

LCQ2: Chemicals used to disperse demonstrators

Following is a question by Dr the Hon Helena Wong and a reply by the Secretary for Food and Health, Professor Sophia Chan, in the Legislative Council today (November 20):

Question:

Since the eruption of the "anti-extradition to China" movement in June this year, the Police have fired thousands of tear gas rounds, used tear spray and sprayed coloured water from water cannon vehicles in densely-populated areas to disperse demonstrators. Some research findings have shown that persons who have inhaled tear gas will develop temporary symptoms such as tearing, coughing, runny nose and vomiting, and they may feel discomfort in their respiratory tracts or lungs for a period of as long as two weeks. Persons who have been hit by tear spray or coloured water will experience burning sensation of skin or temporary loss of sight. In this connection, will the Government inform this Council:

(1) whether it will make public the models, places of origin and detailed composition of the tear gas rounds and tear spray currently used by the Police; if so, of the details; if not, the reasons for that; whether it knows if tear gas rounds will give off cyanide and dioxins during the combustion process;

(2) whether the Food and Environmental Hygiene Department will deploy staff to the areas concerned to carry out decontamination, so as to alleviate the health impacts of such chemicals on members of the public; if so, of the details; if not, the reasons for that; and

(3) whether it studied, in the past six months, the impacts of the chemicals contained in tear gas rounds (in particular those made in China), tear spray and coloured water on food, potable water, the environment and ecology in the areas concerned; if so, of the details; if not, whether it will conduct such a study; whether it will, before it has been ascertained that the chemicals concerned will not cause serious health hazards to members of the public, suspend the use of such weapons?

Reply:

President,

The Government appeals to the public to express their demands in a peaceful and rational manner, to tolerate different views expressed in the community, and to respect the rule of law.

The Government fully understands the public's concern on the impact of

chemicals such as tear gas on health, food safety, drinking water and the environment. In consultation with the Security Bureau, the Department of Health (DH), the Environmental Protection Department (EPD), the Food and Environmental Hygiene Department (FEHD), the Water Services Department (WSD) and the Hospital Authority (HA), consolidated reply to the various parts of the question raised by Dr the Hon Helena Wong is as follows:

(1) Members of the public have the right to expression, speech and assembly. But they must do so in a peaceful and lawful manner. When illegal acts such as unlawful assemblies, arson, hurling petrol bombs and attacking other members of the public occur, the Police have a statutory duty to maintain public safety and public order.

On the procurement of equipment and ammunitions, the Police have been sourcing globally for safe and suitable equipment and ammunitions in accordance with the established procedures to meet their operational needs. As the procurement details of the equipment used by the Police involve operational deployment, the Police considered that it would be inappropriate to disclose procurement details as it would affect the Police's operational capability. The Police will continue to use tear gas in a safe manner in accordance with the guidelines issued by the manufacturer and internally.

In addition, it is understood that combustion of any substance could produce different chemicals, including cyanide and dioxin. The nature, quantity and concentration of chemicals produced would be subject to the duration, temperature of combustion and the substance itself. The DH and Hong Kong Poison Information Centre of the HA have reviewed relevant medical literature and scientific evidence but have found no literature or scientific evidence on dioxin poisoning cases caused by the use of tear gas. Also, given the short duration of combustion of tear gas canisters, any cyanide produced would quickly disperse in the air.

(2) After large-scale public order events, the FEHD would, subject to road conditions, arrange employees and cleansing service contractors (including cleansing workers) to provide street cleansing services.

The FEHD has issued guidelines to its employees and cleansing service contractors, including points to note and the use of personal protective equipment for cleansing the residues of chemicals. The guidelines stipulate, among others, that cleansing workers should wear face masks, rubber gloves, rubber aprons when conducting relevant work, and put on respirators (N95 type or compatible), goggles and caps if considered necessary. Cleansing workers should, upon discovery of dangerous goods or chemical waste, report to the FEHD which will then refer the case to the relevant departments. The FEHD also conducts routine and surprise inspections to check on its cleansing service contractors' performance.

(3) On the impact of tear gas, pepper based solution and colourants, insofar as food safety is concerned, the Centre for Food Safety has provided advice on its website to the general public on how to prevent contamination of food and handle contaminated food. Generally speaking, food may be contaminated by

different substances in the environment. Whether contaminants will affect food safety depends on a number of factors, such as the storage conditions of the food, the duration of exposure and the concentration of contaminants. To reduce the risk of food contamination, food should be properly stored in suitable places such as clean and covered food-grade containers. In general, contaminants on the surface of some kinds of food, such as fruits or vegetables, can be reduced by washing with running water. For the sake of prudence, food suspected to be contaminated or showing abnormality should not be consumed.

In respect of drinking water, the drinking water in Hong Kong are sourced from imported water from Dongjiang and rainwater from local catchments. Since the sources are located at country parks or remote areas, the drinking water would not be contaminated by chemicals. In addition, the drinking water in Hong Kong undergoes rigorous treatment processes in water treatment works and is supplied through concealed pipes to consumers whose internal plumbing systems are generally enclosed as well. Therefore, the risk of contaminating drinking water by chemicals is very low.

On the environmental aspects, tear gas is basically substance in the form of particulates and would disperse within localised areas. The EPD considered that it would not have significant impact on the overall air quality. Since June 2019, the EPD has not detected any abnormality in the air quality and water quality monitoring stations.

Lastly, the Police understand the community's concerns about the use of tear gas near residential buildings, and will take into account the safety and interests of the affected people as far as possible when using the tear gas. Before the operation, the Police will, as far as possible, maintain close contact with the nearby building management offices, commercial tenants and elderly homes through various channels to remind them of Police's possible actions in relation to the demonstration activities so that they can make arrangements accordingly. During the operation, the Police will also appeal to residents in the vicinity to pay attention to the situation through social media and press releases, and to close the windows and stay indoor in a safe place if necessary.