

Press Release

Release By: Mountain View Fire Protection District
Contact: Jesse Hodgson (303) 434-5135
Date of Release: 3/5/07

For Immediate Release

Firefighters train with ‘new dual purpose’ Carbon Monoxide Detectors

It comes as no surprise that in their job, Firefighters are routinely exposed to hazardous conditions including dangerous breathing environments, especially after a house or other structure fire. One of the most dangerous molecules in the air after a fire includes Carbon Monoxide. Firefighters can be exposed to CO typically during overhaul (which is the clean up stage after a fire). Many times CO levels could be considered extreme, even when firefighters believe they are in clean air environments.

Because of that risk and the fact that the health and safety of Firefighters is paramount, firefighters from Mountain View are now carrying carbon monoxide detectors on their trucks. They spent the last week training on the new detectors which are now in service on two of their engines.

With the new detectors, once a firefighter leaves a dangerous environment, they can be tested right away for dangerous levels of carbon monoxide in their blood.

In the past, firefighters relied only on signs and symptoms of carbon monoxide poisoning.

“Many times we would come out of a structure after a fire, have a headache and think nothing more than it was caused by the work involved in fighting the fire” said Jesse Hodgson, spokesman for the Mountain View Fire Protection District.

Now those symptoms are being watched closely by the Districts medical division and every fighter will be tested for CO when exiting an environment.

“It’s a responsibility we have to take upon ourselves to help ensure our own safety” said Hodgson.

But the benefits don’t stop there. Hodgson explains that the monitors are not just for firefighters.

Hodgson says they have a dual purpose. Not only can they check themselves after exiting an environment, but they can use them on patients whom they suspect have been exposed to Carbon Monoxide as well.

The monitor is a handheld device which has a probe that attaches to a patients ring finger. An infrared laser picks up and measures the amount of both oxygen and carbon monoxide in a patient’s blood. It can be used on multiple patients or firefighters because it does not build up a memory.

Mountain View, as well as most other emergency providers, have a similar device called a Pulse Oximeter which measure the amount of oxygen in the patients’ blood. But, because Carbon Monoxide bonds to the hemoglobin in the blood, that device is unreliable because it picks up the carbon Monoxide molecule and reads it as oxygen giving responders a false reading.

Because of that, the device is unreliable and not used in suspected Carbon monoxide poisoning patients.

With the new detector though, it gives not only the Carbon monoxide levels but also an accurate reading of oxygen in the blood by differentiating between oxygen and Carbon Monoxide. The detectors were budgeted for by Mountain View and is the Rad 57 model made by Masimo.

“We’ve identified a true need for these detectors and are continuously looking at other ways to take necessary steps toward increasing our own and our patient’s safety” concluded Hodgson.

Sign and symptoms of possible carbon monoxide poisoning include:

- Headache lasting for several hours and may increase,
- Facial flushing
- Fatigue
- Nausea and vomiting
- In extreme cases, bright red skin or unconsciousness

If you feel you've been exposed to carbon monoxide, leave the environment right away and call 911 from a safe location.