1. May I ask whether mosquito-borne diseases or insect-borne diseases such as yellow fever, dengue fever, epidemic B encephalitis, malaria, lymphatic filariasis, are considered a serious problem in China or Guangdong? For ordinary people who do not take any protective measures, is the likelihood of contracting these diseases?

The mosquito vector on our side is mainly Aedes albopictus, which used to be more prevalent in Guangxi, Guangdong, but now there is a gradual trend of moving north. 2017, there was a big outbreak of dengue fever infecting hundreds of people in Shandong, and people in the north were caught off guard. Probably because of the climate, mosquitoes have produced adaptations, gradually spread and distribution to the north. Not only that, the density of mosquitoes will also wax and wane with the seasons. Reaching its first peak in May, and due to typhoons and heavy rainfall, the density of mosquitoes fell in June and July, in September and October back up. We will also change the concentration of the mosquitoes with the mosquito density of the season. The risk of mosquito-borne disease outbreaks is high because of imported cases, coupled with the high density of mosquitoes in Guangdong. Among insect-borne diseases, mosquito-borne infections are currently the most important in Guangdong Province. However, in terms of the likelihood of contracting specific diseases, for people who have been to infected areas, are indiscriminately susceptible.

2. Mosquitoes can spread many diseases to humans, such as dengue fever, malaria, etc.; how much is the annual economic investment of the Guangdong Provincial CDC for mosquito-borne disease control, examination, treatment, etc.? Or can you say an approximate value of the percentage?

First of all, we will do mosquito vector surveillance, that is, monitoring the density of mosquitoes. Then there is sentinel surveillance, which is the initial screening of dengue virus in the hospital. The investment in disease surveillance will be higher. I understand that the province has more than forty sentinel sites are to regularly report how many reagents and how many positive cases. Hospitals will also be trained to screen after finding flu-like symptoms suspected of dengue fever, so this is also variable. The investment in human disease surveillance is large because the unit cost of reagents is high.

## 3. Has the CDC or the government side organized a relatively large mosquito control action

Yes. This piece belongs to the patriotic health campaign. Every year there is a patriotic health month, every month there is a patriotic health day, are to do sanitation. Each city will have the kind of patriotic health month, telling everyone to be hygienic, as well as the four pests.

4. What are the main methods currently used by government departments in China to prevent and control the spread of mosquito-borne diseases, and the reasons for choosing these methods? How effective do you think chemical repellent can be in preventing the spread of mosquito-borne diseases? For example, physical methods, or chemical methods or what biological methods?

One of the common control concepts nowadays is to eliminate mosquito breeding sites such as stagnant water, and supplement with chemicals to kill adult or juvenile mosquitoes.

## 5. Which kind of chemical insecticide is used?

Which meet the national regulations, through the audit of the species. For example, permethrin is a highly effective and low toxicity type. But these years after the use of more years, there is a relatively

high level of resistance. The generation of a new drug may require thousands of dollars of investment. But a drug resistance, it may only take a year or two to develop. So now, it can even be said that, some place has little insecticide to use.