Child Fatalities: Now what happens?

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Changing What's Possible

Disclosures

- No financial disclosures.
- My content will not include discussion/ reference of any commercial medical products or services.
- I do not intend to discuss unapproved/investigative use of commercial products/ devices.

Objectives

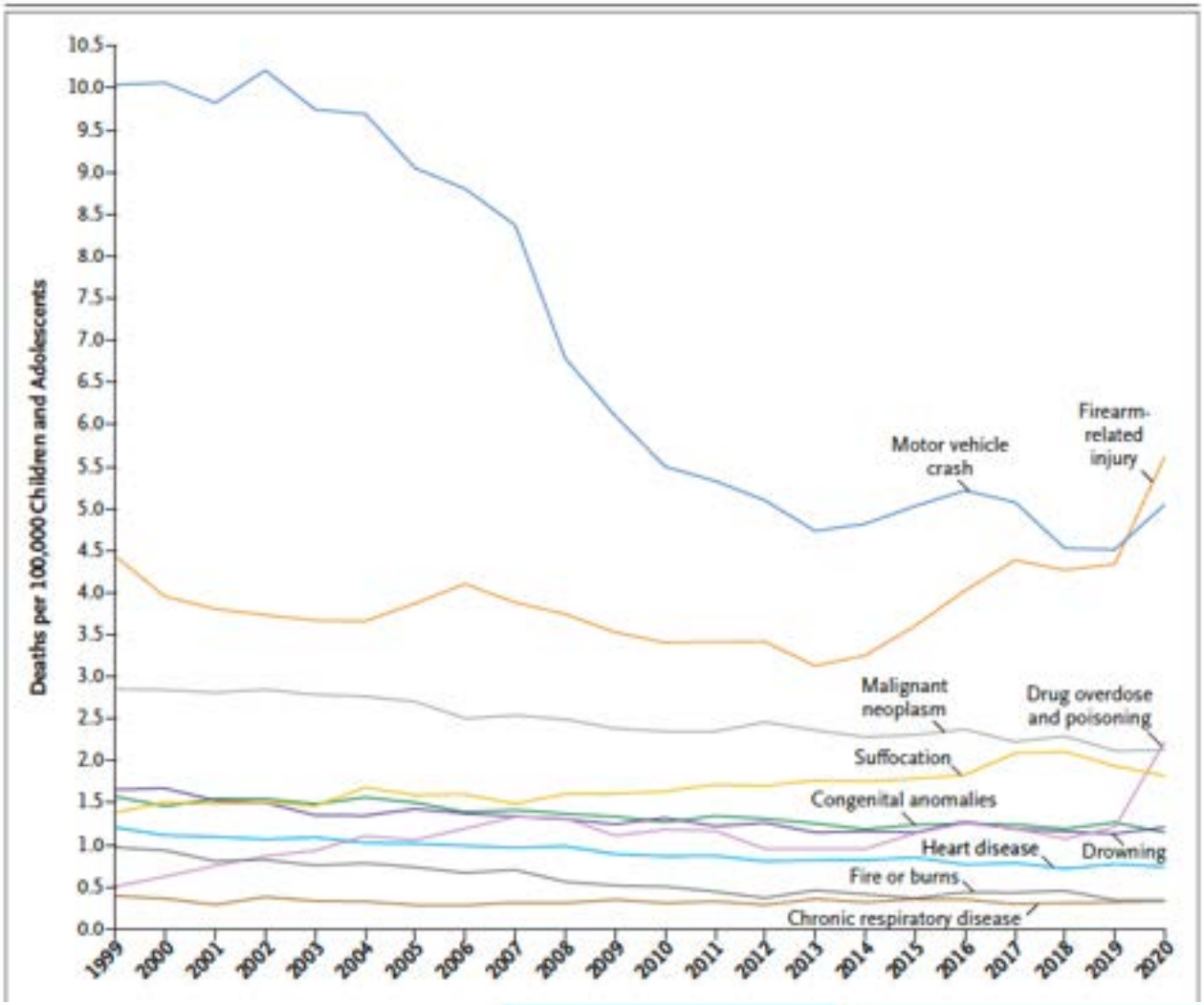
1. Review trends in child fatalities.
2. Understand the Child Death Review process.
3. Offer insight to the clinician's role in a fatality event.

Case

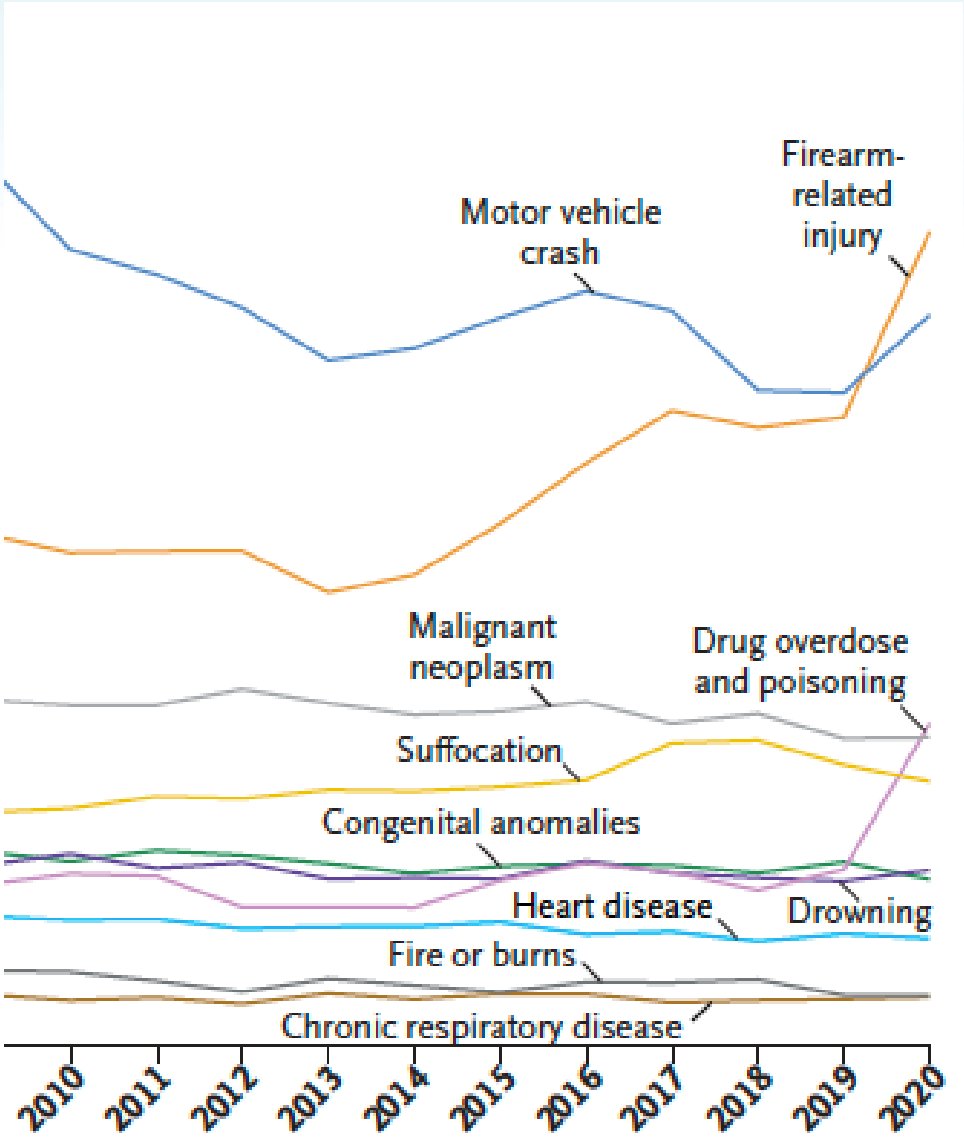
National Child Fatality Data 2021

CDC.gov

National Child Fatality Trends



Goldstick 2022



Definitions

- Sudden Unexpected Infant Death (SUID): sudden and unexpected death of an infant younger than 1 year of age
  - Includes SIDS, Undetermined/Unknown cause of death, Accidental Suffocation or Strangulation in Bed (ASSB)
- SIDS: Sudden Infant Death Syndrome

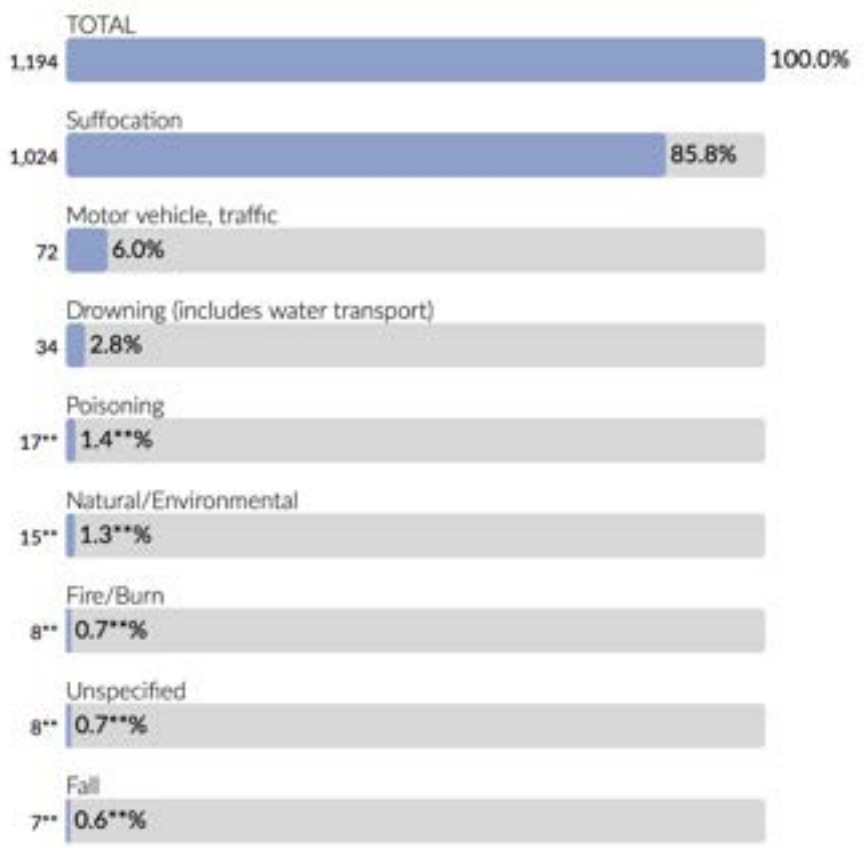
National Child Fatality Causes

	<1	1-4	5-9	10-14	15-24
1	Congenital Anomalies **3,970**	Unintentional Injury **1,288**	Unintentional Injury **726**	Unintentional Injury **926**	Unintentional Injury **14,669**
2	Short Gestation **2,884**	Congenital Anomalies **441**	Malignant Neoplasms **393**	Suicide **493**	Homicide **6,262**
3	Sids **1,529**	Homicide **343**	Congenital Anomalies **241**	Malignant Neoplasms **442**	Suicide **6,040**
4	Unintentional Injury **1,354**	Malignant Neoplasms **266**	Homicide **180**	Homicide **366**	Malignant Neoplasms **1,421**
5	Maternal Pregnancy Comp. **1,215**	Influenza & Pneumonia **129**	Influenza & Pneumonia **77**	Congenital Anomalies **205**	Heart Disease **848**

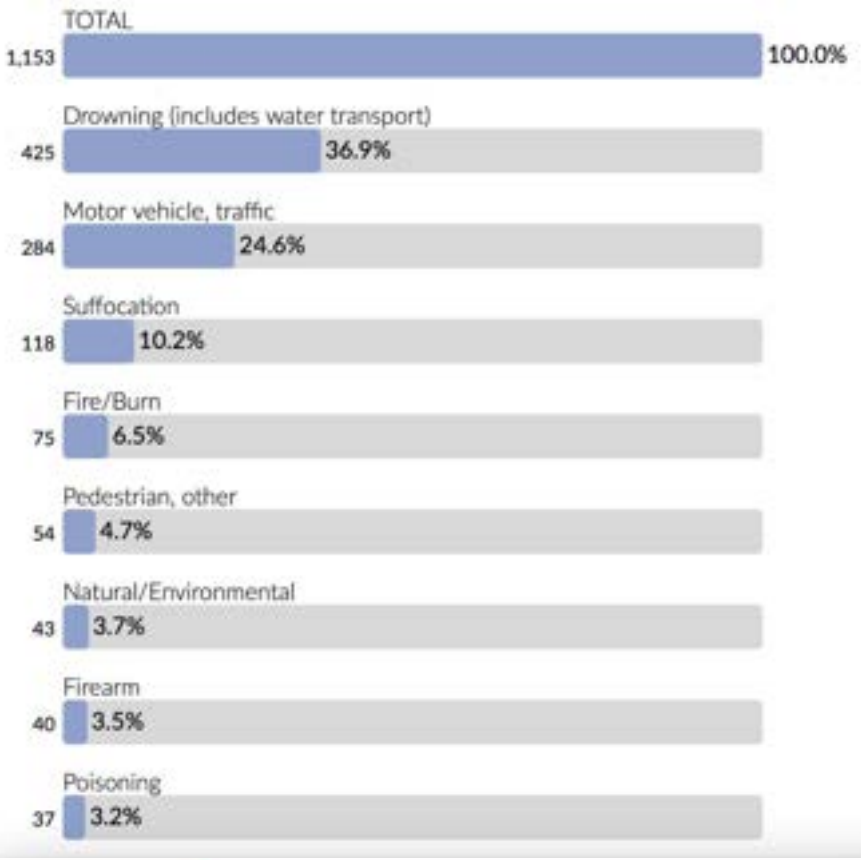
wisqars.cdc.gov 2022

Unintentional Injuries

<1 year old

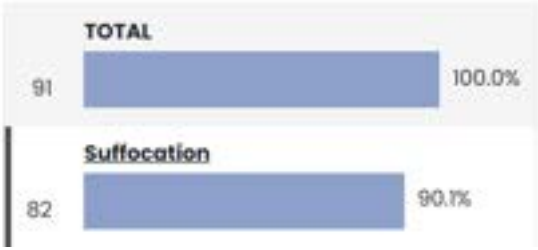


1-4 years old



Unintentional Injury for ages <1, South Carolina

2020 to 2022, All Sexes, All Races



Suffocation

#1 Leading Cause of Death

2020 to 2022, All Sexes, All Races

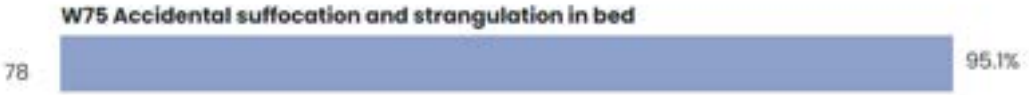
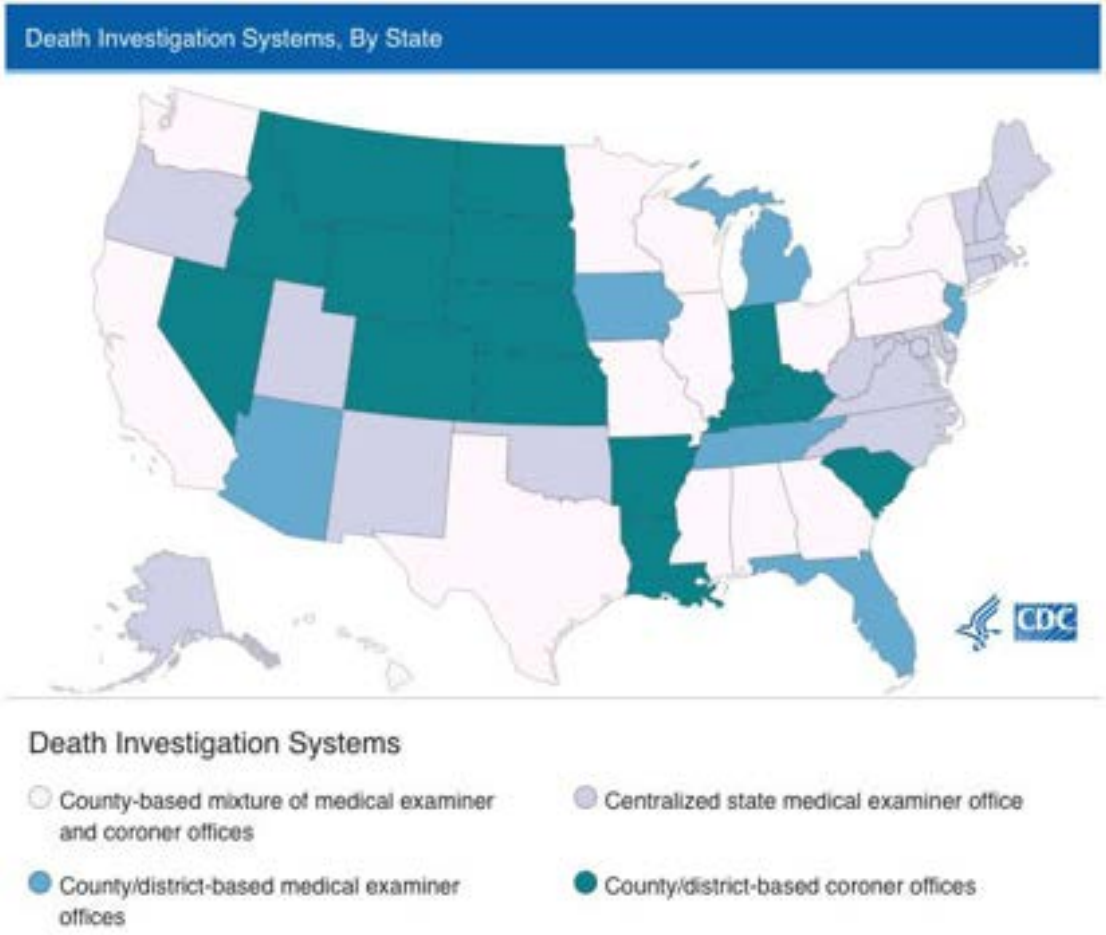


Table 10.
Breakdown of Sudden Unexplained Infant Deaths
South Carolina, 2013-2019
(Residence Data)

	2013	2014	2015	2016	2017	2018	2019	Total (2013-2019)
Accidental suffocation and strangulation in bed (W75, W84)	21	31	35	33	30	34	27	211
Sudden Infant Death Syndrome (R95)	35	31	28	27	28	14	19	182
Hanging, strangulation, and suffocation, undetermined intent (Y20)	9	4	4	1	2	2	1	23
Other ill-defined and unspecified causes of mortality (R99)	6	11	11	10	10	21	25	94
Total	71	77	78	71	70	71	72	510

Terminology:
Coroner versus Chief Medical Examiner

- Coroner
  - Elected
  - Variable medical expertise
- Chief Medical Examiner
  - Forensic Pathologist



CDC.gov

SC Coroner Qualifications

- US citizen, resident of county for at > 1 yr, registered voter, >21yo
- HS diploma or equivalent
- Not convicted of a felony or offense involving ‘moral turpitude’
- One of the following
  - 3y death investigations experience (LE, coroner, ME)
  - 2y degree and 2 year death investigations experience
  - LE certified by SLED and 2yr experience
  - Forensic science degree, MD or RN
- Complete basic training + 16 hr annual training

Terminology: COD versus MOD

- Cause of Death
  - Medical condition, disease or injury that begins the chain of events leading to death.
  - Ex. Blunt force trauma, Sepsis, Undetermined
  - NOT … Cardiopulmonary arrest

- Manner of Death - determined by coroner/medical examiner
    - Homicide
    - Suicide
    - Accidental
    - Natural
    - Undetermined

Back to the In-code

Notifications

- Primary Care Provider, Subspecialists
- Chaplain/ Palliative Care
- Child Life
- Organ Procurement Organization
- Coroner/ Medical Examiner

- Law Enforcement/ Department of Social Services

Coroner ‘Duty to Notify’ Law

- Violence
- Apparent suicide
- In apparent good health
- Unattended by a physician
- Suspicious or unusual manner
- Inmate of penal or correctional institution
- Stillbirth when unattended by a physician
- Healthcare facility (other than nursing homes) within 24 hours of entering or within 24 hours of undergoing an invasive surgical procedure.

Organ Donation

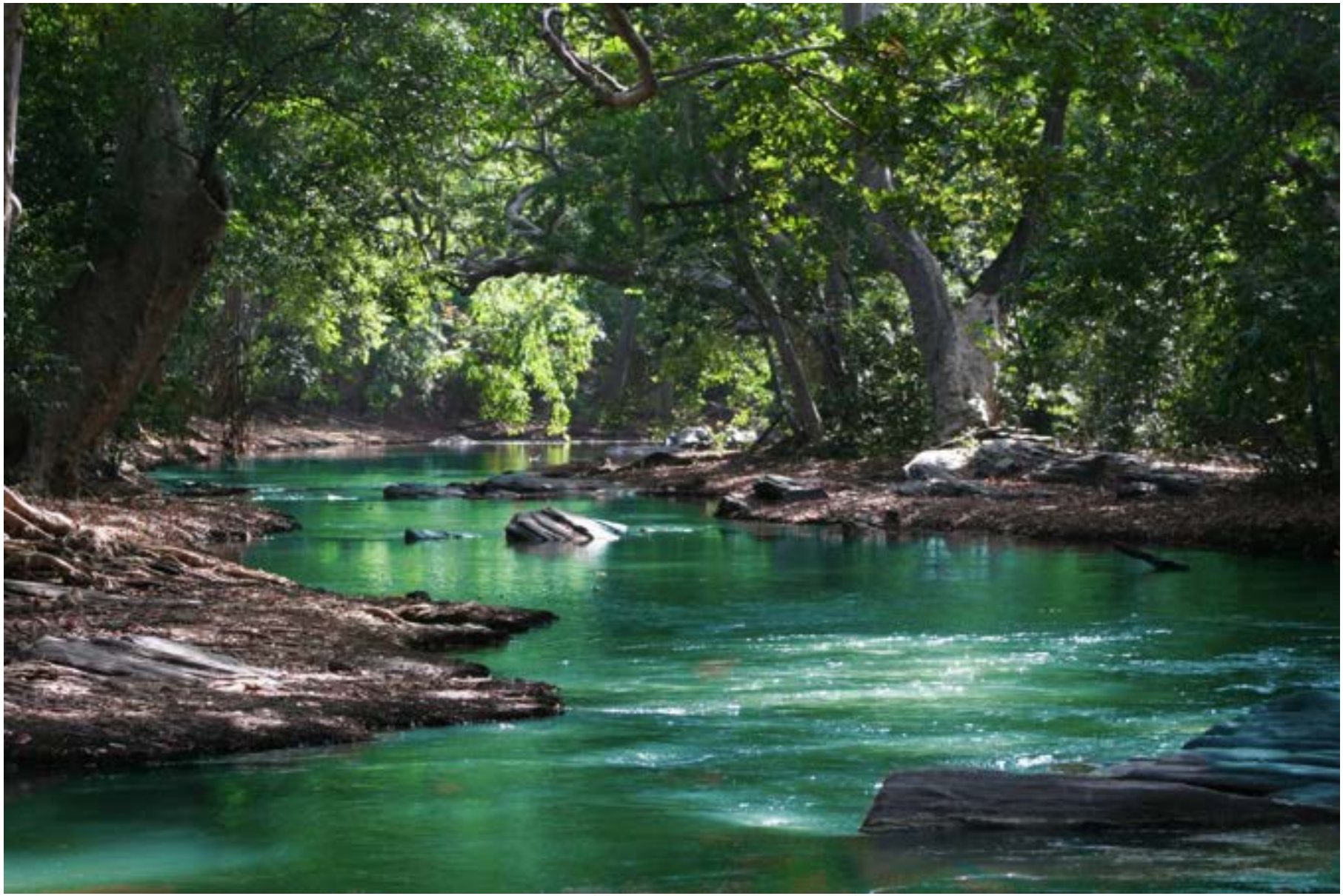
- Organ Procurement Organization, Sharing Hope
- Notification when death is imminent or has occurred
  - Coordinator dispatched to facility
  - “it’s best to let us facilitate discussion about donation”

- Tissue Donation
  - Bones & Tendons
  - Skin grafts
  - Corneas
  - Heart valves

SharingHopeSC.org,

Memory Making

Back to the other patients …



Coroner's Role

- Coroner conducts investigation into death circumstances
  - Determine manner of death and cause of death with support of forensic pathologist if necessary
  - Investigates deaths that are sudden or unexpected
  - Investigates deaths that are due to violence of any kind
  - Occur where violence might be suspected or cannot be ruled out

Coroner/ Law Enforcement

Scene Investigation

NBCnews.com

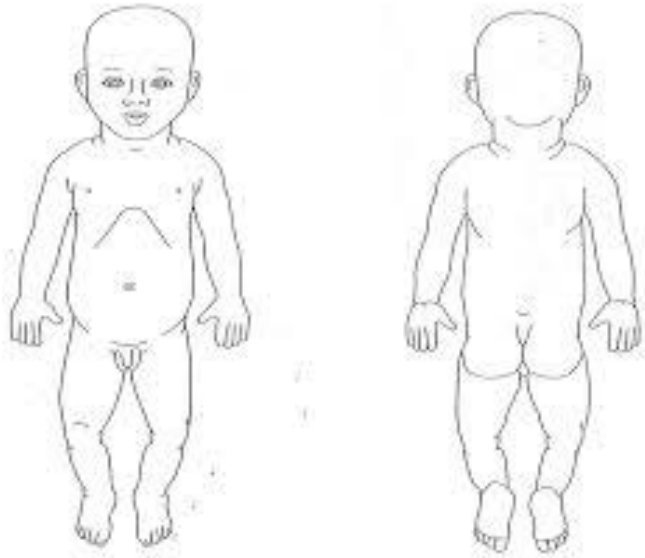
Doll Reenactment

Suididolls.com
NCBI.nlm.nih.gov

Autopsy

- External exam
- Skeletal Survey
- Skin cut downs
- Organ Examination
- Tissue Histology
- Toxicology

- Preliminary: 2 weeks
- Final: minimum 2 months



Child Death/Fatality Review

- South Carolina– Each coroner mandated to conduct a child fatality review per SC law
  - Any child death under 18 years old

Child Death Review Meeting

Child Abuse Pediatrics Involvement

- SC law 17-5-541
- County coroner will schedule local Child Fatality Review within 7 working days
- Team composed of
  - county coroner
  - LE, SLED
  - Child Abuse Pediatrician
  - DSS
  - forensic pathologist

Remember the family

- The system's response is a traumatic event.
- Optimize your role.

- Send a condolence card
- Attend the funeral
  - Hospital memorial services

- Be open to meeting after the event
- Information brings closure

Garstang 2014, Jonas 2018

Back to the case

What I learned at the Review

Having a seat at the table …

- Feedback opportunity
- Information sharing/ Enhanced Investigations
- Loop closure for staff
- Educational opportunity for first responders
- Advocacy opportunity
- Builds relationships

Take homes for us

- Unsafe sleep & gun violence are epidemics, and we are not doing enough.
- The system is hard for families to understand and navigate.
- Secondary trauma is common.
- Understanding the process is an opportunity to provide comfort.

South Carolina Outreach Efforts

- Injury prevention personnel conduct education and outreach across the state
- Crib audits in hospital
- Portable play yard donation programs
- Sleep Baby Safe and Snug book giveaways
- Sleep sack/swaddle giveaways
- Education to families prior to birth and community baby showers and other events
- Staff education + modeling correct behavior
- SC Safe Sleep Initiative (statewide meeting)
- Need clear, early, and consistent messaging to effectively support families in making safe decisions.

Prioritize Wellness

Thank you

References

- Da Silva Knihs, dos Santos J, Schuantes Palm SM, et al. Communication of Death in the Context of Infant-Child Donation: Best Practices for Creating Family Interview for Organ and Tissue Donation. Transplant Proceedings. 2020; 52: 1216-1222.
- Davies R. Mother's stories of loss: their need to be with their dying child and their child's body after death. J Child Health Care. 2005; 9: 288-300.
- Garstang J, Griffiths F, Sidebotham P. What do bereaved parents want from professionals after the sudden death of their child: a systematic review of the literature. BMC Pediatrics. 2014: 14: 269.
- Goldstick JE, Cunningham RM, Carter PM. Current Causes of Death in Children & Adolescents in the United States. N Engl J Med. 2022; 386: 1955-1956.
- Jonas D, Scanlon C, Rusch R, Ito J, Joselow M. Bereavement After a Child's Death. Child Adolesc Psychiatric Clin N Amer. 2018; 27: 579-590.
- October T, Dryden-Palmer K, Copnell B, Meert KL. Caring for Parents After the Death of a Child. Ped Crit Care Med. 2018; 19: 61-68.