

## **TOOLBOX TALK #13**

### **GAS DETECTION IN CONFINED SPACES**

Confined spaces are defined by OSHA as spaces large enough for workers to enter yet not intended for continuous use. They have limited or restricted entry and exit points.



These characteristics mean that gas levels can change rapidly, rendering the atmosphere hazardous with little warning. For this reason, it's important for confined space entrants and hole watchers to not only know – at any given moment – whether the space is safe or not, but also whether conditions are trending toward danger so they have time to make informed decisions about their safety.

So, how can you protect your workers in confined spaces? Supply them with direct-reading monitors. In fact, OSHA requires the use of direct-reading monitors when testing the atmosphere of a confined space before entering. You might be tempted to use alarm-only gas monitors because of their promises of simplicity – your workers only have to know whether the device is in alarm mode and, when it is, they evacuate the space. Direct-reading monitors show workers how safe the atmosphere is as well as give them a chance to recognize patterns and respond to shifting gas levels.

In addition to testing the atmosphere with a direct-reading monitor before entering a confined space, it's a best practice to continuously monitor atmospheric conditions. Gas levels can be unpredictable and change quickly, even between periodic checks. A personal gas monitor with a slide-on sampling pump allows workers to use their device for pre-entry sampling, then remove the pump and wear it on a lapel for continuously monitoring while within the confined space.

Workers aren't the only ones that can benefit from using direct-reading monitors – 60% of confined space deaths are would-be rescuers. There are personal and area monitors that can wirelessly connect to share gas concentrations and alarms in real time. This gives all workers onsite the information they might need to execute a safe rescue. This connectivity keeps your workers visible to attendants even when they can't be seen or heard.

Confined spaces are dangerous, but you can reduce the risk by following OSHA guidelines and best practices. Providing your workers direct-reading monitors – especially those that monitor the atmosphere continuously and wirelessly connect – is the best way to help them return home safely at the end of the day.