

**Summary on Key Health Issues  
for Enhanced Water Quality Monitoring Programme**

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**Key health messages for the public:**

- **The Water Supplies Department will launch an Enhanced Water Quality Monitoring Programme which is part of the Government's overall improvement plan in response to recommendations made by the Commission of Inquiry into Excess Lead Found in Drinking Water to extend the assurance of drinking water quality from connection points to consumers' taps. Under the Programme which is voluntary in nature, random water samples will be collected from consumers' drinking taps for testing six metals, namely antimony, cadmium, chromium, copper, lead and nickel that may be present in internal plumbing systems.**
- **Lead is a naturally occurring heavy metal which has widespread industrial use, and it may be found at low levels in urban dust, contaminated food and water. Antimony, cadmium, chromium, copper and nickel are naturally occurring metals which are widely used by industries and present in the environment.**
- **Experience gained from the incident of excess lead in drinking water in 2015 showed that the most important element of clinical management for people having consumed lead contaminated water is cessation of further exposure to contaminated water. Over time, lead will pass out of the body. Screening of BLL did not affect clinical management.**
- **For the five metals, the World Health Organization's drinking water guideline values are stringent and set at levels substantially lower than those causing clinical poisoning. The risk of causing significant health effects due to consumption of drinking water tainted with these metals is assessed to be very low.**
- **The public should follow WSD's advice to cultivate good habits of water use. From health perspective, it is always good to have blood lead as low as possible. DH has published two pamphlets to introduce health effects of lead and the five metals, and practical measures to minimize their exposure from all sources in daily life.**
- **Persons with history of consumption of drinking water contaminated with lead and the five metals who present with relevant symptoms or are unduly concerned may consult their doctor for advice and counseling. The doctor will see if investigations and referrals are required as part of clinical management.**
- **Parents are also reminded to bring their children to Maternal and Child Health Centres (MCHC) (from birth to 5 years) and Student Health Service Centres (SHSC) (all primary and secondary day school students) to receive developmental surveillance and other preventive health services according to their stage or age of**

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**development. Children suspected of developmental problems will be referred to Child Assessment Centres (CAC) or other specialist clinics for further management.**

**Follow up actions on the more easily affected groups in the incident of excess lead in drinking water in 2015:**

- In 2015, there was no local data pertaining to a similar type and extent of lead exposure through drinking water. The Government launched the voluntary BLL screening programme to help understand the potential impact of exposure to excessive lead in drinking water on the health of exposed residents, especially the impact on the more easily affected groups i.e. children aged below 6, pregnant or lactating women.
- After conducting 5,655 BLL tests covering the more easily affected groups among public rental housing estate residents and children and staff from schools, 165 persons, i.e. 2.9%, were found to have mildly elevated BLL (5.0 to 16.7 ug/dL). In other words, 97.1% of the persons tested were found to have normal BLL. The observed mild elevation of BLL did not and is not expected to result in observable clinical features. **For most people with elevated BLL, their BLL gradually returned to normal after exposure to contaminated water had stopped;** for a few exceptional cases which still have mildly elevated BLL (as at 31 August 2017, there are 5 such cases), HA is following up these cases and their BLL was on a downward trend. Given the mild elevation, no one required chelation therapy or any other specific treatment.
- The DH conducted preliminary developmental assessment and follow-up surveillance for 126 children with borderline raised BLL. As at 31 August 2017, nine were found to have developmental delay. It is worthwhile to note that most of the affected children identified with developmental delay are already being cared for under the Government's child developmental or health services, indicating that the current developmental surveillance system is able to identify children with signs of developmental problems irrespective of the causes.
- Neurodevelopmental or behavioural problems usually have multifactorial aetiologies including children's socioeconomic, environmental, constitutional and parenting factors, it would be difficult to prove or otherwise if exposure to lead in drinking water had played a contributing role in the developmental status of the children concerned. All children with developmental problems were referred to age-appropriate rehabilitation services. Other children were reminded to attend CAC, MCHC or SHSC to follow up on their development.