

LCQ10: Impacts of hot nights' weather conditions

Following is a question by the Hon Martin Liao and a written reply by the Secretary for the Environment, Mr Wong Kam-sing, in the Legislative Council today (July 21):

Question:

The number of hot nights (i.e. the daily minimum temperature being equal to or higher than 28.0 degrees Celsius) in Hong Kong as recorded by the Hong Kong Observatory in recent years has been on the increase, with a record high of 50 hot nights recorded last year. In May this year, 14 hot nights and the longest duration of consecutive hot nights (i.e. six nights) were recorded, breaking the past records for May. A study conducted by scholars of a local university has found that the health threats posed to members of the public by the weather conditions of hot nights (especially consecutive hot nights) were greater than those by the weather conditions of hot days, with the grass roots living in crowded, poorly-ventilated sub-divided flats and residential units being most affected. The study has suggested improving the city's and indoor natural ventilation through urban planning and building design as a starting point, as well as adopting measures such as increasing the greenery ratio, with a view to mitigating the impacts of hot nights. In this connection, will the Government inform this Council:

(1) whether it has collected the following statistics: the monthly numbers of hot nights recorded in each of the 18 District Council districts in the past three years; if so, of the details;

(2) whether it has studied the impacts of hot nights' weather conditions on the health and daily lives of members of the public (especially the grass roots); if so, of the details;

(3) whether targeted measures were taken in the past three years to mitigate the impacts of hot nights' weather conditions on members of the public (especially those living in districts most affected by hot nights as mentioned in the aforesaid study, i.e. Yau Tsim Mong, Tsuen Wan, Central and Sheung Wan, Yuen Long and Tin Shui Wai); if so, of the details and effectiveness; if not, the reasons for that; and

(4) (i) of the annual utilisation situations of the various temporary night heat shelters under the Home Affairs Department (HAD) (including the number of nights opened for service and the user-times in respect of each shelter), and (ii) whether the HAD received suggestions on improving the service concerned, as well as reviewed and improved the arrangements for service provision at these shelters, in the past three years; if so, of the details; if not, the reasons for that?

Reply:

President,

Having consolidated the information provided by relevant policy bureaux and departments, including the Food and Health Bureau, the Home Affairs Department (HAD) and the Hong Kong Observatory (HKO), I would like to reply as follows:

(1) The average monthly and annual number of hot nights recorded by the HKO at the weather stations in various districts of Hong Kong from 2018 to 2020 are set out at the Annex. Generally speaking, hot nights in Hong Kong are more common between June and August, with more hot nights recorded at weather stations in urban areas (e.g. Tsim Sha Tsui) than those in rural areas (e.g. Ta Kwu Ling).

(2) In a very hot environment, the body temperature would rise and the bodily functions would regulate themselves to reduce body heat through, for example, more perspiration and faster respiration. However, when the environment becomes extremely hot and the thermoregulation cannot effectively cool down the body, heat exhaustion or even heat stroke will occur. Children, the elderly, people with chronic illnesses such as heart diseases or high blood pressure, and the obese are more vulnerable to heat stroke.

(3) The HKO issued 57, 53 and 67 Very Hot Weather Warnings in 2018, 2019 and 2020 respectively. The HKO will alert the public during very hot weather and provide relevant health advice, such as advising people staying indoors without air-conditioning to keep windows open as far as possible to ensure adequate ventilation. Furthermore, the HAD runs 19 air-conditioned temporary night heat shelters where drinking water is available and users could stay to take rest.

(4) In the past three years, the number of days on which temporary night heat shelters under the HAD were open and the usage of the shelters are as follows:

Year	2019	2020	2021 (as at July 11)
Number of days on which shelters were open	44	58	30
Number of users	7 371	6 880	3 170

The HAD reviews from time to time the arrangements for the opening of temporary night heat shelters to ensure that the needs of shelter users are met. The enhancement measures implemented in recent years include:

(i) starting from 2017, when the Very Hot Weather Warning is in force, the HAD will open the common areas of designated community halls/community centres during daytime to provide shelters for the people in need;

(ii) starting from 2017, disposable bed sheets have been provided for shelter users to further enhance the cleanliness and hygienic condition of mattresses and quilts in temporary night heat shelters; and

(iii) starting from 2018, four additional temporary night heat shelters have been set up in Wan Chai, Southern, Sai Kung and Islands Districts. Temporary night heat shelters are now provided in all 18 districts in Hong Kong to provide services for the people in need.