



Indoor Air Quality at Schools and Nurseries

Children spend around 1/3 of the day at schools or nurseries

We all want our children to have a good upbringing and to be healthy. We all certainly agree on many different factors affecting their upbringing, but one area too few are aware of is how important the quality of the indoor air at schools and nurseries is for the health of our children and young people.

The indoor air in schools and nurseries unfortunately contains unhealthy substances generated on the premises. These pollutants are exuded from people, textiles, smells, cleaning chemicals, mould spores, paint and building materials, etc. Pollutants can also be originated in leaking ventilation systems.

There are studies showing that the concentration of some common air pollutants in indoor air is higher than the concentration in the same substances outdoors. There are several substances associated with symptoms of asthma, headaches, nausea and allergies, among them formaldehyde which is found in glue, certain sealing materials, building materials and some textiles.

Fine particles from viruses, exhaust gases, asbestos and bacteria enter our bodies through the respiration and further into the blood and other organs. Ultrafine particles enter the brain through the olfactory nerve and inhibit the development of children's brains. They also increase the risk for children, teachers and other staff to develop asthma, allergies and chronic diseases such as cancer and Alzheimer.

In many cases, the number of children in a classroom is higher than it was planned for from the beginning. This reduces the air quality with high levels of carbon dioxide, which causes students to find it more difficult to concentrate and increases their risk of getting infections. Children's work at school also requires greater concentration than the adults because they constantly learn new things and often do a task for the first time. Many studies have shown that poor quality of the indoor air in schools impairs student performance.

It is important and possible to minimise the particle content in indoor environments using efficient filters and air purifiers. Therefore, we rent high quality air purifiers on a monthly basis, with activated carbon filter. They remove contaminants such as dust, pollen, odours, viruses and mould spores, as well as microorganisms and other contaminants generated by building materials, people and clothing, among other sources. You get better indoor air quality immediately after starting.

We at Colswe develop and offer our environmental sensors and our services for measuring indoor air quality, as well as air purifiers, for all types of workplaces. We also offer competence enhancing measurement training for technicians who perform measurement service for indoor air quality and thermal comfort.