PPE General Stats & Facts



DID YOU KNOW?

A new survey of safety professionals has found a high incidence of employee noncompliance with corporate and federal mandates to wear appropriate personal protective equipment (PPE).

In fact, nearly all of the safety professionals in a survey released Aug. 12 said that workers in their organizations had at some point failed to wear the necessary safety equipment while on the job. Ninety-eight percent of respondents who attended the recent American Society of Safety Engineers (ASSE) conference in Baltimore answered “yes” when asked if they had observed workers not wearing safety equipment when they should have been, according to the survey, which was conducted by Kimberly-Clark Professional.

To make matters worse, 30 percent of these respondents said this had happened on numerous occasions. Given this, it’s not surprising that worker compliance with PPE protocols was cited as the top workplace safety issue by all survey respondents.

These findings are in keeping with results from previous surveys conducted by Kimberly-Clark Professional at the National Safety Congress in 2008, 2007 and 2006. Those surveys also found high levels of noncompliance with PPE protocols – 89 percent in 2008, 87 percent in 2007 and 85 percent in 2006.

“Increasingly high noncompliance with PPE protocols is an alarming trend and a serious threat to worker health and safety,” said Gina Tsiropoulos, manufacturing segment marketing manager for Kimberly-Clark Professional. “Whether this is a result of economic conditions, a flawed approach to safety programs, younger workers who are more inclined to take greater risks or some other reason, it’s essential that workers wear PPE when it is required. PPE protects workers against injury, but it will not work if workers fail to use it and use it properly.”

It’s no wonder then that three-quarters of respondents chose workplace accidents and injuries in response to the question: “What is most likely to keep you up at night?” Potential exposure because of noncompliance with PPE protocols was second, at 13 percent, while fear of a global pandemic and its impact on the workforce was a distant third, cited by only 8 percent of respondents.

When it comes to compliance with PPE use protocols, eye protection was found to be the “most challenging” PPE category, according to 42 percent of respondents. Nearly three out of five workers who experienced eye injuries were found not to be wearing eye protection at the time of the accident or were wearing the wrong kind of eye

protection for the job, according to the Bureau of Labor Statistics. According to NIOSH, approximately 2,000 U.S. workers each day have a job-related eye injury that requires medical treatment and the Department of Labor estimates that thousands of workers are blinded each year from work-related eye injuries that could have been prevented. These statistics particularly are troubling when experts agree that nearly 100 percent of workplace eye injuries could be prevented with the use of appropriate eye protection.

The next highest category for noncompliance was hearing protection, also disturbing since occupational noise-induced hearing loss is 100 percent preventable when proper preventative measures are implemented. It was followed by gloves and head protection.

While the reasons for PPE noncompliance were varied, the biggest complaint was that it was “uncomfortable,” selected by 40 percent of respondents, followed by PPE that is “too hot,” “not available near the work task,” “poorly fitting” and “unattractive.”

When asked what they had done or intended to do to improve compliance levels, the safety professionals’ said they planned to:

- Improve existing education and training programs
- Increase monitoring of employees
- Purchase more comfortable PPE
- Tie compliance to individual performance evaluations
- Purchase more stylish PPE
- Develop incentive programs to encourage greater PPE compliance.

Basic facts about personal protective equipment

PPE should be a last resort

Compliance with the Management of Health and Safety at Work Regulations 1999 requires there to be a hierarchy of prevention and control measures where personal protective equipment should be used only as a last resort. Engineering controls and safe systems of work should be used wherever possible instead.

Unfortunately, some employers encourage employees to use PPE without ever considering the introduction of prevention and control measures that could eliminate the use of PPE. This leads to a number of problems:

- PPE protects only the person wearing it, whereas measures controlling the risk at source can protect everyone at the workplace.
- Theoretical maximum levels of protection are seldom achieved with PPE in practice, and the actual level of protection is difficult to assess.
- Protection is often ineffective because the PPE is not suitable, incorrectly fitted, not properly maintained, and may be used improperly.
- PPE is often designed for men, and for women workers this may introduce serious hazards and discomfort.
- PPE is also often designed without considering the reality that both male and female workers come in all shapes and sizes, that parts of the body to be protected vary considerably, that many workers wear spectacles, some have beards and stubble, and so the PPE may fail due to not fitting correctly.
- PPE may restrict the wearer by limiting mobility or vision, or by requiring additional weight to be carried, causing musculo-skeletal problems. As well as the health and safety problems that this may cause, it can also lead to a ‘blame the worker’ culture when the PPE is discarded because of the discomfort that it can cause.

Hazards Affecting Workers

Yet even where engineering controls and safe systems of work have been applied, it is possible that some hazards might remain. These hazards may lead to injuries to the:

- lungs, for example, from breathing in contaminated air
- head and feet, for example, from falling materials
- eyes, for example, from flying particles or splashes of corrosive liquids
- ears and hearing from noise
- skin, for example, from contact with corrosive materials or biological substances, or chemical substances that can be absorbed through the skin or hands, feet or head from extremes of heat or cold.

Sometimes, PPE is needed in these cases to reduce the risk.

In the 2014 TUC safety representatives’ survey, many of these hazards were identified by safety representatives in their top five workplace hazards, broadly similar to 2012. For example:

- 17 per cent mentioned high temperature, up from 14 per cent in 2012.
- Nine per cent mentioned noise.
- Nine per cent mentioned chemicals or solvents.
- 10 per cent mentioned dusts.
- 11 per cent mentioned low temperatures.