

WATER-RELATED DSI PROTOCOL DATA DICTIONARY

General notes: The act of entering/submersion into water is referred to as “the incident.” The incident may have occurred immediately prior to death, or death might have happened long after the incident.

For purposes of the investigation, the deceased child is referred to as “the subject.” This term was selected based on extensive feedback from investigators. The use of “subject” and not “victim” is intended to avoid the suggestion of foul play. This is from feedback from investigators to specifically not use the term ‘victim.’ As the child could have been alive at the time of recovery, “subject” is more universally applicable than “decedent.”

The corresponding question in the pediatric NFR-CRS will follow the Water-Related DSI Protocol question in orange parenthesis, if applicable.

If the information was searched for, but not documented or recorded, select ‘Unknown.’ If no attempt was made to obtain the information, leave the question unanswered.

Subject Age (A4): Please enter the age of the subject at the time of incident. You may choose to enter age in weeks, months, or years.

Subject sex at birth (A7): Enter the subject’s biological sex.

Subject race (A5): Race of child as stated on death certificate. Standard race categories were issued by the [Office of Management and Budget \(OMB\)](#) to promote comparability of data. Check all that apply.

Hispanic or Latino/a origin (A6): "Hispanic or Latino/a" should be selected for a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.

Subject height and weight (A9/A10): Enter the subject’s height and weight, as stated on the autopsy. Can be entered in feet/inches and pounds/ounces.

Time of death: Enter in 24-hour time the stated time of death from the autopsy. For instance, if the subject was declared dead at 1:24pm, enter 13:24.

Reporting Party/Witness Interview Form

These questions should be asked of the reporting party as well as any witnesses present **at the scene** of the incident or recovery. If the individuals interviewed for this information are also family or caregivers of the subject, the questions in the Decedent Information Form should also be asked. In addition to asking reporting parties and witnesses to describe what happened, investigators are encouraged to ask them to show, or reenact, what happened, ideally in the location of the incident. Please iterate to family or witnesses that this is a standard protocol, and these questions will be asked in all circumstances and are not to be interpreted as an interrogation or belief of guilt.

1. **Was the incident witnessed? (E8)** Answer “yes” if someone saw the subject actively entering *and struggling* in the water. If the subject was last seen playing in the water but no one saw the

drowning itself, answer “No.” If a body was discovered without anyone seeing the person enter the water, select “No.”

1a. If witnessed, who witnessed the incident? (E8) Select those who witnessed the incident. Check all that apply. Some people could have been two things at once, like a family member who was also a neighbor. Select both in those instances.

- *Bystander*: Someone with no association with the subject who happened to also be present on land, i.e. a person standing on a pier witnessing the subject in the water below. This is commonly public open water areas.
- *Patron/swimmer*: Someone else in the water or present in the water area (e.g., on the pool deck) who had no association with the subject. This will commonly be public pool areas or open water areas.
- *Boater*: Select if someone who was on a boat but not with the subject witnessed the incident.
- *Lifeguard*: Select if a trained lifeguard who was on duty observed the incident.
- *Other facility staff*: Select if another employee who was not a trained lifeguard observed the incident. This could include facility managers, camp counselors, teachers, or other personnel.
- *Resident or neighbor*: Select if the person who witnessed the incident was a resident or neighbor of the subject. This could include someone with access to a shared apartment complex pool, or a person who lived next door.
- *Parent/guardian/caregiver*: Select if the person who witnessed the incident was a parent or the designated guardian/caregiver of the subject.
- *Other family member, describe*: Select if the witness was a non-parental family member (e.g., aunt, cousin, grandfather, sibling).
- *Intimate partner*: Select if the subject’s significant other was a witness. This could include boyfriends, girlfriends, or spouses.
- *Friend*: Select if witness(es) was a friend(s)/classmate(s)/acquaintance(s) of the subject.
- *Other, describe*: Select if witness was not otherwise captured above (e.g., parent of friend, youth group leader, etc.).

1b. If witnessed, who first noticed the subject was in trouble? Select who first noticed the subject was in trouble. This can look very different in different circumstances. Some examples could be noticing the subject fail to resurface after jumping in the water, noticing the subject struggling, or thinking the subject was pretending/playing dead. If no one saw the subject in trouble, we do not consider the incident witnessed.

1c. Were any of the witnesses aged 18 or older? Select if anyone selected above as a witness to the incident was 18 years of age or older.

1d. What was the reporting party or witness doing when they realized the subject needed some help? Describe what the reporting party was doing when they realized the subject was in trouble.

1e does not appear in the REDCap for entry. This question is only for use by investigators using the form and is not captured in the database.

1f. If incident was not observed, what prompted discovery of subject? If the incident was not observed by anyone, describe how the subject’s absence was noted or how their body was discovered. For

[Type here]

instance, if a headcount at a camp indicated someone was missing, or a parent returned from attending to laundry to discover the subject unresponsive in the pool.

- 2. Prior to the incident, where was the subject last seen? (H3a)** Describe the last known sighting of the subject. This could have occurred on land or in water.
- 3. When subject was last seen, were they observed:**
 - *In the water:* Select if subject was last seen in water, such as a pool, hot tub, bathtub, or lake.
 - *On the water:* Select if subject was on water but not submerged (e.g., in a boat).
 - *Near the water:* Select if subject was last seen near water (playing on shore, in a yard with a canal, the deck of a pool).
 - *Not near any water:* Select if subject was not seen in, on, or near water at last known time (e.g., in their crib).
- 4. What was the subject's last activity immediately prior to the incident?** Select the subject's last known activities. Select all that apply.
- 5. Was subject forcibly submerged by another person?** Indicate if the subject's entry into water was involuntary submersion by someone else. Include roughhousing or being pushed in even if person doing so was just playing. Do not include accidents like boats overturning.
- 6. Was subject supervised at the time on the incident? Include lifeguards present (D1).** Indicate whether the subject was supervised at the time of incident. Supervision is defined as the parent or other assigned supervisor being in close enough proximity that they can see or hear the child. Children less than 6 years of age require constant or close supervision most of the time. As children age, less direct supervision is typically required, and supervision is not typically expected for older teens in most circumstances.
 - *Yes:* Should be marked if the supervisor was within close enough proximity that they could see or hear the child at the time of the incident leading to death. Also, select "yes" if the supervisor was asleep at the time of the incident, and the child was also asleep, and if the incident occurred when you would expect the family to be sleeping.
 - *Supervisor present but distracted:* Select this option if a supervisor was present, or had been present, but became distracted. This can occasionally be ambiguous, but clear examples would be leaving a bathroom to get a clean towel, and leaving an infant in a bathtub alone.
 - *No, but needed:* Should be marked if the supervisor of a child less than age 6 was out of visual or auditory proximity, that is, they could not see or hear the child at the time of the incident. This may also be marked for children 6 or older if the supervisor was not in close enough proximity to see or hear the child and circumstances indicate supervision was needed at the time of incident. This should be marked if the supervisor was sleeping during the day or evening hours when they should have been supervising the child, no other alternative supervisor was assigned, and the child was awake.
 - *No, not needed:* This is usually marked for older children in most circumstances where direct supervision would not be expected (e.g., 14-year-old home alone, 8-year-old playing in the yard).
- 6a. If subject was supervised, who was providing supervision? (D3/D4)** Indicate everyone who was supervising the subject.

[Type here]

6b. Was the supervisor (or the main supervisor, if multiple supervisors) under age 18? Indicate if the supervisor (or the 'main supervisor' if multiple supervisors were present) was under the age of 18 years.

6c. Was anything impacting the main supervisor's ability to attentively supervise? Select if anything was interrupting the supervisor's undivided attention from the subject.

6d. What was impacting supervision for the main supervisor? Check all that apply.

- *Glare on the water:* Select if there was glare on the water limiting the ability to see those in the water.
- *Weather:* Select if weather, such as bright sun, heavy rain, or fog/mist was interfering with the ability to see.
- *Toys/play equipment in the water:* Select if a large toy or other play equipment was obscuring the view.
- *White water/foam on the water:* Select if natural/open water had something on the water limiting the ability to see those in the water.
- *Too many people for attentive supervision:* Select if there were too many people present under one person's supervision.
- *Distracted by mobile device:* Select if the supervisor was on a phone, tablet, or computer when assigned to be the supervisor.
- *Other distractions, describe:* Describe what pulled the supervisor (or their eyes) away from the subject. This could include attending to laundry in the house, other children requiring attention, rescuing another struggling swimmer, etc.
- *Alcohol use:* Select if the main supervisor was using or under the influence of alcohol at the time of the incident.
- *Drug use:* Select if the main supervisor was using or under the influence of prescribed or illicit drugs that may have impaired their ability to supervise at the time of the incident.
- *Other, specify:* Describe any other impairments not otherwise captured above.

6e. What was the main supervisor doing when they realized the subject was missing or in trouble? If the incident was not observed, what made them realize something was amiss? Describe the main supervisor's activity. This question may have the same answer as 1a or 1f if the supervisor witnessed the incident or discovered the body.

7. Was a flotation device used by the subject at the time of incident? (H3h)

- *Yes, life jacket or personal flotation device (PFD):* Select if the subject was wearing a life jacket or personal flotation device, even if not worn properly (e.g., not buckled).
- *Yes, inflatable device, describe:* Indicate if subject was using a different inflatable device ("water wings," innertube or other "floatie") to aid them in being in the water.
- *Yes, other, describe:* Indicate if a different aid was used to be in the water not otherwise described above, and describe.
- *No:* Indicate if the decedent had no inflatable or other flotation devices when they entered the water.
- *Unknown:* Select if the use or non-use of any such devices was unknown.

[Type here]

7a. If subject was wearing a life jacket or inflatable device, was it... Check all that apply to describe said device.

- *The correct size?* Size of these devices is typically based on weight of the subject.
- *Approved by the U.S. Coast Guard?* This can often be determined by looking at the tag or product's advertising.
- *Worn properly?* A life jacket needs to be worn fully buckled and tightened.
- *Properly inflated:* If an inflatable device was used, indicate if it was fully inflated. The device should be firm and not have any leaks or faulty seals.

7b. Did the life jacket or inflatable device contribute to the death? Select if in the investigator's best judgement, the device, or use of the device, contributed to the death. An obvious example would be if a strap got caught and held the subject underwater or if the item relied upon for flotation was not actually a safety or flotation aid (i.e. water wings, pool noodle, etc.).

8. Check all that apply in regards to the subject.

- *Alcohol, drugs, or paraphernalia found at scene:* Select if there were alcohol, drugs, or paraphernalia present at the scene (e.g., beer cans on a lake dock).
- *Subject suspected of using alcohol or drugs at time of incident:* Select if the witness or reporting party suspected the subject had consumed any alcohol or drugs, but did not know for sure.
- *Subject observed using alcohol or drugs at time of incident.* Select if witness or reporting party knew or directly observed subject consuming drugs or alcohol at the time of incident, even if they did not believe the use caused impairment.
- *None of the above:* Select if no use was suspected or known.
- *Unknown:* Select if it was unknown if there was substance use at the scene.

9. Was subject breathing/attempting to breath when discovered? Indicate if there were signs of life when the subject was identified, including attempted or successful breaths.

10. Describe the state of the witness/reporting party. Include if any witnesses had wet clothing or injuries and their physical and emotional condition. Describe in detail the physical, mental, and emotional state of all interviewed witnesses and/or reporting parties. Include if they had wet clothing or injuries seemingly sustained from the incident.

Scene Processing Form

*This information should be collected by a responder or investigator **at the scene of the investigation.***

When possible, make photographic documentation of the following evidence and note time taken. Take photographs of the subject's body as quickly as possible after the body is discovered; the scene where incident occurred as quickly as possible upon arrival; and scene where subject was recovered as quickly as possible after the body is recovered. Include the hands, feet, and eyes of the subject's body, and any layers of protection at the scene (alarms, fencing). Gather other video or photos if taken by bystanders or security footage.

1 Does not appear in the REDCap for entry. This question is identifiable and only for use by investigators completing the form. This information is not captured in the database.

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2. Date and time of incident (E2). Indicate the time that the subject entered the water in 24 hour format, or military time. If unknown, select unknown. **Date is identifiable and only for use by investigators completing the form. This information is not captured in the database.**

3 and 4 Do not appear in the REDCap for entry. This question is identifiable and only for use by investigators completing the form. This information is not captured in the database.

5. How many people were present at the incident location at the time of incident? Estimate if necessary. This could mean different things depending on drowning location—if incident occurred at a beach, estimate how many people were at the beach; if incident occurred at a home, indicate how many people were present at the home even if in a different room. If subject was alone at the time they entered the water, select 0.

6. What was the estimated time between when the subject was last seen and the body was recovered? Indicate how much time elapsed between where the subject was last seen and when the body was removed from the water. If a body was never recovered select “Not applicable.”

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8. Was the incident captured on surveillance video or other video, including from bystanders? Indicate if any footage of the incident or recovery exists.

9 through 14 Do not appear in the REDCap for entry. This question is only for use by investigators using the form and is not captured in the database.

15. Document all applicable temperatures.

- *Water temperature:* Document the temperature of the water at the time of incident. Estimate if necessary.
- *Air temperature:* Document the temperature of the ambient environment (either inside or outside) at the time of incident. Do not factor in wind chill.
- *Body temperature:* Document the temperature of the subject’s body after they were pulled from the water or recovered.

15a. If assessed, how was core body temperature measured?

- *Rectal:* Temperature was taken by inserting a thermometer into the anal opening.
- *Under the arm:* Temperature was taken by inserting a thermometer into the armpit.
- *Other, describe:* Other measurements are not considered as accurate, but should still be captured here if documented.
- *Unknown:* If a measurement was noted, but not a description of how that measurement was taken, select Unknown.

16. Environmental factors can sometimes contribute to a drowning or hamper rescue efforts. Select all relevant environmental factors that may have increased risk or contributed to the drowning (H3e).

Select any factors that either contributed to the water event, or hampered rescue or recovery efforts.

- *None:* The incident occurred indoors, or no environmental factors contributed whatsoever.

[Type here]

- *Water temperature:* Water that was too hot or too cold caused harm.
- *Ice:* Select if the subject fell through ice, or ice hampered visibility and caused the subject to not be extricated from the water in a timely manner.
- *Current:* If the current pulled the subject down or away from a rescue, indicate here, and if known, document the current in knots.
- *Water clarity:* Select if water that was murky or otherwise obscured contributed to the death.
- *Rip current/undertow:* Select if water's rip current or undertow pulled the victim under or away. A rip current is a specific type of current that occurs near beaches where waves break.
- *Wind:* Select if wind impacted the water incident, including boating incidents caused by wind. If known, specify the wind speed in knots.
- *Flash flood:* A flash flood is a sudden, localized flood due to heavy or excessive rain in a short period of time.
- *Other severe weather event, describe:* Other severe weather events can include microbursts, hurricanes, typhoons, monsoons, and more. This can include indirect events, such as a sudden rain storm causing an outdoor party to rush inside for cover and miss a young child who then wanders into an unattended pool. Briefly describe the event.
- *Dropoff:* An unexpected change in depth, either naturally occurring or created by humans.
- *Variable depth water, such as retention pond or lowhead dam:* Water in an area that can be prone to rapid depth changes, especially in events of heavy rain or flooding.
- *Rocky shore/outcropping:* A geographical feature that could be naturally occurring or created by humans.
- *White water/foam:* Water churning, either naturally or from things like a dam, that causes a loss of visibility and/or stronger currents.
- *Waves:* A raised area or swell on the surface of a body of water. These are most likely naturally occurring, but artificial 'wave pools' can contribute to water-related deaths as well. If known, select the estimated wave height.
- *Other, describe:* Provide additional environmental factors not listed above.
- *Unknown:* Select if no environmental were known to have contributed, but it is not certain none contributed.

17. Select all relevant events that may have increased risk or contributed to the death. Additional medical conditions that may have increased risk or contributed are asked about in the Decedent Investigation Form.

- *None:* No other factors contributed to the incident.
- *Fell into water:* The subject fell into water accidentally.
- *Intoxication:* The subject was impaired from consumption of drugs or alcohol.
- *Jumped from height:* This can include recreationally jumping from cliffs, high dives, etc., as well as jumping from a height with suicidal intent.
- *Pushed into water:* Indicate if the subject was pushed into the water, even if this was not with malicious intent.
- *Fell through ice:* The subject fell through the ice accidentally while walking, fishing/animal trapping, riding a motor vehicle, etc.

[Type here]

- *Dam*: Select if a dam caused or contributed to the incident or death. This can include a subject being caught in a dam, or a dam failing causing floods.
- *Airplane crash*: If the subject was in an airplane that crashed into water.
- *Trapped in vehicle*: Select if subject was in a vehicle that had entered water (i.e. driving onto a washed-out road) and they were unable to exit the vehicle.
- *Boat/watercraft involvement*: Select if the subject was in/on a boat or other watercraft, and problems with that device contributed.
- *Watercraft speed*: If subject was in/on a boat or other watercraft or was struck by a boat/watercraft that was traveling at a dangerous rate of speed.
- *Carbon monoxide poisoning*: Select if while engaging in boating, the subject became incapacitated due to carbon monoxide poisoning.
- *Suicide*: Select if the subject's suicidal intent contributed to the death.
- *Homicide*: Select if the subject entered the water due to someone else's homicidal intent. This can include being held under water, thrown into water with intent to harm, or a vehicle intentionally being driven into water.
- *Attempting to rescue a person, animal, or object*: If the subject entered the water in an attempt to rescue another being or item, indicate here, and describe the circumstances further in the narrative section.
- *Trauma or injury, describe*: Describe if other trauma or injury contributed to the incident. Examples could include an injury sustained while jumping off of a diving board.
- *Other, describe*: Describe if anything not medical in nature and not otherwise captured above contributed to the death.
- *Unknown*: Select if no factors were known to have contributed, but it is not certain that none contributed.
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17a. Boat or watercraft involvement?

- *Capsized*: The boat overturned.
- *Crashed*: The boat collided with something else.
- *Swamped or took on water*: The boat filled with water.
- *Sinking/sunk*: The boat was in the process of sinking or had sunk.
- *Fell overboard*: The subject fell overboard from a boat, which was not caused by any other issues listed above.
- *Other, describe*:

18. Was there a trained or certified lifeguard present? (H3o)

- *Yes*: Lifeguards were on-duty and supervising the water the subject was in or near.
- *No, no lifeguards at the hour of incident*: The body of water does sometimes have lifeguards, but not at the time of the incident (i.e., subject snuck into a country club pool after hours; a county park only has lifeguards at certain hours).
- *No, no lifeguards for body of water*: The body of water where the incident occurred does not have lifeguards (e.g., a bathtub, backyard hot tub).
- *Unknown*

[Type here]

18a. If there were lifeguards present, how many were supervising that area at the time of incident?

Sometimes pools or open water swimming areas are divided into sections—for instance, if subject was in a small wading pool separate from a larger pool, how many lifeguards were supervising just that pool?

18b. Was there a rotation system for lifeguards? Sometimes if a pool or swimming area have multiple lifeguards, there will be a system where the lifeguards switch positions—e.g., one is on the deck while another is in a high chair and they switch positions every 20 minutes. If so, describe the rotation system in detail, including how long the lifeguard had been in that spot.

18c. Approximately how many swimmers was this lifeguard in charge of supervising at the time of incident? Describe if the swimming area had a system or a required ratio of lifeguards to swimmers.

18d. Describe the experience and qualifications of the lifeguard(s) on duty, including training and experience. If known, detail years of experience lifeguarding and when trainings or certifications were obtained.

19. How did the subject access the water? What events led to the subject being in water?

- *Subject placed into water (such as bathtub):* Select if the subject had been placed into water. This is most common for bathtubs.
- *Permitted access with supervisor accompaniment:* Select if the supervisor and subject entered the water together, like walking into water at a park's swimming beach.
- *Permitted access but supervisor did not accompany:* The supervisor did not enter the water but was present.
- *Permitted access, no supervisor required:* The subject was allowed to enter the water without a supervisor's presence or permission. This is more common in young adults.
- *Unpermitted access, wandered in or fell in:* The subject was able to enter the water unsupervised or fall into the water. **This applies to bodies of water with no barriers present** and includes water that subject had been told they needed supervision to enter, and they entered without supervision.
- *Unpermitted access, breached a protective barrier:* The subject was able to get around barriers like doors, gates, fences, etc. in order to access the water. This includes doors or gates being left or propped open, and can include water that subject had been told they needed supervision to enter, and they entered without supervision if they surpassed a barrier to do so.
- *Unpermitted access, trespassing:* Subject unlawfully accessed water, either public or private. Typically doing so would involve breaching barriers like fences or gates.
- *Other, specify:* Describe other ways the subject may have entered the water that were not included in the options above. **This should only be selected in rare instances.** For instance, a driver takes their vehicle with subject inside into water with homicidal intent.
- *Unknown*

20. Did any of these barriers or layers of protection exist to prevent access to the water? (H3j) Check all that apply. Select if the barrier or protection was present, and if so, if it were breached. If the layer was breached, select or detail how.

[Type here]

- **Fence:** Select if a fence was present, even if not encompassing the pool on all sides. This covers all fencing materials and heights, except fence gates, which are the next option. If a fence was present, detail in follow-ups the height of the fence. If the fence was breached, detail how:
 - *Climbed fence:* The subject was able to go over the fence. This can be easily done with chain-link fencing.
 - *Fence too short:* Subject could step over the fence.
 - *Gap in fence:* Subject could slip through a gap in the fence.
 - *Fence had pre-existing damage:* The fence had damage long before the incident that may have knocked over fencing or created gaps. This could be from storms.
 - *Fence was damaged expressly to gain access:* An example could be someone cutting a chain-link fence to unlawfully gain access to the water.
 - *Other, specify:* Provide details here if the fence was breached in another way not described above.
 - *Unknown*
- **Gate:** Select if a gate was present. The gate can be part of a fence and be made of any material or height. If breached, detail how:
 - *Gate left/propped open:* The gate was not shut, subject was able to walk right through.
 - *Gate unlocked:* The subject was able to unlock the gate to gain access.
 - *Gate latch failed:* The gate's latch failed and subject was able to push through.
 - *Gap in gate:* There was a gap in the gate, either by design flaw or other means, that allowed the subject to slip through.
 - *Other, specify:* Provide details here if the gate was breached in another way not described above.
 - *Unknown*
- **Door/window:** Select if the decedent was indoors before the incident, and was able to escape through a door or window to access the water. If breached, detail how:
 - *Door/window left/propped open:* The door or window of a house was left open or propped open, allowing the subject to exit.
 - *Door unlocked:* The subject was able to open an unlocked door to exit.
 - *Door/window broken or screen broken:* Either a door or window was broken or their screen was broken/torn.
 - *Door self-close failed:* Some doors or screen doors have a self-close feature. If present but it did not close the door properly, indicate here.
 - *Doggy door:* Select here if the child was able to exit the house by using a doggy door or cat flap.
 - *Other, specify:* Provide details here if the door was breached in another way not described above.
 - *Unknown*
- **Pool or door alarm:** Some people have door alarms installed that make a large chime if the door is opened. Some home pools have alarms that make noise if the water is disturbed or if there is motion in or around the pool area or the pool gate. Select if any were present; and if they were breached, detail how:
 - *Pool alarm not answered:* The alarm went off, but was ignored or dismissed or not heard.

[Type here]

- *Door alarm not answered*: The alarm on a door went off, but was ignored or dismissed or not heard.
- *Not working/broken/failed*: The alarm did not sound off, but should have.
- *Not armed/set at time of incident*: The alarm was in working order, but had been turned off or was on a timer for certain hours only.
- *Other, specify*: Provide details here If the alarm was breached in another way not described above.
- *Unknown*
- *Pool cover*: Some pools or hot tubs have covers over the top of them. These can be hard materials or soft materials. If breached, specify how:
 - *Cover left off*: There was a cover present, but it was not on the water at the time of incident.
 - *Cover torn/damaged*: The cover was torn or damaged, allowing the subject to access.
 - *Cover not locked*: The cover was able to easily be removed by the subject.
 - *Non-rigid cover bypassed*: A soft cover, like a tarp, was able to be squeezed under.
 - *Other, specify*: Provide details here If the cover was breached in another way not described above.
 - *Unknown*
- *None*: No barriers were present. This can apply to open water, such as a pond with no fencing around it.

21. Was there any other equipment in use relating to safety? Some times there is equipment in place that while not meant for prohibiting access into the water, might still have prevention purposes. Indicate the item(s):

- *None*
- *Ladder*: Select if this was an above-ground pool, and the family used the removal of a ladder as a way to keep children away from the pool.
- *Water alert bracelet*: Devices a child can wear that emit a large sound if they can sense that a submersion has happened.
- *Tracking device on subject*: Some caregivers have tracking devices on their children. This can be common in children with autism who can be prone to wander or elope. This can include a GPS bracelet, or other tracking devices.
- *Other, describe*: Describe anything else that was in place for safety of those around the water that was not a barrier or listed above.

22. Were any warning signs or labels posted? (H3n) Select if *any* signs or labels were present (e.g., “Enter at Own Risk,’ ‘Thin Ice,’) or systems like beach flags. If ‘Yes,” a follow-up of **22a** asks if the subject, or their supervisor if present, was able to read and understand the sign.

23. Were swimmers required to pass a swim test to access the water? Some pools or bodies of water might require a swim test. This is common at public pools or camps but some private homeowners might have guests do this as well. This could be a policy in place for *any* entry into the water, or for accessing a larger/deeper swimming area.

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- *Yes, to access the whole area:* Swimmers had to pass a test to enter at all. If so, detail the test, who administered it, and if the subject had passed or failed.
- *Yes, but only for deep end:* Swimmers had to pass a test if they wanted to access a secondary body or area (typically a deep end). If so, detail the test, who administered it, and if the subject had passed or failed.
- *No:* The subject was swimming or recreating in water, but in an area or body of water that did not require a test.
- *N/A, drowning was not in a typical swimming body of water:* The subject was using a bathtub, fell in a bucket, canal, or other non-swimming body of water.

24. Was a rescue attempt made? (H3p) Someone noticed the subject entering the water or struggling to be in the water, and attempted to extract the subject from the water. Note this is different than recovery of a deceased body.

24a. If attempt was made, by whom? Check all that apply.

- *Family member 18 years or older:* This can include parents, caregivers, grandparents, aunts, uncles, and siblings or cousins aged 18 or older.
- *Family member under 18 years:* If any siblings, cousins, aunts, or uncles were under the age of 18, but tried to help.
- *Lifeguard:* A trained or certified lifeguard was present and tried to help.
- *Other facility staff:* Another employee who was not a trained or certified lifeguard (e.g., building manager) tried to help.
- *EMS/First responder:* Someone working as a first responder (fire, police) or emergency medical services tried to rescue the subject.
- *The person who discovered the subject:* This could be a witness or reporting party to the incident.
- *Other adult:* Another adult involved with the subject, but not a family member, lifeguard, or EMS tried to rescue. This could be a friend's parent or an adult camp counselor.
- *Other child:* A friend of the subject or classmate.
- *Bystander:* A stranger or person not affiliated with the subject, like a person boating or fellow patron.

24b Does not appear in the REDCap for entry. This question is only for use by investigators using the form and is not captured in the database

24c. Did anyone attempting to rescue the subject also require assistance or aid? (H3p) If in coming to the aid of the subject, anyone else also died, was hospitalized, and/or needed other medical attention as a result of offering the aid. Check all that apply.

25. What equipment was present, and subsequently used, at the scene? (H3q) Investigators should scan the scene and note any equipment in the vicinity. Scene photographs or video can also aid in this after an investigator has left the scene. This only refers to items intended to pull a person out of the water. Indicate all present and if used:

- *None:* No rescue equipment was present at the scene, or none were used. For instance, none of the following items would be present in a bathroom, so 'none' would be selected for both. if a

[Type here]

body was discovered in the ocean after death but was still in water, items might have been present, but select 'none' for items used.

- *Rescue can*: This item is typically orange in color, plastic with handles, and carried by lifeguards.
- *Rescue tube*: Also frequently carried by lifeguards, this item is typically red and foam with a strap.
- *Ring buoy*: A circular ring that floats and can be tossed to people struggling in water.
- *Life hook/Shepard's crook*: A long pole with a hook people struggling can grab onto to be pulled back to shore or towards a rescuer.
- *Rescue throw rope bag*: Also known as a throw bag or a throw line, this device is a bag that contains rope that when thrown floats and can connect a rescuer and a rescuee.
- *Rescue watercraft*: A boat, surfboard, paddleboard, or other craft that is specifically for rescue use. Could be owned/operated by city or county law enforcement, coast guard, or other beach patrol.
- *Other, describe*: Describe any additional equipment that was present at the scene but not mentioned above. This can include homemade rescue equipment like garden hoses, rope and gallon jugs, etc.
- *Unknown*: Select if it is unknown what equipment was present or used at the scene.

26. What resources were dispatched in response to the incident? Check all that apply of people or offices who were contacted regarding the incident, including for rescue or recovery.

27. Select all resuscitative methods that were used or administered on-scene or in transit from the scene. Do not include methods administered at a hospital.

- *Rescue breaths*: Also known as "mouth to mouth." Alone or in tandem with chest compression can be referred to as "CPR" (cardiopulmonary resuscitation).
- *Chest compressions*: Alone or in tandem with rescue breaths can be referred to as "CPR"
- *Automated external defibrillator (AED)*: An external device used to analyze heart rhythms and administer 'shocks' on-scene to restart a heart or return it to a normal rhythm.
- *First aid*: Act of caring for cuts, scrapes, or other physically-presenting injuries.
- *Rescue medications, including naloxone*: Medications administered on-scene to attempt to resuscitate a subject. Do not include anything used in a hospital setting.
- *Supplemental oxygen/bag-valve mask*: A bag-valve mask or other way of increasing subject's oxygen intake on-scene.
- *Other, describe*: Anything else administered on-scene to aid in saving the subject's life not described above.

27a. If any of the above methods were used, who applied them? Check all that apply, and detail their training/certifications and if said certifications were currently active.

27b. What was the approximate duration of resuscitation? Detail how long or how many doses/rounds/shocks were administered.

28. When found, was the subject: Check all that apply to describe the subject's disposition.

- *Deceased*: If the subject did not have a detectable pulse or was declared dead on arrival on-scene.

[Type here]

- *Transported to the hospital:* Subject was removed from the scene and taken to a hospital.
- *Admitted to hospital:* Subject was admitted to a hospital for treatment from the water incident.
- *Treated in-field:* Subject received treatment or aid, including AED, CPR, first aid, or other resuscitative efforts, on-scene or in transit.

29. How deep was the water? Estimates and approximations are fine, but if any depths are completely unknown, please select “unknown.”

- *Where subject was last seen:* Detail the depth of the water if subject was last seen in water, such as a pool, bathtub, or lake. If subject was last seen on land/not in water, select “not applicable.”
- *Where incident occurred:* Enter how deep the water was where the incident occurred.

29a. How were depths measured? Detail how depth was known. Examples: “Stated pool depth of 3 feet” “Used a ruler” “Estimated,” etc.

30. Where did the incident occur? (H3b) This is the gatekeeper for the next sections. This question greatly informs the rest of the tool. Please ensure answer is accurate.

- *In contained water available to the public, customers, or patrons; such as a pool, hot tub, water park, etc.* Select this option for any “public” water that is not considered open/uncontained/natural water. This includes pools, hot tubs, wave pools, lazy rivers, diving pools, water parks, and more, located indoors or outdoors. This can be schools, universities, private clubs, city-owned pools, and more.
- *In contained water at a private residence, such as a pool, hot tub, bathtub, or other water container. This includes private vacation rentals, apartments, mobile home parks, or a hotel/motel if a subject’s place of residence.* Select if the incident occurred in contained water at someone’s residence. This would include toilets, buckets, and farm tanks.
- *In open/natural water, including open water on public or residential property such as a pond or other water access point, ditch, canal, lake, or river. This includes falling through ice.* Select any open water, including human-constructed ponds.

Public Pool

Public Pool 1. What type of facility was this? (H3g) Select what best describes the type of facility where the incident occurred.

- *Government/city/neighborhood pool:* This includes HOA neighborhood pools.
- *Hotel/Motel (as guest):* Select if the subject was a guest at a hotel or motel, including resorts. If subject or their family were living at a hotel or motel, select “Private Residence” in the previous question.
- *Private membership/country club:* Select if the pool was only accessible to those holding membership (or a guest) at a private club or country club.
- *Camp:* Select if the pool was owned or run by a camp.
- *School or university:* Select if the pool was part of a school or university, including a university’s student gym or athletic facility.
- *Gym:* Select if the pool was part of a gym or fitness center, excluding school gyms.
- *Water feature:* Select if this was a water park or water feature (like a fountain).
- *Other, specify:* Describe any type of public access pool not described in the options above.

[Type here]

Public Pool 2. In what type of pool, hot tub, etc. did the incident occur? Check all that apply.

- *Outdoor facility:* A public pool or hot tub, or part of a pool or hot tub, that is fully outdoors.
- *Indoor facility:* A public pool or hot tub, or part of a pool or hot tub, that is fully indoors.
- *Main pool:* The main or sole pool.
- *Wading pool:* A separate, shallow pool meant for toddlers.
- *Diving pool:* A separate extra-deep pool, common at athletic facilities for competition diving.
- *Lazy river:* An artificial river that may be indoors or outdoors. Users could be on inner tubes or not.
- *Therapy pool:* Aquatic therapy pools are special pools used for physical therapy.
- *Zero-entry pool:* A type of pool with a graduated entrance that slopes down from the edge, getting incrementally deeper.
- *Spa/hot tub:* A small pool with extra-warm water.
- *Water park feature (slide, tank, wave pool):* Something at a water park that is not a plain 'main' pool or hot tub. Describe more in the narrative.
- *Other, specify:* Describe any type of water not mentioned in the options above.
- *Unknown:*

Public Pool 3. In what type of water did the drowning occur? Pools can be filled with several types of water that may impact health outcomes in drowning events. Please select if known the water composition.

- *Saltwater:* The pool contained salt water.
- *All-chlorine:* The pool only contained water treated with chlorine.
- *Freshwater:* The pool contained fresh water that was neither salinized nor chlorinated. These are uncommon. Select if a previously empty city pool had filled with rainwater.
- *Unknown:* Select if the water composition was unknown.

Public Pool 4. Was facility open or operating at the time? Indicate if the pool or facility was open to patrons/customers at the time of incident.

Public Pool 5. Did facility have posted rules/policies around...

- **Supervision?** Indicate if the water had rules around supervision, e.g., children under the age of 5 must be accompanied by an adult.
- **Alcohol or drug use?** Indicate if the pool had rules around alcohol or drug use. This could include no alcohol or drugs allowed on the pool deck, or rules about not swimming while intoxicated.
- **Swim test for water access or use?** See Scene Processing 22.

Public Pool 6. Did the pool have any known prior safety complaints or legal compliance issues? If yes, please describe in detail, including when the issue occurred. DO NOT NAME THE FACILITY HERE.

Public Pool 7. What was the maximum swimmer capacity of the area the drowning occurred in? This information should be posted at the scene. Check scene photos or videos if not noted by on-scene investigators.

[Type here]

Public Pool 7a. If capacity was known, at the time of the incident was the venue: Indicate if at the time of the incident if the facility had fewer swimmers than capacity, close to the capacity, or was over the posted capacity.

Public Pool 8. Was subject a/an: Indicate how the subject gained entry into the facility.

- *Employee:* The subject was employed by the facility, even if entering after public hours.
- *Paying/permitted patron:* The subject had paid for entry or was permitted to be using the facility.
- *Trespassing:* Subject had unlawfully enter the facility, including breaching protective barriers.
- *Unknown*

Private Residence

Private Residence 1. Type of dwelling?

- *Single family home:* Select if the incident occurred in a single-family home owned or rented by the subject, their family, or their friends. Do not select if a vacation rental property.
- *Multi-unit home, such as an apartment, townhome, or duplex:* Select if the incident occurred in a building part of a multi-housing unit, or a facility meant for residents/tenants of an apartment or other housing complex.
- *Manufactured/mobile home:* A mobile home or manufactured home or mobile home park.
- *Hotel/motel, if subject was residing there at time of death:* Select if the subject or their family were living in a hotel or motel. If subject was a temporary hotel/motel guest, change previous gatekeeper question to "Public Pool."
- *Vacation rental:* Select if area was a home, apartment, etc. rented temporarily by subject, their family, or friends for a short-term recreational purpose or vacation.
- *Other, specify:* Describe here if the private residence was a different kind of dwelling than the options above.
- *Unknown:*

Private Residence 2. Was this dwelling a HUD-subsidized housing unit? Indicate if unit was a Housing and Urban Development-subsidized housing unit.

Private Residence 3. Type of body of water? (H3b/H3f) Select the body of water or vessel where the incident occurred.

- *Above-ground pool:* The pool was on the ground. Typically a ladder is present to help users enter the pool.
- *In-ground pool:* A pool that is in the ground and can be walked into.
- *Hot tub/Spa:* A small pool with extra-warm water.
- *Wading/Kiddie pool:* A small, mobile, shallow pool, often made of plastic or inflatable material.
- *Bathtub:* Include any infant bathing devices placed in a bathtub.
- *Bucket, toilet, or other item not intended for bathing or swimming:* Include any farm/stock tanks or troughs and describe the item.

[Type here]

- *Water feature:* Any indoor or outdoor fountains. If part of a pond, select “Open Water” in prior question Scene Processing 29.
- *Other, describe:*

Private Residence 3a. In what type of water did the drowning occur? Pools can be filled with several types of water that may impact health outcomes in drowning events. Please select if known the water composition.

- *Saltwater:* The pool contained salt water.
- *All-chlorine:* The pool only contained water treated with chlorine.
- *Freshwater:* Select if a previously empty pool or bucket had filled with rain water.
- *Unknown:* Select if the water composition was unknown.

Private Residence 3b. Does state or locality have safety laws, regulations, or requirements for pools, including fences, gates, ladders, or drains? (H3k) Indicate if area had any known rules, laws, or requirements for pools.

Private Residence 3c. Was pool in compliance with laws? Specify if the pool currently met all enacted laws or regulations at the time of incident. Some areas allow pools built before enactment of a law to not have to be corrected to be up to code at the time of law passing—this is called being “legacy exempted.” While not illegal, it is of interest to this project to separate fully compliant pools from pools not in compliance, but not breaking laws due to being legacy exempt.

Private Residence 3d. Was pool fenced? Indicate if the pool had any fencing on any side. Fencing could be wood, metal, or other materials. For round or irregularly-shaped pools, select what best fits.

Private Residence 3e. If drowning occurred in a bathtub, select all that were present.

- *Infant mini-bath:* This is a small bath that is placed in an existing bathtub for use of bathing infants.
- *Infant bath seat:* Similar to a mini-bath, this is a seat intended to keep babies and infants upright while being bathed in an existing tub.
- *Protective spout cover:* A safety item meant to prevent a baby or infant from injury from a water spout or faucet.
- *Water thermometer:* A safety item meant to ensure bathwater is not too hot.

Private Residence 4. At whose home did the incident occur? Indicate the owner or main tenant (if renting) of the home where the incident occurred.

Open Water

Open Water 1. In what type of water did the incident occur? (H3c)

- *Lake:* A large body of water, can be natural or constructed.
- *Ocean:* A large saltwater natural body of water with tides.
- *River:* A large natural stream of water flowing in a channel to the sea or a lake. Include creeks and streams here as well. Include rivers or creeks that are frozen over.

[Type here]

- *Natural or constructed pond:* Include naturally occurring small bodies of water as well as constructed ponds, golf course ponds, retention ponds, ornamental ponds, koi ponds, etc. Include frozen over ponds.
- *Estuary/bay:* The tidal mouth of a large river where it connects to open sea. A bay is a broad inlet of the sea. An estuary is often a bay, but a bay is not always an estuary.
- *Gravel pit/quarry:* An open pit mine where rocks, sand, gravel, or other minerals are extracted. Quarries often fill with water from underground aquifers and rainwater.
- *Irrigation canal/ditch:* Water in a dug valley/low point. Water can be flowing through the area at all times, or collect in times of heavy rain.
- *Bayou:* A naturally occurring waterway, often characterized by slow or stagnant water. They can be freshwater, salt water, or brackish water, and are typically wide and shallow.
- *Reservoir:* A large natural or artificial lake used as a source of water supply, often behind a dam.
- *Ice road:* This is to be selected if the subject was traveling on ice (snowmobile, ATV, etc.) and the ice gave way.
- *Other, specify:* Describe open water not captured above. This will be selected in rare instances. One instance of when to select this option is if rain or a flash flood caused water to enter or fill a space not normally filled with water (a roadway or a field).

Open Water 2. What was the approximate distance subject was found from shore? Identify how far from shore the subject was recovered from. Include the unit of measurement. If subject not recovered, say "Subject not recovered."

Open Water 3. Did the incident occur at a park? Specify if the body of water (either where subject entered the water or was recovered from) was a park. If so, specify what kind of park if known.

Open Water 4. Was there a designated swimming area? Some lakes, oceans, and other bodies of open water have specific contained areas meant for swimming. Select if this body of water had such designation, and if so, if that is where the incident occurred (**Open Water 4a**).

Open Water 4b. How was the swimming area designated? What separated the swimming area or made it clear the area permitted swimming?

- *Ropes:* Ropes were used to measure out an area. There might have been multiple ropes designating a shallow and deep section.
- *Buoys:* Either standalone buoys, or floating buoys on ropes were used to delineate a swim area.
- *Lifeguard station:* A small building or chair (often white in color) where lifeguards work from.
- *Rescue equipment:* Sometimes at entry/access points to water on rivers, streams, or creeks there can be life jacket loaner boards or other equipment, indicating it is a location for watersports.

Open Water 4c. What size is the swimming area? This information might be posted on a park's department website. Indicate the size of the designated swimming area.

Open Water 4d. What is the maximum swimmer capacity of the area the drowning occurred in? This information might be posted at the scene. Check scene photos or videos if not noted by on-scene investigators.

[Type here]

Open Water 4e. If capacity was known, at the time of the incident was the venue: Indicate if at the time of the incident if the swimming area had fewer swimmers than capacity, close to the capacity, or was over the posted capacity.

Open Water 4f. Was there a diving platform or other structure on the water? Indicate if a floating or fixed diving platform, water trampoline, or other structure was on the water. If so, indicate if the subject had been seen on or around the structure.

Open Water 5. Was subject engaging in transportation or a recreational activity, in or on a vessel, watercraft, or snowmobile at the time of incident? (H3d) Indicate if the subject was boating or snowmobiling at the time of incident. Specify what type of vessel in **Open Water 5a**. Vessels include any devices for transportation (e.g., ferries), recreation, sightseeing (other commercial motorboats), or exercise. Indicate the length of the vessel in **Open Water 5b**.

Open Water 5c. Was subject operating the boat or device? In some instances, this will be clear, e.g., if on a motorboat, answer if the subject was piloting the boat. Select 'yes' if subject was also paddling or pedaling the device to make it move or steer. If subject was on an innertube or a passenger who was not paddling or pedaling, select "No."

Open Water 5d. Had boat operator completed mandatory boater education? Some areas or circumstances require the person operating a boat to have completed courses or obtained a certificate. If those circumstances applied, select 'yes' or 'no.' If no educational requirements were in place (e.g., subject was on an innertube), select "Not required for location or circumstances."

Open Water 5e. Did the boat/device have all legally required safety equipment? This will vary by boat and jurisdiction. Some areas require boats for transportation or commercial purposes to have life jackets and/or lifeboats onboard. Some areas require life jackets on personal craft for some or all ages. If safety equipment was on board, describe equipment and if requirements were met (if applicable).

Open Water 6. On shore, was there any of the following water safety equipment? Select all that apply. If none were noted by investigators on-scene, double check scene photographs or video.

- *None:* No known safety equipment was on shore.
- *Lifeguard station—Staffed:* There was a lifeguard stand or station that had lifeguards on duty at the time of incident.
- *Lifeguard station—Closed or unstaffed:* There was a lifeguard stand or station, but no lifeguards were on duty at the time of incident.
- *Life rings:* Circular flotation devices that can be used to aid struggling people in water.
- *Life jacket loaner board—Stocked:* A board on shore where people could borrow life jackets. Both adult and child sizes were available.
- *Life jacket loaner board—No proper sizes:* There was a life jacket loaner board, but it did not have any sizes that fit the subject.
- *Life jacket loaner board—Empty.* There was a life jacket loaner board on shore, but there were no life jackets available to use. This could be the case if all life jackets were in use, or if life jackets were put away seasonally.
- *Other, specify:* Describe here if there was water safety equipment not described in the options above.

[Type here]

Decedent Investigation Form

1. What happened? Please describe the incident and the sequence of events leading up to it, including the source of the information, details around entry or submersion, or additional drownings that may have occurred at the same time. DO NOT INCLUDE ANY IDENTIFIERS IN THIS TEXT. This includes names, addresses, business names, names of bodies of water (e.g., "Silver Lake"), and specific service providers.

2. What sources were used to gather information for this report? These can include coroner/medical examiner reports, police reports, hospital records, and more.

3. Did the subject have a history of experiencing child maltreatment, abuse, or neglect? Specify if a history of abuse, neglect, or maltreatment were known.

4. Was there an open child welfare case at the time of incident? Indicate if the subject or the subject's caregivers were being investigated by child welfare at the time of incident.

5. Did the subject have a history of criminal activity? If known, indicate if the subject had any history of criminal activity, including juvenile convictions.

6. Was subject familiar with the location? Answer if the subject had been in the location and was familiar with it. Examples of "yes" include a bathtub, backyard pool at their residence, or a park they frequented. "No" would include a vacation rental with a pool or open water the subject had not frequented.

7. Subject's swimming ability? (H3m) Answer from the options below the one that best fits:

- *Not a swimmer:* The subject would not voluntarily enter water (by choice or due to age) or could not put their face in water or float unassisted.
- *Beginner swimmer:* The subject was comfortable putting their face in water or floating.
- *Intermediate swimmer:* The subject was comfortable and/or safe even in deep water.
- *Advanced swimmer:* The subject could swim multiple strokes efficiently.
- *Unknown:* The subject's swimming ability was unknown.

8. Did subject usually rely on a flotation device for water-related activities? (H3i) Indicate if the subject only would typically enter water with a flotation device (e.g., innertube, water wings, etc.).

9. If subject could swim, how did they learn? Check all that apply. Once selected, describe the instruction, including skills taught and how many lessons. Include when the instruction occurred.

- *Formal swimming lessons:* Subject was enrolled into lessons taught by an instructor.
- *Taught by family member or friend:* Subject learned informally by being instructed by a friend or family member.
- *Other, describe:* Describe how the subject learned swimming skills if not described in the options above.
- *Unknown:*
- *Subject could not swim:* If subject could not swim, indicate here.

[Type here]

10. Did any of the following prevent the subject from participating in swimming lessons? Check all that apply.

11. Select all of the following skills the subject was able to do without the assistance of a floatation device. (H3I) Select all the apply.

12. What language did the subject primarily speak at home? Select the language predominantly spoken by the subject (or their family, if subject pre-verbal) at home. Indicate if subject used any other languages in **13**.

14. Did subject have or experience any of the following? Check all that apply. Detail or specify any of the conditions the subject had.

- *Recent illness or injury:* If the subject had any recent illness or injury in the days or weeks before the incident.
- *Illnesses, injuries, or general malaise on day of incident:* If the subject had any illnesses, injuries, or complaints of general malaise on the day of the incident. Do not include injuries sustained in the incident.
- *Autism spectrum disorder:* This can present in subjects in a myriad of ways. Detail severity of condition and ways it presented (e.g., subject non-verbal, reliant on others for care, etc.)
- *Seizure disorder, such as epilepsy:* Select if the subject had a seizure disorder that was known about before the incident.
- *Cardiac/heart condition:* Select if the subject had a known heart condition, such as a murmur.
- *Long QT syndrome:* A specific type of cardiac condition.
- *Mental illness:* Select if potentially relevant to the incident, including active suicidal ideation.
- *Previous suicide attempts:* If the subject had ever attempted suicide, indicate here.
- *Intellectual and/or developmental conditions:* Indicate here if the subject had conditions like cerebral palsy or Down Syndrome.
- *Mobility issues:* Select here if subject suffered from paralysis, amputation, or neuropathy.
- *Increased risk for adverse events:* Some people are known to be at an increased risk for events such as a heart attack, stroke, or embolism.
- *Sensory:* Examples include deafness or blindness. Sensory processing issues would be documented under autism spectrum disorder.
- *Chronic illness or autoimmunity:* Include here conditions like multiple sclerosis or arthritis.
- *Access or functional needs:* If not from a condition above, outline if the subject needed additional assistance, like an assistive device such as a ramp or handrail.
- *Other:* Specify any other conditions that do not fit above.
- *None:* The subject did not have any known illnesses, conditions, or diseases.

15. Did subject have an illness or medical condition that may have contributed to the drowning? This can be varied and subject to interpretation. An obvious example would be if subject had a seizure while in the water.

16. Did subject have an emotional, mental, or behavioral condition that may have contributed to the drowning? This can be varied and subject to interpretation. One example would be if subject was drawn to water due to having autism.

[Type here]

17. Did the subject have a biological first-degree relative that died suddenly before the age of 50? If yes, detail who and how. Include all deaths, even if seemingly unrelated to drowning or water. Only include biological relatives that are in the first degree of being related—grandparents, aunts, uncles, cousins, biological parents, and siblings.

18. Did the subject have a biological first-degree relative with heart disease? If yes, detail who and what the condition was. Only include biological relatives that are in the first degree of being related—grandparents, aunts, uncles, cousins, biological parents, and siblings.

19. Did the subject have a known history of alcohol or substance use/misuse, including prescription medication? Indicate if the subject was known to ever have problems with alcohol or substance use/misuse.

20. Was the subject known to be taking any prescription or non-prescription medications or supplements? If subject was taking any medications or supplements at the time of the incident, please list them by name or describe (e.g., “antibiotics” or “antidepressants” if names not known).

21. Had subject experienced any of the following? Select which, if any, of the listed life stressors the subject (or their family) had experienced. If none listed apply, select “none of the above.”

22. Was supervision indicated for any of the following reasons? Select all that apply as reasons why the subject needed or should have been under supervision when in water.

23 and 24 Do not appear in the REDCap for entry. These questions are only for use by investigators using the form and are not captured in the database.

25. Official cause of death stated on death certificate: Copy the cause of death exactly as seen from the subject’s death certificate.

26. Official manner of death stated on death certificate: Copy the manner of death exactly as seen from the subject’s death certificate.

27. Death was referred to: Indicate if the death was sent to a medical examiner or coroner.

28. Was toxicology performed? Indicate if a toxicology analysis was done. If one was done and results were pending at the time of review or data entry, select ‘yes’ and indicate ‘results pending.’ Otherwise, describe the substances detected and at what levels from the report.

29. Was an autopsy conducted? Select if an autopsy was conducted. If so, more follow-up questions will appear. Describe any evidence of prior abuse or assault in **29a**. **29b** refers to injuries observed on autopsy related to the incident. Document any other noteworthy findings, including histology if applicable, in **29c**. Lastly, include time of death in 24-hour format for **29d**.

30. List or describe any enforcement actions or safety improvements planned as a result of this drowning. Only include plans in motion, like if barriers are being installed or lifeguards are being added. Do not describe how you think the drowning could have been prevented or what was discussed but not acted upon. Include any pending jail time/punishment for homicides or negligence being investigated or child welfare cases opened.

[Type here]