

Training Bulletin

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Wearing SCBA



The self-contained breathing apparatus (SCBA) is the most advanced and intricate piece of personal protective equipment (PPE) that firefighters have to protect us in the environment of the fireground, which is toxic and not adequate to support life.

So how exactly does the SCBA protect firefighters? It protects the biggest and most easily compromised system in our body, the respiratory system. One breath from a toxic environment can kill us and we cannot even see what we are breathing in! All firefighters must wear and use their SCBA when they are exposed to any abnormal working environment. There is no excuse good enough to justify not wearing SCBA, although some firefighters still try to excuse themselves from doing so.

The SCBA is comprised of four parts: regulator, cylinder, back plate and harness, and face piece. No matter what brand of SCBA you are using, they all have these four basic components. Let's look at each one to detail how well they will protect you when wearing it.

- The face piece protects the user's face and mouth. The face piece doubles as a connection point for the regulator as well as impact protection for the face with the lens.
- The regulator is where the closed system comes into play because it attaches to the face piece and provides a continuous flow of air to the user from the cylinder. The air flow in the regulator has been stepped down from the cylinder pressure of either 2,216 psi, 4,500, or 5,500 psi to about 100 psi or less.
- The backplate and harness is where the electronic brains of the SCBA are usually located as well as the reducing block for the cylinder air to be processed and stepped down for the regulator.

Source: https://www.fireengineering.com/firefighter-training/firefighter-basics-wearing-scba/