

I-Team: Preventing Pool Entrapment

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Reporting: Stephen Stock

(CBS4)-In August the CBS4 **I-Team** exposed how dangerous backyard swimming pools and spas can be for children trapped in drains and suction devices. The federal government says that in the last ten years more than 89 people, mostly children, but some adults, have become trapped by the suction at the bottom of pools and spas. At least one dozen have died.

And the **CBS4 I-Team** discovered that Federal laws meant to fix that problem aren't being enforced by state and local officials. That includes the federal law in Florida where tens of thousands of pools carry potential risk.

I-Team investigator Stephen Stock talked to pool safety experts about how you can fix the problem as well as what to do if your child becomes entrapped in a suction drain.

In August, the images captivated the country. A three year old little girl in Key Biscayne trapped in a swimming pool's vacuum line on August 24, 2009. The girl's arm was sucked into the vacuum line so far that firefighters had to cut the pool wall away just to get her out.

And experts tell the **I-Team** that all it would have taken to prevent this accident, a simple plastic plug costing less than \$10 or a valve costing less than \$30.

"She wouldn't have been injured if this had been in place," said pool safety expert Ron Schroader.

Schroader is with a company, DrainSafe.com, whose sole purpose is to prevent pool and spa entrapments. You can see the website by [clicking here](#).

Schroader has been building pools all his life. Schroader has now served as an aquatic safety consultant based out of Palm Beach County for more than a decade. He and other pool experts tell us this accident and dozens of others like it where children and even adults have been maimed or killed could have been prevented.

"What you want to have is a drain cover that has a dome okay?" Schroader said. "That way a child's body can't completely block it."

And, the experts tell the **I-Team**, if someone becomes entrapped in a pool or spa drain the best way to free them is NOT to immediately begin pulling on them. Even though that might be a natural reaction, you must think differently when it comes to entrapment in pools.

"The first reaction is to jump into a pool or spa and try to yank the child off," said expert George

Pellington. "Well, really the first reaction ought to be go turn off the pump."

Pellington is General Manager of Vac-Alert of Florida, a subsidiary of Vac-Alert Industries LLC, a national company that manufactures safety equipment to prevent entrapments. Pellington said that the solution to actually freeing a stuck child can be counter-intuitive.

"If the child is suction entrapped rather than trying to lift the child (straight) off the drain, it's much better to try and roll or peel a child off rather than do a dead lift," Pellington said.

The problem of pool drain suction accidents has become so serious that now there are a number of companies whose only goal is to make and sell products to prevent entrapments.

"This channel drain is unique in a way that is actually known as a single unblockable drain," said Cheryl Salla as she showed off the specially designed, three holed drain.

Salla represents one of those growing companies that build products to prevent entrapments. Salla's company is called AquaStar and is based out of California. AquaStar sells drain covers designed specifically to comply with federal law, called the Virginia Graeme Baker Pool and Spa Safety Act or VGB.

The law was named after the granddaughter of former Secretary of State James Baker who drowned in an entrapment accident in Northern Virginia. The federal law was signed into law in December, 2007. It requires all public pools to have certain drains and safety systems on them which are meant to keep kids from becoming entrapped.

[Click here](#) to read a copy of the Virginia Graeme Baker Pool and Spa Safety Act.

But as the **CBS4 I-Team** uncovered in its investigation last month, Florida Health Department officials won't enforce the federal law, saying it's not up to them. The federal Consumer Product Safety Commission says it does not have enough inspectors to adequately enforce the law in every state, including Florida.

Read a statement from US Consumer Product Safety Commission regarding this issue by [clicking here](#).

The **I-Team** discovered that there are thousands of pools in South Florida that potentially have these problematic drains that don't comply with federal law. Florida will begin enforcing stricter rules in November when the Administrative Code changes to more closely parallel federal law.

Cheryl Salla said her company hasn't waited. It began manufacturing these safer drains that comply with federal law years ago.

"Any drain that is compliant will have VGB 2008 (stamped) on it," Salla said.

I-Team investigator Stock asked Salla "If it doesn't have that stamped on it?"

"It's not compliant," Salla said.

Experts agree the key to keeping your child safe is to avoid drain covers that are cracked, yellowing and/or old.

"If you go to a pool and you see this color (yellow) versus a nice white color ask the pool operator how long has this been installed," Ron Schroader said.

Schroader has spent more than a decade learning about entrapments and sharing his knowledge with others.

"With a single suction outlet, if that drain cover was to come off and I didn't have a back-up system the child could be in great danger," Schroader said describing one pool scenario.

Schroader calls this back-up system "layers of protection." Schroader says "layers of protection" are critical for safety when something like a drain cover fails. One of those layers of protection is a system called Vac-Alert.

"We call this a safety vacuum release system because it acts like a vacuum breaker," Pellington said.

Pellington's company, Vac-Alert Industries, LLC, makes and sells this strange contraption that shoots air into a stuck pool drainage system. For about \$450 the contraption can be added to an existing pool or spa and potentially save a life.

Pellington described how it works: "This valve then opens up and shoots all this air that's all in a chamber into the (pool's) pump," Pellington said. That sudden burst of air breaks the vacuum holding a person sucked to the drain.

"This charge of air goes to the pump and disengages it's pulling power," said Pellington. "It (the pump) is what's creating the vacuum. Right then once the pulling power is gone and the child is free to get off."

What makes these suction entrapment cases so tragic is that all these redundant systems that the experts talk about costs only around \$500 to install onto your pool or spa.

For instance, pool drain covers: you can replace faulty or old covers for around \$50 a piece. A Vac-Alert "suction breaker" system costs \$500 or less. Experts estimate there are as many as 150,000 pools out there with problematic or dangerous drains or systems that could be dangerous to children.

Web resources to find out more on pool drain safety and how to prevent it.