

“Every Breath You Take”

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Borrowing the title line to a song performed by the Police in the 80s – “Every breath you take... I’ll be watching you.” But is anyone watching the breaths that you and your co-workers take?

One of the most vital functions of life is respiration. Over 17,000 times a day we inhale about a ½ liter of air. This air provides us with life-sustaining oxygen, but what else is in the air that you are inhaling? Inhaled particulate material can deposit in the lung and airways. Inhaled gases and vapors can enter the blood stream through the capillaries in the alveolar region of the deep lung. The characteristics of the particulates will determine if they contribute to disease or if they are cleared by the body’s many protective mechanisms.

When exposures can’t be controlled, respirators are needed to protect our lungs from exposures at work. These exposures can include wood dust (especially hardwood), silica from concrete or stone cutting, asbestos from demolition work, solvents in paints, heavy metals from welding fumes and fungal exposures from mold-contaminated materials. OSHA has very specific requirements for companies using respirators. Even a simple disposable respirator worn voluntarily requires employers to provide employees with Appendix D of the OSHA respiratory protection standard. Those allowing employees to use cartridge respirators are additionally required to provide for medical clearance and develop a written program.

A respirator which is not properly fit-tested and fit-checked (do you know the difference?) is paramount to wearing a self-contained underwater breathing apparatus (SCUBA) with a leaking seal. When respirators are required, companies must have a written program, assign a respirator administrator, conduct annual training and fit-testing, determine a proper change-out schedule for cartridges and obtain medical clearance for individuals wearing respirators. Construction activities can present some serious respiratory hazards which some choose to ignore. Some

respiratory exposures can result in immediate discomfort while other exposures may not present themselves in the form of disease until years later.

Selecting a proper respirator requires the user to understand what contaminants they are facing. Specific filter media are required to remove different contaminants. For example, attempting to remove solvents with a particulate filter will have no protective effect. Respirators have Assigned Protection Factors which indicate the protective value of the respirator. If individuals in your organization are relying on respirators to protect their lungs, it is the employer’s responsibility to comply with the OSHA requirements and to assure the use of respirators is effective. Poor fits, wrong respirator or filter types, poor maintenance and a lack of training all contribute to ineffective programs and OSHA violations.

There’s nothing more important than Every Breath You Take.

On May 14, 2009 from 7:30 am – 11:30 am, ABC Keystone will hold an Administrator’s Respirator Protection course. This program is designed for those within an organization who are responsible for the oversight and administration of the respiratory protection program. The program will also cover topics related to the annual training required for users of respirators. If your organization uses respirators or should be using respirators, be sure to attend this program for an in-depth education on respiratory protection requirements.

Visit www.abckeystone.org to download a registration flyer or contact Jo Ann at the Chapter office, 717.653.8106.

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