

# Improving Indoor Air Quality: Advice for Homes





### What is air pollution?

Air pollution is a build-up of gases and particles in the air that are harmful to our health. Air pollution can be found outside and inside our homes. Children, older people, pregnant women, and people with existing health conditions are most vulnerable to air pollution. There are a number of different types of air pollutant, and the most common are:

- **Nitrogen dioxide (NO<sub>2</sub>)** – a gas produced when fuels are burned in vehicle engines, boilers and other appliances
- **Particulate matter (PM)** – small particles suspended in the air that are produced when materials such as wood and coal are burned, and also from the abrasion of surfaces such as car tyres
- **Volatile organic compounds (VOCs)** – gases formed when fuels and materials are burned, and also released by chemical cleaning products, sprays, paints and new furniture
- **Tobacco smoke** – the most harmful source of indoor air pollution according to the World Health Organization, which estimates that people exposed to high levels of tobacco smoke are two or three times more likely to develop chronic respiratory disease

### How can air pollution affect our health?

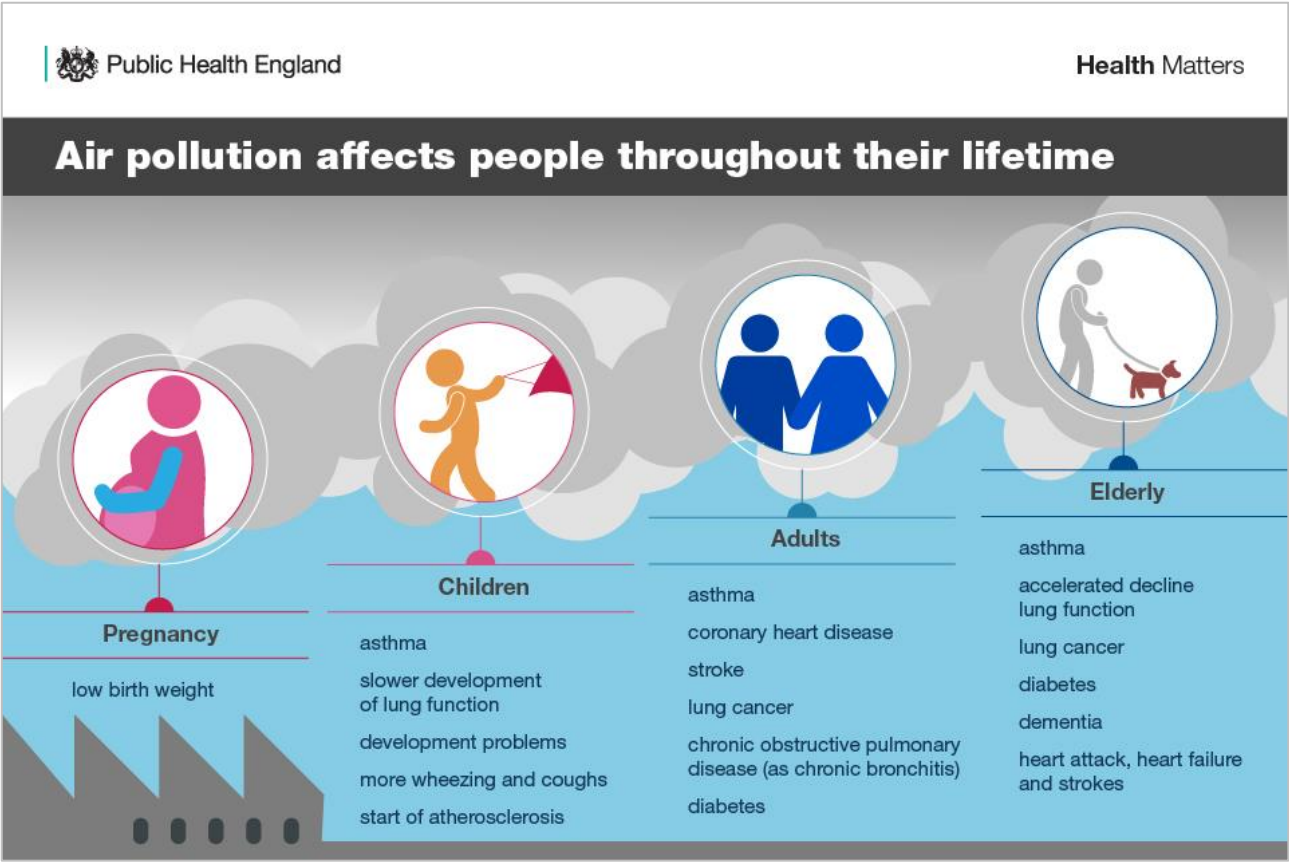
Breathing in polluted air can have short-term and long-term impacts on our health, at any stage in our lives. Some of these impacts may not be immediately visible and may affect us later in life.

Frequent or continuous exposure to air pollution can harm lung development in children and can increase the risk of developing asthma or other respiratory health conditions, as well as cardiovascular disease (CVD) and lung cancer. Air pollution has also been associated with other health conditions such as dementia, low birth weight, diabetes, and mental health disorders especially during adolescence.

Air pollution can worsen the symptoms of existing health conditions; for example, for an asthmatic child or adult a high-pollution day or exposure to polluted air next to a busy road might cause wheezing or may trigger an asthma attack. Pollution can also cause less serious temporary effects such as eye irritation or headaches.

In all, air pollution is thought to cause up to 36,000 early deaths each year in the United Kingdom. This is almost 20 times more than the number of people killed in road traffic accidents.





What is air quality and indoor air quality?

Air pollution can have the same health impacts whether found outdoors or inside buildings and other spaces. ‘Air quality’ is an indication of whether the air we breathe has low levels of pollutants and is safe for our health. Camden Council has committed to achieving good air quality throughout Camden by 2030, with safe levels of pollutants as defined by the World Health Organization.

Indoor air quality is the ‘cleanliness’ of the air inside buildings. Air quality inside the home is important for human health and wellbeing. Poor indoor air quality in buildings can contribute to the health conditions listed above, and may lead to fatigue, reduced levels of concentration, and lower rates of productivity. Poor indoor air quality can be caused by air pollutants from a range of different sources, including gas ovens and hobs, boilers, heaters and stoves, cleaning products, paints, and furniture. These are described in more detail below.

A build-up of humidity and moisture can lead to the growth of mould and spores which can also have a negative effect on health.

<sup>1</sup> Public Health England, Health matters: air pollution. November 2018.

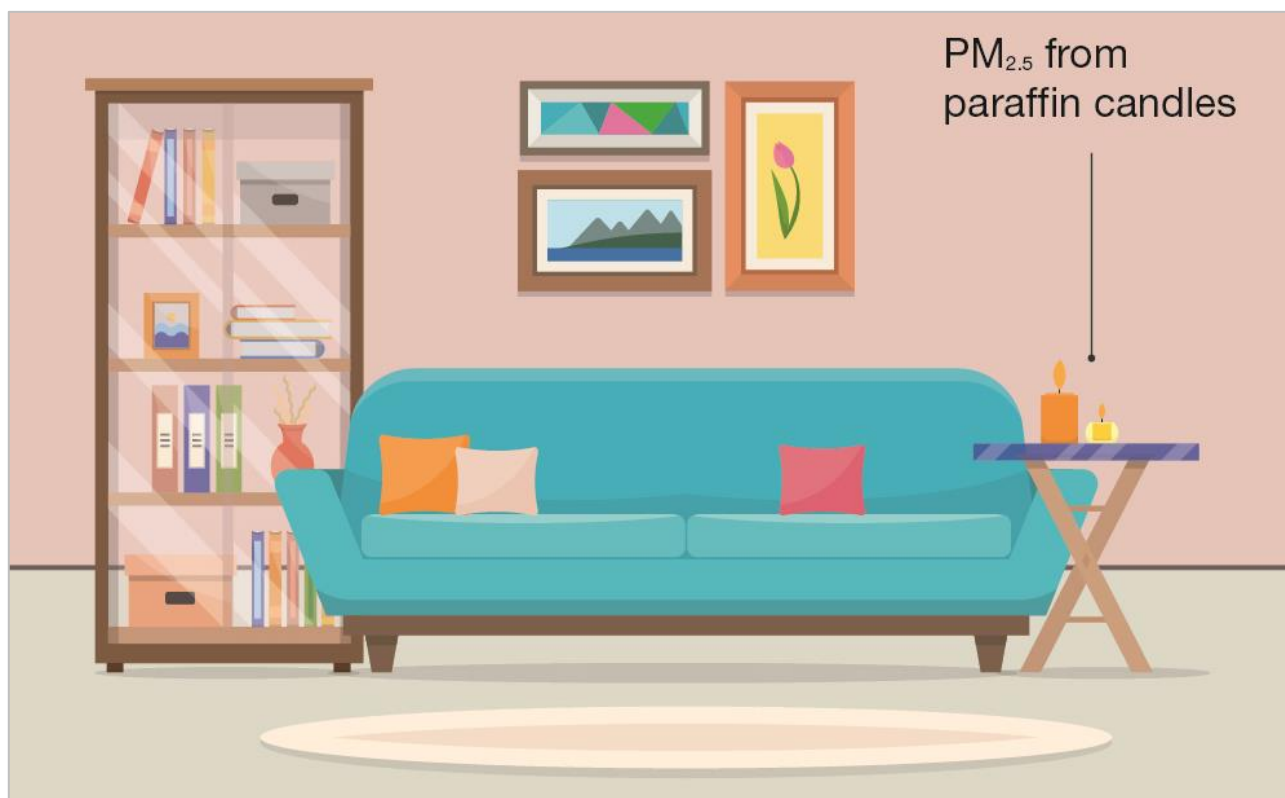
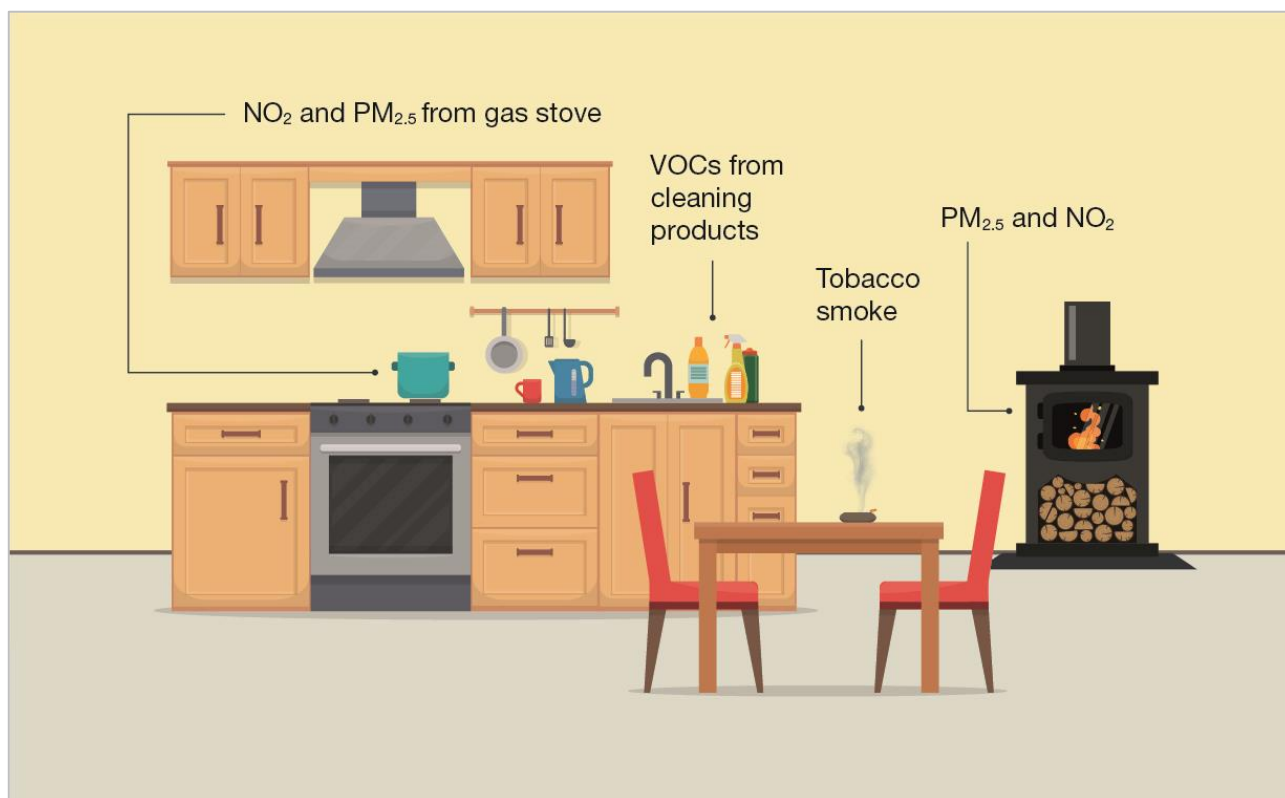


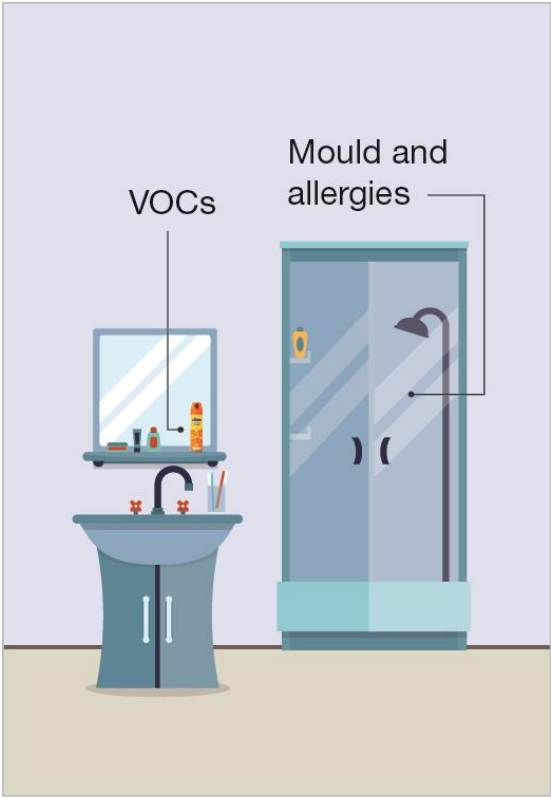
### What can cause poor indoor air quality in my home?

There are a number of activities and conditions that can affect the air quality within your home:

- **Smoking** – tobacco smoke (including second-hand smoke) is a serious source of health-damaging air pollution inside the home
- **Using wood-burning and coal-burning stoves and open fireplaces** – even if these are permitted under the Clean Air Act they can be a major source of air pollution
- **Using gas hobs and ovens for cooking** – these may be a major source of NO<sub>2</sub> within the home
- **Using chemical cleaning products and disinfectants** – glass polish, furniture sprays, bleach and other disinfectants can be significant sources of VOCs
- **Using air fresheners, room sprays, and other aerosols such as deodorants** – these are also common sources of VOCs in homes
- **The build-up of moisture and humidity, for example from showers, drying clothes, or boiling water** – excess humidity can lead to mould growth, which can trigger allergies
- **Burning paraffin candles incense and scented oils** – this is a source of PM and VOCs in the home
- **Having an old or poorly-maintained gas boiler** – this can contribute to indoor and outdoor air pollution
- **Deep-fat frying and cooking oily foods** – this may release liquid oil particles which are a form of PM and can affect health
- **Being close to a busy road or another source of outdoor air pollution** – air pollution from outside may enter our homes, and vice versa

The diagrams on the following pages illustrate some of these example sources of air pollution inside the home.







### What can I do to improve indoor air quality in my home?

There are several things we can do to reduce indoor air pollution and ensure that our homes are healthy spaces:

- **Avoid smoking**, especially inside or near your home
- **Don't burn wood or coal**, or use oil heaters, where possible – use central heating instead
- **Ensure your boiler is well-maintained** and running efficiently
- **Ventilate your kitchen** when using gas hobs or deep-fat frying
- **Cover pots and pans** when cooking to contain vapour and save energy
- **Use ecological low-chemical cleaning products** ('low-VOC' content)
- **Ventilate and avoid excess humidity**, especially in bathrooms and bedrooms
- **Dust surfaces regularly** to limit the build-up of allergens
- **Avoid opening windows during traffic** if these face onto busy roads
- **Remove black mould build-up within your home** wherever this arises
- **Avoid burning paraffin candles or incense**
- **Use non-chemical essential oils to fragrance your home** instead of aerosol sprays
- **Ensure a good supply of fresh air if you paint or purchase new furniture** (or carpets)

### How can Camden Council help to improve indoor air quality in your home?

**Well and Warm:** Camden's [Well and Warm service](#) provides free home energy advice visits to help make your home warmer, more comfortable and help reduce your energy bills. The visit includes tailor-made energy efficiency advice and free installation of small energy-saving measures, and can provide help to reduce damp and mould in your home<sup>2</sup>.

**WISH Plus:** The [WISH Plus referral hub](#) is a way for Camden residents to access a range of warmth, income, safety and health services (WISH)<sup>3</sup>. To refer either yourself or another person, please call 0207 974 5971.

**Camden Climate Fund:** The [Camden Climate Fund](#) provides funding of up to £1,500 (covering up to 50% of total costs) to support households and landlords install solar panels on homes<sup>4</sup>. This will help to reduce energy bills.

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<sup>2</sup> <https://www.camden.gov.uk/energy-efficiency-grants#rttu>

<sup>3</sup> <https://www.camden.gov.uk/wish-plus>

<sup>4</sup> <https://www.camden.gov.uk/camden-climate-fund>



**Advice for Camden housing residents:** If you are a Camden housing tenant and have issues with condensation, damp or mould, try to reduce humidity build-up in the first case by following the suggestions above, where possible. If the problem remains, you can contact the [housing repairs service](#) online<sup>4</sup> or by calling 0207 974 4444 and selecting option 3 and then option 1.

**Advice for private tenants:** If you are a private tenant and you have issues with damp and mould, or you believe that your landlord is not maintaining your rented property to a safe and healthy standard, you should first contact your landlord to raise the issue. If they do not deal with the problem you can contact Camden's [Private Sector Housing Team](#) for advice and support, either through the website<sup>5</sup> or by calling 0207 974 2543.

**If you think air quality inside your home is being affected by smoke or fumes from a neighbouring property please contact [AirQuality@camden.gov.uk](mailto:AirQuality@camden.gov.uk) or, for an immediate response, the Environmental Health pollution response service via the Camden switchboard: 0207 974 4444.**

### What should I do if I think my child has asthma?

You can read about the symptoms of asthma on the **Asthma UK** website, which can be viewed at: <https://www.asthma.org.uk/advice/child/diagnosis/spotting-symptoms/>.

If your child or baby has one or more of the symptoms of asthma then it is important to book an appointment with your GP for diagnosis and advice on treatment.

Correct diagnosis and treatment of asthma will reduce symptoms and your child should be able to live a normal, healthy life.

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<sup>4</sup> <https://www.camden.gov.uk/housing-repairs#dfmo>

<sup>5</sup> <https://www.camden.gov.uk/advice-private-tenants#dfmo>





### Other information

Please see the resources below for further information about indoor and outdoor air quality:

- [Public Health England: Health Matters – Air Pollution](#)<sup>6</sup>
- [British Lung Foundation](#)<sup>7</sup>
- [Camden’s Clean Air Action Plan 2019-2022](#)<sup>8</sup>
- [Camden Air Quality Monitoring](#)<sup>9</sup>

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<sup>6</sup> <https://publichealthmatters.blog.gov.uk/2018/11/14/health-matters-air-pollution-sources-impacts-and-actions/>

<sup>7</sup> <https://www.blf.org.uk/support-for-you/air-pollution>

<sup>8</sup> [https://www.camden.gov.uk/documents/20142/0/Clean+air+action+plan+2019-2022\\_final2.pdf/f7cd1a68-e707-0755-528a-59388adf0995](https://www.camden.gov.uk/documents/20142/0/Clean+air+action+plan+2019-2022_final2.pdf/f7cd1a68-e707-0755-528a-59388adf0995)

<sup>9</sup> <https://opendata.camden.gov.uk/stories/s/Camden-Air-Quality-Monitoring/bmrm-k7pv/>

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