UNDERWATER HYPOXIC BLACKOUT

Know the Risk. Prevent the Tragedy.

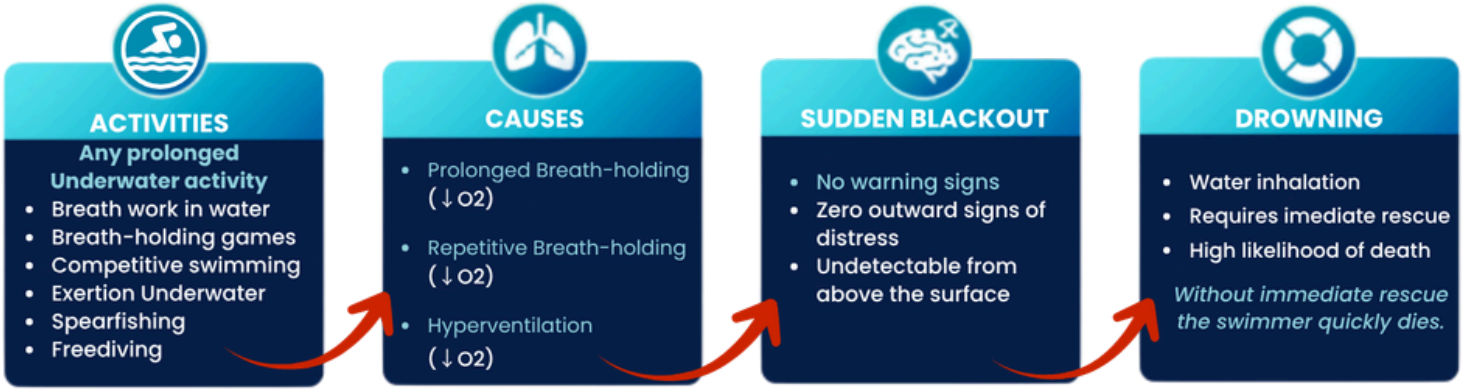
Underwater Hypoxic Blackout (fainting underwater) can happen to **anyone** holding their breath underwater. Hyperventilating makes it more dangerous but is not required. There is no “safe” breath-hold limit.

What is Underwater Hypoxic Blackout?

Underwater hypoxic blackout, sometimes called shallow water blackout, **is a sudden loss of consciousness caused by a lack of oxygen during underwater activities.** It can occur when a swimmer or diver holds their breath for an extended period or hyperventilates before submerging, which can dangerously lower carbon dioxide levels and delay the urge to breathe. Most cases occur in pools, lakes, or during free diving, and often involve experienced swimmers. Blackout occurs without warning and can be fatal within minutes.

How it Happens

- Extended breath-holding underwater depletes oxygen without warning, leading to unconsciousness.
- Hyperventilation or overexertion before swimming reduces carbon dioxide, delaying the body’s natural signal to breathe.
- Oxygen can fall to blackout levels before the swimmer feels an urgent need to breathe.
- The swimmer cannot call for help, signal distress, or self-rescue.



Risk Factors

- Intentional breath-holding contests, games, or personal challenges.
- Multiple repetitive underwater breath-holds
- Competitive swimming and free diving.
- Hyperventilating or exercising before breath-holding.
- Wellness trends that include underwater breath-holds.
- Lack of awareness about hypoxic blackout.

Key Stats and Facts

- ***Aquatic safety professionals believe Underwater Hypoxic Blackout to be the #1 cause of death among experienced swimmers.***
- Incidents are preventable through awareness, education, and safe swimming practices.
- Immediate action is critical to prevent drowning and minimize injury.

Prevention

- Never hyperventilate before swimming or diving.
- Avoid competitive or prolonged breath-holding underwater.
- Always swim with a buddy and under supervision.
- Educate swimmers, lifeguards, coaches, and families about hypoxic blackout.
- Use a dedicated water-level observer for breath-hold activities.
- Know CPR and call 911 at the first sign of unconsciousness.

Who is at Risk?

- Anyone holding their breath underwater
- Inexperienced and Experienced swimmers.
- Freedivers and spearfishermen.
- Competitive and non-swimmers.
- Anyone performing breath-holding challenges.

Sources

Sources: Underwater Hypoxic Blackout Prevention; American Red Cross, USA Swimming & YMCA joint statement; CDC drowning prevention.

UHB CAN HAPPEN TO ANYONE

These are just a few of the lives lost to underwater hypoxic blackout.

UHB does not discriminate by age, fitness or swimming ability. Prevention begins with understanding the risk.



WHITNER MILNER
Age 25
An exceptional athlete, Whitner was practicing breath-holding in his family's pool in preparation for an upcoming spearfishing trip.

CAIDEN BARBER
Age 19

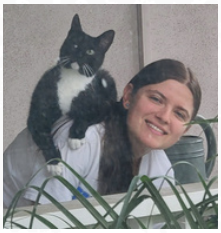


Caiden was practicing breath-holding drills in a YMCA pool while preparing for entry into military special operations. He lost consciousness underwater while a coach and lifeguard were nearby.



JACK RONEY
Age 39
A father of five, former Division I swimmer and NC State coach, Jack succumbed to UHB while practicing breath-holding in a pool, with his wife just a few feet away.

MADELYN METZGER
Age 19



A vibrant college student and athlete, Madelyn succumbed to UHB while practicing breath-holding in a pool.



LUKE KANTOWITZ
Age 17
Young, healthy, athletic and a strong swimmer, Luke succumbed to UHB while practicing breath-holding in his backyard pool.

MATTHEW RAICHE
Age 40



A healthy father of four and experienced swimmer, Matthew lost consciousness while practicing breath-holding in a spa and did not survive.