



CHOOSING THE RIGHT
DROWNING PREVENTION
TECHNOLOGY FOR YOUR
AQUATIC FACILITY

A guide from

WAV
saferswimming.com

WHY USE A DROWNING PREVENTION SYSTEM?

Enhanced Safety Measures

Aquatic facilities are responsible for ensuring the safety of all participants. Today's drowning prevention systems use the latest cutting-edge technologies to provide an additional layer of safety, thereby reducing the risk of drowning incidents. These systems can act as a crucial backup to human monitoring, addressing the limitations of lifeguards who cannot maintain perfect vigilance at all times.

Reduced Risk of Drowning

Drowning is a leading cause of unintentional death among children and teens, making it imperative for aquatic facilities to adopt comprehensive safety measures. Research indicates that formal swim lessons can reduce the risk of drowning by up to 88% for young children. However, even skilled swimmers can face risks, making technological interventions like drowning prevention systems essential components of a multi-layered safety strategy.

Improved Lifeguard Efficiency

Drowning prevention systems enhance the efficiency and effectiveness of lifeguards by providing real-time alerts and guidance. Today's systems alert lifeguards when a swimmer may be in distress, allowing for quicker response times and more focused attention on potential emergencies. This technology ensures that lifeguards can monitor large groups more effectively and reduce the likelihood of human error.



A Positive Impact on Facility Reputation

Implementing advanced safety technologies can significantly enhance the reputation of an aquatic facility. Parents and guardians are more likely to enroll their children in swim classes at facilities that prioritize safety through modern technology. By adopting drowning prevention systems, facilities demonstrate their commitment to providing a safe environment, which can lead to increased enrollment and community trust.



Compliance with Safety Standards

Many regions have strict regulations regarding pool safety, including requirements for fencing and lifeguard presence. While these measures are crucial, drowning prevention systems provide an additional safeguard that aligns with best practices in water safety. By integrating these technologies, facilities can ensure compliance with local regulations while exceeding standard safety expectations.

If you're reading this guide then you have likely already realized that incorporating a drowning prevention system would be a wise, proactive step towards enhancing water safety at your facility. Using technology not only supports lifeguards in their critical role but also provides peace of mind to parents, swimmers and facility operators by significantly reducing the risk of drowning incidents.

WHAT'S THE RIGHT DROWNING PREVENTION SYSTEM FOR YOUR FACILITY?

Choosing the right drowning prevention system for a commercial aquatic center is crucial for ensuring the safety of all visitors. This guide provides a comprehensive overview of the recommended steps to research and select the most appropriate system based on key factors such as affordability, ease of use, customer service, existing customer feedback, awards received, and media reviews.



Step 1: Conduct a Situational Assessment

Purpose: To understand the specific needs and risks associated with your aquatic center.

- Identify Local Drowning Profile: Assess local drowning statistics and identify high-risk groups ^{[3][4]}.
- Evaluate Current Safety Measures: Review existing safety protocols and equipment to identify gaps.
 - Stakeholder Analysis: Identify key stakeholders, including staff, local authorities, and community groups, who will be involved in or affected by the implementation of new safety measures ^[3].



Step 2: Research Available Technologies

Purpose: To explore various commercially available drowning prevention technologies suitable for your type of facility.

- Infrared Detectors and Underwater Motion Alarms: These systems provide automated alerts when someone enters the water [1].
- Wearable Technology: Systems that use lightweight wearable devices to accurately track swimmer submersion times in real time and alert lifeguards if necessary [2].



- Computer-Aided Detection Systems: Systems that use cameras and software to detect potential drowning incidents [5].
- Advanced AI Systems: Systems that integrate AI and machine learning for real-time incident detection and response [7].

Step 3: Evaluate Based on Key Criteria

Affordability

- Compare both the initial costs and the long-term maintenance expenses of different systems. Learn if affordable payment plans or financing options are available.
- Consider potential cost savings from reduced liability and enhanced safety ^[5] as more and more insurance carriers are becoming aware of the benefits of having these types of systems in place.



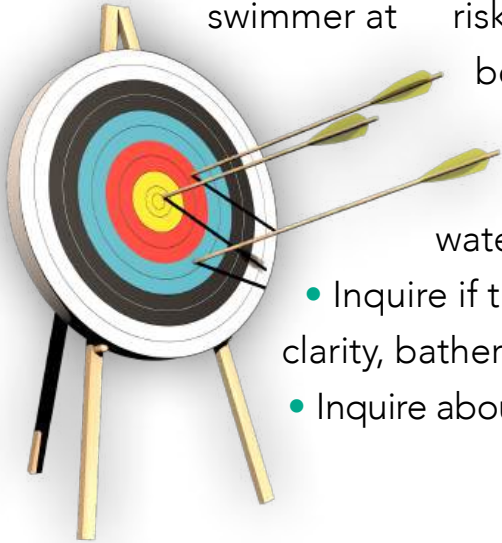
Impact on Facility

- Assess the installation requirements of each type of system and learn if and how those requirements may impact your pool area. These may include required physical alterations, making room available for larger equipment, running AC power lines and cabling, etc.
- Assess if the installation of each type of system can be accomplished “in-house” or if outside contractors and/or permits will be required.



Reliability & Accuracy

- Reach out to existing customers to learn how reliable each type of technology is in detecting a swimmer at risk. Importantly, learn at what stage of the drowning process will your guards be alerted.
- Depending on your needs, learn how well each type of technology functions at various locations such as indoor or outdoor pools or natural waterfronts such as lakefronts.
- Inquire if the the technology is impacted by conditions such available lighting, water clarity, bather load, or physical features found in your pool.
- Inquire about the effort required to relocate equipment if it may be needed at a later date.



Ease of Use

- Assess how intuitive the system is for lifeguards and staff to operate.
- Check if the system requires extensive training or can be easily integrated into existing protocols [2][5].
- Learn if the system can easily be moved or work in the kind of environment you need protected, ie, indoor or outdoor pools, remote areas, or dark natural bodies of water.

Customer Service

Investigate the level of customer support offered by each



company, including installation assistance, product warranty, ongoing technical support & upgrading [7].

Existing Customer Feedback

- Read reviews from other commercial pool operators who have implemented these systems.
- Look for feedback on reliability, effectiveness, and ease of integration [6].



Awards Received

Check if the system has received any industry awards or recognitions for innovation or effectiveness. Awards for drowning prevention products are rare, so be sure to be on the lookout for them when searching for a system.



Media Reviews

Look for media coverage that highlights the strengths or weaknesses of different systems. Positive media reviews can indicate a well-regarded product that you can more likely trust.



Step 4: Decision-Making and Implementation:

Rank Options: Create a ranking matrix based on your evaluation criteria to compare different systems side-by-side. We've put together a simple worksheet on the following page to help you compare each type of technology you are considering.



Pilot Testing: If possible, conduct a pilot test of your top choice to ensure it meets your needs in practice. While for some technologies this may not be possible due to their complexity, pilot programs afford your facility an opportunity to evaluate the system in your actual setting.

Implementation Plan: Develop a detailed plan for installing and integrating the selected system into your aquatic center's operations, keeping in mind the importance of involving all of your key stakeholders during the process. Make sure that the company that you decide to work with has experience and resources available to help make the process as smooth as possible.



DECISION WORKSHEET

SUGGESTION: Use 1 through 10 point scoring where "10" is best.

	OPTION A	OPTION B	OPTION C	OPTION D
TECHNOLOGY/ COMPANY				
TYPE OF TECHNOLOGY				
AFFORDABILITY				
INSTALLATION IMPACT ON FACILITY				
ACCURACY/RELIABILITY				
IMPACT ON DAILY ROUTINES				
SUITABILITY FOR OUR AQUATIC ENVIRONMENT				
EASE OF USE				
CUSTOMER SERVICE/ SUPPORT				
EXISTING CUSTOMER FEEDBACK				
AWARDS/ MEDIA REVIEWS				
TOTAL SCORE				



Training: Ensure all staff are adequately trained to use the new system effectively. Again, make sure that the company that you decide to work with has experience and resources available to help make the this process as smooth as possible as well. This should include information to educate your swimmers and their families about how the system works and how it will be used to enhance lifeguards' supervision of the water.

In conclusion, selecting a drowning prevention system involves careful consideration of various factors to ensure both safety and operational efficiency. It is our hope that by following this guide you can make an informed decision that best suits your aquatic center's needs.

If you have any questions please feel free to reach out to us a WAVE. While we believe our technology is the best solution, we will always support all efforts to prevent drowning and are here to help.



Sources:

- [1] Top Pool Safety Equipment to Prevent Drowning Accidents | SafeWise <https://www.safewise.com/blog/gadgets-will-keep-swimming-pool-safe/>
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- [3] [PDF] Preventing drowning: an implementation guide <https://assets.bbhub.io/dotorg/sites/2/2017/05/Preventing-Drowning-an-implementation-guide.pdf>
- [4] [PDF] Preventing drowning: an implementation guide - IRIS <https://iris.who.int/bitstream/handle/10665/255196/9789241511933-eng.pdf>
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- [8] Prevention of Drowning | Pediatrics - AAP Publications <https://publications.aap.org/pediatrics/article/143/5/e20190850/37134/Prevention-of-Drowning?autologincheck=redirected>
- [9] Drowning Prevention Technology | Clearfield City <https://clearfield.city/2023/04/25/drowning-prevention-technology/>

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IMPORTANT: Technology is designed to support and enhance lifeguards' supervision of swimmers and not as a replacement for responsible and vigilant human supervision.

For helpful information about drowning prevention we recommend visiting the National Drowning Prevention Alliance website, ndpa.org.

Safer swimming starts with **you.**