

**For discussion  
on 13 July 2004**

**LegCo Panel on Food Safety and Environmental Hygiene**

**Review on Measures to  
Monitor and Prevent Ciguatera Poisoning Cases**

**PURPOSE**

This paper briefs Members on the current monitoring and control system on ciguatera and sets out measures to enhance the system with a view to addressing the problem of ciguatera poisoning.

**BACKGROUND**

2. In late March 2004, there was a cluster of ciguatera poisoning cases. In view of the increasing number of cases, we briefed the Food Safety and Environmental Hygiene Panel at its meeting on 2 April 2004 the various preventive measures taken by the Administration. We reported that only dead fish or fisheries products or live shellfish commonly sold, offered for sale or used for human consumption are defined as food and are regulated in Hong Kong whereas live fish is not. We agreed to review the current situation and where appropriate, formulate preliminary proposals to regulate live fish in three to four months' time.

**CURRENT MONITORING AND CONTROL SYSTEM ON  
CIGUATERA**

***Voluntary Reporting of Live Fish Imports***

3. 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 the Food and Environmental Hygiene

Department (FEHD) (and 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.

4. 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***

5. 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.

### ***Investigation and Follow-up Action***

6. Incidents of ciguatera fish poisoning often come to light as notifications of food poisoning to the Department of Health. Cases where the incriminated fish is consumed or purchased in Hong Kong are referred to FEHD for further action.

7. 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.

8. FEHD would also liaise with the Hong Kong Chamber of Seafood Merchants Limited to trace the source country. A letter 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***

9. 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 advices 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.

## **PROBLEMS OF THE CURRENT SYSTEM**

10. The sporadic occurrence of ciguatoxin in fish and the lack of means to identify affected fish by appearance, taste, texture or smell make it very difficult, if not impossible, for fish traders and consumers to differentiate contaminated fish from non-contaminated ones. The effectiveness of prevention and control measures is also limited by the lack of quick and reliable laboratory test. Moreover, such laboratory test, even if available, would not be cost-effective as the sizes and species of fish vary in each consignment and it would be very difficult to select appropriate samples for testing. For the reporting system on source tracing and retrieval of contaminated fish, since it is entirely voluntary, the effectiveness and accuracy of information collected relies very much on the cooperation of the fish trade. Besides, fish traders may choose not to adhere to our advice of not importing fish from areas where recent ciguatera cases were reported.

## **AUSTRALIAN EXPERIENCE**

11. To learn from overseas' experience on the control of live fish, in particular coral reef fish, we visited Australia in early June 2004 to study its food safety regulatory system. We learn that since there is no quick and reliable test in detecting ciguatera with the present

technology, Australia does not conduct any ciguatera sampling test for the coral reef fish imported/collected by fish traders. Instead, it relies on restricting fish catching areas and imported/caught fish species to control the risk of ciguatera poisoning cases. Fishermen are not allowed to fish at areas where incriminated fishes are frequently found. Fish species which are more likely to contain ciguatera are prohibited to be caught and traded. There is also wide publicity programme to educate the public the types of fish which are potentially dangerous, the symptoms of the poisoning cases and the way to minimize the risk of ciguatera poisoning.

## **PRELIMINARY PROPOSAL**

12. As it will take a long time to enact legislation to regulate live fish, we intend to adopt a two-phase approach so that we can address the problem of ciguatera poisoning at an early stage.

### ***First Phase***

13. We plan to introduce a pilot scheme whereby a voluntary Code of Practice (COP) will be developed in conjunction with the fish trading industry in the next few months. 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, the distribution channel and the retrieval mechanism will be collected. Fish traders will also be advised not to collect/import fish from new fishing areas or areas where ciguatera cases are recently found.

14. We will conduct more research on risk in relation to different fishing regions. 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.

### ***Second Phase***

15. We will review the effectiveness of the COP one year after its implementation and consider the suitability or otherwise of extending

the pilot scheme to regulate other kinds of seafood. If it is found not effective, we will consider other measures, including the introduction of legislation, to further strengthen our control on live fish.

### **ADVICE SOUGHT**

16. Members are invited to comment on the proposal set out in paragraphs 12 to 15.

**Health, Welfare and Food Bureau**  
**Food and Environmental Hygiene Department**  
**July 2004**