Capability Gap sent to the DHS R-Tech Program:

I currently work for FEMA Region IV's National Preparedness Division in support of Community Preparedness. Recently, I received training as a CERT First Responder through the Fulton County (GA) Public Safety Department. The capstone exercise was a functional exercise in which we were required to enter a smoked out structure, search for survivors, triage them and extricate them for medical treatment and evacuation. In teaming up with my partner to initiate the structure search, I clipped an E/T Light® on the back of his pack, and had him place one on mine. We set the color to flash amber and proceeded with our search. I received many comments and compliments from the teams that entered with us about the visibility of the lights, their size, construction, and functionality. There were discussions about how teams or sites could be assigned colors and flashing patterns to distinguish who was in what location, or what their assignment was. I chose to employ my remaining lights in a different fashion, however.

A recognized capability gap within the EMS and first responder community is the amount of excess equipment you must carry with you in order to properly triage survivors, especially at night. While a strip of colored ribbon or tape around the upper arm may be sufficient during daylight hours, the probability that those indicators will be missed or misread at night skyrockets. To assist with triage in dark conditions, EMTs have used chemlights for years. The issue inherent with this tactic is that a minimum of three colors must be carried for survivors, which doesn't address the found remains of the deceased. Priority for treatment and evacuation is based partly upon color, and partly upon order in staging. At a large scene, if the logistics of this are not clearly labeled and communicated to the personnel conducting evacuation, the opportunity for the highest priority patients to be overlooked increases.

To combat this issue, my remaining lights were attached to the survivors and victims that we located within the structure. We could immediately code survivors by color based on our initial assessment, and evacuate them to the treatment point. Having four colors available allowed us to mark the deceased with blue and not lose track of where their remains were within the structure, as we were focused on rescuing the living. At the treatment point, if the person in charge of triage disagreed with the incoming assessment, it was much easier to make an immediate adjustment up or down, rather than having to break out and affix an new chemlight. Further, when the survivors on the more serious side of their category were assessed, their particular color could be changed to a flashing pattern, indicating that they had priority within their identified category. This easily recognizable visual cue allowed survivors to be directed to the proper area upon arrival, and allowed for changes in their status to be quickly updated and communicated to medical staff. Overall, this saved time; time for the survivors being extricated from the structure, time for survivors gaining access to treatment, and time that would have been spent reviewing survivors for evacuation by transportation teams.

In addition to the above listed benefits are the durability of the E/T Lights®, their flexibility (through various programming and color schemes) and the ability for one enduring piece of equipment to replace four consumable items for an extremely long period of time with little maintenance storage cost.

Management Director for Okeechobee County (FL), and can definitely see how E/T Lights® would be a great use to both small and large EMS agencies. Their total lifetime cost is fantastic when compared to the continual replacement of chemlites or various other identification systems. Their performance surpasses established systems immeasurably in visibility, durability and staying power. The flexibility of their employment makes them useful for a broad variety of purposes, from marking patients with status and evacuation order to identifying responder teams to designating makeshift facilities.

If you have any additional questions, or if I can be of any further assistance, please don't hesitate to contact me at any of the points listed below. Thanks -

Respectfully,

Michael , CEM, FPEM

EM Program Specialist

National Preparedness Division

Department of Homeland Security-FEMA Region IV