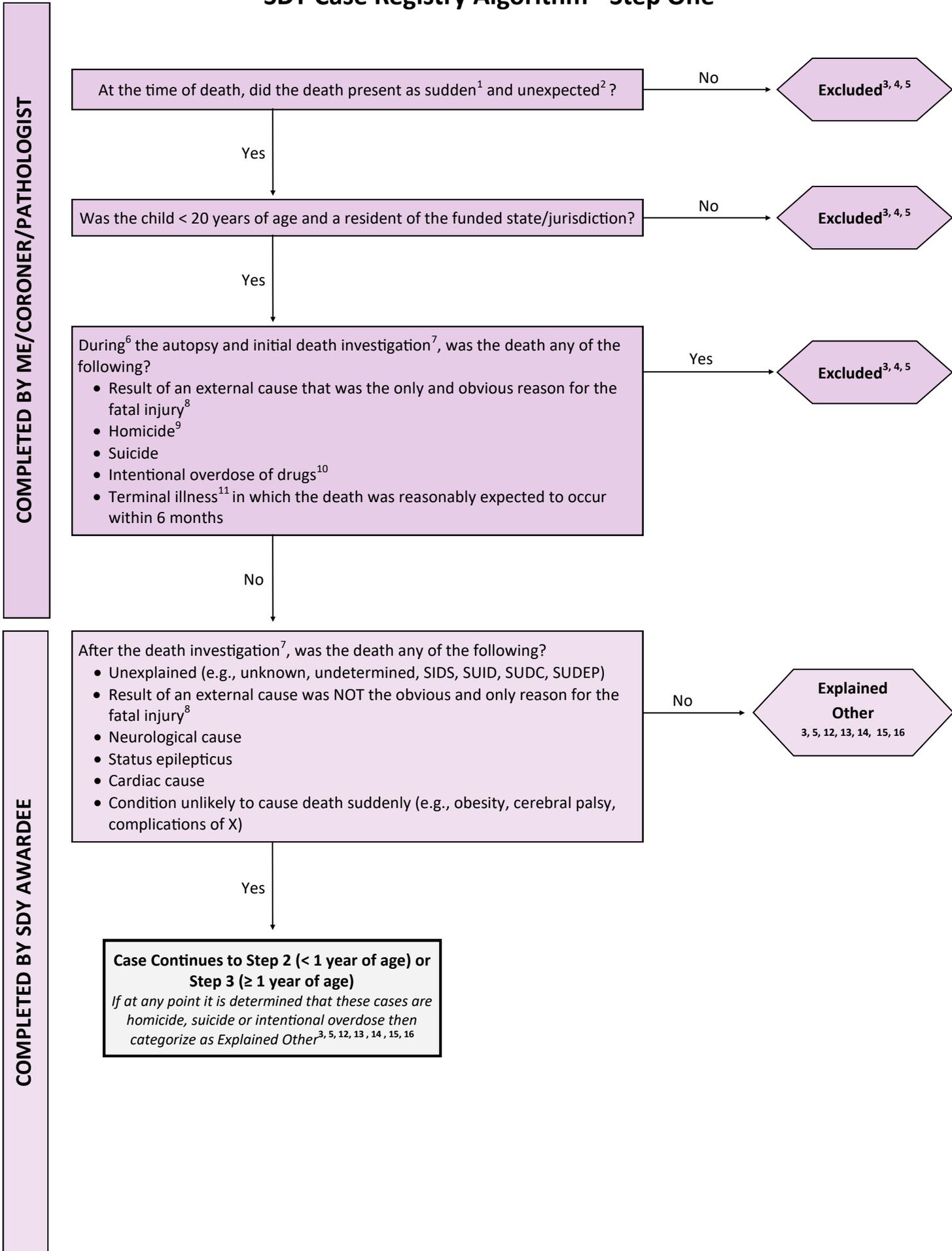


SDY Case Registry Algorithm - Step One



SDY Case Registry Algorithm - Step Two

Cases from Step 1 (< 1 year of age)

Does the infant death meet the criteria for SUID Case Registry categorization? Cases are those where the death certificate indicates the cause as unknown, undetermined, SIDS, SUID, unintentional sleep-related asphyxia /suffocation/strangulation, unspecified suffocation, cardiac or respiratory arrest without other well-defined causes, or unspecified causes with potentially contributing unsafe sleep factors.

No
Explained, Excluded

SDY Category: Incomplete Case Information
3, 5, 12, 13, 16

Unexplained, No Autopsy or Death Scene Investigation¹³

Was an autopsy and death investigation done?

Were all of the following complete: toxicology, any imaging, and pathology (including histology, microbiology or other pathology)?

No
Unexplained, Incomplete Case Information

Do you know location (e.g. adult bed, couch, etc.) AND position (e.g. prone, supine, side) in which the infant was found?¹⁷ Consideration of lividity may be useful in verifying position, but lack of information on lividity does not make the case incomplete. Lividity that indicates supine positioning could be from flipping the infant after death and should be considered cautiously.

No
Unexplained, Incomplete Case Information

Was there any evidence of unsafe sleep factors when the infant was found?¹⁷ Safe sleep includes: supine, in crib, bassinet, or portable crib, with nothing in the crib but a safety approved mattress with fitted sheet. An infant placed supine and found prone, no matter his/her age or stage of development should continue down the algorithm. Infant put in car seat...
⇒To sleep, should continue down the algorithm
⇒To travel, not sleep, with soft objects or loose bedding, should continue down the algorithm
⇒To travel, not sleep, with no soft objects or loose bedding, should categorize as Unexplained, No Unsafe Sleep Factors

No
Unexplained, No Unsafe Sleep Factors^{18, 19}

Was there evidence of a full or partial obstruction of the airway (nose, mouth, neck and/or chest)?¹⁷

No/Unknown
Unexplained, Unsafe Sleep Factors¹⁸

Was there evidence of what obstructed the airway (e.g., blanket, pillow and blanket, adult bed)?¹⁷ The team does not have to know the singular item that obstructed the airway. The following are acceptable examples: infant prone in bassinet on top of an adult sized pillow, infant face down on an adult bed, multiple/layered items identified (e.g., a mattress, sheet and blanket), and supine infant with blanket overhead even with unknown blanket weight.

No/Unknown
Unexplained, Unsafe Sleep Factors¹⁸

Were there all of the following?

- Non-conflicting and reliable witnessed account — Can come from a description like 'Father reported...' or 'Mother saw...', doll reenactment, or very clear complete detailed description
- No other potentially fatal findings or concerning conditions
- An age/developmental stage that made suffocation feasible (e.g., a mobile 11 month old unlikely to suffocate due to position alone)
- Sufficiently detailed evidence to visualize how obstruction occurred
- Strong evidence of full external obstruction (e.g., report of full obstruction of nose and mouth, and/or external compression of the neck or chest)

No
Unexplained, Possible Suffocation with Unsafe Sleep Factors^{18, 20, 21}

SDY Category: Explained Suffocation^{3, 13}

Explained, Suffocation with Unsafe Sleep Factors^{3, 13, 21, 22}

Which primary mechanism explains suffocation or possible suffocation?²¹

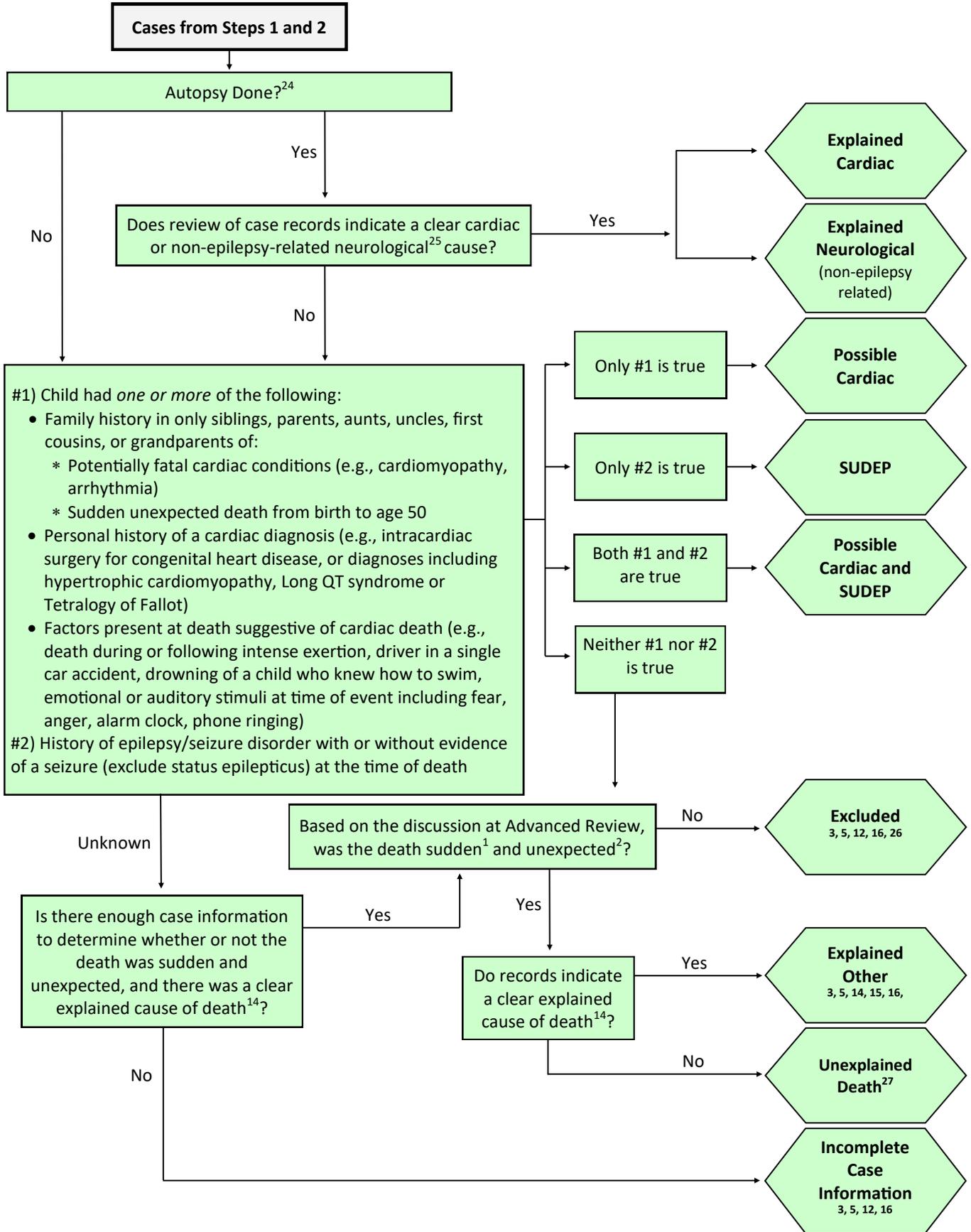
- Soft Bedding
- Wedging
- Overlay
- Other

Case Continues to Step 3 (Advanced Review)

COMPLETED AT CHILD DEATH REVIEW FOR INFANTS - SUID CATEGORIZATION²³

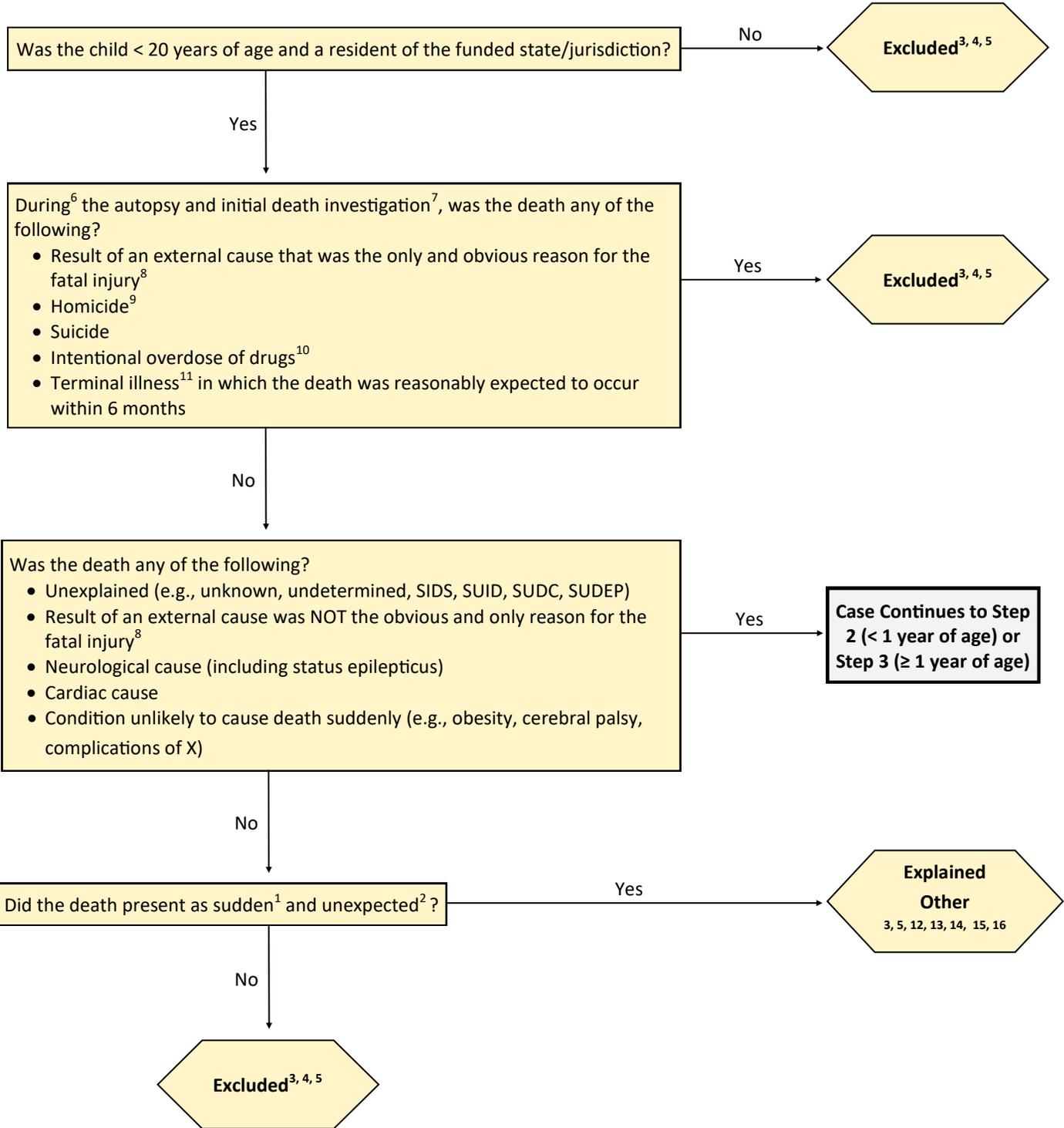
SDY Case Registry Algorithm - Step Three

COMPLETED AT ADVANCED REVIEW



SDY Case Registry Algorithm - Appendix

COMPLETED WHEN IDENTIFYING CASES USING VITAL RECORDS FOR CASE ASCERTAINMENT CHECK



Footnotes

1. Sudden = Death within 24 hours of first symptom or death in hospital after resuscitation from a cardiac event.
2. Unexpected = Death of someone who was believed to be in good health or had a stable chronic condition or had an acute illness that would not be expected to cause death.
3. No consent necessary, but if consent was obtained send it and the sample in.
4. Answer no to N1.
5. Retain all data entered.
6. This includes the initial autopsy results and death investigation; do not wait for the toxicology results.
7. Death investigation = Any agency obtaining information about the circumstances of the death; this does not need to include a visit to the scene.
8. Cases in which the underlying cause of the fatal event (e.g., drowning, infant suffocation, drivers in motor vehicle crashes, etc.) may be cardiac or neurological in origin should not be considered the 'result of an external cause that was the obvious and only reason for the fatal injury' and should continue to Step 2 or 3.
9. Homicide = Intention to kill, not by official manner of death or if charges were filed (e.g., this excludes accidental unsafe sleep cases where charges were filed against the parents).
10. Includes accidental overdoses, medical treatment mishaps and adverse medication effects.
11. Terminal Illness = Diagnosis prior to death that is incurable and irreversible.
12. Answer yes to N1.
13. No Advanced Review necessary.
14. Excludes infant suffocation cases; includes status epilepticus at the time of death.
15. Explained Other needs to be one definable cause, not "Complications of....". If the cause cannot be identified specially and supported by autopsy evidence then it is not an explained cause of death and should be categorized as Unexplained Infant Death/SUID or Unexplained Child Death.
16. Enter at a minimum the data elements of age, sex, cause of death and category in the Case Reporting System.
17. When there is conflict:
 - Use the expertise of your multi-disciplinary team and ALL of the evidence to figure out what really happened.
 - If there is enough evidence for the team to resolve the conflict, then document the team's decision in the narrative and continue down the algorithm.
 - If the evidence does not reveal a clear resolution, then document the sustaining conflict and treat it as an unknown.
18. Category includes cases that may or may not have other potentially fatal findings, concerning conditions, or competing cause of death, but how these factors contribute to death is uncertain.
19. Includes infants who were witnessed going unresponsive.
20. Includes infants whose airways were obstructed by a Consumer Product Safety Commission approved mattress used as recommended in a crib, portable crib, or bassinet.

Footnotes

21. Needs to be assigned at least one mechanism using the following definitions (the following are examples, not a comprehensive list):
- **Soft bedding:** when an infant's airway is obstructed by a blanket, sheet, pillow, couch or recliner cushions, or other soft objects of loose bedding that are part of the immediate sleep environment.
 - ⇒ Nose and/or mouth obstructed at the intersection of soft bedding (e.g., where a pillow and mattress meet, where the back and seat of a couch meet)
 - **Wedging:** when an infant's airway is obstructed as a result of being stuck or trapped between inanimate objects.
 - ⇒ Wedged with face clear (e.g., in gap, face above mattress), chest/neck obstruction only
 - **Overlay:** when a person rolls on top of or against an infant obstructing the infant's airway.
 - ⇒ Overlay with face clear (obstructed chest/neck only)
 - ⇒ Face into person with or without chest/neck obstruction
 - ⇒ Infant pinned between person and couch, facing person
 - ⇒ *Note: Surface sharing only is not enough evidence for overlay. An overlay needs to be witnessed (e.g., someone waking up on top of an infant, or someone seeing someone else on top of an infant).*
 - **Other:** when an infant's airway is obstructed by something in the sleep environment other than soft bedding, overlay or wedging like a plastic bag.
 - ⇒ *Note: Other should not be selected for unsafe sleep factors like prone positioning or impaired caregivers.*
 - **Multiple mechanisms:**
 - ⇒ **Wedging and Soft Bedding**
 - * Wedged with face into soft bedding (mattress, pillow, blankets), nose and mouth obstructed
 - * Wrapped/entangled in blankets and wedged
 - ⇒ **Overlay and Soft Bedding**
 - * Overlay with nose/mouth obstructed by soft bedding (mattress, pillow, blankets)
 - * Infant pinned between person and couch, facing couch
22. Examples include:
- A 1-month-old infant found face down in a pillow with her nose and mouth fully obstructed.
 - A 2-month-old infant found with her head and face wedged between the cushions at the back of the sofa.
 - A 4-month-old infant found lifeless in a twin bed with his head and body underneath his mother.
23. Reference: Shapiro-Mendoza CK, Camperlengo L, Ludvigsen R, et al. Classification system for the Sudden Unexpected Infant Death Case Registry and its application. *Pediatrics*. 2014;134:e210-e219.
24. If extensive testing was performed during the same hospitalization as the death and identifies a cause of death, the Advanced Review Team can decide to answer "yes" to this question, even if an autopsy was not performed. Justification and explanation of why the Advanced Review Team made their decision needs to be documented in Case Reporting system in the *Notes Section from Advanced Review*.
25. Includes first seizure at time of death with neurological process that could have independently led to death found on autopsy (e.g., large subarachnoid hemorrhage, meningitis, or encephalitis).
26. The combination of yes to N1 and the category of Excluded should only be used when a case looked like it was sudden and unexpected until the experts at the Advanced Review Team uncovered that it was not.
27. Includes all Sudden Unexpected Infant Death (SUID) cases including those the Advanced Review Team deems to be suffocation.

Shape indicates
SUID category

Shape
indicates SDY
category