

2. General health advice

2.1 Is the water from the affected public estates safe for consumption?

Water Supplies Department (WSD) had completed systematic water sampling tests for public rental housing (PRH) estates completed in and after 2005. The test results indicated that the drinking water lead level in some of the flats of 11 PRH estates exceeded the provisional guideline value of the World Health Organization's Guidelines for Drinking-water Quality.

Installation of water filters certified by American NSF 53 Standard for removal of lead for the 11 affected PRH estates has been completed except for a very few with difficulty in contacting. Filtered water from these filters had been tested by Housing Department and WSD and confirmed that the lead level met the WHO's provisional guideline value. For those living in units installed with these filters, filtered tap water can be used for cooking and drinking. Nevertheless, filters must be operated strictly according to the manufacturer's operational conditions with regular maintenance including timely change of core parts to give the claimed performance. Residents of the affected estates can also use alternative sources of water, e.g. distilled water or temporary water supply from connection pipes from roof-top water tanks to each floor, for cooking and drinking.

2.2 Is the water from the affected public estates safe for personal hygiene purpose?

Since the absorption or inorganic lead via skin is not effective, use of water from the affected public estates for any purpose other than ingestion, such as shower, brushing and face washing, should not impose a health effect.

2.3 Will the exposure cause lead poisoning in this event?

Exposure to the reported level of lead in this event will not cause acute poisoning. However, health effects related to such exposure depends on blood lead level. If the blood lead level is above the reference value (i.e. for children, pregnant women and lactating women, a blood lead level equal to or more than 5 ug/dL, and for adults, a blood lead level equal to or more than 10 ug/dL), there is potential health risk, and health evaluation and follow-up are required.

2.4 I am breastfeeding my baby, should I stop breastfeeding?

Lactating women living in the affected public estate should stop further exposure to lead tainted water and use alternative source of water, such as distilled water, for cooking and drinking. Also they can arrange for a whole blood lead test by calling the Department of Health at 2125 1122. The lead level in breast milk is about 3% that of the blood lead level. If the mother's blood lead level is only slightly higher than the reference value, she can continue breastfeeding.

2.5 Is it safe to use distilled water or mineral water to prepare the formula milk?

It is safe to use the distilled water instead of tap water to prepare the formula milk, but please follow the same steps of preparation including boiling of water.

On the other hand, mineral water contains levels of mineral which may exceed the requirement of infants and young children, and thus mineral water must not be used to prepare formula milk.

2.6 Can lead be filtered by household water filters?

Some domestic water filters (such as those certified by American NSF 53 Standard for removal of lead) can reduce the lead level in water. Nevertheless, no filter will give the claimed performance unless it is operated strictly according to the manufacturer's operational conditions with regular maintenance including timely change of core parts. Without proper maintenance, filters may also become an ideal breeding ground for growth of micro-organisms. As chlorine level in water will be reduced by activated charcoal in the filters, the water from filters should be boiled to kill germs before drinking.

2.7 What should I do if I suspect that my chronic medical illnesses are caused by the elevated lead level in the drinking water?

There are many risk factors for chronic medical illnesses. Some of these factors are modifiable while some are not. If you are resident of the affected public estates with chronic medical illnesses, the most important thing is to stop further lead exposure by using alternative water source such as distilled water and water from water tankers for drinking and cooking. When exposure stops, the lead in

body will be gradually cleared from the body. You should also continue to have treatment according to the advice of your medical doctors. Apart from that, lead absorption can be minimised by maintaining a healthy diet with high calcium, iron and vitamin C.

2.8 The 150+ ug/L lead in water reading is by far the highest. Is there a risk of toxicity for the affected household?

There are many factors that may account for raised lead level in water including the household's water utilisation pattern and whether there is practice of discarding overnight water. For an individual, many factors such as duration of and daily consumption amount of water with raised lead level and the person's dietary habit that determine how much lead is absorbed. DH will approach affected households to understand their health situation and offer blood lead testing. Meanwhile, the most effective means of management is to stop drinking contaminated water and switch to alternative water sources such as bottled water. DH and HA have devised a healthcare protocol for persons with raised blood lead level. Further health management will be based on risk stratification.

2.9 Un Chau Estate has many elders with chronic illness. Is lead in water a cause for the chronic disease?

Chronic diseases result from a combination of factors, some are modifiable and others are not. Age itself is a predisposing factor for non-communicable diseases. It is therefore important in the management of chronic diseases, to avoid risk factors. You should maintain a healthy lifestyle and follow up your condition with healthcare providers.

2.10 Can lead in water cause further damage to my already poor health?

Different diseases are predisposed by different risk factors. Take non-communicable diseases as an example, some risk factors are modifiable and others are not. Age itself is a predisposing factor for non-communicable diseases. It is therefore important in the management of chronic diseases, to avoid risk factors. You should maintain a healthy lifestyle and follow up your condition with healthcare providers.

17 November 2015