

UNDERWATER HYPOXIC BLACKOUT

AWARENESS AND PREVENTION OF A SILENT KILLER



**UNDERWATER HYPOXIC
BLACKOUT PREVENTION**



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Underwater Hypoxic Blackout Prevention (UHBP)
is a 501(c)(3) non-profit foundation based in Atlanta, Georgia.

Our mission is to prevent incidents and fatalities due to underwater hypoxic blackouts (also known as shallow water blackouts) through awareness and education.



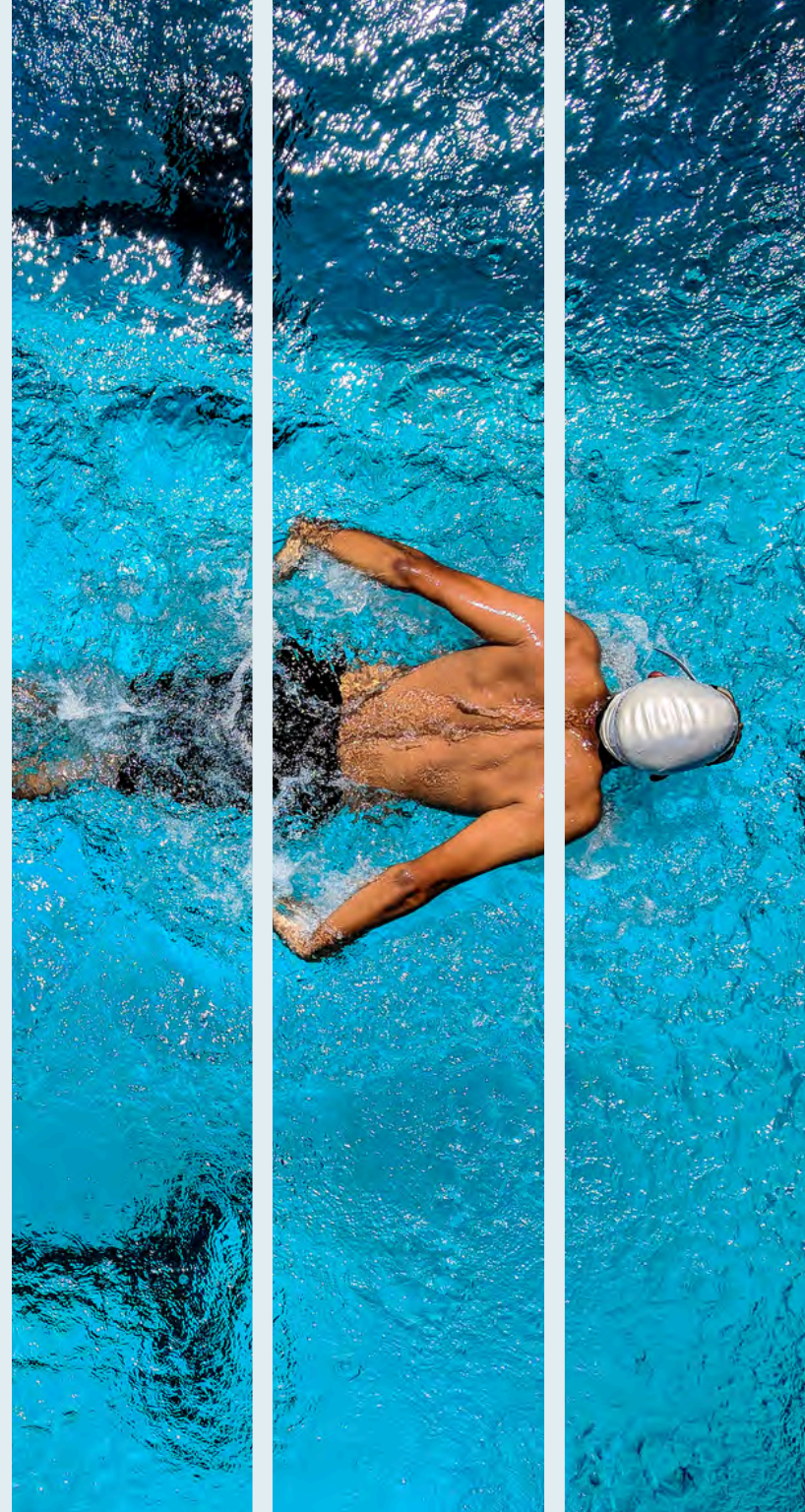
SESSION OBJECTIVES

- Understand the physiology of Underwater Hypoxic Blackout (UHB)
- Be able to identify behaviors that lead to underwater blackouts
- Ready to equip lifeguards and aquatics staff to navigate difficult conversations with swimmers
- Be equipped with messaging and signage best practices to mitigate risk at aquatic facilities



WHAT IS AN UNDERWATER HYPOXIC BLACKOUT?

ALSO KNOWN AS SHALLOW
WATER BLACKOUT



WHAT IS UNDERWATER HYPOXIC BLACKOUT?

IT'S WHEN A
SWIMMER



CAUSED BY A



TO THE
BRAIN

TRIGGERED BY



HOLDING
{YOUR BREATH}

REPEATEDLY

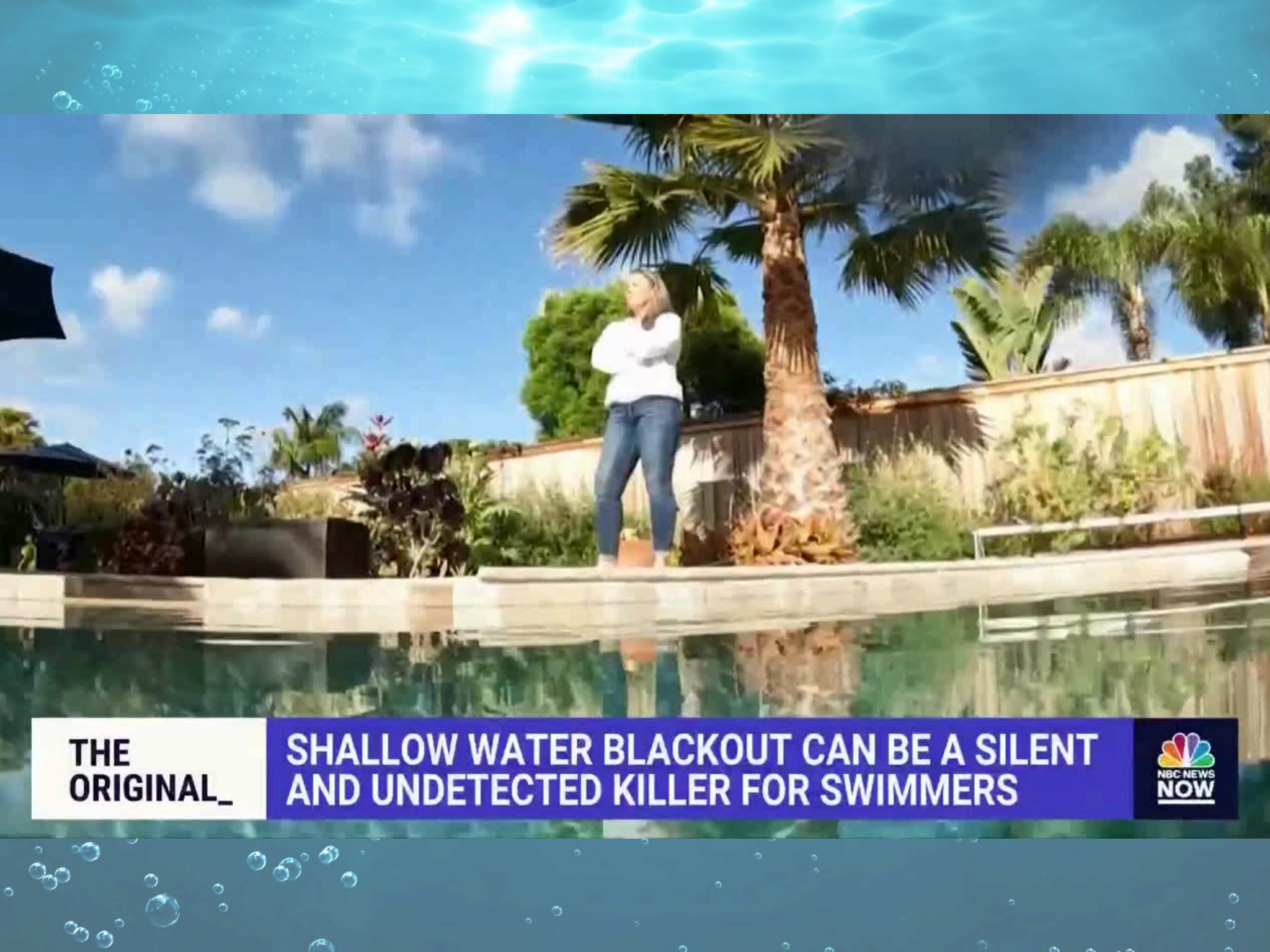


TOO LONG

WITHOUT IMMEDIATE



SWIMMER
QUICKLY DROWNS.



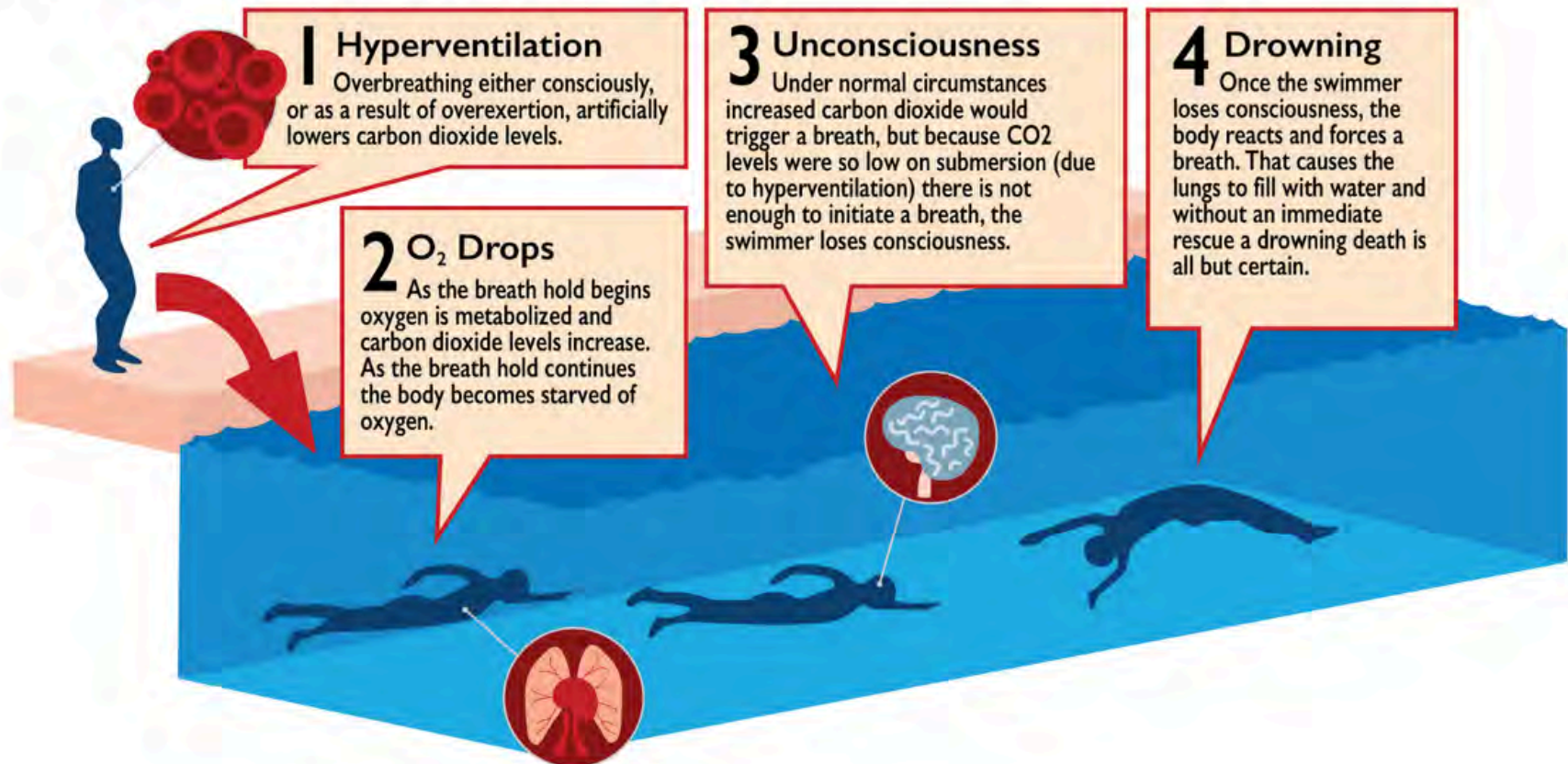
**THE
ORIGINAL_**

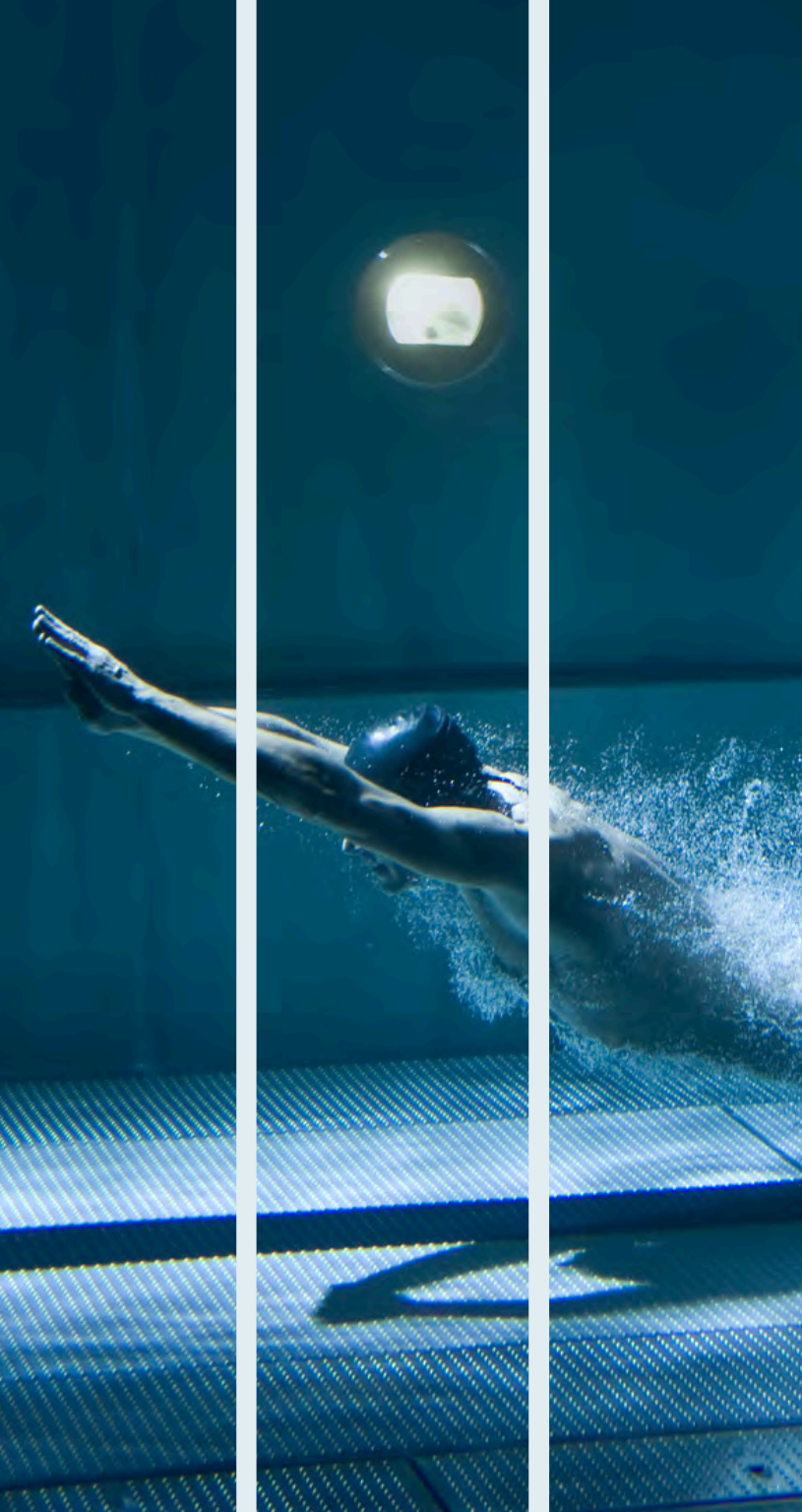
**SHALLOW WATER BLACKOUT CAN BE A SILENT
AND UNDETECTED KILLER FOR SWIMMERS**


**NBC NEWS
NOW**

Underwater Hypoxic Blackout: How it Happens

Prolonged underwater breathholding can be deadly





WHO DOES IT HAPPEN TO?

**Anyone, but typically:
Highly proficient swimmers**

High Risk:

- Freedivers
- Spearfisherman
- Military special-ops
- Competitive swimmers
- Wellness gurus
- Children (especially excellent swimmers)



WHEN DOES IT HAPPEN?

It occurs WITHOUT ANY WARNING.

Because of the hypoxia and detached mental state, one can feel **euphoric and empowered** to continue breath-holding.

Unlike regular drowning where there can be 6-8 minutes before brain damage and death, **there are only about 2 ½ minutes before brain damage and/or death occurs** because the brain has already been heavily deprived of oxygen.

WHERE DOES IT HAPPEN?

Underwater Hypoxic Blackout (shallow water blackout) can occur in **any** body of water (pool, lake, river, ocean, bathtub) when breath-holding underwater, regardless of water depth.

Even if lifeguards are on duty, there is still a **great** risk because **UHB is impossible to detect from above the water.**

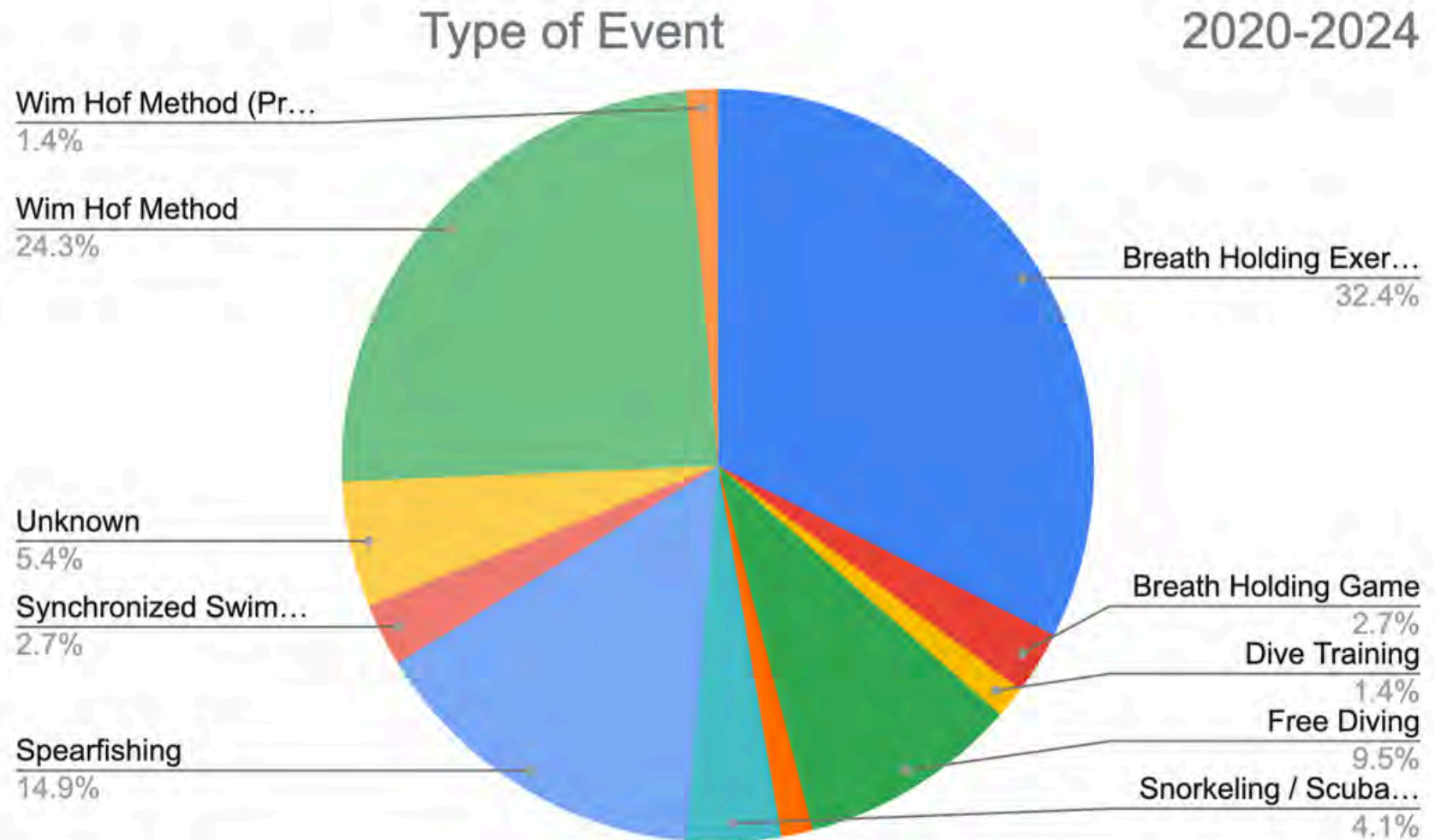


WHY DOES IT HAPPEN?

It occurs due to **lack of education, awareness and understanding** of the dangers of breath-holding.

Swim coaches, lifeguards, swimmers, free divers, snorkelers, spear fishermen, wellness gurus should ALL be made aware of the danger and how to prevent incidences.

KNOWN FATALITIES - 2020-2024



Data Source: Unpublished, Underwater Hypoxic Blackout Prevention 2/2025

UNDERWATER WORKOUTS



WIM HOFF

CAIDEN BARBER

2004 – 2023



Caiden was practicing breath-holding in a YMCA pool while preparing to enter a NAVY special-ops program. His trainer and a lifeguard (two people) were standing directly above him, watching him. They could not see that he had succumbed to a blackout.

UHB is not recognizable from above the surface. Lifeguards are unable to see if a swimmer has blacked out.

2.5 years without Blackout



12.4K



165



1,572




breathholddiary

📍 Ija Brodsky · Serenade

Follow







HOW CAN YOU STAY SAFE FROM UHB?

Take a Breath!

Avoid prolonged breath-holding and breathe normally, which includes taking regular breaks, breathing deeply, and taking breaths at a steady pace.

Never hyperventilate, the practice of breathing in and out quickly to deplete your CO₂ levels, as it dramatically increases the risk of UHB.







HOW CAN YOU STAY SAFE FROM UHB?

Change the Culture


Spread the word to friends and family so they understand the risks and what to avoid.


Remember that lifeguards don't typically have training to monitor breath-holding, and that everyone from parents to coaches regularly encourage breath-holding drills.





HOW CAN AQUATIC FACILITIES MITIGATE THE RISKS?



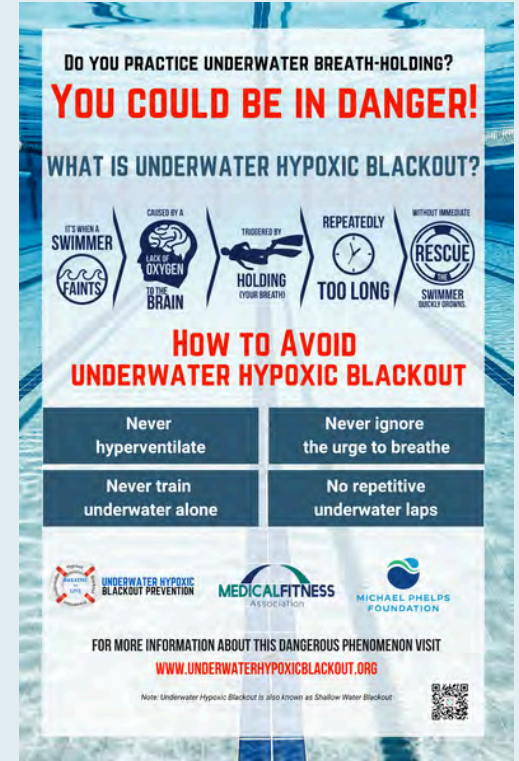


HOW CAN AQUATIC FACILITIES MITIGATE THE RISKS?

- Awareness
 - Education
 - Policies
 - **Signage**
- 

AWARENESS

- Discussion
- Ask questions
- Locker room posters





EDUCATION

- **Staff and Lifeguard Training**
- **Prepare staff to recognize red flag behaviors**



WARNING BEHAVIORS

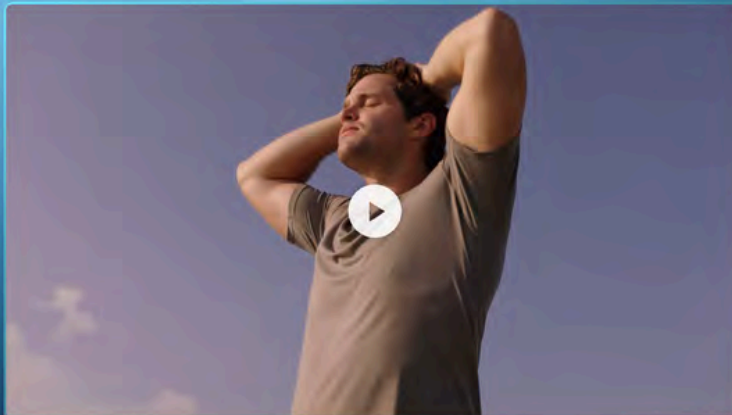
Aquatics professionals should remain vigilant to observe these behaviors and redirect swimmers

- Breath work in or near water
- Workouts that include submersion
- Breath-holding games
- Any activity where the swimmer is repeatedly submersing/diving
- Competitive swimmers doing “underwaters”

AVAILABLE ON OUR WEBSITE



UNDERWATER HYPOXIC
BLACKOUT PREVENTION

[Report An Incident](#)[About](#)[News](#)[Contact](#)[WHAT IS UHB?](#)[AWARENESS & EDUCATION](#)[GET INVOLVED](#)[SURVIVOR & MEMORIAL STORIES](#)[DONATE NOW](#)

"Underwater hypoxic blackout took me by surprise. I want to make sure no one else experiences what I did." – Chandler Watson

DON'T HOLD YOUR BREATH CHANDLER WATSON'S STORY

Watch the short documentary *Don't Hold Your Breath*, a powerful story of survival amid a seemingly random yet deadly tragedy. Join the Watson family as they uncover the realities of Underwater Hypoxic Blackout and learn why it can strike when you least expect it.

POLICIES



- **Support staff intervention with “no breath-holding” policy. Enforce with signage.**

SIGNAGE



Signage files (branded and unbranded) available for free download and usage at underwaterhypoxicblackout.org





#1 New Release
amazon

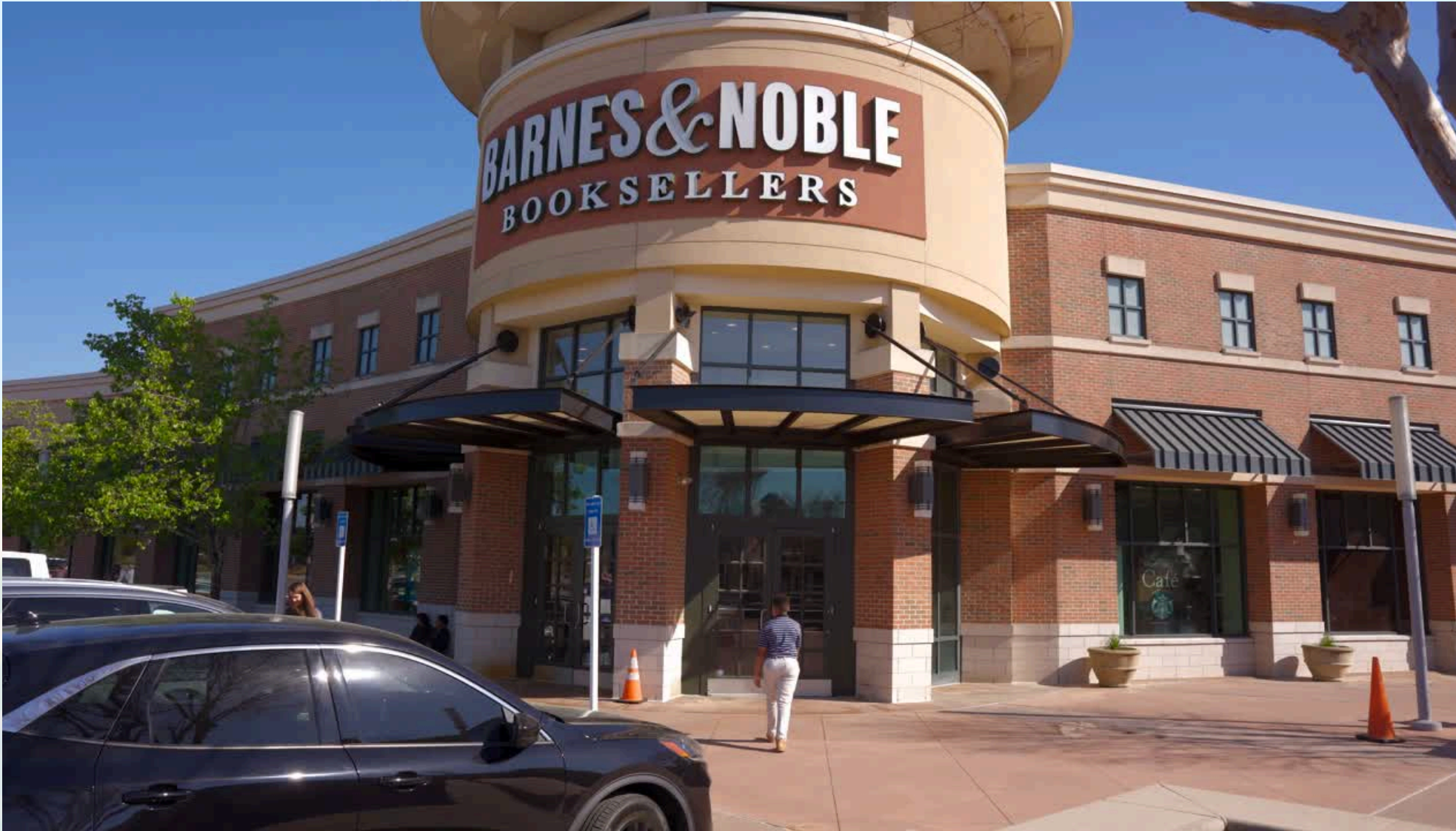


**BARNES
& NOBLE**

The first children's book of its kind!
Join Seth the dolphin and his friends as they discover why playing breath-holding games is never safe, and learn about the importance of being safe in the water.

TAKEABREATHSETH.COM





TAKEABREATHSETH.COM



VISIT
WWW.UNDERWATERHYPOXICBLACKOUT.ORG

for more information and resources.



The screenshot shows the homepage of the Underwater Hypoxic Blackout Prevention (UHB) website. The header is dark blue with a navigation bar containing links: "Report An Incident", "About", "News", "Contact", and a search icon. Below the navigation bar is a black banner with the UHB logo on the left, which includes a life preserver with the text "Hypoxic BREATHE or LIVE Hypoxic" and "UNDERWATER HYPOXIC BLACKOUT PREVENTION". To the right of the logo are four menu items: "WHAT IS UHB?", "AWARENESS & EDUCATION", "GET INVOLVED", and "SURVIVOR & MEMORIAL STORIES". A red button labeled "DONATE NOW" is on the far right of the banner.

The main content area has a blue background. On the left, the text "RAISING AWARENESS" is displayed in large, bold, light blue letters. Below this, a paragraph reads: "Prolonged underwater breath-holding is dangerous and can be deadly. Underwater Hypoxic Blackout affects even the most experienced swimmers. UHBP exists to save lives and families through awareness, education, and prevention." At the bottom left of this section is a red button labeled "HOW IT HAPPENS".

On the right side of the main content area is a video player showing two men in USA swimwear. The man on the left is wearing a white and navy blue USA jacket, and the man on the right is wearing a red and white USA jacket. A play button icon is overlaid on the video.