Overview

• State Updates
• Criteria for SUID Case Registry Categorization
• Categorization Using the Algorithm
• Database Entry
• Priority Variables
State Updates

- **Staff Changes**
  - Rachel Heitmann, MS
    - Deputy Director for Child Health and Injury Prevention
  - Ashley Moore, MPH
    - Injury Prevention and Detection Section Chief
  - Chase Foster, BS
    - Child and Infant Fatality Program Director
  - SDY Coordinator Position to be filled on 6/1/2023

- **Grant Application**
  - Sudden Unexpected Death (SUID) and Sudden Death in the Young (SDY) Case Registry with The Centers for Disease Control and Prevention
SUID Case Registry
Reminders for SUID Case Registry Categorization

- **SUID/SDY Categorization **DOES NOT change the COD!

- **Always** follow the algorithm from the top to bottom

- **SUID Categorization** is for a child less than 1 year of age who dies **sudden and unexpectedly**

- **Typical COD on Death Certificate**
  - Unknown
  - Undetermined
  - SIDS/SUID
  - Asphyxia
Criteria for SUID Case Registry

• Unintentional sleep-related asphyxia, suffocation, accidental strangulation

• Unspecified suffocation

• Cardiac or respiratory arrest without other well-defined causes

• Unspecified causes with contributing unsafe sleep
  ▫ Such as pneumonia, RSV, rhinovirus
How to Categorize?
Algorithm Categorization

• Was an autopsy AND death investigation completed?
  ▫ Yes: move onto next step
  ▫ No:
    – Unexplained, No Autopsy or Death Investigation

• SDY Categorization vs SUID Categorization
Categorization, Cont.

• If an autopsy was performed, were **ALL** of the following also completed?
  ✓ Toxicology
  ✓ Imaging
  ✓ Pathology

• Yes: move onto the next step.
• No:
  ▫ Unexplained, Incomplete Case Information
Categorization, Cont.

• Is there detailed information about the location AND position of how the infant was placed and found?
  ▫ This information needs to be consistent. If multiple people have reported different scenarios this would be a true unknown.
  ▫ Where: couch, crib, adult bed, bassinet
  ▫ Position: on back, on stomach, on side, face up, face down, face turned
• Yes: move onto next step
• No:
  ▫ Unexplained, Incomplete Case Information

Example:
• Mother and father completed doll reenactment, and both placed infant in bassinet, face up.
• Hospital notes indicate mother stated they were sleeping with the infant in their bed.
• Statements were later made to the MEI that the parents couldn’t remember if the infant was on found their back or stomach.
Categorization, Cont.

• Was there **ANY** evidence of Unsafe Sleep Factors?
  ▫ Co-sleeping: with another person or animal
  ▫ Soft bedding: blankets, pillows
  ▫ Stuffed animals
  ▫ **Placed** on stomach or side
  ▫ Sleep positioners used (doc-a-tot, crib incliner)
  ▫ Placed to sleep anywhere not a crib: swing, infant seat, car seat, adult bed

• Yes: move onto next step
• No:
  ▫ **Unexplained, No Unsafe Sleep Factors**
    – This category also includes infants who were witnessed going unresponsive.
Categorization, Cont.

- Was there evidence of partial or full obstruction of the airway?
  - Nose or mouth obstructed
  - Chest compressed
  - Head was chin to chest or hyperextended
  - Infants was found face down on a surface, including a crib (exception is if the infant was at an age they could roll, typically 3 months)
  - Infant was trapped between mattress and wall.

- Yes: move onto next step
- No or Unknown
  - Unexplained, Unsafe Sleep Factors
Categorization, Cont.

• Do we know **WHAT** obstructed the airway?
  ▫ Adult mattress
  ▫ Blanket
  ▫ Sibling
  ▫ Stuffed animal
  ▫ Adult
  ▫ Swing padding
  ▫ Lose clothing

• Yes: Move onto next step
• No or unknown
  ▫ Unexplained, Unsafe Sleep Factors
Categorization, Cont.

• Were **ALL** of the following present?
  ✓ **Non-conflicting** and reliable witness accounts
  ✓ No other potentially fatal findings
  ✓ An age/developmental stage that suffocation is feasible
  ✓ Strong evidence of full external obstruction when found.

• No or unknown
  ▫ **Unexplained, Possible Suffocation with Unsafe Sleep Factors**
  ▫ Continue to next step: Mechanism

• Yes:
  ▫ **Explained Suffocation with Unsafe Sleep Factors**
  ▫ Continue to next step: Mechanism

Example of Possible Suffocation:
• Infant was placed on an adult comforter
• Infant was found on their side, with the left nostril pressed into the mattress.
• Mouth was not obstructed.

Last step: Mechanism Selection

- For possible suffocation and explained suffocation categories

- Four Possible Mechanisms
  - Soft Bedding
  - Wedging
  - Overlay
  - Other

- A Combination of Mechanisms May be Selected

- Note: Cause of death does not indicate category. Example, COD: Asphyxia, but the way the infant was found does not fit into explained suffocation category.
Mechanism Selection

Soft Bedding

Wedging


https://media.springernature.com/lw785/springerstatic/image/chp%3A10.1007%2F978-1-61779-403-2_28/MediaObjects/186001_1_En_28_Fig17_HTML.jpg
Mechanism Selection

Overlay


Other

https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcRPLV9Htoi4oTOgРИEPngVHh3q7L_LZQr7cg&usqp=CAU
## Case 1

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Undetermined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autopsy</td>
<td>Completed</td>
</tr>
<tr>
<td>Toxicology</td>
<td>Completed</td>
</tr>
<tr>
<td>Imaging</td>
<td>Completed</td>
</tr>
<tr>
<td>Postmortem Cultures</td>
<td>Completed</td>
</tr>
</tbody>
</table>

### Circumstances:

8 month old infant was placed to sleep on their back in a bassinet. The bassinet was placed in the same room as the parents but was not too close to the bed. Child was placed in a sleep sack and was using a pacifier when they were last known to be alive. There were no items in the bassinet. Doll reenactments were completed by both parents, which confirmed the infant was placed on their back face-up, and found on their back and face-up.

### Health History

No known health issues, last well child check day before death

- Unexplained, Incomplete Case Information
- Unexplained, No Unsafe Sleep Factors
- Unexplained, Unsafe Sleep Factors
- Unexplained, Possible Suffocation with Unsafe Sleep Factors
- Explained, Suffocation with Unsafe Sleep Factors
## Case 2

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Asphyxia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autopsy</td>
<td>Completed</td>
</tr>
<tr>
<td>Toxicology</td>
<td>Completed</td>
</tr>
<tr>
<td>Imaging</td>
<td>Completed</td>
</tr>
<tr>
<td>Postmortem Cultures</td>
<td>Completed</td>
</tr>
</tbody>
</table>

### Circumstances:

A 3 month old infant was discovered unresponsive on a couch. The infant’s caretaker (unknown relation to infant) had placed them to sleep 30 minutes prior. They were placed in the far back corner of a sectional surrounded with pillows. The caretaker stated they did not want them to roll off. The doll reenactment confirmed that the infant’s head was turned to the side and their nose was partially obstructed by the couch cushion.

### Health History

No known health issues, unknown last well-child check.

- **Unexplained, Incomplete Case Information**
- **Unexplained, No Unsafe Sleep Factors**
- **Unexplained, Unsafe Sleep Factors**
- **Unexplained, Possible Suffocation with Unsafe Sleep Factors**
- **Explained, Suffocation with Unsafe Sleep Factors**
Case 2: Unexplained, Possible Suffocation with Unsafe Sleep Factors

• Mechanism Selection:
  - Soft Bedding
  - Wedging
  - Overlay
  - Other
Case 3

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Sudden unexplained infant death</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autopsy</td>
<td>Completed</td>
</tr>
<tr>
<td>Toxicology</td>
<td>Completed</td>
</tr>
<tr>
<td>Imaging</td>
<td>Not complete-Scanner not working</td>
</tr>
<tr>
<td>Postmortem Cultures</td>
<td>Completed</td>
</tr>
</tbody>
</table>

**Circumstances:**

A 5 month old infant was sleeping with their parents in a queen size bed. Parents noted that the child was heard crying approximately 1 hour before they were discovered unresponsive. The mother stated child cried for a few minutes then went to sleep. Parents did not want to do a doll reenactment. Their interviews were both consistent with the position of the child, and the events leading up to death. Child was found face up and their airway was unobstructed.

**Health History**

No known health issues
Database Entry
**Database Entry**

- Make sure the sleep related section 12 is filled out as thoroughly as possible

<table>
<thead>
<tr>
<th>Were the following</th>
<th>Present</th>
<th>If present, describe position of object:</th>
<th>If present, did object obstruct airway?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult(s)</td>
<td>Yes</td>
<td>On top of child</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>Under child</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>U/K</td>
<td>Tangled around child</td>
<td>U/K</td>
</tr>
<tr>
<td>Other child(ren)</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal(s)</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mattress</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comforter, quilt,</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or other</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fitted sheet</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thin blanket/flat</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sheet</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillow(s)</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cushion</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Data MUST match categorization**
Database Entry, SECTION N (SUID/SDY)

- Select categorization from algorithm

- If appropriate select mechanism related to suffocation.

- Complete entry by adding a detailed narrative in section O1

11. Categorization for SUID Case Registry (choose only one):

- Excluded (other explained causes, not suffocation)
- Unexplained: No autopsy or death scene investigation
- Unexplained: Incomplete case information
- Unexplained: No unsafe sleep factors
- Unexplained: Unsafe sleep factors
- Unexplained: Possible suffocation with unsafe sleep factors
- Explained: Suffocation with unsafe sleep factors

Select the primary mechanism(s) leading to the death:
- Soft bedding
- Wedging
- Overlay
- Other
Priority Variables
Blank vs Unknown

• Blank
  ▫ Response wasn’t needed
  ▫ Didn’t try to locate information
  ▫ Accidentally left blank
  ▫ Skipped

• Unknown
  ▫ Information can’t be located
  ▫ An attempt has been made to collect information
  ▫ Information is a TRUE unknown
Variable A 13

- Birth Transcript
- PCP Records
- Hospital Records
- SUIDI
- SUCDI
- Autopsy
Variable A15

- PCP & hospital records
- Face sheet
- Might require a separate release to be sent to the billing department
- TennIIS
Variable A23

- CPS team member
- Police Investigation Notes
Variable A49- Infant

- Automatic Upload
- Birth Transcript
- Birth Records
- PCP Records

50. Prenatal care provided during pregnancy of deceased infant?

- Yes
- No
- Unknown
Variable A65- Infant

- Automatic Upload
- Birth Transcript
- Birth Records
- PCP Records
- SUIDI
Variable A66- Infant

- Birth Records
- PCP Records
- Email request to NBS.Health@tn.gov
Variable C1

- SUIDI
- Police Investigation
- Secondary Caregiver can be left blank if the child only had one caregiver
- Unknown if it is known that there is a secondary caregiver, but unclear who it is

<table>
<thead>
<tr>
<th>Primary Caregiver</th>
<th>Secondary Caregiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self</td>
<td>Biological mother</td>
</tr>
<tr>
<td>Biological mother</td>
<td>Biological father</td>
</tr>
<tr>
<td>Adoptive parent</td>
<td>Adoptive parent</td>
</tr>
<tr>
<td>Stepparent</td>
<td>Stepparent</td>
</tr>
<tr>
<td>Foster parent</td>
<td>Foster parent</td>
</tr>
<tr>
<td>Mother's partner</td>
<td>Mother's partner</td>
</tr>
<tr>
<td>Father's partner</td>
<td>Father's partner</td>
</tr>
<tr>
<td>Grandparent</td>
<td>Grandparent</td>
</tr>
<tr>
<td>Sibling</td>
<td>Sibling</td>
</tr>
<tr>
<td>Other relative</td>
<td>Other relative</td>
</tr>
<tr>
<td>Friend</td>
<td>Friend</td>
</tr>
<tr>
<td>Institutional staff</td>
<td>Institutional staff</td>
</tr>
<tr>
<td>Other</td>
<td>Other</td>
</tr>
<tr>
<td>Unknown</td>
<td>Unknown</td>
</tr>
</tbody>
</table>
Variable I2

- SUIDI
- Hospital Record
- MEI
- EMS records
- Police records
- Autopsy narrative
Variable I2a

- SUIDI
- Hospital Record
- MEI
- EMS records
- Police records
- Autopsy narrative
Variable I2c

- SUIDI
- MEI
- Police records
- EMS records
- Autopsy narrative
Variable I2I

- SUIDI
- MEI
- Police records
- EMS records
- Autopsy narrative
Variable I2n

- SUIDI
- MEI
- Police records
- EMS records
- Autopsy narrative

n. Child’s airway when found (includes nose, mouth, neck and/or chest)

- Unobstructed by person or object
- Fully obstructed by person or object
- Partially obstructed by person or object
- Unknown
Variable I2o

- SUIDI
- MEI
- Police records
- EMS records
- Autopsy narrative
- Please fill out a response to each item

<table>
<thead>
<tr>
<th>Objects in child’s sleep environment and relation to airway obstruction:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were the following:</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Adult(s)</td>
</tr>
<tr>
<td>Other child(ren)</td>
</tr>
<tr>
<td>Animal(s)</td>
</tr>
<tr>
<td>Mattress</td>
</tr>
<tr>
<td>Comforter, quilt, or other</td>
</tr>
<tr>
<td>Fitted sheet</td>
</tr>
<tr>
<td>Thin blanket/flat sheet</td>
</tr>
<tr>
<td>Pillow(s)</td>
</tr>
<tr>
<td>Cushion</td>
</tr>
<tr>
<td>Boppy or U shaped pillow</td>
</tr>
<tr>
<td>Sleep positioner (wedge)</td>
</tr>
<tr>
<td>Bumper pads</td>
</tr>
<tr>
<td>Clothing</td>
</tr>
<tr>
<td>Crib railings/side</td>
</tr>
<tr>
<td>Wall</td>
</tr>
<tr>
<td>Toy(s)</td>
</tr>
<tr>
<td>Others, specify:</td>
</tr>
</tbody>
</table>

Deselect answer
Variable I2s

- SUIDI
- MEI
- Police records
- EMS records
- Autopsy narrative
- Hospital records
Variable I2t

- MEI
- EMS
- Police Department
- RFC
- Sketch from SUIDI
- Scene photos without doll reenactment
Variable 01

- Enter info from CFR meeting
- Medical records
- Autopsy Narrative
- A simple narrative is better than no narrative
Important Data Fields

- Section P
  - Helps identify when QA needs to be completed and when a case can go to SDY AR
  - Pulled to give time component for CDC purposes

- Variable E8
  - Was the child seen going unresponsive, drowning, crashing, etc.
Only item that needs to be completed by CFR team/Data Entry
Questions?
Contact Information

Chase Foster
Child and Infant Fatality Program Director
Phone: 615-253-2657
Email: chase.foster@tn.gov