



# Francis Street

Community  
information



## Air pollution and noise monitoring

EPA Victoria has commenced a 12 month program to monitor air pollution and the noise impacts of vehicles in Francis Street, Yarraville. The program will use the latest scientific data to inform EPA about noise and air pollution in the area.

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### Why monitor in Francis Street?

Francis Street, or Docklands Highway, in Yarraville is a thoroughfare for up to 20,000 trucks and cars travelling to and from the Port of Melbourne via the west of Melbourne.

The concentration in vehicle movements can generate extreme days of air pollution and noise in the local area, which may affect health.

Air monitoring was undertaken in Francis Street in 2001 and 2002 to assess the types and concentration of air pollutants along the road. In April 2002, a curfew on trucks was introduced between the hours of 11pm and 6am.

EPA found there were a number of days in 2001 when residents were likely to feel the impacts of extreme air particle pollution.

Particle concentrations measured in 2002 were lower than the previous year. This was most likely to be influenced by different weather conditions.

Full reports are available on EPA's website.

A decade on, it is timely for EPA to conduct further monitoring in Francis Street and cross-reference with earlier studies and other data.

Traffic counts will be conducted by VicRoads and Maribyrnong City Council to increase knowledge and understanding of the role truck emissions play in Francis Street and other local major arterial streets.

### What will be measured?

EPA will measure major air pollutants associated with motor vehicle emissions.

This includes:

- Two types of small particles; those less than 10 micrometers in diameter (PM<sub>10</sub>), which is also found in windblown dust, and particles less than 2.5 micrometers in diameter.
- Pollutants related to the burning or combustion of fuel including nitrogen dioxide (NO<sub>2</sub>) and benzo(a)pyrene.

Noise monitoring will be measured in week-long blocks periodically throughout the year.

## WHAT IS AIR POLLUTION?

Air pollution occurs when the air is affected by chemicals or particles that aren't normally present and have the potential to affect health. Its composition can vary greatly depending on the season, weather and the different types and number of sources - such as vehicles, bushfires, roads, domestic, commercial or industrial sites.

EPA's role is to regulate and report on air pollution.

The main pollutants in large cities are ozone, particles, nitrogen dioxide, carbon monoxide and sulphur dioxide.

The main pollutants in Francis Street, Yarraville are particles. Particle pollution is formed directly from sources such as vehicles, factories, power plants, and smoke from bushfires. Small particles are responsible for reducing visibility and for dirtying buildings and, when concentrated enough, can become a health concern.



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## When and where is EPA measuring?

The monitoring began in May 2012 and will run for one year. EPA's air monitoring station will be on the vacant block at 51 Francis Street, near the community centre.

The site was selected because it is representative of residential sites in Francis Street and is open; it will not be affected by construction or major road works for the duration of the study; and importantly there are no industrial sources of pollutants adjacent or close by.

## What will monitoring tell us?

EPA's monitoring of Francis Street will measure the levels of specified pollutants, which EPA will assess against relevant standards. EPA will be able to compare results obtained from the 2012–13 monitoring program to earlier work, to better inform the community.

## Limits of the monitoring program

The air monitoring program will measure air particles, NO<sub>2</sub> and benzo(a)pyrene. It won't indicate the source of the pollutants. We expect that because the monitoring is taking place next to such a busy road, the major source of pollutants is likely to be motor vehicle emissions.

Each individual will react differently to air pollution depending on their health status, the length of time spent outside, and the concentration of pollutants. What EPA will be able to judge from this study is how air quality in Francis Street, Yarraville, compares to the rest of Melbourne.

The monitoring program will provide a snapshot of air pollution and noise impacts from vehicles. It will not survey the health of residents.

## How air pollution affects health

Everyone can potentially be affected by air pollution when concentrations of pollutants are very high. Research shows that different groups of people are sensitive to different types of air pollution. The prevalent air pollutant previously measured in Francis Street was small particles (PM<sub>10</sub> and PM<sub>2.5</sub>). These particles are most likely to affect people with asthma, lung disease and cardiovascular (heart) disease.

Older adults, children and those with heart and lung disease can be sensitive to particles. Particle pollution can irritate the eyes, nose, and throat. Particle pollution can also cause chronic bronchitis, coughing, chest tightness, shortness of breath, and painful or difficult breathing. It can aggravate asthma, and even result in premature death in people with heart or lung disease. Even healthy adults may find they suffer temporary symptoms, such as sore eyes, throat or irritated nose, a dry or productive cough, tightness in the chest and shortness of breath.

Common symptoms of dust exposure are irritated eyes and upper airways. Exposure to elevated PM<sub>10</sub> levels (small particles) can increase the symptoms of existing heart and lung conditions, such as asthma. For people who are vulnerable, elevated PM<sub>10</sub> may:

- cause allergic reactions and asthma attacks
- worsen breathing-related problems in people with respiratory conditions
- aggravate the symptoms of existing heart problems.

For general information on air pollution visit [www.betterhealth.vic.gov.au](http://www.betterhealth.vic.gov.au).

People who are concerned about their health should seek medical advice.

## WHAT IS ROAD TRAFFIC NOISE?

**Cars and trucks travelling on residential streets and roads, as well as freeways, can have noise impacts.**

**Road traffic is the most common source of noise in Victoria.**

**It is heard by 70% of residents, and significantly 'bothers, annoys or disturbs' 20% of the population annually.**

## HOW MIGHT YOU BE AFFECTED BY ROAD TRAFFIC NOISE?

**Road traffic noise can affect the health and wellbeing of residents, particularly when sleep is disturbed.**

**Prolonged exposure to noise can cause anxiety, increase in heart rate, hearing loss and have other health effects.**

**People who are concerned about their health should seek medical advice.**

## MORE INFORMATION

EPA will provide the community with updates throughout the program.

There will also be an opportunity for local residents to speak with EPA staff quarterly about the results.

Visit [www.epa.vic.gov.au](http://www.epa.vic.gov.au) or phone EPA on 1300 EPA VIC (1300 372 842) for further information.