

# Brooklyn Air Monitoring Program and Health

## Frequently Asked Questions

An air monitoring program undertaken by the Environment Protection Authority Victoria (EPA) has measured levels of particle matter (PM<sub>10</sub>) above the national air quality standards. This fact sheet is to provide answers to some frequently asked questions on elevated PM<sub>10</sub> levels and possible health effects.

### **What is PM<sub>10</sub>?**

Airborne particles with a diameter less than 10 micrometres (one micrometre is 1/1000 of a millimetre) are referred to as PM<sub>10</sub>. They can arise from a number of different sources including industrial processes, urban environment (motor vehicles, wood heaters), agricultural and natural sources (general windblown particles). These small particles are less than one-tenth the diameter of a hair and if breathed in, are small enough to make their way into the lungs.

### **How do particles affect human health?**

The most common symptoms experienced as a result of elevated dust are irritation to the eyes and upper airways. Elevated PM<sub>10</sub> levels can increase the symptoms of existing heart and lung conditions including asthma. For vulnerable populations, elevated PM<sub>10</sub> may:

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

This may lead to increases in medication usage or the need to seek medical treatment at your GP, or in some cases at the hospital. Even if you are healthy, you may experience temporary symptoms from exposure to elevated levels of particle pollution, such as irritation to the eyes and upper airways.

### **How do I know if it is going to be a high PM<sub>10</sub> day?**

During the spring/summer months, high particle levels can be expected with warm to hot temperatures and moderate to strong winds from the north. In autumn and winter low temperatures combined with low winds can produce poor dispersion of general urban air pollution leading to high particle levels. Urban pollutants are typically from combustion sources such as motor vehicles, industry and solid fuel heating.

### **Was the Department of Health notified by the EPA of the air quality results?**

The Department of Health has an ongoing relationship with the EPA in relation to environmental issues and their potential health impacts. The department is working closely with the EPA in relation to this issue to provide public health information to the community.

### **What are the long term health impacts to the community of high PM<sub>10</sub> levels?**

The long term health effects may include small increases in heart and lung illness.

### **What are the health standards for air quality?**

The State Environment Protection Policy (Ambient Air Quality) sets standards for air quality in Victoria. These standards reflect those contained in the National Environment Protection Measure (Ambient Air Quality) which were developed in consultation with health professionals, environmental experts and the community.

### **What measures has the department taken to protect the health of Brooklyn residents in relation to air quality?**

The Department of Health has provided health protection advice to the community on dust.

The Department of Health is supporting Hobsons Bay, Brimbank and Maribyrnong local governments, the Environment Protection Authority and industry to reduce the levels of PM<sub>10</sub>.

### **My children have been raised from newborn in Brooklyn. What are the implications for them in the years to come?**

The risk from PM<sub>10</sub> is small compared to the many other factors that influence health over a person's lifetime. There is no way of identifying specific health outcomes for individuals as a result of exposure to PM<sub>10</sub>. However, it is important to prevent potential health effects by minimising exposure on high PM<sub>10</sub> days.

### **What are the implications of inhaling toxins that may be in PM<sub>10</sub>?**

Toxicity of particles is often dependent on their size and chemical composition. Regardless of particle composition, the department recommends that it is important to minimise dust exposure, especially for vulnerable people.

### **Is more specific health advice required for residents of the Brooklyn/Yarraville area?**

The general advice provided applies to the Brooklyn area. This includes advice to avoid physical activity outdoors and staying indoors on high PM<sub>10</sub> days, particularly for people who have respiratory and heart conditions including asthma. Medical advice should be sought from a qualified medical practitioner if you have specific concerns or medical needs.