

Health Information on Tear Gas on the Website of the Centre for Health Protection of the Department of Health

Tear gas is a crowd dispersal agent and many chemicals can be used as tear gas.

In general, post-exposure symptoms to tear gas may include stinging and burning sensation to eyes and other mucous membranes, tearing, salivation, runny nose, tight chest, headache, nausea, burning sensation of skin, and erythema of skin. These symptoms will usually disappear within a short time after exposure to tear gas. Information or literature on the chronic health effect of tear gas is limited. However, some studies suggest that tear gas exposure could cause persistent physical and psychological illnesses, in particular for children, elderly and patients with respiratory diseases or allergic conditions. In general, health effects of tear gas depend on a number of factors such as the specific chemical composition of the tear gas, duration and dose of exposure, exposure route, health conditions of the individuals and the physical environment during exposure.

The public should leave the area affected by tear gas immediately. Skin exposed to tear gas should be washed thoroughly with water and soap and contaminated clothing should be changed. Eyes with discomfort should be irrigated with large amount of water or saline. For persons who are in an indoor environment when tear gas is being released nearby, they should close all doors and windows, turn off the air conditioner, and could seal the gaps over the doors and windows with wet towels.

Concerning the question on how long a lactating woman should wait before breastfeeding again after exposure to tear gas, there is no relevant international guideline available at the moment. According to advice from the Hospital Authority toxicologists, active chemicals in the tear gas will decompose when coming into contact with the mucous membranes. As such, the chance of these chemicals accumulating in the breast milk is minimal. As a precaution, the experts recommend lactating women to avoid breastfeeding for one to two hours after exposure to tear gas. The recommended waiting time before breastfeeding would depend on the type of chemical exposure and the distance of exposure which would increase the dilution effect. In addition, lactating women should change their clothes and clean their hair and skin thoroughly before contacting the infants or breastfeeding them with a view to preventing the infants from contacting any tear gas residual materials.

When cleaning the tear gas residual materials at home, disposable cleaning items are preferable. Suitable personal protective equipment such as masks, rubber gloves and rubber aprons should be worn. In general, surface with residual materials could be wiped by cloth soaked with soapy water but hot water should not be used in order to avoid evaporating the materials. Also, residual materials should not be stirred up and therefore tools such as high pressure water jet and brooms, as well as electric fans, should not be used. The disposable cleaning items should be properly packed (such as in a sealed plastic bag) after cleaning and then disposed.

Individuals who had been exposed to tear gas with persistent symptoms should promptly consult healthcare professionals.

For advice on food safety relating to tear gas or other substances, please visit the website of the Centre for Food Safety of the Food and Environmental Hygiene Department (<https://www.cfs.gov.hk/english/index.html>) > Hot Topics > Advice to the Public on Contaminants and Food Safety.