

FEHD releases Rodent Absence Rate of Rodent Activity Survey of five districts for first half of 2024

The Food and Environmental Hygiene Department (FEHD) announced today (March 26) that it has completed the Rodent Activity Survey (RAS) for the first half of 2024 in five districts. The Rodent Absence Rate (RAR) of the five districts are tabulated below:

District	Central and Western District	Wan Chai District	Eastern District	Mong Kok District	Sham Shui Po District
RAR (%)	95.3	87.1	96.0	94.0	90.3

The spokesman said, "The aim of the RAS is to assist the FEHD in monitoring the situation and trend of rodent infestation in each district, enabling adjustments to anti-rodent strategies and allocation of resources. Based on the survey data, the FEHD will implement targeted rodent prevention and control measures, including the use of rodenticides and trapping devices as well as filling rat holes, in areas with frequent rodent infestation. If there are facilities or venues managed by other government departments, private buildings or housing estates in the vicinity, the FEHD will also invite relevant government departments, organisations or property management groups to conduct joint operations, thereby strengthening the effectiveness of rodent control."

The FEHD has fully adopted thermal imaging cameras with artificial intelligence technology for conducting the RAS, replacing the original Rodent Infestation Survey from 2024 onwards. The RAS will be conducted in 19 districts of the FEHD across the territory once every six months. Compared with the traditional survey method using sweet potato baits, the new method has greater sensitivity and precision, with a more comprehensive coverage and a lower risk of interference by environmental factors. Therefore, it is more effective in reflecting the distribution and severity of rodent infestation in districts.

When conducting the RAS, the FEHD will take into account a basket of factors, including information verified from investigation of rodent-related complaint cases, the number of live rodents caught and dead rodents collected, inspection results and the views of local representatives. This is done to identify about 300 locations with potential rodent problems in each district as the sampling frame. For each survey, based on factors such as geographical distribution and verified complaint figures, etc, approximately 100 locations will be selected from the sampling frame via stratified random

sampling for installation of thermal imaging cameras, in order to effectively deploy resources and ensure the representativeness of the sampled locations. The thermal imaging camera will capture two thermal images at every two-minute interval from 7pm to 7am the following day for three consecutive nights. Artificial intelligence will be utilised to analyse the images and identify the presence of rodents. The FEHD will consolidate the analysis results of artificial intelligence for each individual district and enumerate an RAR for that district. The RAR is calculated by the following formula:

$$\text{RAR} = \frac{\text{Number of thermal images with no rodents detected}}{\text{Total number of thermal images taken}} \times 100\%$$

The RAS of the first half of 2024 in other districts is still underway. After collating and analysing the data, the FEHD will announce the results in the second and third quarters of this year progressively.

The spokesman stressed that effective rodent prevention and control hinges on co-operation between government departments, relevant sectors, stakeholders, as well as members of the public to strengthen anti-rodent work from their respective areas. Members of the public should maintain environmental hygiene and eliminate the three fundamental survival conditions of rodents, namely food, harbourage and passages, i.e. the elimination of the food sources and hiding places of rodents as well as blockage of their dispersal routes.