

Petition: Protect children's lungs from harmful pollution whilst at school

Y Pwyllgor Deisebau | 17 Gorffennaf 2018

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Research Briefing:

Petition Number: P-05-825

Petition title: Protect children's lungs from harmful pollution whilst at school

Text of petition:

People in towns and cities across Wales are breathing in levels of air pollution that are illegal and harmful for their health. Children are among those most vulnerable to air pollution. Their lungs are still growing, and polluted air can stunt the growth of their lungs and increase the likelihood of asthma and other health problems later on in life.

A freedom of information request by the British Lung Foundation (BLF) to local authorities in 2017 found that 68 per cent of respondents (15 out of 22) were not monitoring air pollution within 10 metres of any of their schools.

We, the undersigned, call on the Welsh Government to require all Local Authorities to monitor the quality of the air children breathe whilst at school so decision-makers have the information they need to take action on air pollution.

Note: A response to the petition from the Welsh Government had not been received at the time of writing this brief.

Background

The World Health Organisation (WHO) states that [air pollution is the largest contributor to the burden of disease from the environment](#) (PDF, 2.20MB). In 2012, the WHO estimated that air pollution was responsible for 7 million premature deaths globally.

Poor air quality is recognised as an issue across the UK and it was announced on 17 May that the [European Commission is pursuing infraction proceedings against the UK Government](#) for air quality breaches as well as other EU member states. The Commission has referred the UK,

France, Germany, Italy, Hungary and Romania to the European Court of Justice for violating clean air rules.

Although a UK wide issue, Wales has some of the worst air quality and the Research Service has produced a [recent briefing on the issue](#). Cardiff and Port Talbot both have [higher particulate matter levels](#) than Birmingham or Manchester, and a [road in Caerphilly](#) is the most polluted outside of London. Public Health Wales (PHW) figures show that air pollution contributes to around [2,000 deaths per year in Wales](#) and PHW has described it as an urgent public health crisis, second only to smoking. Some areas have breached EU Regulations for several years, culminating in the Welsh Government also being taken to court.

The [Air Quality Wales website](#) states that:

Government statistics estimate that air pollution in the UK reduces the life expectancy of every person by an average of 7–8 months, with an associated cost of up to £20 billion each year.

Pollutants

The primary air pollutants that impact health are nitrogen dioxide (NO₂), ozone (O₃) and other small, particulate matter (PM) (PM₁₀ for matter <10 µm in size or PM_{2.5} for matter <2.5 µm). These pollutants come from a range of sources, but the vast majority arise from the burning of fuels. A [report from the European Environment Agency](#) highlights:

Road transport remains an important source of some of the most harmful air pollutants. In particular, road transport is responsible for significant contributions to emissions of nitrogen oxides (NO_x) and particulate matter (PM). Pollution released by vehicles is particularly important, as emissions generally occur in areas where people live and work, such as cities and towns. Therefore, although emissions from the transport sector may not be as great in absolute terms as those from other sources, population exposure to the pollutants released by road transport can be higher than for sources such as power plants or large industrial facilities, which often tend to be located in remoter, less populated areas.

Monitoring

Air quality data is collected from active and non-active monitoring sites. There are around 40 active monitoring sites in Wales, primarily located in Swansea, Port Talbot, Cardiff and Wrexham. These provide continuous measurements that can be [viewed online](#). There are over 1000 non-active monitoring sites (primarily NO₂ detectors) that provide data over longer periods of time (typically monthly).

The data from active monitoring sites is used to inform the public about potentially hazardous, brief increases in air pollution levels and also to measure compliance with EU directives.

NO₂ is the subject of all the [Air Quality Management Areas \(AQMA\)](#)s in Wales, except Neath Port Talbot. [Road transport is specified as the main source for NO₂](#) (PDF,5.16MB) in 96% of the AQMA's declared for exceeding NO₂ limits.

Health impacts

[A recent Public Health Wales report](#) (PDF, 2.36MB) highlights that the effects of air pollution can disproportionately affect vulnerable population groups including children.

[British Lung Foundation research](#) suggests that long-term exposure to air pollution can contribute to the development of lung conditions. There's good evidence that outdoor air pollution contributes to lung cancer, and it's possible that long-term exposure to air pollution is linked to the development of asthma. Research also shows that if [children are exposed to air pollution for a long period of time](#), it can affect how their lungs develop. The long term impacts of air pollution are not fully understood and children are particularly vulnerable, meaning the effects of today's air pollution may be seen well into the future.

The [foundation also highlights](#) that

high concentrations of air pollution can ...lead to respiratory problems – even in otherwise healthy children. Long-term exposure has been linked to worsening symptoms of conditions such as asthma, which is common in children. Diesel emissions have even been linked to an increased risk of lung cancer. And research has also shown that pollution levels increase at lower heights, potentially exposing children to greater concentrations than adults.

For their size, children also breathe more air each minute than an adult and buggies and prams put them at the level of car exhausts.

Air quality near schools

The environmental law charity [ClientEarth](#) has started a UK wide ['posioned playgrounds' campaign and petition](#) stating that 'across the country, children are exposed to illegal and harmful levels of air pollution while on their way to and at school'. As part of the campaign a publically available tool has been produced showing how far a school is from a road where NO₂ levels exceed legal limits. The analysis shows that across the UK, pupils at almost 1000 schools are exposed to NO₂ levels that endanger their health. The tool shows there are schools in Wales that are less than 150m from an illegally polluted road in Newport, Port Talbot and [nine schools in Cardiff](#).

Although the tool is unable to give an exact measure of air pollution levels in playgrounds, the campaign highlights that children are also exposed to harmful air pollution when travelling to and from schools.

The British Lung Foundation has also raised awareness of the issue through the [#DropOffSwitchOff](#) campaign. This campaign aims to raise awareness of the fact that:

Idling in cars, which means keeping the engine running while stationary when waiting to drop off or pick up your child from school, increases the amount of this toxic vehicle exhaust in the air.

Welsh Government Action

Local Air Quality Guidance

In June 2017, the Welsh Government issued [local air quality management \(LAQM\) policy guidance](#) to local authorities. The guidance recognised the role of schools in air quality management, highlighting:

the significant contribution made by the “school run” to levels of air pollution and traffic congestion on roads within many school catchment areas during term-time rush-hours...[and] the potential for schools to help educate children and parents on the issues around air quality and explore potential solutions, such as car sharing and no-idling policies on and around school grounds.

The policy guidance states:

Local Authorities should consider engaging with schools as part of their LAQM activities, both to explore options for mitigating the impacts of the school run on society in general and children in particular, and to educate children and grown-ups on local air quality more generally.

Legal Challenge

In February 2018, the High Court ruled that the Welsh Government had failed to meet EU targets to cut air pollution in a case brought by the environmental group ClientEarth. The ruling in the court case, which also included the UK Government, placed a legal obligation on the Welsh Government to draft a plan by the end of April 2018, and have a final plan in place by 31 July 2018, to improve air quality across Wales in line with EU law.

Clean Air Wales Programme

On 24 April the Minister for Environment, Hannah Blythyn, made a [statement in Plenary](#) announcing that the Welsh Government will establish a Clean Air Wales Programme. The “immediate aim will be to achieve compliance with existing legislative air quality obligations”. The Minister stated that should the programme identify “gaps in the necessary levers to make required air quality improvements” she will seek to develop new legislation to address this.

Within the statement, the Minister also announced a number of other measures being taken by the Welsh Government.

- Planning Policy Wales (PPW) has recently been rewritten and restructured around the principles of the *Well-being of Future Generations (Wales) Act 2015*. The new version of the policy contains a section on air quality and soundscape. The consultation closed on 18 May and the new PPW is expected to be published before the end of the year;
- A Clean Air Plan will be published for consultation by the end of 2018 setting out in greater detail how the Welsh Government will action improvements in air quality;

- An Air Quality Monitoring and Assessment Centre will be established in 2019;
- On 25 April the Welsh Government launched its [consultation on a draft Clean Air Zone Framework for Wales](#). A Clean Air Zone is a defined geographical area where a range of actions can be applied with the purpose of significantly reducing public and environmental exposure to airborne pollutants;
- The Welsh Government has published a [consultation on its supplemental plan to the UK plan for tackling roadside nitrogen dioxide \(NO₂\) concentrations](#). The plan sets out how the Welsh Government will reduce concentrations of NO₂ around roads where levels are above legal limits; and
- Over £20 million has been allocated for an Air Quality Fund through to 2021.

National Assembly for Wales Action

With regard to the location of air quality monitors, in May 2017, the then Minister for Social Services and Public Health, Rebecca Evans [stated in plenary](#):

Local authorities really do have to take a risk-based approach in terms of siting their monitors, and that should be based on the evidence that they have in terms of areas that are likely to be exposed, or areas where people are likely to be exposed to the highest levels of air pollution.

A [written question was tabled by David Melding AM](#) on 23 April 2018 on mitigating children's exposure to air pollution in schools and nurseries throughout Wales. Responding, the Minister for Environment, Hannah Blythyn highlighted that local air quality management statutory policy guidance was issued by Welsh Government in June 2017. The Minister highlighted that the:

policy guidance recognises schools, amongst others, as “sensitive receptor locations” and in doing so requires local authorities to give special consideration to the same when carrying out their duties of local air quality management

The Minister also highlighted that she had agreed funding to ‘support an awareness raising and behaviour change project around air quality with school children through the Eco Schools programme.’ More information on the project was given during a [cross-party Members debate on air quality on 20 June 2018](#), to coincide with Clean Air Day (21 June). During the debate the Minister stated that:

Schools that are involved have been sent 10 diffusion tubes, and they are invited to put these up at various locations around the school...by the main gates, by the car park, and one was right the way through, across the field by the trees, but there was also one that was neighbouring a busy road going past the side of the school. Those results will then be sent off to be analysed and then will come back to the schools and the children can develop their own campaigns in terms of how they can tackle this and how they can encourage the adults around the school to take this on board...The project introduced pupils to the cause and impacts of air pollution, and information on how they can make these changes.

On 25 May 2018, Simon Thomas AM [tabled a written question regarding air quality monitoring equipment](#). The question asked:

What consideration has the Welsh Government given to requiring the installation of air quality monitoring equipment on all school buildings in receipt of 21st Century Schools funding.

The response from the Cabinet Secretary for Education, Kirsty Williams stated that:

The 21st Century Schools and Education Programme is delivered in partnership with local authorities, who may choose to install air quality monitoring equipment if they consider it appropriate.