

Knowledge that will change your world

Electric Shock Drowning

Know the risk and the simple steps that you can take to prevent it



Boating and swimming are great things to do especially when the temperature heats up. However, there may be a hidden danger of which many people are unaware. Be it at a rivers and lakes or at the pool, electric shock drowning (ESD) is becoming more and more prevalent. While we understand the need for personal flotation devices to help maintain water and swimming safety we should also understand the need to understand ESD and some steps to prevent it. There have been two recent incidents in Alabama that draw extra attention to the issue of ESD. Last spring, a Priceville High School student died while

swimming at her family's lake house on Smith Lake. In April two women were killed in Tuscaloosa in what officials believe to be attributed to ESD. In both instances, a boat dock plugged into shore power was silently leaking electricity into the water. The victims were killed when they swam into energized water around the dock.

But it's not just lakes that can have potentially life threatening electrical leakage. Backyard and community pools have live electrical currents that, if not installed or maintained properly, can potentially cause an ESD tragedy. [Safe Electricity.org](http://SafeElectricity.org) recommends all electrical installations be performed by professional electrical contractors who are familiar with codes and standards for marine environments. The group also recommends that all docks and pools have a ground fault circuit interrupter (GFCI) breakers on the circuits feeding electricity to the dock or pool.

Here are a few additional tips to keep in mind for your boats electrical system:

- Have the boats electrical system checked at least once per year by a qualified professional
- Boats with ship to shore power systems should have isolation transformers or electrical leakage circuit interrupter (ELCI) protection
- Boats should also be checked when something is added or taken away from the power system

There are a few steps that you can take if you are someone you know is in the water and feel an electric current:

- Do not swim around docks with electrical equipment or boats plugged into shore power
- If you are in the water and feel electric current, shout to let others know, try to stay upright, tuck your legs up to make yourself smaller, and swim away from anything that could be energized
- DO NOT head to a boat or dock ladder to get out
- Avoid metal swim ladders if you feel an electrical current

If you are on the dock or shore and a swimmer feels an electrical current:

- DO NOT jump in to save them
- Throw them a flotation device
- Eliminate or turn off the source of electricity as quickly as possible
- Call for help

Purchasing an electrical current sensor that floats in your pool or next to your dock is a very reliable and relatively inexpensive way to ensure that your summer will not meet with tragedy due to ESD.