For discussion on 26 October 2004

LegCo Panel on Food Safety and Environmental Hygiene

Recent Ciguatera Poisoning Incidents

PURPOSE

This paper briefs Members on (i) the recent ciguatera poisoning incidents, (ii) the current monitoring and control system on ciguatera in fish and (iii) the progress of implementing further measures to address the problem of ciguatera poisoning.

BACKGROUND

- 2. Ciguatera fish poisoning is caused by the presence in the fish of toxin, ciguatoxin, which is produced by dinoflagellates that are usually attached to dead coral surfaces under the sea. Fish eating the algae become toxic, and the effect is magnified through the food chain from small fish to large predatory fish. In general, larger coral reef fish are more likely to carry a higher level of toxin. This occurs worldwide in tropical areas.
- 3. Ciguatoxin does not cause any harm to the marine fish but may cause gastrointestinal and neurological symptoms in man after consumption of the implicated fish. These include numbness of the mouth and the limbs, vomiting, diarrhea, reversal of sensation of coldness and hotness, and pains of the joints and muscles. These symptoms are usually transient and the vast majority of people affected recover completely.

RECENT CIGUATERA POISONING CASES

4. This year, up to 15 October 2004, there were a total of 51

incidents of ciguatera fish poisoning reported to Department of Health (DH), affecting a total of 215 persons. Upon receipt of information from DH, the Food and Environmental Hygiene Department (FEHD) conducted immediate investigations into the cases. Results of investigation showed that the fishes came from a number of different sources. Concerned vendors were asked to destroy the fish of the same batch and not to import the same kind of fish from the same source.

CURRENT MONITORING AND CONTROL SYSTEM ON CIGUATERA

Voluntary Reporting of Live Fish Imports

- 5. A voluntary reporting, tracing and retrieval system for coral reef fish has been established with fish traders since 1998. Under the system, fish importers report to FEHD (to the former Agriculture and Fisheries Department before 2000) on arrival of coral reef fish in Hong Kong and provide information on the source, type and size of the fish.
- 6. Importers are also advised to maintain proper records of fish distribution to facilitate tracing and retrieval should there be incidents of ciguatera fish poisoning.

Food Surveillance

7. FEHD takes routine samples of fish for ciguatoxin testing mainly from market stalls, fresh provision shops and restaurants. Samples are also taken during the course of investigation of ciguatera fish poisoning cases. Two to three hundred samples were taken each year for ciguatoxin testing. In 2003, of the 361 samples taken only one (0.3%) was found to have unsatisfactory result. This year, up to August, of the 201 samples taken and with results available, four (2%) were found to have unsatisfactory result.

Investigation and Follow-up Action

8. Incidents of ciguatera fish poisoning often come to light as

notifications of food poisoning to the DH. Cases where the incriminated fish is consumed or purchased in Hong Kong are referred to FEHD for further action.

- 9. Upon receipt of incident reports of ciguatera fish poisoning, FEHD will take immediate actions to investigate into the fish species involved, trace the source of fish at retail, wholesale and import levels, and advise the fish traders concerned to stop selling the same fish species belonging to the same shipment. Where appropriate, samples of fish will be taken for laboratory analysis and surveillance will be stepped up.
- 10. FEHD would also liaise with the Hong Kong Chamber of Seafood Merchants Limited to trace the source country. Letters would be issued to fish traders and fishermen advising them to be cautious in importing or selling the suspected species of fish from the harvest area concerned.

Publicity and Health Education

11. Apart from the voluntary reporting system and the food surveillance mechanism, FEHD and the Agriculture, Fisheries and Conservation Department provide the latest information on ciguatera fish poisoning to fish traders and fishermen, as well as producing posters and pamphlets with pictures to help retailers, restaurants and consumers to differentiate fish species which may carry a higher risk of ciguatera fish poisoning. FEHD also offers advice on prevention and control of ciguatera fish poisoning to retail outlets and food premises involved in ciguatera fish poisoning cases and organizes health talks on food safety for food premises.

FURTHER MEASURES TO ADDRESS THE PROBLEM OF CIGUATERA POISONING

12. At the Panel meeting held on 13 July 2004, we proposed and Members agreed to adopt the following two-phase approach to address the problem of ciguatera poisoning –

(a) First Phase:

To introduce a pilot scheme whereby a voluntary Code of Practice (CoP) will be developed in conjunction with the fish trading industry. The CoP will require fish traders to provide information on each lot of collected/imported fish. Information such as the source of the marine fish, their species and size will be collected. Fish traders will be asked to keep proper records of distribution of the marine fish to facilitate prompt and effective control measures in case of occurrence of ciguatera poisoning incidents. They will also be advised not to collect/import fish from new fishing areas or areas where ciguatera cases are recently found.

We will step up publicity and health education programme to provide up-to-date information on ciguatera to both fish traders and consumers. More innovative and effective measures will be explored to disseminate the message.

(b) <u>Second Phase:</u> To review the effectiveness of the CoP after its implementation and consider the suitability or otherwise of extending the pilot scheme to regulate other kinds of seafood.

WAY FORWARD

- 13. We have met with the fish traders to discuss the draft CoP. It is expected that the CoP can be finalized by the end of this year for implementation in early 2005.
- 14. As a longer term measure, we will also explore other options to strengthen control on live fish. We could explore the feasibility of establishing designated landing points for the live fish. Certain locations, e.g. Aberdeen, Cheung Sha Wan, etc. could be designated as landing points for vessels to import and distribute fish. This would enhance the CoP and ensure the trade to report critical information related

to import and distribution of fish.

15. At present, live fish is not defined as food and is not regulated by the relevant food safety legislation. We will review the existing regulations on fish and explore ways to enhance the regulation of fish as a whole.

ADVICE SOUGHT

16. Members are invited to note the progress on the implementation of further measures to address the problem of ciguatera poisoning and comment on the way forward as outlined in paragraphs 12 to 15.

Health, Welfare and Food Bureau Food and Environmental Hygiene Department October 2004