

## **Fact Sheet for staff and parents**

### **Lead testing results at RBWH**

Queensland Health has just been advised on 16 January 2008, of results of air testing in several sites on the RBWH campus, including at the Edith Cavell Building and the Lady Ramsay Child Care Centre. The results indicate levels which are slightly higher than the maximum safe levels recommended by the Environmental Protection Agency.

The levels detected on one day in mid December, were 1.7 to 2.0 units (micrograms per cubic metres) – slightly higher than the recommended 90 day average of 1.5.

There is no indication of how long the environmental lead levels have been high.

The testing was done in mid December as a precautionary measure when lead paint was being removed from a building, but the results show increased levels at other sites, which raises the likelihood that the elevated levels may not be due to the paint removal, but may be in the ambient air.

QH has organised urgent precautionary repeat testing of both air and environmental samples in the hospital grounds. Further testing has commenced on 17 January 2008 to determine whether the lead levels remain high.

The EPA has agreed to organise environmental air testing in the surrounding suburb.

It is unlikely that this degree of elevation in lead levels will have caused any ill effects, but as a precautionary measure, Qld Health has organised to provide free blood lead tests to the children of any parents who are concerned.

In addition, Dr Neil Wigg, a paediatrician with experience in dealing with lead issues in association with Port Pirie in South Australia, has offered to provide advice to any parents who are concerned about this issue.

## **Background information on exposure to high levels of lead for long periods**

**(please note that QH does not anticipate that this degree of air contamination would be associated with any of the following features. This information is included for parents)**

Exposure to lead can affect the health of children, unborn babies and adults. Children under the age of five are at the greatest risk due to the following:

- The brain in young children is still maturing and appears to be more vulnerable to lead,
- The exploratory hand-to-mouth activity of children places them at a higher risk of ingesting lead from a contaminated environment,
- Very young children absorb a much higher proportion of ingested lead than older children and adults
- The development of children can be affected by long term exposure to lead.

### **Clinical Features of high blood lead levels**

#### **Children**

- Typically asymptomatic unless the blood lead level is significantly elevated. Elevated exposure in early childhood has been found in population-based studies to be associated with impaired development. Reported effects include poor development of motor abilities and memory, and reduced attention span. Anaemia, constipation and abdominal colic can occur with high blood lead levels.

#### **Pregnant Women**

- Long term exposure to lead while pregnant can result in elevated blood lead levels affecting the unborn baby. Complications from high levels of exposure include premature birth, low birth weight, or even miscarriage or stillbirth. The baby may also suffer impaired learning and development.

#### **Adults**

- Symptoms, if any, depend on the level of exposure. Very high levels can cause joint and muscle pain, muscle cramps, anaemia, nausea, constipation, colicky abdominal pain, sleep problems, reduced concentration and headaches. At very high levels, lead may cause neuropathy, encephalopathy and convulsions. Lengthy high level exposure to lead can be associated with chronic renal damage many years. Such symptoms in adults have mostly been observed with occupational exposure to lead.

**Anyone with health concerns over the lead levels in the vicinity of RBWH should call the Queensland Health hotline 13HEALTH – 13 432 584.**