

**Legislative Council Panel on Housing  
Meeting on 2 November 2015**

**Excess Lead in Drinking Water in  
Public Rental Housing Estates Incident**

**Supplementary Information**

At the Panel on Housing meeting held on 2 November 2015, Members requested the Government to provide supplementary information on matters relating to the excess lead in drinking water in public rental housing (PRH) estates incident. The supplementary information is set out below.

- (a) The 11 PRH developments found with excess lead in drinking water involve three plumbing sub-contractors. These three plumbing sub-contractors are involved in 41 out of the remaining 72 PRH developments where no excess lead in drinking water had been found.
- (b) Since the discovery of excess lead in drinking water in some PRH estates, the Government and the Hong Kong Housing Authority have taken immediate measures, including the supply of bottled water, standpipes, and requesting the contractors concerned to connect pipes from the roof-top tank to each floor of the block, as well as to install water filters and replace filter cores for free within two years for affected households.

As at 7 December 2015, apart from Un Chau Estate Phase 2 and 4, the temporary water points for the other ten estates have already been put into use. As for the water filters, except for a small number of households which could not be contacted, installation work for the 11 estates has been completed.

As mentioned in previous occasions, we will keep in view the installation progress of the water filters and the temporary water points in various estates, and cease distributing bottled water after having considered the actual circumstances. Currently, filter installation has been completed, and the temporary water points for Un Chau Estate Phase 2 and 4 are expected to be put

into use shortly. Once the temporary water points for Un Chau Estate Phase 2 and 4 are put into use, and after a period of adjustment, Housing Department (HD) will announce the arrangements for ceasing the distribution of bottled water to the 11 estates altogether.

To different tenants in affected estates, the effectiveness of the series of measures mentioned above may vary. It is believed that, in general, these measures would be able to address the different circumstances and needs of individual tenants.

- (c) Taking reference from medical literature and experience from local medical sector and overseas health authorities, the Hospital Authority and Department of Health (DH) have derived the reference values of blood lead levels and corresponding actions to be taken in various healthcare settings. DH performs lead exposure assessment for all citizens with borderline raised blood lead levels, and arranges preliminary developmental assessment for children aged under 12. As at 4 December 2015, 126<sup>1</sup> children who were found with borderline raised blood lead levels have received preliminary developmental assessment. Among them, 83 children with no developmental problem detected have been referred to the Maternal and Child Health Centre or Student Health Service for follow up; 33 children require re-assessment (follow-up plans will be formulated according to the situations of individual children); 10 children show features of developmental delay (follow-up plans will be formulated according to the situations of individual children). The Hospital Authority arranges health evaluation and follow-up for those aged 12 or above, adults, pregnant women and lactating women with borderline raised blood levels, and arranges ongoing blood lead level monitoring for citizens with borderline raised blood lead levels.
- (d) The Hospital Authority and DH have, after reviewing the relevant literature and research from local medical sector and overseas health authorities, derived the reference values of blood lead levels and corresponding actions to be taken in various healthcare settings so as to effectively deploy medical resources according to a risk-based approach. Young children are at a rapid stage of growth, and their developing organs and tissues

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<sup>1</sup> The 126 children include the 125 children who received blood lead level testing through the Voluntary Blood Lead Level Screening Programme administered by the Government, and a child referred by a private doctor who was found to have borderline raised blood lead level by an overseas accredited laboratory.

are more susceptible to the effects of lead. Moreover, if drinking water with the same amount of lead is consumed, young children would absorb 4 to 5 times as much lead when compared with an adult. As for pregnant women and lactating women, the lead consumed by them may be indirectly absorbed by their fetuses and babies. Therefore, experts of DH and the Hospital Authority defined the groups which are more easily affected by lead as children aged below six, pregnant women and lactating women. DH has set up a hotline on 10 July 2015 for answering public enquiries on the health impact of lead and providing health advice. DH also makes appointments for tenants with excess lead found in water sample, as well as tenants of the affected PRH estates who fall into the groups which are more easily affected by lead to receive blood lead testing.

Considering the request of tenants of the affected PRH estates, the Government expanded the scope of blood testing on 21 July 2015 to children who were aged below six at the time when moving into Kai Ching Estate, Kwai Luen Estate Phase 2 and Wing Cheong Estate. Subsequently on 3 August 2015, in view of the latest developments, the Government expanded at discretion the scope of blood testing to children aged below eight, pregnant women and lactating women in other affected PRH estates.

Since HD first announced in 10 July 2015 that the lead content in drinking water samples from Kai Ching Estate exceeded the World Health Organization's provisional guideline value, DH and the Hospital Authority have deployed medical professionals from the respective specialties to work overtime with a view to providing extra services and focusing on arranging blood taking and blood testing for people who are more easily affected by lead. These measures are not sustainable in the long run, otherwise the daily operation and clinical services of the Housing Authority and DH would be affected. In view of the upcoming winter influenza season, the measures above will further aggravate the burden on the Hospital Authority's workload and manpower. Therefore, the Government has no capacity to expand the scope of blood testing.

As at 4 December 2015, DH's hotline has received 7 887 telephone enquiries and DH has arranged 5 854 appointments for blood testing. During the same period, the Hospital Authority has conducted tests on blood lead levels for 5 640 citizens, only

165 citizens were found to have borderline raised blood lead levels, ranging from 5 to 16.7 micrograms per decilitre, which indicates potential health risk but far from risk of poisoning. From the medical perspective, for citizens with borderline raised blood lead level, it is of utmost importance to identify and eliminate the source of lead. After ceasing the contact with lead, the blood lead level will gradually drop due to the excretion of lead through urine and bile. Individuals should also eat a balanced diet with adequate intake of calcium, iron and vitamin C to minimise the amount of lead absorbed in the body. It has been over four months since the occurrence of excess lead in drinking water in PRH estates incident. The Government has introduced a host of measures immediately to provide safe drinking water to the affected PRH estates, as well as recommended citizens to avoid drinking lead-tainted water. The Water Supplies Department has also identified the causes of the incident in the PRH estates. Therefore, the Government does not see the value of expanding the scope of blood testing at this stage in safeguarding public health.

**Transport and Housing Bureau  
Food and Health Bureau**

**December 2015**