Smoke inhalation

This fact sheet is for people who have presented to the emergency department with this condition.

This fact sheet provides general information. If you have specific concerns, speak to your healthcare professional for further information and advice.

What is smoke inhalation?

You may inhale smoke when you breathe in the products of combustion (burning) during a fire. Smoke is a mixture of heated particles and gases.

Smoke usually only causes mild irritation, and little or no treatment is required.

Occasionally smoke inhalation causes more serious problems such as:

- lack of oxygen (from carbon monoxide (CO) gas *****)
- chemical irritation (from burnt particles lodging in the lungs)
- swelling of your airways (due to heat damage)
- a combination of the above.

***** Carbon monoxide or CO is a gas produced by burning of substances. It reduces oxygen levels in your body. In pregnant women, the unborn baby can be more affected than the mother as the baby's blood retains more carbon monoxide than the mother's.

A blood test may be taken to see if there has been exposure to carbon monoxide, but this is not always needed if symptoms are mild.

The treatment for carbon monoxide inhalation is breathing high concentrations of oxygen through a mask for a period of time. This speeds up the removal of the carbon monoxide from the blood.

Smoke inhalation is more concerning if you are:

- exposed in an enclosed space (more than 5 minutes)
- have experienced prolonged exposure (hours) to smoke, e.g. from bushfires
- have a pre-existing medical condition such as:
    - respiratory disease, e.g. asthma
    - heart disease
    - being pregnant.

Symptoms

- Cough
- Shortness of breath
- Hoarseness of voice
- Headache
- Nausea and or vomiting
- Drowsiness or confusion
- Eye irritation
- Vein colour change from blue to cherry red
- Soot in nostrils with swelling of the nasal passage

What to expect

Most people with smoke inhalation will be assessed in an emergency department with the majority making a full recovery without any long-term adverse effects.

However, some people exposed to smoke can take up to 24—36 hours to develop signs of serious lung irritation.

Therefore, please seek medical attention and call an ambulance if you or the patient experiences any of the following symptoms post smoke inhalation:

- Hoarse voice
- Difficulty breathing
- Prolonged coughing spells
- Mental confusion

NB: For those with respiratory diseases, such as asthma: During bushfire seasons or times of backburning (organised fires) please remember to start taking your preventors early and remain indoors as much as possible, until the air quality improves.