The V-Watch Personal Voltage Detector, offered by HD Electric Company® (HDE), is a personal voltage detector that alerts users of unseen electric fields nearby. It adds an extra layer of protection for frontline workers in any industry where high-voltage dangers may be present. For Emergency Medical Services (EMS) and Fire Professionals, having an early warning when these dangers are nearby means peace of mind in high-pressure rescue situations — and saves lives.

Members of the Coral Gables Fire Rescue Department experienced first hand how HDE’s V-Watch Detector can be trusted to alert first responders of life-threatening electric fields during an emergency. As Hurricane Irma barrelled down on Southeastern Florida in September, members of the department’s Rescue Recon team tasked with clearing roads of debris in the wake of the storm waded into the field equipped with V-Watch Detectors. In this case study, EMS Captain Kenny Anderson explains the unique dangers his department faces, and relays the story of how HDE’s V-Watch Detector saved the lives of four crew members.

"There are four guys still walking on the face of this earth because of that HDE V-Watch." — Kenny Anderson, Coral Gables EMS Captain

**CHALLENGE**

Firefighters and EMS technicians in Hurricane and storm prone areas know very well the dangers that come with responding to calls when power lines may be down. Because downed lines are not always obvious and electric fields are invisible by their very nature, these professionals face a very real risk of electrocution that is difficult to detect.

For Anderson and his 140 person crew in Coral Gables, responding to "wires down" calls where electrical dangers could be present is a near daily occurrence, and training for such a hidden hazard is not easy. Firefighters and EMS crews are trained to use the backs of their hands to quickly touch any surface that might conduct electricity before grabbing it — taking hold of a metal fence or something similar causes the hand to clamp down and expose someone to dangerous levels of electricity. Anderson refers to it as "operating on a wing and a prayer," and while the department trains and educates crews on the dangers of electrical hazards, until recently there was no proactive measure in place to warn responders of danger.

Training also presents another unique level of challenges for first responders: Introducing a new piece of technology or equipment to an entire department is not a simple task. Getting different shifts together and teaching them the ins and outs of a new piece of equipment and how it operates in the field can be difficult and time consuming. Additionally, EMS and first responders must remain focused at all times when in the field. According to Anderson, it can be easy to forget how a tool works, especially when it isn’t used frequently. As such, the most useful and trusted tools used by first responders have something in common: They are simple to operate and require little ongoing training.

Finally, as municipal emergency responders know, the purchasing process for new equipment can be slow and complicated. EMS decision makers and leaders need to be able to make a clear case to those involved in reviewing and approving purchases that the new technology or tool is worth the investment.
APPLICATION

Anderson didn’t know it yet, but as Hurricane Irma made landfall on September 10th, his crew and other city workers would clean up more than 300,000 cubic yards of debris in the wake of the storm. What was on Anderson’s mind as the storm approached was the safety of his Rescue Recon team as they would take to the roads, tasked with clearing all main streets and thoroughfares within 72 hours following the storm. During that time, they would face downed lines and an electrical danger relatively unique to departments in flood and hurricane prone areas — poorly wired generators that can backfeed into the power grid and electrify lines even when the local utility has shut power off.

Knowing the high probability of these dangers being present, Anderson recalled seeing the HDE V-Watch product at a conference months earlier. While he was in early discussions with the city’s finance department to order some of the products, the order had not been placed and time was of the essence. Anderson contacted the HDE employees who spoke to him about the product, and the company agreed to priority ship 20 V-Watch units to the department ahead of the hurricane — crews wouldn’t be heading into the storm blind of electrical danger.

When the units arrived, Anderson said his crews received less than an hour of training. Still, the simplicity of the V-Watch Detector’s functionality proved even brief training would be lifesaving. As a four person crew embarked on their Rescue Recon duties shortly after the worst of Irma passed, they were called to a scene and found themselves at an impassable road. Equipped with chainsaws, they exited their vehicle and prepared to clear the debris. As they approached the obstacle, a member of the crew saw his V-Watch Detector was alerting him of danger. Sure enough, a nearby tree had taken down a high-tension wire — a danger that was completely obscured from their view and impossible to have been detected without the V-Watch Detector, according to Anderson.

RESULTS

Seeing the value in a tool that can proactively detect electrical hazards, especially for a department that so frequently encounters them, Anderson has advocated for V-Watch Detectors use citywide. The Coral Gables Fire Rescue Department is in the process of making sure they have enough of the devices for every crew, and additionally, equipping other public works crews with the devices.

Anderson said getting buy-in for the purchase of additional units was made easier because of the quick training time, ease-of-use and proven ability to detect danger and save lives of his crew members.

To learn more and request a demonstration, please visit HDEFirstResponder.com.

“Buy them. This is an inexpensive and critical piece of equipment to keep your guys safe. If you have doubts, call me. I’ll put you in touch with these four guys. That’s all you need to know.”

“THE OFFICER ON THE TRUCK LITERALLY CONFIDED IN ME AND SAID ‘LISTEN, WE PROBABLY WOULDN’T BE HAVING THIS CONVERSATION TODAY IF IT WASN’T FOR THAT V-WATCH.’”

For more information please contact HD Electric Company at (847) 473-4980.