

# CHP updates on latest situation of invasive Group B Streptococcus cluster

The Centre for Health Protection (CHP) of the Department of Health (DH) today (October 21) said that it is proactively following up on the epidemiological investigations into the cluster outbreak of invasive Group B Streptococcus cases, and appealed to members of the public again to refrain from consuming raw freshwater fish or aquatic products, and to handle raw freshwater fish or aquatic products with caution by avoiding contact with wounds.

As of October 20, the Hospital Authority (HA) had reported to the CHP that 88 in-patients had tested positive for invasive Group B Streptococcus last month and this month, and provided specimens of 68 patients for genetic sequencing analysis. Laboratory analysis has shown that, amongst the specimens of 68 patients, 32 of them belonged to serotype III sequence type 283 (ST283), 27 cases belonged to other serotypes or another strain of ST283 different from the 32 cases, whereas the genetic analysis results for the remaining nine cases were pending.

The CHP's current epidemiological investigations showed that the 32 ST283 cases should have the same source of infection, indicating an outbreak cluster. The 32 cases involved 14 males and 18 females with ages ranging from 31 years to 87 years resided in various districts. Half of the cases had reported a history of handling freshwater fish and some of them had reported handling of raw freshwater fish with hand wounds. None of them reported consuming raw freshwater fish. Three of them are cooks in restaurant and one of them is part-time fishmonger. According to the information from the HA, two out of the 32 cases have died (but the cause of death cannot be ascertained to be infection-associated) and ten have been discharged from hospitals.

The CHP has collected fish and environmental samples in markets visited by some of the cases and confirmed that the genetic sequencing of these samples is identical to those of 32 ST283 cases. The CHP considers that handling raw freshwater fish with hand wounds may be associated with the infection but the risk of association with consumption of undercooked freshwater fish cannot be excluded.

The CHP had issued press releases on October 4 and 18 respectively to enhance public education and awareness to prevent invasive Group B Streptococcus infection. A letter to doctors was also issued on October 18 to remind healthcare workers to keep abreast of the latest local situation of Group B Streptococcus. The Food and Environmental Hygiene Department has been carrying out thorough cleansing and disinfection of the market concerned, whereas the Agriculture, Fisheries and Conservation Department has started taking more fish samples from the freshwater fish wholesale markets in order to ascertain the situation of local freshwater fish.

"Group B Streptococcus is widely distributed among diverse species including humans, mammalian animals, amphibians, reptiles and fishes. It is found in 20 per cent to 40 per cent of healthy adults and colonises in human gastrointestinal and genitourinary tract as commensals. It is also a significant cause of severe infections among the elderly and those vulnerable including sepsis, meningitis, septic arthritis, infective endocarditis and even death. The sources of invasive Group B Streptococcal infection are mostly unclear. More commonly known route includes mother-to-child transmission. Literature also reported that it relates to eating or improper handling of contaminated food, and some even reported that invasive Group B Streptococcus of ST283 exists in freshwater fish, especially cultured fish. In 2015, there were a number of cases of Group B Streptococcus of ST283 involving 146 persons in Singapore who had consumed raw freshwater fish. Thereafter, presence of Group B Streptococcus of ST283 was also reported in freshwater fish in other Southeast Asia countries including Thailand and Vietnam," a spokesman for the CHP said.

To minimise the infection risks, workers of aquatic products or restaurants must wear gloves when handling aquatic products and avoid direct contact with aquatic products or dirty water with bare hands.

When buying fish from markets, the public must not touch the fish or use any towel provided in the market stalls. They should wash hands with liquid soap and water as soon as possible if having contact with raw aquatic products. When handling aquatic products at home, the public should also wear gloves and wash hands thoroughly afterwards.

Members of the public must not eat any freshwater fish sashimi, raw or undercooked freshwater aquatic products. When consuming hot pot food or congee items which consist of aquatic products, they should ensure that the food is thoroughly cooked in which the centre or the thickest part of the food should reach a temperature of 75 degrees to be cooked for at least 15 seconds so as to destroy pathogen.

In addition, people must not touch aquatic products directly whenever there is a wound on hands. If a wound is sustained during handling aquatic products, the wound must be cleaned immediately and properly covered with waterproof adhesive dressings. Individuals should seek medical advice promptly when wound infection is found.  
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