### **WHO**

Shallow Water Blackout affects the physically-fit swimmer, but can affect anyone breath-holding underwater. People who hold their breath while swimming or practicing breath-holding underwater in pools are at risk of "passing out" due to lack of oxygen.

### **WHAT**

When oxygen levels fall to critical levels, blackout is instantaneous and frequently occurs without warning. Carbon dioxide levels in the blood are primarily responsible for the swimmer's desire to breathe. When the level of carbon dioxide in the blood is driven to artificially low levels as a result of hyperventilation or excessive breath-holding activities, the desire to breathe is diminished. This artificial method of fooling the body into thinking it does not need oxygen is deadly, as it lures the breath-holder into believing he can hold his breath longer than he safely can.

## **WHEN**

It frequently occurs **WITHOUT ANY WARNING** of its onset. In fact, because of the hypoxia one feels euphoric and empowered to continue breath-holding.
Unlike regular drowning where there can be 6-8 minutes before brain damage and death, there is ONLY about 2 minutes before **BRAIN DAMAGE** then **DEATH with SWB**.



Whitner died in our family pool from shallow water blackout, which experts believe to be the #1 cause of swimming-related deaths.

We are committed to educating about Shallow Water Blackout Prevention and the dangers of breath holding.

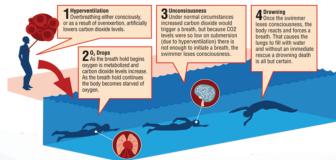
#### WHERE

It can occur in **any body of water when breath-holding**, with or without lifeguards present. Shallow Water Blackout is hard to detect from above the water.

#### WHY

Shallow Water Blackout occurs because of the **LACK OF EDUCATION** and understanding of the dangers of breath-holding. Lack of safety training for swimmers, freedivers, snorkelers, and spearfishermen also contribute to the frequency of Shallow Water Blackout.

Shallow Water Blackout: How it Happens
Prolonged underwater breathholding can be deadly, here's what happens



Courtesy of Aquatics International, Nov/Dec Issue, 2011 "Deathly Shallows" by Kendra Kozen

# THE FACTS ABOUT SHALLOW WATER BLACKOUT (SWB)

- Underwater breath-holding and underwater swimming have been proudly practiced for decades.
- Coaches and military trainers teach hypoxic training and breath-holding, which can be deadly.
- Lifeguards and parents routinely accept and admire breath-holding drills conducted in swimming pools.
- Freedivers and spearfishermen, not safetytrained, practice hyperventilation routinely.
- Internet sites promote and encourage breathholding contests, games, and records.
- Because of their false sense of safety, swimming pools are often the sites of SWB, but SWB also occurs in any body of water.
- Hypoxic training, breath-holding, and underwater swimming lead to drowning and sudden deaths that are disregarded and often misdiagnosed as traditional accidental drowning.
- SWB is not well known because when Coroners rule "drowning" it masks the real problem: hyperventilation combined with competitive, repetitive breath-holding.
- Cause of death may be ruled drowning with water in the lungs, but the lungs may also be dry from laryngospasm and asphyxiation.
- Intentional hyperventilation does not have to occur for SWB to happen.
- SWB often precipitates other unknown and underlying medical causes like Long Q-T, RyR2, seizures, etc.
- · The best of swimmers CAN succumb to SWB.
- The ARC, YMCA and USA Swimming now ban hypoxic training and prolonged underwater swimming although far too many still practice it.

www.shallowwaterblackoutprevention.org



## Help prevent these senseless deaths of unintentional suicide.

### **SIGNAGE**

For every sign purchased through their website, Clarion will donate \$5 dollars to Shallow Water Blackout Prevention.

www.shallowwaterblackoutprevention.org/signage







Shallow Water Blackout
Prevention is a non-profit
organization that was founded
by the Milner Family after the
tragic loss of their son, Whitner
Milner, who was practicing
breath-holding in the family pool
and succumbed to shallow
water blackout.

Our mission is to prevent senseless deaths from shallow water blackout through awareness and education.

### Please visit:

www.shallowaterblackoutprevention.org

to learn more!

### CONTACT

Shallow Water Blackout Prevention 5125 Peachtree Industrial Blvd Norcross, GA 30092 855-787-5600 shallowwaterblackoutprevention@gmail.com

For information on safety guidelines for freediving/ spearfishing go to <u>www.divewise.org</u> and <u>www.immersionfreediving.com</u>

