



Indoor Air Quality at Health Care Centres and Retirement Homes

Elderly people in retirement homes are living in the same environment all the time, around the clock year round

Elderly people and others who need care and supervision are staying almost 100% of the time indoors. Therefore, it is important that the air quality in hospitals and nursing homes is the best possible. Air pollution is the biggest cause of shortened lifespan in humans. Indoor air in hospitals and nursing homes unfortunately contains unhealthy substances generated on the premises. These pollutants come 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. Among these substances there are gases such as formaldehyde, one of several substances associated with symptoms of asthma, headaches, nausea and allergies and it is found in glue, certain sealing materials, building materials and some textiles.

Fine particles from viruses, exhaust gases, asbestos and bacteria in a room enter our bodies through the respiration and further into the blood and other organs. This is particularly harmful to sensitive individuals as the elderly and persons with allergies and cardiovascular diseases as well as respiratory diseases such as asthma. The elderly who are weakened in various ways, often with a reduced immune system, are particularly susceptible and sensitive to the effects of viruses and bacteria.

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. The air purifier removes contaminants such as dust, pollen, odours, viruses and mould spores, as well as microorganisms and other contaminants exuded from building materials, people and clothing, etc. 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 measuring services of indoor air quality and thermal comfort.