

Narrative

This proposal is submitted to support my request for a Use Permit. Given the urgent need for the services I provide, it seemed appropriate to also include some background and context.

The Epidemic of Pediatric Drowning

Every year that we continue to push the same water safety suggestions, stick puddle jumpers on our toddlers, and cross our fingers that maybe THIS is the year the statistics magically change, we are failing our kids. Children need and deserve to learn the skills necessary to save themselves from drowning.



The Tragedy of Pediatric Drowning:

When my daughter was 8 months old, I willingly handed her to the murderer who took her big brother's life.

And, then I watched as she fought off this killer and learned to live.

My three-year-old son, Levi, drowned in June 2018, while we were on a beach vacation with friends. One moment, he was sitting on the couch, watching TV while I cleaned up after dinner. In the next, I pulled his lifeless body from the bottom of the pool.



Levi had somehow slipped out of the living room filled with children and adults, including myself, my husband, and five other physician friends. We weren't drinking, weren't on our phones, and the pool was not even in our line of vision.

I was the one who glanced, unsuspectingly, over the balcony and found our Levi, my guttural screams bringing a rush of people outside. My

husband, a cardiothoracic anesthesiologist, was the first to perform CPR on his only son. Our older daughters watched in horror from the balcony, until our friends gently ushered them inside.

The confusion of “But, we weren’t even swimming!?” and “Levi was *just* on the couch” hung in the air, as we grappled to make sense of the senseless.

We begged to trade places with this boy who had so much life left to live and who we had *somehow failed to protect*. But, despite immediate attention, including being fully intubated before the ambulance even arrived, we lost Levi just hours later.

How did our son *drown*? How were years of intentional parenting canceled out within seconds?



Levi’s death rests on my husband and me. We failed to keep him safe, and there is no denying that fact. But, I have since learned that water

safety goes far beyond the assumed foolproof advice of “watch your kids while swimming.”

Here is the truth: parents only know what they know. I *thought* I was doing everything right to keep Levi safe. I have 16 photos of what would be his final day of life, and in 14 of them, he is wearing a life jacket or puddle jumper: time-stamped photos of my boy, grinning proudly in his puddle jumper, as we unknowingly marched toward the end.

Of course, I will never stop wishing I had not momentarily turned to clean up dinner and had seen Levi slip out the door that night. But, over the last year and a half of research and advocacy, **I have realized the most impactful mistake I made that ultimately led to my son’s death: I allowed and even encouraged Levi to believe that water was fun.**

We don’t stand in a busy parking lot and eagerly proclaim to our impressionable toddlers: “Come on in!!” We don’t encourage our kids to “become comfortable” around guns and tell other parents, “We don’t want our kids to be afraid of guns.”

Yet, this is exactly what we do with water, a substance that is just as deadly as parking lots and guns.

As a society, we brush aside the threat of drowning. “Tsk, tsk,” we say from the safety of our iPhones as we casually scroll (often inaccurate, sensationalized) news reports on drowning. We almost smugly view drowning as some sort of just punishment for the parents too neglectful to protect their children. We find the loophole rather than facing the fear that this could be us. *This stigma around drowning is the greatest threat to prevention efforts.*

But, honestly? Here is the real, raw truth that we want to turn our heads and ignore: the implications of neglect are irrelevant, because drowning isn’t happening *to the parents*. **It is happening to the children.** It’s the 3 year old who will never get another bedtime kiss,

the 8 year old who will never again open a Christmas stocking, and the teenager who will never graduate high school. Behind the statistics are real children and teenagers, with whole lives spread before them. Until those lives are taken.

I'm not just a mom with a broken heart: the statistics back me up. Drowning is the #1 cause of death for kids 1-4, a toddler can drown in less than one minute, and at least 69% happen when kids aren't even swimming. It remains the #2 cause of death for 5-14 year olds. And, then it spikes AGAIN for teens, who are drowning in natural water.

While advancements in other areas of childhood safety push forward each year, drowning prevention watches from the sidelines, ignored, wondering why researchers and the medical community continue to turn their heads. **The statistics have remained stagnant for decades.** The same water safety tips are casually tossed out each year: Watch your kids while swimming! Install a fence! Buy a puddle jumper! Learn CPR!

Well, my son was not swimming; he was wearing khaki shorts and sitting on a couch a moment before he drowned. The beach house had a fence. Levi wore a puddle jumper while swimming. My son had 6 physicians by his side within seconds of being pulled out of the water. AND NONE OF THESE SAVED HIM.

We are failing our kids. Every year that we continue to only push the same suggestions, stick puddle jumpers on our toddlers, and cross our fingers that maybe THIS is the year the statistics magically change, we are failing our kids. We are telling thousands of children every year: *We don't care enough about you to figure out how to stop this epidemic. Your lives are not worth it.*

Then, how *do* we stop this epidemic? We start by looking beyond what we are currently doing and say "*WHAT ELSE?*"

We start by treating water as if it can be a lethal environment, *because it can*. I am not advocating that we avoid water; my older girls still love swimming, and we even live on a lake. But, our culture has the fun

aspect of water figured out, and we must add in how to also respect it. We start by looking at what worked in the past to change the statistics

And radical change is exactly what is needed to stop this drowning epidemic. We must start treating water with the respect it deserves and teaching our children how to SURVIVE in water. The missing layer of protection is the one that considers the *individual child* while also simultaneously protecting against *multiple* bodies of water.

After Levi died, I started researching drowning prevention and heard about survival swim lessons everywhere I turned. I was admittedly skeptical. "That's some sort of gimmick," I remember thinking. "It wouldn't have worked with Levi."

I saw the videos circulating on social media of babies floating, even had hundreds of parents reach out to me and share their personal stories, passionate testimonials of how survival swim lessons saved their child.

My questions and skepticism outweighed my answers. Does this really work? Is this traumatic for kids?

But, as I delved deeper into the statistics and personal stories around drowning, I saw consistent common factors: children who drown usually loved water, relied on a puddle jumper, and did not know how to survive if they reached water alone.

My perception of water safety shifted dramatically, and this carried over to my family.

And, on the exact day that marked 20 months since we last saw our son alive, our 8 month old daughter Willow, Levi's little sister that he will never meet on this Earth, she took her first ISR survival swim lesson.

I was prepared for it to be emotionally challenging. But, ISR took me by the hands and said, "Be open minded and watch *the process*."

I handed my baby to the water, and, my heart pounding at every lesson, I watched as she learned to roll her tiny body, to find the surface, to get air. It has been the most empowering experience I have had in my eleven years of parenting.



Before her lessons started, part of me still expected it to be a trick or just rote training in floating that my baby would soon forget. It is none of that. Rather, survival swim lessons are about a behavioral approach to water. **My daughter was not trained to float; she LEARNED to problem-solve and to survive in water.**

She knows where the air is, knows how to get oxygen, understands that if she gets to the surface that Mommy will scoop her up. And, I do. And, she claps and laughs in delight, proud of the kick-ass job she just did in learning to save herself. This experience is beyond just teaching her to find the surface and float, though: Willow is developing a respect for water, which will continue for her lifetime.







In the best moments of this lifetime of grief and regret, I know my family will survive this tragedy. We are choosing to live purposeful lives for our other children. But, in the worst moments, when I feel certain this is what the depths of Hell must feel like, I think about Levi's final seconds in the water, and my broken mommy heart cannot help but wonder: *Was he scared?*

When the layers failed and he reached the water without me, he did not have a chance. I was right behind him; I just needed 30 more seconds, just needed him to hold his breath. I wish I had known the real truth about drowning before June 2018, but I know it now. And, should Willow, Levi's baby sister, ever reach the water alone, she will have a fighting chance.

Watching her learn ISR survival skills and to get to the surface in water and breathe, *to live*, is a gut punch. How did I not know that Levi was capable of this skill?



Traditionally, drowning prevention efforts have utilized and advocated three levels of defense:

1. Adult supervision
2. Fencing or other protective barriers, and
3. CPR techniques applied after the fact

Clearly, the mortality rate of more than 4,000 drowning incidents per year is a grim testimony to the failure of the traditional approaches when the victim had not been effectively trained to survive an aquatic accident.

Certainly, appropriate adult supervision and effective physical barriers (i.e., pool fencing) are helpful. Yet, at the same time, they are subject to human error. CPR, the recommended “last line of defense” is, at best, an after the fact, emergency management procedure with a highly uncertain outcome. Per American Heart Association data, even with effective CPR, survival of a prehospital cardiac arrest is only around 14%. Of the victims who do survive the initial submersion incident, thousands suffer severe and permanent neurological damage. It is estimated that for every child who drowns another four will suffer permanent brain damage.

The need for an effective defense, after adult supervision and pool barriers have failed, is self-evident. A moment’s inattention does not have to cost a baby his life. A baby or toddler who has the physical strength and motor skills to escape adult supervision, defeat a pool barrier, and enter the water can, with effective instruction, be trained to float on his/her back to breathe and survive.

Infant Swimming Resource (ISR)-The Program (infantswim.com)

ISR is the safest provider of infant and toddler survival swimming lessons worldwide. With over 50 years of ongoing research and development behind this program, ISR teaches each child aquatic self-rescue skills, and progresses to basic swimming lessons that give them the competence required to safely enjoy the water. To date, ISR Instructors have safely delivered more than 8,000,000 ISR self-rescue lessons and saved more than 800 lives.

As a Certified ISR Instructor, I have spent the past 12 years working to prevent as many water-related tragedies as possible. Every year I hear numerous stories from parents sharing how this program saved their child when he or she accidentally reached the water alone.

ISR- The Lessons

Lessons are offered to children ages 6 months - 6 years. They are one on one, for up to 10 minutes each day, five days per week for 3-6 weeks.

Children 6-12 months learn to roll onto their backs to float, rest, and breathe. They learn to maintain this position until help arrives.

Children 1-6 years of age learn the ISR self-rescue sequence of swimming until they need air, rotation onto the back to float, then rolling back over to continue swimming. ISR students are taught to repeat this sequence until they reach the safety of the steps, side of the pool, or the shoreline

Specific Business Details Requested...

- Heated pool
- Parking is in driveway
- Hours
 - April-July = max 5 hours
 - August max 2 hours
 - No teaching during the other months!
- Entrance is through the RV Gate that is propped open during business hours.
- Teach Monday-Friday only
- One parent allowed per child
- No other employees



General Safety/COVID-19

According to the Arizona Republic (August 8, 2020) child drownings spiked in Maricopa and Pinal Counties as Covid-19. Drownings nearly tripled from the previous year. Families quarantined at home and public pools shut down were certainly contributing factors. ISR already had so many safety protocols in place before enhancing them with additional COVID-19 precautions.

-Registration Review: A medical questionnaire is completed online for all students prior to scheduling lessons. The Registration Evaluation Team (RET), staffed by Registered Nurses who are also ISR trained Instructors, evaluates each registration to ensure that lessons and protocols are modified where needed to provide the safest lesson experience for each child.

-BUDS: Monitoring of the child's Bowel, Urine, Diet, and Sleep which is important to make modifications to the lesson based on the specific needs of each child.

-Lesson/Pool Environment: Pool entrance and deck area is inspected to ensure a clean and accessible area. The chlorine, PH levels are monitored daily to ensure chemically balanced water. Pool water is always free of algae and debris.

-Water/Air Temperature: Water temperature is maintained between 82-86. Temperatures above and below this range do not allow for adequate safety monitoring. I do have a pool heat pump and it is checked regularly. Sunscreen is recommended and umbrellas cover my pool area.

-Weather: Lessons will not be conducted when lightning, heavy rain, high winds, or other potentially dangerous conditions have been reported in the area within a minimum of 30 minutes of the lesson time. Parents and Instructors observe for sudden changes in weather throughout the lesson. Lessons must be stopped if there is thunderstorm or lightning.

-Instructor/student Health: Lessons will not be conducted if the Instructor is ill or injured. Students that experience fever, diarrhea, vomiting, open skin lesions, new rashes, or other obvious signs of illness or injury will be asked to stop lessons until the condition can be evaluated by physician and by the RET.

-Medical Lesson Update (MLU): Students who miss 3 or more lessons in a row due to a medical condition OR visit a doctor OR start a new medication OR who have changes to the health information questions in the online registration form will need to complete a MLU online prior to resuming lessons. The RET will respond to these requests within 24 hours. An email indication clearance and any applicable safety protocols will be sent to the parent together with a new registration form.

-Getting in the Pool: Each parent will hand the child to the Instructor who is already in the pool. The child will not walk down steps, jump in, or enter the pool without hands-on assistance from the parent.

During the Lesson:

-Seven Second Rule: No student will be submerged for more than 7 seconds. Seven seconds is 1/3 of the time period that defines apnea by the American Academy of Pediatrics.

-Swim Diapers: Students who are not potty trained must wear a swim diaper that has elastic waist and leg openings plus an additional layer of protection such as plastic pants to prevent accidental fecal contamination of the pool water. (I always request parents have two layers of protective reusable plastic swim diapers that fit securely on their child).

-Bowel/Vomiting Accidents: If there should be an incident where fecal material leaks from the swim diaper into the pool water or where the child vomits into the water, the lesson must end immediately. Pool is sanitized and filtered for a minimum of 12 hours prior to resuming lessons.

After the Lesson:

-The 3 Towel Rule: Parents bring 3 towels to each lesson for placement on my mat where the students have the left-side recovery. Towel 1 is a barrier to prevent person to person contact on the pool deck and allows for the prevention of disease transmission. Towel 2 is for absorption of pool water and any stomach contents that may be expelled during the recovery process. Towel 3 is for drying and warming after the lesson, paying special attention to the head first as heat loss occurs most rapidly from the child's head.

-Refresher/Maintenance Lessons: Students return to the pool from time to time throughout the year/years to review skills and make adjustments as the child grows and develops.

As previously mentioned, ISR lessons are the safest lessons provided and all of these safety precautions were already in place on a daily basis. Once COVID-19 became a widespread pandemic, I knew that I still needed to reach children - now more than ever with so many at home! Although my season was postponed while waiting to see what added safety precautions were needed as well as finding out more about COVID-19, ISR was able to provide the best safety measures to put in place to safely be able to offer lessons yet once again!

COVID-19 Precautions:

-BUDS: All BUDS interviews now are filled out by myself so that no one is sharing a pen or touching anything poolside. Also, every parent and child has to take their temperature before lessons and let me know what it is before lessons.

-Parents now need to wait in their car until 1 min before their time slot before coming out of their vehicle and around to the backyard. Each parent is required to wear a mask.

- Water proof facial covering needs to be worn while I teach and I maintain at least a 6ft distance from any parent poolside.
- Students need to arrive in swim attire as before and once they have rested they must exit promptly, no changing student poolside or in the backyard.
- Parents must dispose of any swim diapers, diapers or any other trash should be placed in a bag and taken home by the parents.
- Any shared surface (such as the mat that children lay on with the 3 towels) is sanitized before and after each child!
- My hands are sanitized between students.

My husband, Trevor, of almost 25 years has been a Chandler Fire Fighter for 23 years. We share the passion of drowning prevention and know first-hand the importance of children learning aquatic survival skills. Trevor has seen, first-hand, the tragic consequences for unskilled children who reach the water unsupervised. Drowning is very real and it is preventable.

Below, please find some additional supporting documentation regarding both the ISR program and threat that drowning poses to our youngest and most vulnerable of citizens...Our Children.

Thank you for your consideration.

Therace Pollard

ISR Certified Master Instructor

Pediatric Support:

February 29, 2020

To whom it may concern:

My name is Dr. Todd Porter and I am a pediatrician at Denver Health Medical Center in Denver, Colorado. I am also the father of 3 children aged 10 years, 8 years and 6 years. Since completing my residency in pediatrics, I have always been passionate about pediatric injury prevention. From 2003-2009 I was actively involved in our local Safe Kids Coalition especially in the area of child passenger safety. In 2009 my wife and I started our family and from this point on my primary role has been attempting to figure out how to keep my children safe in a world full of dangers and unexpected hazards. Yet despite being a former competitive swimmer as well as a community pediatrician, I really had no insightful anticipatory guidance on how best to teach my own children how to swim nor advise my patient's parents on what to do with their children. Being passionate about injury prevention I was familiar with the statistics about drowning, but it was easier to talk about car seats to families than how best to reduce the child's risk about drowning.

Then in 2013 at the recommendation of a friend and neighbor, we enrolled our then 3-year-old daughter and 22-month-old son in this lesson program called ISR. As a pediatrician, I had never really heard about it and still around that time the guidance from the American Academy of Pediatrics (AAP) did not seem to have any strong recommendations for swim lessons in the 0-4 age group. Over the next 6 weeks I watched in awe and wonder as my daughter and son learned how to problem-solve in the water and rotate and float on their back with eventual ability to float-swim-float. Fast forward to 2014 when we enrolled our third child at the age of 10 months in ISR and he accomplished the same survival skill of independent floating in the water proving at least to me that an infant of his age was developmentally ready to learn this skill.

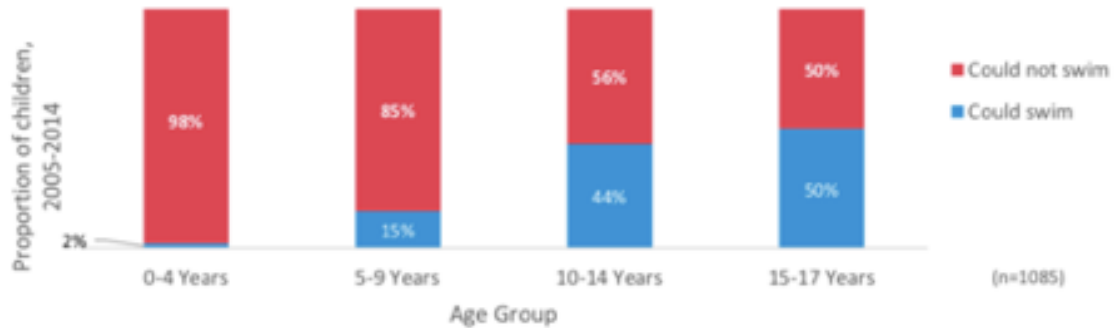
After witnessing the success of the ISR program I did start to recommend it verbally to my patient families during anticipatory guidance on drowning prevention in the 0-4 age group my personal experience with ISR and my

growing friendship with Nicole Hughes that I have come to better understand the gross deficit that continues to exist in our national drowning prevention efforts as well as our society's misperception on how we should introduce water activities to our children.

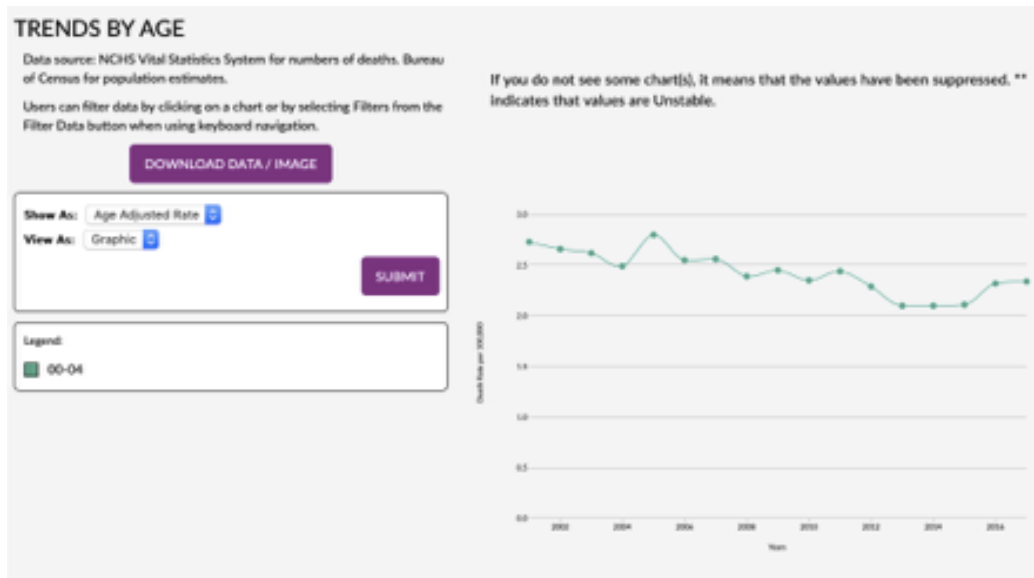
Some facts and graphics about drowning:

- children 0-4 years drown at 3 times the rate of 5-17 year olds
- children < 2 years are more likely to drown in a bathtub while 1-4 year olds drown more often in swimming pools where child death review investigations showed lack of supervision and failure of physical barriers to be key factors.
- it is estimated that for every death, 5 children visit the emergency room for non fatal drowning
- Current supported drowning prevention approach consists of Layers of Protection that include Barriers around pools, adult supervision, water safety education (may include swim lessons) and CPR
- 2004-2014 Child Death Review data on Pool Drownings found that "breaches in these layers of protection ranged from 7-91% of cases meaning that at least one layer was breached in 9 out of 10 fatal drownings reviewed...Barriers failed 47% of the time, supervision was missing in 49% of the time, and only 2% of children < 5 yrs reported to be able to swim". (Dangerous Waters - SKWW)

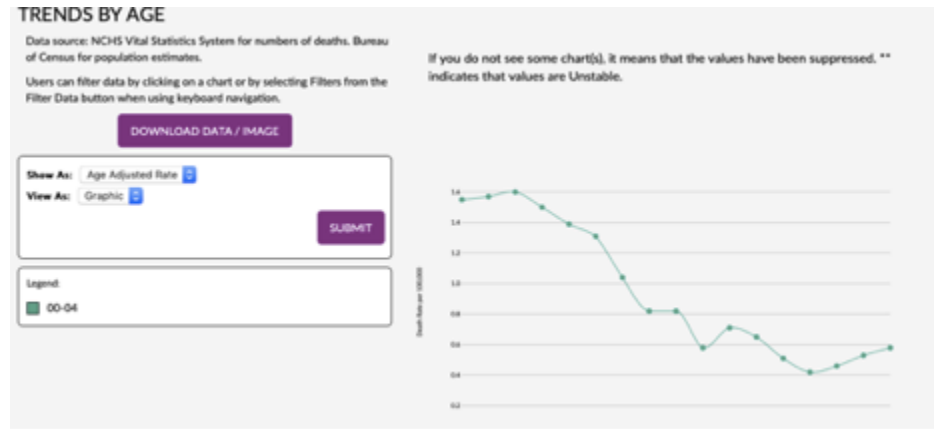
Child Death Review Data 2005-2014 on Swimming Ability by Age



CDC data on Fatal Drownings age 0-4 years from 2002 to 2016

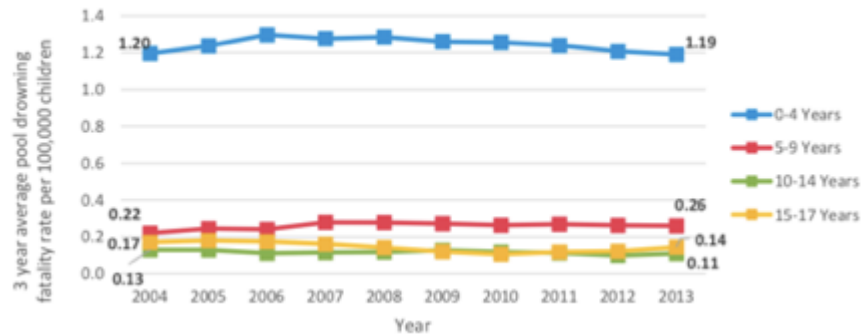


Contrast to reduction in death rate for children 0-4 years of age in Motor Vehicle Crashes 2002 to 2016 — CDC Data.

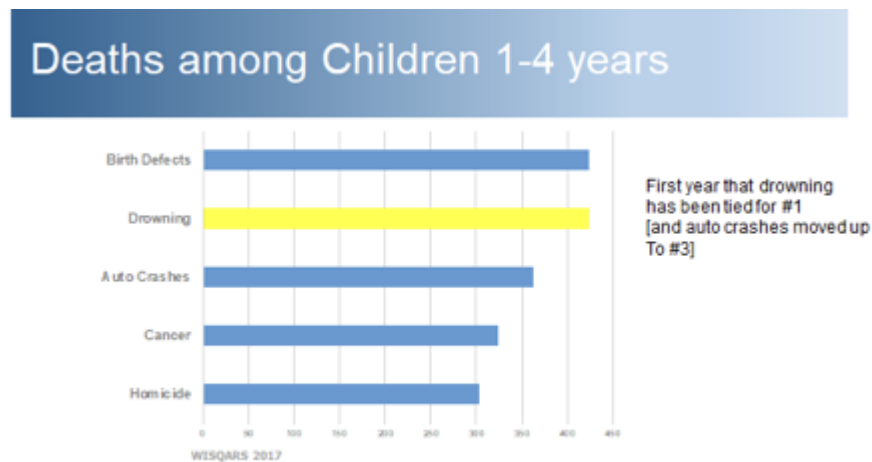


CDC Wonder Data 2004 - 2013 on lack of reduction in Child Pool Drowning Deaths by Age

Figure 5. There have been no significant improvements in age-specific pool fatalities in the last 10 years⁴



CDC 2017 Data showing drowning now tied for #1 cause of deaths in 1-4 year olds



The above graphics clearly display the lack of meaningful reduction in child drowning deaths specifically in the 0-4 year age group over the past 15 years. So much emphasis has been placed on layers of protection and despite having great potential to reduce drownings (pool fences / covers / PFDs / supervision), data has shown that all of these have the potential to fail and they all depend on placing responsibility on something and someone else external to the child.

The one layer of protection that travels with the child wherever he/she goes is the child's own learned survival skills when faced with an unexpected interaction with the water. However, unlike car seats which are crash tested and heavily regulated and have lead to a significant reduction in motor vehicle occupant fatalities in the 0-4 age group over the last 20 years, swim lessons are not regulated and therefore are quite variable with what, if anything, the child learns during the swim lesson program. Because of this, leading pediatric injury prevention advocates have been prudent in their recommendations on when a child is developmentally ready to start swim lessons in this age group. *Therefore, unlike motor vehicle occupant fatalities, we have not observed any substantial reduction in drowning deaths in the 0-4 year age group over the last several decades.*

Regardless of the layers of protection external to the child that are enacted, they will never be absolute or ubiquitous around the child. Because 69% of drownings in the 0-4 age group occur with unplanned interactions with water, we must elevate the priority of individual swim lessons, specifically lessons with the intent of teaching self-survival skills of floating independently.

Sincerely,

Todd Porter, MD, MSPH, FAAP



The statistics on drowning have remained stagnant for decades. How many more thousands of children must drown? How many more parents, brothers and sisters, aunts and uncles, and grandparents will have to sit on the front row of a funeral for precious children who had full lives snatched away from them in seconds.

We must teach our children how to survive in water before we teach them that it is fun. They are counting on us. The next generation of parents should never have to say, "I just wish I had known."

