Related-Deaths among Children by Age Group, Ages 0-17 Years, Arizona, 2022 (n=81) Percentage of Motor Vehicle Crash Related-Deaths among Children by Position, Ages 0-17 Years, Arizona, 2022 (n=81)





### Neglect/Abuse Deaths

#	There were 146 neglect/abuse deaths in 2022, 17% of all child deaths. 90% of neglect/abuse deaths were classified as neglect or neglect and abuse.
<b>↓</b> ↑	The neglect/abuse death rate increased 12% from 7.9 deaths per 100,000 children in 2021 to 8.9 deaths per 100,000 children in 2022.
Z	100% of neglect/abuse deaths were preventable.
<u>=</u>	#1 Cause: Suffocation (n=44) #2 Cause: Drowning (n=15) #3 Cause: Prematurity (n=15)
Q.X	Of the neglect/abuse deaths, 59% were male and 41% were female.
Age	60% of neglect/abuse deaths occurred in infants (less than 1 year of age).
	Black and American Indian children were disproportionately affected. Black children made up 18% of neglect/abuse deaths but only 6% of the total population. Similarly, American Indian children made up 23% of neglect/abuse deaths but only 5% of the total population.
$\triangle$	#1 Risk Factor: Parent Substance Use History (67%). #2 Risk Factor: Poverty (62%). #3 Risk Factor: CPS History with Family (59%).

# Number and Percentage of Substance Type Identified in Neglect/Abuse Deaths among Children, Ages 0-17 Years, Arizona, 2022

Substance Type**	Number	Percent
Marijuana	27	18%
Methamphetamine	25	17%
Opioid	25	17%
Alcohol	24	16%
Other (i.e., prescription drugs, cocaine)	*	*

<sup>\*</sup>Number/Percentage suppressed due to count less than 6.

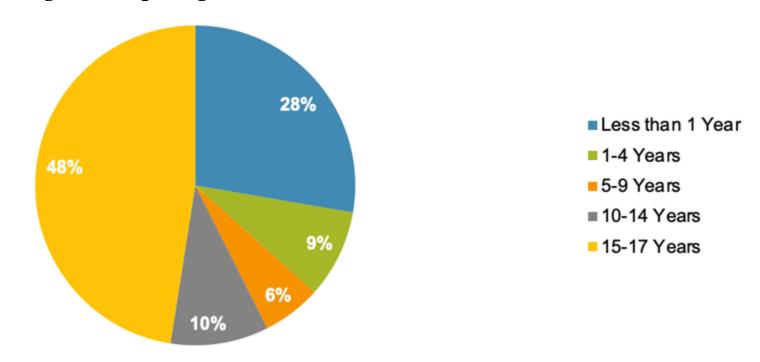


<sup>\*\*</sup>More than one substance may have contributed to each death.

#### Substance Use Related-Deaths

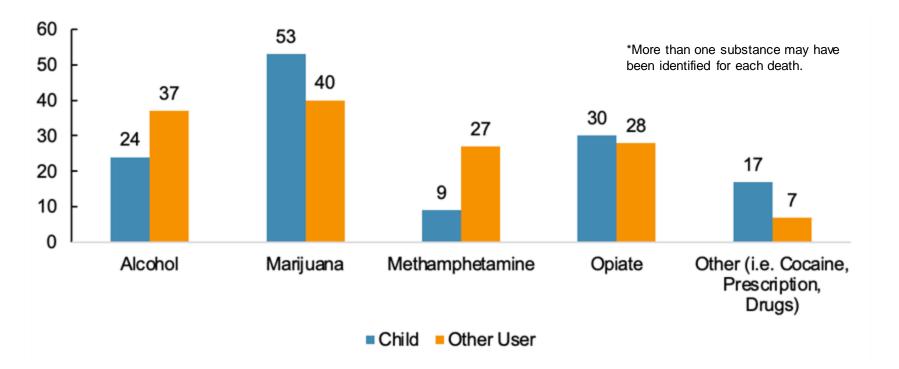
#	There were 163 substance use-related deaths in 2022, 19% of all child deaths.
<b>↓</b> ↑	The substance use-related death rate decreased 9% from 10.9 deaths per 100,000 children in 2021 to 9.9 deaths per 100,000 children in 2022.
S	100% of substance use-related deaths were preventable.
<u>=</u>	#1 Cause: Poisoning (n=41). #2 Cause: Firearm Injury (n=31). #3 Cause: Motor Vehicle Crash (n=26).
Q <del>X</del> O	Of the substance use-related deaths, 67% were male and 33% were female.
Age	48% of substance use-related deaths occured in children ages 15-17 years.
	Black and American Indian children were disproportionately affected. Black children made up 12% of substance use-related deaths but only 6% of the total population. Similarly, American Indian children made up 16% of substance use-related deaths but only 5% of the total population.
$\triangle$	#1 Risk Factor: CPS History with Family (63%). #2 Risk Factor: Parent Substance Use History (56%). #3 Risk Factor: Poverty (40%).
8	Of the 41 poisoning deaths, 34 were opiate overdoses and fentanyl was responsible for all of the opiate poisonings. Of the 34 fentanyl poisonings, 8 were among children less than 5 years of age.

## Percentage of Substance Use Related-Deaths among Children by Age Group, Ages 0-17 Years, Arizona, 2022 (n=163)





Number of Substances Found as a Contributing Factor to the Death of a Child by Deceased Child or Other User, Ages 0-17 Years, Arizona, 2022\*





### 2022 County Infographics







### 30<sup>th</sup> Annual Report



Questions? Email Morgan.Anderson@azdhs.gov

