



While asthma cannot be cured, it can be controlled through medication and lifestyle management. With the proper care, the vast majority of people with asthma can live full, symptom free lives. However, 60% of Irish asthmatics do not have their condition under control. As a result, they are at risk of having a serious attack at any time. In Ireland, 20,000 hospital visits occur as a result of asthma each year; this translates as one emergency hospital visit every 26 minutes.

The total economic burden of asthma in Ireland is estimated to be ~€500 million each year. Tragically, asthma is responsible for one death each week in Ireland. Given that 90% of asthma related deaths are believed to be entirely preventable, this is a frightening and unacceptable figure.

Lifestyle factors such as avoiding substances or conditions which worsen asthma symptoms are a key component of achieving and maintaining asthma control. However, many triggers are ubiquitous in the environment and as such are impossible to avoid entirely. Smoke and particulates from combustion are two such asthma triggers which cannot be completely avoided. In this sense, many people with asthma continue to experience asthma symptoms and struggle to get their asthma under control as a direct result of the poor air quality in their environment.

The negative health impacts of poor air quality and airborne particulates are well documented. Particulates have been associated with a marked increase in asthma symptoms, greater incidence of asthma, COPD and lung cancer.

Particle size is also an important factor as the health effects can differ. Particles are categorised into three groupings. Coarse particles can reach the central airways while fine particles can reach the outer lungs where gas exchange takes place and can also get into the blood stream, causing cardiac problems. Ultra fine particles may reach the heart and blood-brain barrier. The varying reach of different sized of particulates is an important issue for people with asthma and other respiratory conditions as micro-organisms such as bacteria and viruses can be carried on the particle surface. This exposes the individual to a greater risk of respiratory and systemic infection. Colds and flu in particular are considered a powerful trigger for asthma and respiratory illness.

The positive health effects of clean air have already been seen in the success of Ireland's existing 'Smoky Coal Ban' which was implemented in 1990. The ban was limited to Dublin and large towns and has been credited with saving 8,000 lives to date. In September 2015 it was announced that this would be followed by a nationwide ban to be implemented in autumn 2018. We believe this ban would improve the health of the thousands of people with respiratory conditions living outside the current ban zones, many of whom are actively struggling to keep their asthma under control.

However, we fear the national ban may not be implemented on schedule. As such we hugely welcome the proposal to extend the regulation of Clean Air Zones on a national level and the legislative framework this provides for better implementation and enforcement. We look forward to seeing the benefits of clean air available to all Irish citizens.