

Advice on improving indoor air quality



THE ROYAL BOROUGH OF KENSINGTON AND CHELSEA

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On average we spend 90 per cent of our time indoors, whether in our homes, at school/ college or in the workplace. It is therefore very important that the air we are breathing is of a good quality and does not have a negative impact on our health.

Some people are particularly vulnerable to poor indoor air quality. This includes people with pre-existing lung and heart conditions, children and older people. Poor indoor air quality can also contribute to asthma and other allergies.

This leaflet looks at some of the main sources of pollutants indoors, some of the associated health effects and what you can do to improve air quality in your home.

## **Household products**

Some products used for daily household activities or decorating work can result in potentially harmful pollutants in your home. These are known as volatile organic compounds (VOCs).



Front cover image by Gwen Anderson, HNC Fine Art Student at Kensington and Chelsea College. Gwen's image was the winning entry in a competition.

#### Advice on improving indoor air quality



Sources	Cleaning products, polishes, air fresheners, stain removers and printers. Cosmetic products such as hairspray and nail varnish. Paints, varnishes, glues, and wood preservatives.
Associated health effects	Exposure to VOCs can cause eye, nose, and throat irritation, headaches, nausea and dizziness. Prolonged exposure to high concentrations can increase the risk of lung disease and cancer.

## What you can do:

- Ensure your home is well ventilated.
- Reduce the amount of cleaning products used.
- Avoid sprays and use solid or liquid substitutes where possible.
- Use less harmful "ecological" products.
- Use low-emitting paints and varnishes.
- Follow manufacturers' instructions and seal products when not in use.
- Place equipment such as printers where exposure can be minimised.



## Household fuel burning appliances

Fuel burning heating and cooking units are all potential sources of dangerous gases such as carbon monoxide. Carbon monoxide is produced when fossil fuels such as gas, coal, oil and wood burn without enough air. It is a colourless, odourless and tasteless gas which can build up without you being aware. Burning fuel also produces nitrogen dioxide and fine particles.



#### Advice on improving indoor air quality



Sources	Incorrectly installed, poorly maintained or poorly ventilated heaters, fires or cookers.
Associated health effects	Carbon monoxide prevents blood carrying oxygen around the body and can therefore be extremely dangerous. Lower levels can cause headaches, dizziness, nausea and flu-like symptoms. High levels can cause coma and death.
	Prolonged exposure to low levels of carbon monoxide can cause serious harm to health, often leading to lasting neurological (nerve) damage.
	Nitrogen dioxide and fine particles can cause eye, nose and throat irritation. Longer term, higher exposure can increase the likelihood of developing lung and heart disease.



#### What you can do:

- Make sure all fuel burning appliances are installed and regularly serviced by a qualified and registered engineer.
- Use an extractor fan where possible and ensure rooms with fuel burning appliances are adequately ventilated.
- Install a carbon monoxide monitor and regularly check its batteries.
- Keep chimneys and flues clear and have them swept at least once a year by a qualified sweep.
- Only use appliances which are specifically designed for indoor use.





## **Biological contaminants**

These are produced by, or are, living things; many of which are small enough to be inhaled.

Sources	Mould spores, dust mites, bacteria and pet dander (pet's skin, urine and saliva).
Associated health effects	Can trigger allergic responses such as inflammation of the lining of the nose, hay fever-like symptoms and worsening of pre-existing conditions such as asthma.

## What you can do:

- Keep your house clean, dry and well-ventilated, especially whilst cooking or showering.
- If possible, dry washing outside to limit sources of moisture.
- Bath pets regularly with antidander shampoo.
- If you have a severe allergic response it may help to replace carpets with wooden or laminate flooring to control dust mites.





## Smoking

Tobacco smoke contains tar droplets, carbon monoxide and over 4,000 chemicals, many of which are toxic and damaging to health. Breathing second-hand smoke increases a non-smoker's risk of lung cancer by 24 per cent and heart disease by 25 per cent.



Sources	Any form of tobacco smoking.
Associated health effects	Associated with approximately 25 diseases including cancer, heart disease and pneumonia. Children who are exposed to smoking are at greater risk of ear and chest infections and are more likely to develop asthma.



#### What you can do:

- Contact NHS Kensington and Chelsea's Stop Smoking Service on **0800 085 9147** for help and advice to quit smoking.
- Take the Smokefree Homes pledge. Contact our Smokefree Homes Officer on **020 7341 5721** or go to the Royal Borough's website for further information.
- If you do smoke at home, confine smoking to one room and ensure it is properly ventilated. NB Carcinogens and toxins from cigarette smoke will remain in the air even after ventilation.
- Do not expose your child to smoke.

# **Pollution from outside**

The quality of indoor air can also depend upon the presence of pollutants such as nitrogen dioxide and fine particles that may filter in from outside sources. Kensington and Chelsea is an Air Quality Management Area. This means that levels of these pollutants are higher than national targets. Traffic is one of the main sources of pollution and if you live near a busy road it is likely that nitrogen dioxide and fine particle concentrations are elevated.



## What you can do:

- If possible, ventilate your home on the side away from sources of pollution, such as busy roads.
- Reduce your impact on local air quality and climate change by using alternatives to the car, such as walking and cycling.



## Workplace air quality

The Health and Safety Executive regulates workplace air quality. Employers have a legal duty to provide a safe working environment which includes good air quality. If you think there are any air quality issues in your workplace you should speak with your employer.



## **Useful contacts**

For further advice and information on indoor air quality call the Royal Borough's Environmental Health Line on **020 7361 3002** or contact the Air Quality Promotion Officer on **020 7341 5683**.

Healthy Homes Scheme - If your house is cold or damp and you sometimes struggle to pay your bills call **0808 202 6204** 

The Royal Borough's Smokefree Homes Officer: **Smokefree@rbkc.gov.uk** or on **020 7341 5721** 

NHS Kensington and Chelsea's Stop Smoking Service: 0800 085 9147

Kensington and Chelsea Respiratory Team: 020 7349 3261



#### English

Information from this document can be made available in alternative formats and in different languages. If you require further assistance please use the contact details below.

#### Arabic

يمكن توفير المعلومات التي وردت في هذا المستند بصيغ بديلة ولغات اخرى. إذا كنت في حاجة إلى مزيد من المساعدة، الرجاء استخدام بيانات الاتصال الواردة أدناه.

#### Farsi

اطلاعات حاوی در این مدارک به صورتهای دیگر و به زبانهای مختلف در دسترس می باشد. در صورت نیاز به کمک بیشترلطفا از جزئیات تماس ذکر شده در ذیل استفاده کنید.

#### French

Les informations présentées dans ce document peuvent vous être fournies dans d'autres formats et d'autres langues. Si vous avez besoin d'une aide complémentaire, veuillez utiliser les coordonnées ci-dessous.

#### Portuguese

A informação presente neste documento pode ser disponibilizada em formatos alternativos e em línguas diferentes. Se desejar mais assistência, use por favor os contactos fornecidos abaixo.

#### Somali

Macluumaadka dokumentigan waxaa lagu heli karaa qaabab kale iyo luuqado kala duwan. Haddii aad u baahan tahay caawinaad intaas dhaafsiisan fadlan isticmaal xiriirka faahfaahinta hoose.

#### Spanish

La información en este documento puede facilitarse en formatos alternativos y en diferentes idiomas. Si necesita más ayuda por favor utilice la siguiente información de contacto.

Environmental Healthline: 020 7361 3002 environmentalhealth@rbkc.gov.uk