



# SOMETHING IN THE AIR?

SOWERBY BRIDGE LIBRARY



Exploring Air Quality and Health in Sowerby Bridge  
A project led by Calderdale Libraries



# AIR QUALITY AND HEALTH

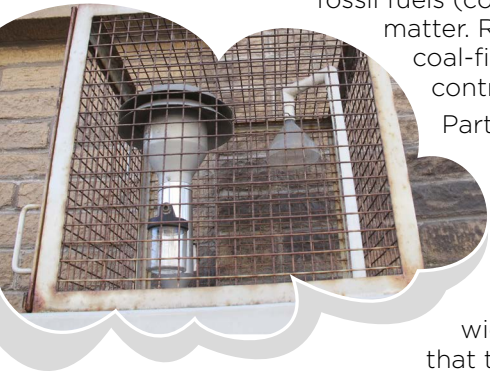
**Air quality affects us all.** We breathe air in order to live – but do we know what we're actually breathing in and what effects it might be having on us? It's also important to bear in mind that indoor air quality, in our homes and workplaces, can be as much of a problem as the air outside.

## What is polluting our air?

A range of pollutants may be present in the air. Two of the most important are Nitrogen Dioxide (NO<sub>2</sub>) and Particulate Matter (PM).

Nitrogen Dioxide is a gas and the main source of emissions is the burning of fossil fuels (coal, oil & natural gas), wood and other organic matter. Road traffic, domestic heating, bonfires, coal-fired power stations and more all make their contribution.

Particulate matter is made up of tiny particles of dust and liquid droplets suspended in the air. It comes from a wide range of sources, including smoke from fires, exhaust fumes, smoking and the dust from brake pads on cars. PM is classified by size, usually PM<sub>10</sub> or PM<sub>2.5</sub>. The particles are smaller than the width of a human hair - the numbers indicate that they are up to 10 or 2.5 micrometers in width.



## How can this affect our health?

We can breathe in pollutants without noticing – but when they enter our bodies, they can damage our cells in different ways. Any level of pollution can damage our health, but the more exposure, the bigger the risk. It can increase the risk of developing health problems and can make existing health problems worse.

People with lung conditions, such as asthma or COPD, are particularly at risk. Older people, children and babies are also at greater risk of symptoms and harmful effects.

Local authorities are responsible for monitoring air quality in the local area. Part of Sowerby Bridge is designated an AQMA (air quality management area) and the focus is on nitrogen dioxide.

Air quality indexes are a way of communicating pollution levels and corresponding health risks. The portable monitors available through this project make use of these indexes.



# WHAT IS THE SOMETHING IN THE AIR? (SITA) PROJECT?



SOMETHING  
IN THE AIR?

It's a funded project led by Calderdale Libraries, as part of the Engaging Libraries 2 programme. Its aim is to engage local people of all ages, in and around Sowerby Bridge, with research around air quality and health. The project is supported by the University of Manchester.

## What's happening?

Events and activities will be held between March and November 2021.

- A launch event with a guest speaker
- The opportunity to borrow and experiment with 2 types of portable air quality monitor, for measuring indoor and outdoor air quality, and to share findings
- A series of public events where you can learn from specialists, including University of Manchester researchers, and raise questions, including those arising from use of the monitors. The events will be:
  - Air Quality and.... Pollution
  - Air Quality and.... Your Home
  - Air Quality and.... Health
  - Air Quality and.... Traffic & Transport
- A closing event, bringing participants together to review experiences and what has been learnt and reflecting on possible responses.



## School participation

An accompanying project will be running in Bolton Brow Primary Academy.

## Will events & activities be held in person or online?

Given the pandemic, we will decide in advance of each event as to whether it will be in-person or online.

## How will I know the details of events?

- E-mail: join our mailing list - e-mail: [sita@calderdale.gov.uk](mailto:sita@calderdale.gov.uk)
- Something in the Air? Facebook group. All events will be publicised there
- What's On - The Council's events calendar will also give full details: [www.calderdale.gov.uk/v2/residents/leisure-and-culture/whatson](http://www.calderdale.gov.uk/v2/residents/leisure-and-culture/whatson)
- Posters around Sowerby Bridge, giving details of each event

# TO FIND OUT MORE ABOUT AIR QUALITY AND HEALTH

## Books and e-books from the library service

- Clearing the Air by Tim Smedley (hard copy and e-book)
- The Invisible Killer by Gary Fuller (hard copy and e-book)
- Choked: the age of air pollution and the fight for a cleaner future by Beth Gardiner (hard copy)
- How to grow fresh air: an illustrated guide to the houseplants you need for clean and fresh air when you're stuck at home, by B.C Wolverton (hard copy)
- Every Breath You Take: A User's Guide to the Atmosphere, by Mark Broomfield (hard copy)

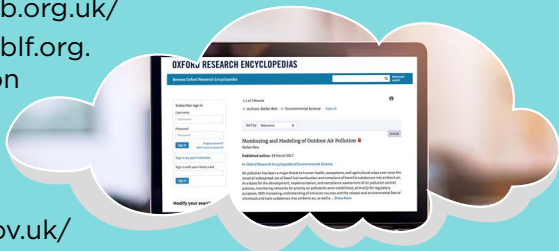


## Digital Reference Library

- Oxford Research Encyclopedias (search Air Pollution) - from the library or from home (From home <https://oxfordre.com/> and log in with your Calderdale library card)
- Access to Research (journal articles) - from the library

## Useful Websites

- Clean Air Hub: [www.cleanairhub.org.uk/](http://www.cleanairhub.org.uk/)
- British Lung Foundation: [www.blf.org.uk/support-for-you/air-pollution](http://www.blf.org.uk/support-for-you/air-pollution)
- Plume Labs: [air.plumelabs.com/learn/en](http://air.plumelabs.com/learn/en)
- DEFRA: [uk-air.defra.gov.uk/](http://uk-air.defra.gov.uk/)
- Public Health England: [www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution](http://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution)
- Calderdale Council: [www.calderdale.gov.uk/v2/businesses/pollution/air-quality](http://www.calderdale.gov.uk/v2/businesses/pollution/air-quality)
- Air Quality News: [airqualitynews.com/](http://airqualitynews.com/)
- Air Pollution Calculator: [calculator.cleanairhub.org.uk/quiz](http://calculator.cleanairhub.org.uk/quiz)



## Questions?

E-mail: [sita@calderdale.gov.uk](mailto:sita@calderdale.gov.uk)

