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life's best moments.*

Residual Risks In The Workplace



Residual Risk

If you follow all the workplace safety requirements, you are guaranteed to make it home at the end of the day, right...? Unfortunately not - there are residual risks in the workplace that could seriously hurt or kill you.

After identifying and eliminating risks from a workplace (inherent risks), the remaining are residual, which can be mitigated but not eliminated. An example of [residual risk](#) in a workplace is stairs leading up to an office; it is not practical to set rules around the use of the stairs, but an accident leading to an injury or possibly even death could still occur. It is up to management to reduce risk in the workplace as much as is reasonable and acceptable, but there is only so much it can do, and there comes a time when it must live with it or pass that risk onto an insurance company.

So, what other residual risks reside in an average workplace?

A ladder has risks; it is designed for access but often gets used for [short-term jobs](#) like changing light bulbs or cleaning out gutters. Scissors, knives, and blades all come with residual risks, and while you can train staff on their correct use or put guards on them, there will always be an element of risk involved. Covid 19 is very contagious, and even if you are vaccinated, wash your hands frequently, avoid crowds of people and wear a mask, you can still catch the disease at work.

Residual risks in the workplace include exposure to particulate air pollution caused by things like [diesel engines](#). Diesel produces far less carbon monoxide than petrol engines but gives rise to more nitrogen oxides and aldehydes, which are prone to irritate the respiratory tract. While more research is needed, inhaling these small particles induces an inflammatory reaction in the airways and subsequent induction of systemic inflammation and coagulation disturbances.

A [Swedish study](#) of 176,309 construction workers between 1971 and 2002 confirmed that diesel fumes increase the risk of ischaemic heart disease. As you can imagine, eliminating diesel fumes in some workplaces is nigh on impossible, but there are safety precautions you can take, like using low-emission engines and only running them outside, modifying the work area to separate employees from the exhaust, and using personal protective equipment such as respirators.

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Forms of PPE

Risk is complicated for many workplaces, and its practical implications are immense for all staff involved. Because of different risks, all with varying degrees of danger and often just meters away from each other, staff must alternate between [various forms of PPE](#).

For instance, a highly protective blasting respirator like the GVS-RPB [Nova 3](#) (which uses supplied air) is worn in a blast booth - while the more versatile and tight-fitting [Eclipse P100](#) is preferable in the general work area outside of it.

As you can imagine, using a high-pressure hose to smooth a surface or remove paint creates a toxic dust cloud that can travel anywhere from one hundred yards to 30 miles, hence the requirement for protection in and out of the booth. The onus is on management to clearly define what PPE is required and where to wear it, with a diagrammatic overview of PPE, training sessions, and posters.

Permissible Exposure Limit

It is a topical subject, with new [Permissible Exposure Limit](#) (PEL) regulations imposed on US companies in 2020, with airborne carcinogens now limited to 50 micrograms of respirable crystalline silica per cubic meter of air, averaged over an 8-hour day. These new regulations aim to save up to 700 lives and reduce new silicosis cases by 1600 per year.

In Conclusion

It is impossible to eliminate all residual risks, but there are ways to reduce their effects on the workforce. A complete picture of incidents must be recorded to determine if control measures are working. If some fall through the cracks, the company might waste money on unnecessary changes or think a control is working when it isn't. Through frequent monitoring, it can identify trends and gaps. For instance, has controlling one type of risk increased incidents of another? Finally, it takes an entire team to make a workplace safe, so insights from all employees about potential risks are vital.

It is all too easy to feel overwhelmed by risks in the workplace. The key is to find a happy medium between protecting people and allowing them to achieve what they are employed to do. Next time you ponder the subject, remember this famous quote 'Life is inherently risky. There is only one big risk you should avoid at all costs, the risk of doing nothing'.

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