

Addressing New Orleans' Child Drowning Crisis

Team 35
October 2024



Table of Contents

01 Introduction	Background and Context: The Child Drowning Crisis in New Orleans
02 Problem Statement	Identification of the Issue
03 Criteria	The Defined and Measurable Set of Rules of the Solution
04 Our Proposal	Policy Proposal and Estimation of Cost
05 Implementation Plan	Timeline and Feedback Loops
06 Conclusion and Discussion	Longevity of the Solution



01

Introduction

The Child Drowning Crisis in New Orleans





Drowning Deaths by State

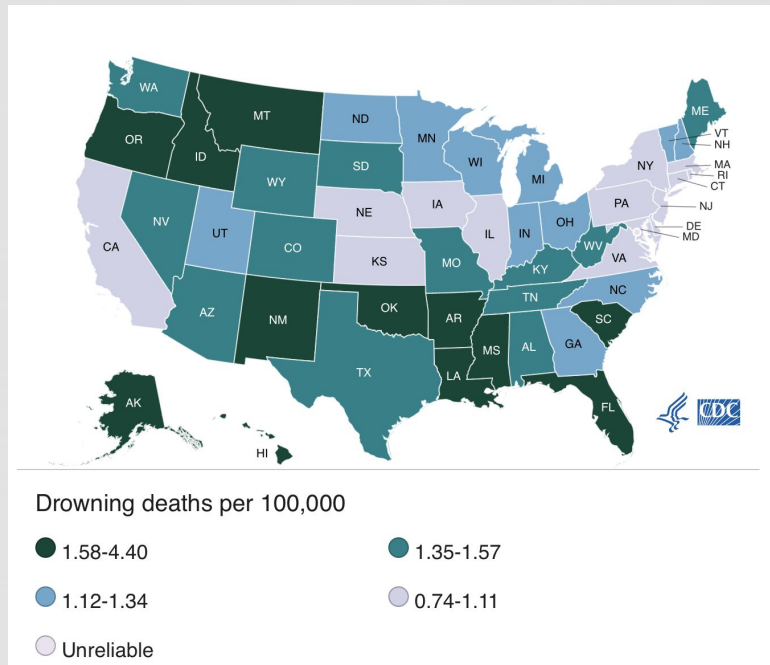


Figure A: The rate of deaths per 100,000 is highest in the state of Louisiana among all states in United States



Trends in the last Decade

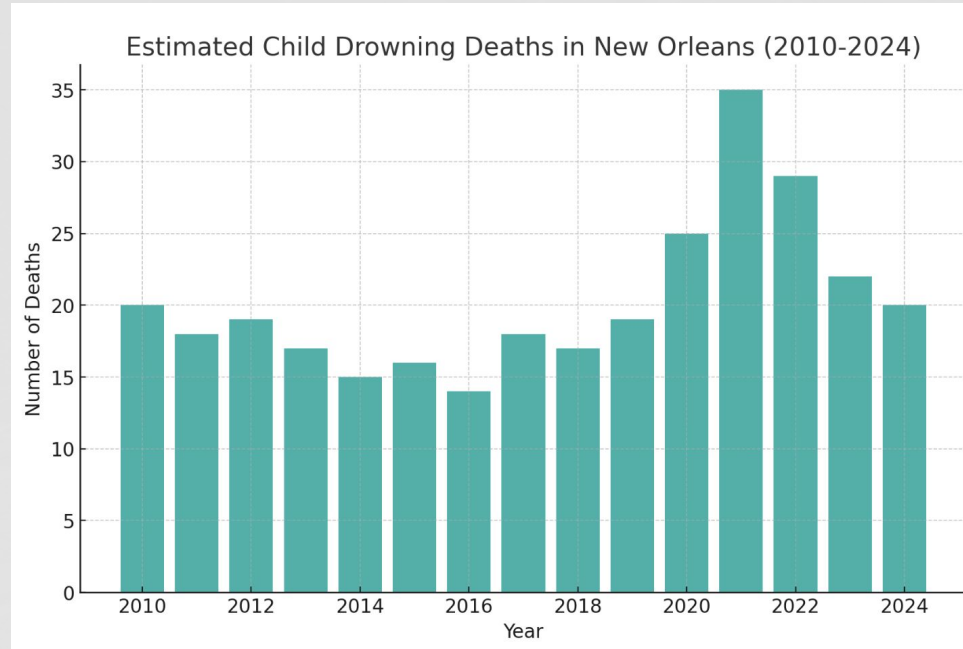


Figure B: An increase in deaths during the pandemic years, followed by a slight decline as safety measures improved

LDH: Safe Swimming Practices Lead to Decrease in Child Drownings." *LDH: Safe Swimming Practices Lead to Decrease in Child Drownings* | *Healthcare Journal of New Orleans*, healthcarejournalno.com/news/ldh-safe-swimming-practices-lead-to-decrease-in-child-drownings. Accessed 21 Oct. 2024.
"Drowning Data." *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, www.cdc.gov/drowning/data-research/index.html. Accessed 21 Oct. 2024.
Press, Associated. "Child Drownings up in La. after Years of Falling Numbers." *American Press*, 17 May 2022, www.americanpress.com/2022/05/17/child-drownings-up-in-la-after-years-of-falling-numbers/.



Demographics of Drowning

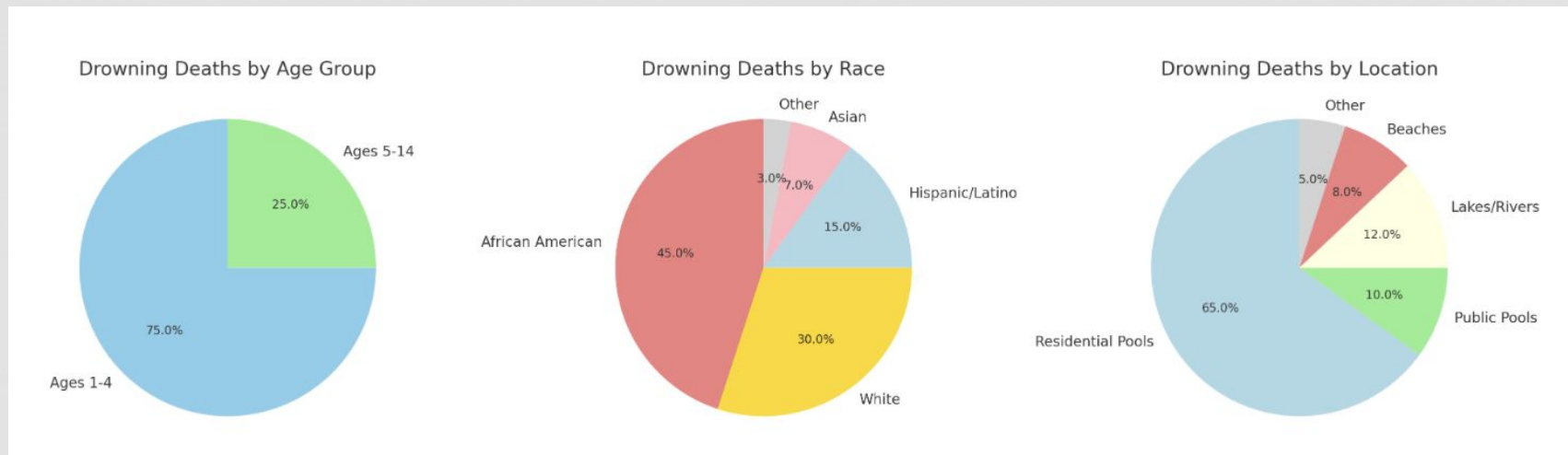


Figure C: Key demographics for child drownings in New Orleans

“CDC WISQARS - Web-Based Injury Statistics Query and Reporting System.” *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, wisqars.cdc.gov/. Accessed 21 Oct. 2024.

“Louisiana 988 Helpline.” *La Dept. of Health*, ldh.la.gov/. Accessed 21 Oct. 2024.

Drowning

- **Top Cause:** Drowning is the leading injury-related cause of death for Louisiana children ages 1–4.
- **Risk Factors:** Lack of supervision (52%), inability to swim (49%), and absence of pool barriers (38%) are key causes.
- **Common Locations:** 60% of child drownings occur in pools, hot tubs, or spas.
- **Prevention:** Supervision, swim lessons, barriers, and life jackets are critical to prevention.



“LDH: Safe Swimming Practices Lead to Decrease in Child Drownings.” *LDH: Safe Swimming Practices Lead to Decrease in Child Drownings* | *Healthcare Journal of New Orleans*, healthcarejournalno.com/news/ldh-safe-swimming-practices-lead-to-decrease-in-child-drownings. Accessed 21 Oct. 2024 .

Press, Associated. “Child Drownings up in La. after Years of Falling Numbers.” *American Press*, 17 May 2022, www.americanpress.com/2022/05/17/child-drownings-up-in-la-after-years-of-falling-numbers/.

New Orleans Specific Policies and Programs



Louisiana Health Department

LDH oversees statewide health campaigns focused on drowning prevention. The department works closely with local healthcare providers to ensure communities are informed about water safety.



Louisiana Boating Safety Regulations

The Louisiana Department of Wildlife and Fisheries mandates that all Children under 16 wear coast guard-approved life jackets when on water vessels.



New Orleans Municipal Code

This ordinance outlines enclosure regulations including in regards to fencing and is aimed at preventing drowning in home pools.



New Orleans Recreation Development (NORD) Commission

NORD offers free and subsidized swimming lessons to children and families, focusing on areas with high drowning risks due to socioeconomic barriers.



Recent Initiatives



Riley Bourgeois Act

Passed in 2022, requiring water safety education for all Louisiana public school students.



American Red Cross Aquatics Centennial Campaign

Expanding to help reduce drowning rates in high-risk areas like New Orleans.

Why Are These Deaths Occurring?



Lack of Access to Swimming Lessons

Many children, especially in underserved communities, lack access to affordable swimming lessons, increasing the risk of drowning. This disproportionately affects African American children, who are 5.5 times more likely to drown than White children.



Inadequate Pool Safety Measures

Many drownings occur in home pools without proper fencing, gates, or alarms. Although New Orleans mandates pool safety measures, inconsistent enforcement leaves gaps, allowing unsupervised access to pools.



High Prevalence of Natural Water Bodies

New Orleans' proximity to lakes, rivers, and canals increases the risk of drownings, particularly for children who lack swimming skills and play unsupervised near water.

02

Problem Statement



Problems

High Drowning Rates: New Orleans has experienced a **concerning increase** in child drowning deaths in the last decade.

Limited Water Safety: Knowledge: Many families lack access to essential water safety education and resources, specifically those in **marginalized** communities, leading to a knowledge gap.

Ineffective Interventions: Existing interventions and policies have been insufficient in reducing deaths, highlighting the need for more **targeted** strategies.



04

Criteria





Effectiveness

The implementation of strategic policies that solves the stated problems.

Efficiency

The minimization of cost while maintaining the desired objectives.

Equity

The equitable allocation of interventions that extend access to all children, particularly those from marginalized populations.

Feasibility

The extent of implementing acceptable policies that are financially and politically practical.

Acceptability

The proposed policy is supported by both community members and governmental officials.

03

Our Proposal



NOLA Lifesaver Initiative

Overview of Proposal

01 Water Safety Program

02 Community Outreach Program

03 Safety Regulation Ordinance

Water Safety Program



SplashSafe NOLA

“Dive into Safety and Saving Money”

1. The completion of a water safety education course that allow participants to receive a discount on pool admissions or other recreational centers
2. The certification of completion of the program is valid to be used in all community/local swimming pools and recreational facilities in the New Orleans region.
3. The encouragement and promotion of long-term education on water safety and the reduction of financial barriers to participate allows for an increase of community engagement from diverse backgrounds and continued support to underrepresented communities.



SplashSafe NOLA



Primary Mechanics



Water Safety Education

Participants complete a certified course covering water safety, drowning prevention, and basic swimming techniques, offered by local organizations, recreation centers, or schools, with flexible online or in-person options.



Discount Incentive for Certification

Upon completing the course, participants receive a certification that qualifies them for discounted pool and recreation center admissions, creating a financial incentive for families to prioritize water safety education and access, especially for low-income groups.



Community Engagement and Accessibility

The program focuses on reducing financial barriers, making it accessible to underrepresented communities that may not typically engage with water safety initiatives due to cost constraints.



Program Components

Components of the SplashSafe NOLA Water Safety Education Program

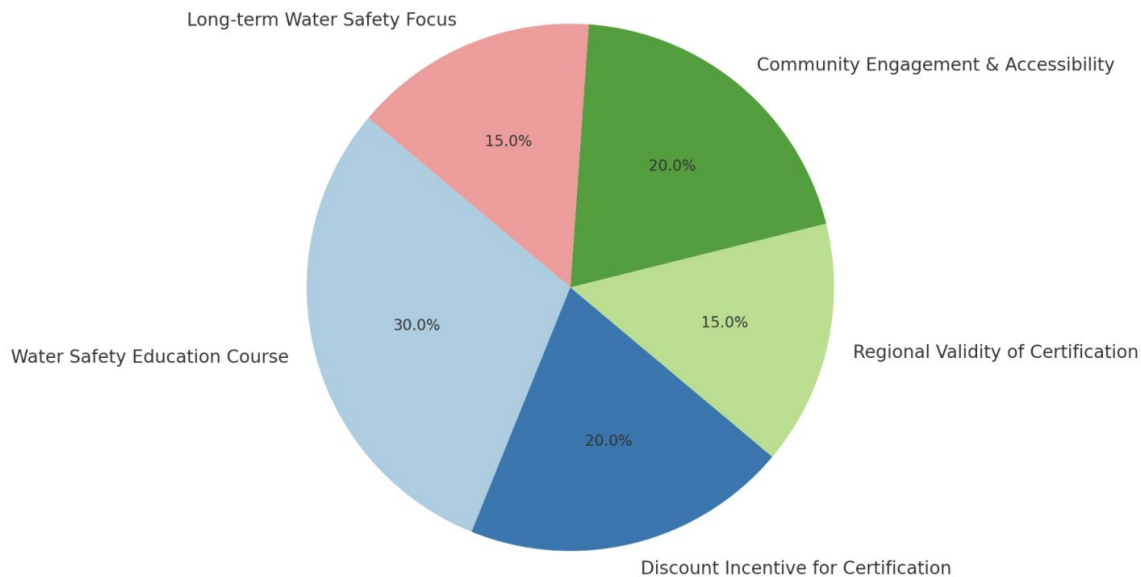


Figure D: Reflects key elements of the program highlighting its main focuses.

Success Measures

Increased Participation in Water Safety Education

Financial incentives through discounted admissions boost participation in the course, especially in low-income communities, spreading water safety knowledge and reducing child drownings.

Equitable Access for Underrepresented Communities

By reducing financial barriers, the program increases access for low-income and marginalized communities at higher risk for drowning.

More Affordable Access to Recreational Facilities

Discounted pool access encourages more frequent swimming, improving water safety and overall community health.

Strengthening Long-Term Safety Habits

Regular pool visits reinforce long-term water safety habits, helping children and families build skills and confidence.

Standardized Certification Across the Region

Regional certification ensures consistent water safety standards, boosting program credibility and participant skills.



Community Outreach Program



Safe Waters NOLA

"Together We Rise, Empowering Lives Through Water-Wise"

1. Partner with local organizations to identify high-risk areas and tailor solutions for each community.
2. Host water safety fairs and family swim days to promote program participation and foster local investment.
3. Offer free lessons for children aged infant-14, focusing on skills and safety knowledge.
4. Regularly assess program impact through data-driven methods and stakeholder feedback.
5. Develop a replicable model and secure diverse funding sources for long term success and expansion.





Program Components

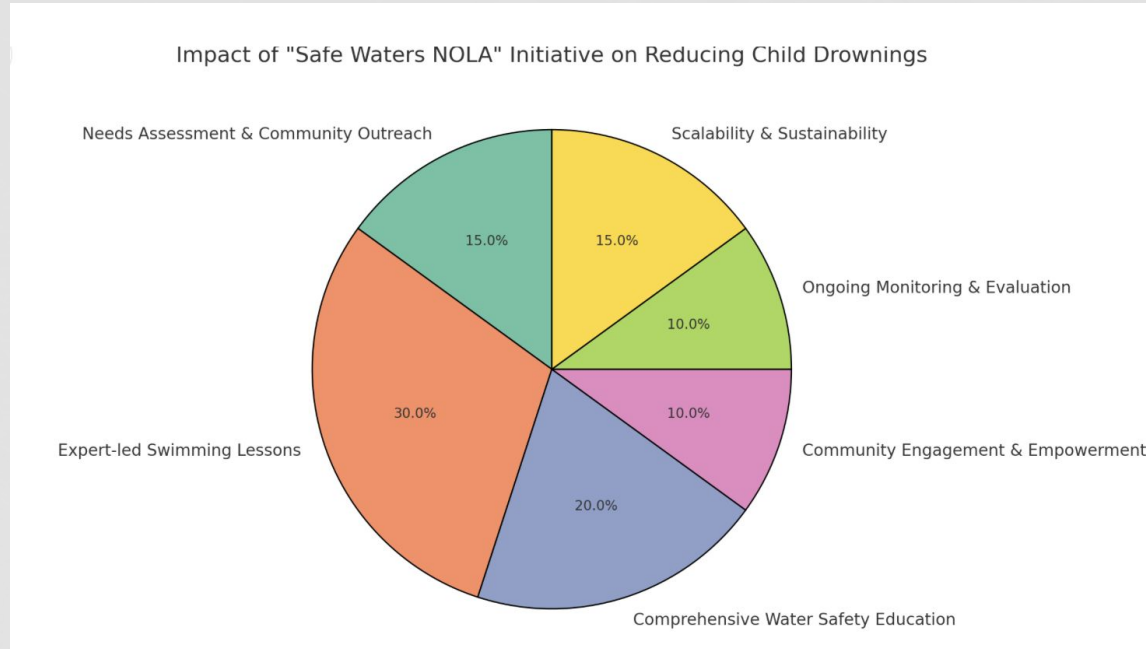


Figure E: Illustrates the various components of the initiative and there relative contributions.

Primary Mechanics



Swimming Lessons

Certified swim instructors deliver free swimming lessons at local pools, focusing on basic skills and safety knowledge.

Lessons are scheduled at convenient times for participants and include transportation if needed.



Water Safety Education

Interactive workshops and seminars, led by experts, teach children, parents, and caregivers about drowning risks, prevention, and emergency response.



Monitoring and Evaluation

Regular data collection and analysis track progress in reducing child drowning incidents. Findings are shared with partners and policymakers to guide future interventions and policies.



Success Measures

Reduced Drowning

Lower child drowning rates demonstrate program effectiveness in improving water safety.

Increased Water Safety Knowledge

Participants demonstrate an enhanced understanding of safety practices and emergency response, leading to safer behaviors.

Empowering Children with Water Safety Skills and Confidence

Children gain confidence and abilities through swimming lessons, promoting safe water-based activities.



Regulation





AquaGuard Water Safety Ordinance of NOLA

1. **Barrier Requirements:** Mandates approved safety barriers for all residential pools, ensuring city-wide safety standards. It includes provisions for inspections and resident support.
2. **Safety Equipment:** Explicitly requires appropriate safety equipment at all swimming facilities, ensuring preparedness for emergencies and maintaining high safety standards.
3. **Advanced Technology:** Introduces AI systems to detect potential drowning incidents and alert nearby adults, providing an additional safety layer and rapid response.



Success Measures



Compliance Rates

Monitoring the percentage of residential swimming pools that meet the required safety barriers standards.



Increased Safety Availability

Tracking the number of swimming facilities that have acquired the necessary safety equipment in accordance with the ordinance.



Technological Implementation

Assessing the effectiveness of the AI systems in detecting potential drowning incidents and determining the number of alerts issued.



05

Implementation Plan



Budget Breakdown

Programs	Total Allocation (\$)	% of Total Budget
SplashSafe NOLA	150,000	30%
Safe Water NOLA	200,000	40%
Water Safety Ordinance	150,00	30%

SplashSafe NOLA: Focuses on education, certification, and outreach, which requires significant investment in instructional materials and subsidies for community participation.

Safe Water NOLA: Has the largest portion of the budget due to its comprehensive community engagement strategy.

Water Safety Ordinance: Funds are allocated for infrastructure improvements , safety provisions, and investment in advanced AI technology for drowning detection.





Splash Safe NOLA

Program	Category	Details	Amount (\$)	% of Total
Splash Safe NOLA			\$150,000	30%
	Instructor Fee (1-2)	Certified instructor and educator on water safety regulation.	40,000	10%
	In-Person Facility Rental	Participants attending in-person, the program will be held at a community and/or recreational center.	25,000	5%
	Online Platform Subscription	Participants attending online, the program will be held on a video hosting platform (Zoom).	2,000	1%
	Learning Management System	Participants attending both in-person and online will have access to course content and material (Canvas).	15,000	1%
	Insurance	Participants attending in-person for liability insurance.	20,000	3%
	Course Materials	Participants attending in-person will be provided paper handouts, materials, and lesson guides.	8,000	5%
	Teaching Equipment and Supplies	CPR Kits, Rescue Dummies, Life Vests	40,000	5%



Safe Waters NOLA

Program	Category	Details	Amount (\$)	% of Total
Safe Water NOLA			200,000	40%
	Community and Partnerships Risk Assessment	Engage with local organizations to identify high-risk areas and develop tailored solutions	50,000	10%
	Water Safety Fairs & Family Swim Days	Organize community water safety events (venue, staffing, materials)	35,000	7%
	Free Lessons for Children (Infant-14)	Hire instructors, cover pool rentals, and purchase water safety equipment (life jackets, etc.)	80,000	16%
	Program Evaluation & Data Collection	Collect data and feedback to assess program impact; invest in survey tools and stakeholder analysis	15,000	3%
	Model Development & Expansion	Develop a replicable program model; seek additional funding sources	20,000	4%



AquaGuard Safety Ordinance

Program	Category	Details	Amount (\$)	% of Total
Ordinance			150,000	30%
	Barrier Requirements (Residential Pools)	Create inspection program for residential pools; provide subsidies to install fences and cover	50,000	10%
	Safety Equipment for Facilities	Provide safety equipment (life jackets, rescue hooks, first aid kits) for public pools and centers	30,000	6%
	Advance Technology (AI Drowning Systems)	Acquire and install AI-powered drowning detection systems; provide maintenance and tech support	60,000	12%
	Administrative and Enforcement Costs	Oversee ordinance enforcement, conduct pool inspections, and ensure compliance	10,000	2%

Timeline





2030 Plan

[Plan Access Link](#)

06

Conclusion



Feedback

Positive

- Comprehensive Approach to Water Safety
- Focus on Accessibility
- Community-Centered Initiatives
- Innovative Use of Technology
- Promotion of Lifelong Skills

Negative

- Initial High Costs
- Potential Resistance to Regulation
- Unequal Access in the Initial Phases
- Technology Maintenance and Reliability
- Sustainability Concerns





Thank you!

Team 35

07

References



“CDC WISQARS - Web-Based Injury Statistics Query and Reporting System.” *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, wisqars.cdc.gov/. Accessed 21 Oct. 2024.

“Drowning Data.” *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, www.cdc.gov/drowning/data-research/index.html. Accessed 21 Oct. 2024.

“Drowning Facts.” *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, www.cdc.gov/drowning/data-research/facts/?CDC_AAref_Val=https%3A%2F%2Fwww.cdc.gov%2Fdrowning%2Ffacts%2Findex.html. Accessed 21 Oct. 2024.

“LDH: Safe Swimming Practices Lead to Decrease in Child Drownings.” *LDH: Safe Swimming Practices Lead to Decrease in Child Drownings | Healthcare Journal of New Orleans*, healthcarejournalno.com/news/ldh-safe-swimming-practices-lead-to-decrease-in-child-drownings. Accessed 21 Oct. 2024.

“Louisiana 988 Helpline.” *La Dept. of Health*, ldh.la.gov/. Accessed 21 Oct. 2024.

“National Drowning Prevention Alliance.” *NDPA*, 1 Oct. 2024, ndpa.org/.

Press, Associated. “Child Drownings up in La. after Years of Falling Numbers.” *American Press*, 17 May 2022, www.americanpress.com/2022/05/17/child-drownings-up-in-la-after-years-of-falling-numbers/.

“Water Safety Education and Training Saves Lives.” *YMCA of Greater New Orleans*, www.ymcaneorleans.org/news/2023/05/28/home-news/teach-kids-how-to-stay-safe-in-the-water/. Accessed 21 Oct. 2024.

