

**Hydrocarbon ingestions can cause early CNS depression and seizures, and delayed aspiration pneumonitis.**

### Categories/Examples

**Aliphatic:** essential oils (*see separate eucalyptus and essential oils guideline*), petroleum distillates, turpentine

**Aromatic:** benzene, xylene, toluene

**Halogenated:** carbon tetrachloride, methylene chloride, chloroform

**Alkane gases:** propane, butane

**Toxicity:** *Most exposures are benign*

**Oral:** gastric irritation; high risk for pulmonary aspiration

**Inhalation:** *see 'Inhalants/Volatile Substance Use' guideline*

**Dermal:** dermatitis, chemical burns or defatting injury of skin.

### Clinical features:

**Pulmonary:** cough, tachypnea, dyspnea, wheeze, low SpO<sub>2</sub>

Can be delayed 6 hours; prolonged inhalation -> asphyxia

**CNS:** euphoria, disinhibition, CNS depression, seizures

Usually rapid onset within 1-2 hours

**Renal toxicity:** Acute toluene – high AG metabolic acidosis

Chronic toluene – renal tubular acidosis, hypokalaemia

**Hepatotoxicity:** particularly halogenated hydrocarbons

**CO poisoning:** unique to methylene chloride exposure

**CVS:** arrhythmias, Sudden Sniffing Death Syndrome (rare)

### Management

Supportive care and attention to ABCs are the mainstay of treatment.

Intubation and ventilation may be required for significant CNS depression.

### **Decontamination:**

Remove clothing and decontaminate skin as required.

There is no role for activated charcoal.

**Seizures:** Diazepam 5-10 mg IV every 5 min as necessary

### **Aspiration pneumonitis**

Management is supportive

Oxygen and bronchodilators as required

Severe cases may require non-invasive or mechanical ventilation

There is no proven role for corticosteroids or antibiotics

**Cardiotoxicity** (More likely to occur in inhalational exposures)

- *see separate 'Inhalants/Volatile Substance Use' guideline*

### **Hepatotoxicity:**

**Possible with clove oil, pennyroyal oil and halogenated hydrocarbons**

- Use of NAC may be hepatoprotective – dosing is same as for paracetamol toxicity

**Disposition:** Ingestions with normal CXR and no symptoms can be discharged

after 6 hours observation pending mental health assessment.