

Communicable Diseases WATCH



EDITORIAL BOARD *Editor-in-Chief* Dr Albert Au **Members** Dr KH Kung / Dr Tonny Ng / Dr Hong Chen / Dr Taron Loh / Dr Wenhua Lin / Jason Chan / Doris Choi / Chloe Poon **Production Assistant** Joyce Chung. This monthly publication is produced by the Centre for Health Protection (CHP) of the Department of Health, 147C, Argyle Street, Kowloon, Hong Kong **ISSN** 1818-4111 **All rights reserved** Please send enquiries to cdsurinfo@dh.gov.hk.

FEATURE IN FOCUS

Department of Health to launch one-off catch up programme for HPV vaccination

Reported by Dr CHENG Leung Li, Nanley, Senior Medical and Health Officer, Programme Management and Vaccination Division, Emergency Response and Programme Management Branch, CHP.

A one-off catch-up programme (first phase) for human papillomavirus (HPV) vaccination will be launched on December 2, 2024 aiming to boost the herd immunity of the community against high-risk HPV infection, thereby preventing cervical cancer (Figure 1).

Cervical cancer was the seventh most common cancer among females in Hong Kong and accounted for 3.1% of all new cancer cases in females in 2021. In 2022, a total of 167 women died from this cancer, accounting for 2.6% of female cancer deaths. Almost all cervical cancers are caused by persistent infection with high-risk HPV. HPV vaccines are very effective against high-risk HPV, including HPV genotypes 16 and 18, with a vaccine efficacy of over 90%¹. The World Health Organization (WHO) recommends that all countries introduce HPV vaccines for girls aged nine to 14 before their sexual debut².

The Centre for Health Protection (CHP) of the Department of Health has been providing HPV vaccination to Primary Five and Primary Six school girls under the Hong Kong Childhood Immunisation Programme (HKCIP) since the 2019/20 school year. The vaccination coverage rate for Primary Five and Primary Six school girls has remained at a high level. In the school years 2022/23 and 2023/24, the two-dose coverage rates of HPV vaccination for Primary Six school girls reached 91%, which greatly exceeded the interim target coverage of 70% for completion of two doses of HPV vaccination as stated in the Hong Kong Cancer Strategy 2019.

In 2022, the WHO updated its recommendations on HPV vaccination, prioritising catch-up HPV vaccinations for girls up to 18 years old who missed their initial vaccination, when feasible and affordable. This aims to achieve a faster and greater population impact through both direct protection and herd immunity³. Besides, the WHO considered the available scientific evidence supporting the recommendation of a two-dose schedule for girls aged nine to 14 years and for all older age groups. Having reviewed related scientific evidence and taking into account of the WHO's updated recommendations and overseas practices, the Scientific Committee on Vaccine Preventable Diseases (SCVPD) under the CHP recommended expanding the target group of HPV vaccinations to older girls aged 18 or below. While maintaining the current two-dose schedule for girls aged nine to 14 years old, the SCVPD recommended a two-dose schedule (an off-label use) instead of the three-dose schedule for older girls.

Based on the recommendation of the SCVPD, the CHP will launch a one-off catch-up vaccination programme in phases starting from December 2, 2024, for all female Hong Kong residents born between 2004 and 2008 (i.e. girls aged 18 or below as of 2022, and not covered by the existing HKCIP) to receive free HPV vaccinations. Each eligible participant can receive two doses of vaccination, while immunocompromised participants have to receive three doses of vaccination (all three doses are free of charge). This programme will last for around two years until December 2026 and will be implemented in three phases (Table 1).



Figure 1 – Poster of HPV Vaccination Catch-up Programme.

Table 1 – Target groups of the programme and implementation schedules for each target group.

Phase	Target Group	Implementation Schedule
1	Full-time female students (including secondary sections of special schools) studying Secondary Five or above (or an equivalent grade) in Hong Kong	From December 2, 2024
2	Female Hong Kong residents studying in local post-secondary institutions or universities who were born between 2004 and 2008	1st quarter of 2025
3	Female Hong Kong residents born between 2004 and 2008 who have completed their studies in Hong Kong	1st half of 2025

Phase 1 targets full-time female students (including those in secondary sections of special schools) studying Secondary Five or above (or an equivalent grade) in Hong Kong. Similar to the arrangement of Seasonal Influenza Vaccination School Outreach Programme, public-private-partnership vaccination teams will be arranged to visit the participating secondary schools to provide free outreach HPV vaccination services to female students. Briefings for schools and doctors have been conducted and a media briefing was arranged on November 6, 2024 to announce details of the programme (Figure 2).

Phase 2 will target female Hong Kong residents studying in local post-secondary institutions or universities who were born between 2004 and 2008, and will be launched in the first quarter of next year. Phase 3 will cover the remaining eligible female Hong Kong residents born between 2004 and 2008 who have completed their studies in Hong Kong and is planned to start in the first half of 2025. Details of Phases 2 and 3 will be announced in due course.

All eligible participants must have been registered with eHealth. Details of the programme are available at its designated webpage (<https://www.chp.gov.hk/en/features/108084.html>).

References

- ¹ Kamolratanakul S, Pitisuttithum P. Human Papillomavirus Vaccine Efficacy and Effectiveness against Cancer. *Vaccines (Basel)*. 2021 Nov 30;9(12):1413.
- ² World Health Organization. Human papillomavirus vaccines: WHO position paper, May 2017 [Internet]. Geneva: World Health Organization; 2017. Available from: <https://iris.who.int/bitstream/handle/10665/255354/WVER9219-241-268.pdf?sequence=1> [Retrieved on November 21, 2024]
- ³ World Health Organization. WHO updates recommendations on HPV vaccination schedule [Internet]. Geneva: World Health Organization; 2022. Available from: <https://www.who.int/news/item/20-12-2022-who-updates-recommendations-on-hpv-vaccination-schedule> [Retrieved on November 21, 2024].

General Public's Knowledge, Attitude and Practice Survey on Antibiotic Resistance 2023

Reported by Dr. Lok-sum KO, Medical and Health Officer and Dr. Andrea TW LIU, Senior Medical and Health Officer, Infection Control Branch, CHP

The Centre for Health Protection (CHP) of the Department of Health conducts regular surveys to monitor the trend of the general public's knowledge, attitude and practice on antibiotic resistance (KAP Survey), and to evaluate the effectiveness of public health interventions. As formulated in the Hong Kong Strategy and Action Plan on Antimicrobial Resistance (2023 -2027), regular survey is one of the priority interventions that enables the Government to develop effective strategies against antimicrobial resistance (AMR). The latest 2023 KAP survey was conducted from November 27, 2023 to January 8, 2024, and the full report is now available on the CHP website (<https://www.chp.gov.hk/en/static/108316.html>) (Figure 1).

The KAP Survey adopted the same method as the previous survey in 2022, which was derived from the World Health Organization's "Antibiotic resistance: Multi-country Public Awareness Survey" with modifications made to take account of the local context. The target population consisted of non-institutional Hong Kong residents aged 15 or above who could speak Cantonese, Putonghua or English (excluding foreign domestic helpers). The survey was conducted through landline and mobile telephone interviews via random sampling. A sample size of 1 083 successful interviews (426 through landline numbers and 657 from mobile numbers) was achieved, with an overall response rate of 50.1%.

The key findings of the KAP Survey included:

- ✧ Knowledge and Awareness
 - ❖ More than half of all respondents have heard of the terms "drug-resistant bacteria" (66.6%) and "antibiotic resistance" (66.7%) in either Chinese or English.
 - ❖ The majority of the respondents (83.8%) correctly answered that cold and flu does not need to be treated by antibiotics.
 - ❖ Less than half of the respondents (39.2%) correctly answered that bacteria which were resistant to antibiotics could be spread from person-to-person.
 - ❖ Among those whose last course of antibiotics was prescribed by doctors, only 19.7% reported that they had noticed the health advice (e.g. disinfecting and covering all wounds) on the antibiotic medicine bag.
 - ❖ In terms of awareness of food safety, only 71.4% of respondents correctly understood that thorough cooking is effective in killing drug-resistant bacteria in food. About three-quarters (73.7%) of the respondents correctly understood that if high-risk individuals (including pregnant women, young children, the elderly and immunocompromised persons) avoid consuming raw or undercooked ready-to-eat food, their risk of being infected by drug-resistant bacteria from food will be reduced.



Figure 2 – Media briefing on 6 November 2024 chaired by Controller, CHP Dr Edwin TSUI (second right).



Figure 1 – Report on the Telephone Opinion Survey on General Public's Knowledge, Attitude and Practice on Antibiotic Resistance 2023.

- ❖ Elderly are also found to have lower health literacy on antimicrobial resistance (AMR) including the conditions requiring antibiotics, risk of AMR in food and person-to-person transmission of resistant bacteria
- ❖ Attitude
 - ❖ When a doctor’s initial assessment indicated that antibiotics are not needed, the vast majority of respondents (94.7%) would accept the doctor’s advice to observe for a few more days or to wait for the diagnostic test result before deciding whether to prescribe antibiotics or not.
 - ❖ Less than half of all respondents (49.5%) wished their doctor to share decision making on antibiotics prescription with them.
- ❖ Practice
 - ❖ Among respondents who had ever taken antibiotics, the vast majority (97.1%) reported that their last course of antibiotics was prescribed by doctors.
 - ❖ Among respondents (46.7% of all respondents) who reported that they had consulted a doctor (for cold or flu) in the past 12 months, only 3.6% requested antibiotics during that consultation.
 - ❖ Among respondents whose last course of antibiotics was prescribed by a doctor, 7.1% did not complete the whole course of treatment as instructed, with the main reason (59.3%) being symptom improvement.

Results from the 2022 and 2023 KAP Surveys were compared. Statistically significant differences were tabulated as below (Table 1):

The survey revealed an increase in antimicrobial use after the COVID-19 pandemic; the proportion of respondents who had taken antibiotics increased from 26.1% in 2022 to 36.6% in 2023. This is likely due to a rebound of respiratory infections as reflected in the increase in the percentage of respondents having consulted doctors for cold or flu (from 21.6% in 2022 to 46.7% in 2023), which may reflect in both appropriate use of antibiotics to treat bacterial infections and inappropriate use for viral illnesses. Despite this rebound, it was encouraging to note a significant improvement in the respondents’ knowledge, from 49.7% in 2022 to 83.3% in 2023 that cold and flu does not require antibiotics, after launching the publicity campaign on AMR. The general public’s awareness of personal hygiene likely improved following the pandemic, as exemplified by the common habit (77%) of wearing mask when experiencing respiratory symptoms.

Table 1 – Comparison of 2022 and 2023 KAP Survey Results.

Questionnaire Item	2022	2023
Antibiotics last taken within one year	26.1%	36.6%
Consulted doctors for cold/flu in last 12 months	21.6%	46.7%
Correctly answered that cold and flu do not need to use antibiotics	49.7%	83.8%
When doctor’s initial assessment indicated that antibiotics are not needed, accept doctor’s advice to observe for a few more days or to wait for the diagnostic test result before deciding whether to prescribe antibiotics or not	96.4%	94.7%
Wished doctors to share decision making on antibiotics prescription	66.3%	49.5%
Have heard of the term Antibiotic Resistance/抗生素耐藥性	76.0%	66.7%
Have heard of the term Antimicrobial Resistance/抗菌素耐藥性	40.3%	22.6%
Bacteria which were resistant to antibiotics could be spread from person to person	44.1%	39.2%
Always wear surgical mask if they have respiratory symptoms when taking last course of antibiotic	72.3%	77.3%

However, there were decreases in the percentage of respondents who had heard of the terms “Antibiotic Resistance/抗生素耐藥性” (from 76.0% to 66.7%), and “Antimicrobial Resistance/抗菌素耐藥性” (from 40.3% to 22.6%). Of note, only around 40% of respondents knew that antibiotic-resistant bacteria could be spread from person-to-person. The survey also revealed that a significant proportion of respondents did not wish to share decision-making with doctors on antibiotics prescription (66.3% in 2022 and 49.5% in 2023). However, the vast majority (95%) would accept a doctor’s advice to observe when the initial assessment indicated that antibiotics were not needed.

The KAP Survey findings provided valuable insights and guided the strategies employed in the upcoming publicity campaign for the World AMR Week in 2024. To enhance awareness on AMR and promote appropriate use of antibiotics among the general public, the CHP has leveraged on a variety of platforms, such as the social media, broadcast media, mobile applications and public transport advertising to reach a wider audience. Recognizing the knowledge deficit among the elderly population, the campaign also engaged the District Health Centres, Elderly Health Centres of the Department of Health, elderly and community centres under the Social Welfare Department, and Care teams under the Home Affairs Department.

NEWS IN BRIEF

A local sporadic case of *Streptococcus suis* infection

On October 24, 2024, the Centre for Health Protection (CHP) of the Department of Health recorded a local sporadic case of *Streptococcus suis* infection affecting a 60-year-old female with underlying illnesses residing in Sha Tin. She had handled raw pork without wearing protective gloves at home during the incubation period. She developed fever, left thigh and shoulder pain on October 21, and was admitted to a public hospital on October 22. Her blood was cultured positive for *Streptococcus suis*. She was treated with antibiotics and her condition was all along stable. She did not have other exposure to livestock, farms, abattoirs or butcher shops before onset of symptoms. Her home contacts were asymptomatic.

Three sporadic cases of psittacosis

The CHP recorded three sporadic cases of psittacosis on October 30, November 1 and November 20, 2024 respectively.

The first case involved a 38-year-old woman with good past health residing in Sha Tin. She presented with fever, cough and shortness of breath on October 17. She sought medical attention on October 19 and was admitted to a public hospital on October 26. Her chest X-ray showed right lower zone haziness. She was treated with antibiotics. She remained stable and was discharged on October 30. Her sputum collected on October 27 was tested positive for *Chlamydia psittaci* DNA by PCR. She did not keep any birds at home, but reported flock of birds and droppings near her workplace in Tai Wai.

The second case involved a 63-year-old man with underlying illnesses residing in North. He presented with fever and sore throat on October 15. He sought medical attention on October 16 and was admitted to a public hospital on October 19. His chest X-ray showed left lower zone haziness. He was treated with antibiotics. He remained stable and was discharged on October 22. His sputum collected on October 22 was tested positive for *Chlamydia psittaci* DNA by PCR. He did not keep any birds at home, but reported the presence of birds flying around his workplace in Diamond Hill .

For both cases, there was no travel history during incubation period. All their home contacts were asymptomatic. No epidemiological linkage with previous cases was identified. Both cases were referred to Agriculture, Fisheries and Conservation Department and Food and Environmental Hygiene Department for follow-up.

The third case affected a 65-year-old male with underlying illness residing in Tin Shui Wai. He presented with fever, cough, headache and dizziness since November 4 and was admitted to a public hospital on November 11 due to worsening of symptoms. Chest X-ray showed right sided haziness. His sputum collected on November 14 was tested positive for *Chlamydia psittaci* DNA. His condition was stable and he had been discharged. During incubation period, he had travelled to Australia and reported having seen doves there. He could not recall history of contact with bird's dropping or carcasses and he had no pet bird at home. His travel collaterals and household contact remained asymptomatic.

Two linked cases of listeriosis

The first case affected a 37-year-old pregnant woman with no underlying illness. She presented with fever and decreased fetal movement on November 3, 2024 at about 35 weeks of gestation. She was admitted to obstetric ward of a public hospital on November 4. Clinical diagnosis was preterm premature rupture of membrane and she had uneventful delivery on the same day. Placental swab collected grew *Listeria monocytogenes*. She was given antibiotics and in stable condition. She resided in Shenzhen during incubation period. She claimed that she had not taken high risk food.

The second case affected the newborn son of the first case. He was born by normal spontaneous delivery at a gestational age of 35 weeks and six days. His umbilical swab collected on November 4 was cultured positive for *Listeria monocytogenes*. Clinical diagnoses were *Listeria monocytogenes* bacteremia and respiratory distress syndrome due to prematurity. He was given antibiotics and in stable condition.

Imported case of food poisoning related to mushroom consumption

The CHP recorded a case of food poisoning related to mushroom consumption affecting two persons on October 27, 2024. One of the patients, a 47-year-old woman, travelled to Yunnan from October 13 to 25 where she purchased mushrooms from a wholesale market in Lijiang. The packaging bore no identifiable brand or shop name. She stored the mushrooms at room temperature at home after returning to Hong Kong. On October 26, she soaked the mushrooms in water and fried three pieces of mushrooms with garlic and green pepper for around 25 minutes. The dish was consumed by her and her son (20-year-old man) at home at around noon that day. Approximately six hours later, both individuals experienced symptoms including nausea, vomiting, diarrhea, and abdominal pain. They were subsequently admitted to a public hospital and received supportive treatment for suspected mushroom poisoning. Both were discharged on October 27. Mushrooms remnants were sent to Toxicology Reference Laboratory for analysis, which was identified as *Neoboletus venenatus*, a toxic mushroom species known to cause severe gastrointestinal illnesses.

DH participated in WHO's IHR Exercise Crystal 2024

The Communicable Disease Branch and Emergency Response and Programme Management Branch under the CHP participated in the annual International Health Regulations (IHR) Exercise Crystal organised by the World Health Organization (WHO)'s Regional Office for the Western Pacific (WPRO) on November 13. Representatives of Environmental and Ecology Bureau (EEB) and the Food and Environmental Hygiene Department (FEHD) also joined the exercise. The IHR Exercise Crystal 2024 simulated the occurrence of a vector-



Photo 1 – CHP colleagues participated in the annual IHR Exercise Crystal organised by the WPRO, together with the representatives of the EEB and the FEHD, to enhance public health emergency preparedness and response systems.

borne disease locally. The Exercise tested the responses of each unit, including soliciting key information to facilitate immediate risk assessment, reporting and notifying the emergence of relevant local cases, and assessment on cross-border spread of the disease. Representatives of the CHP, the EEB and the FEHD co-ordinated the cross-sectoral response and reported to the WHO. Representatives from Hong Kong also shared their experiences with the host of WPRO and other participants during the debriefing and experience-sharing session.

CHP launches official Instagram account. Follow us!

The CHP has officially launched its Instagram account to enhance communication with the public. By engaging with the community on this new social media platform, the CHP aims to help all sectors of the society to gain a better understanding on how CHP safeguards public health.

Meanwhile, the CHP has produced a series of WhatsApp stickers (<https://whatsticker.online/p/744757EiG70e5/HK/zh>) to promote our new Instagram account to the public. Follow us to get latest public health information!



Photo 1 – Instagram of CHP



Photo 2 – WhatsApp stickers of CHP

New Recommendations by the Scientific Committee on AIDS and STI (Sexually Transmitted Infections)

In recent years, although the number of new HIV cases has decreased, the proportion of late presenters among newly reported cases in Hong Kong has increased significantly from 28.5% in 2014 to 47% in 2023. Late presentation indicates that individuals were not diagnosed and started on treatment in a timely manner at an earlier stage of infection. This delay results in a weakened immune system. Late presentation can lead to an increased risk of opportunistic infections and malignancies, resulting in a higher mortality rate. Additionally, due to an unsuppressed viral load, late presenters contribute to an increased risk of HIV transmission within the community.

The Scientific Committee on AIDS and STI recently published the "Recommendations on HIV Testing in Hong Kong" (The Recommendations), taking into consideration the latest local epidemiology, scientific evidence, recommendations from the World Health Organization, and overseas practices. It provides guidance on who should get tested, how to test, consent procedures, post-test care, and referral pathways, serving as a reference and practical guide for healthcare professionals and frontline service providers in the community.

Details of the Recommendations are available on the CHP's website at www.chp.gov.hk/en/static/24003.html. More information on HIV/AIDS could be found at the Virtual AIDS Office (www.aids.gov.hk), the Red Ribbon Centre (www.rrc.gov.hk), the HIV Testing Service website (www.hivtest.gov.hk), and the Gay Men HIV Information website (www.21171069.gov.hk).



Photo 1 – The Consultant (Special Preventive Programme) of the Public Health Services Branch of the Centre for Health Protection (CHP) of the Department of Health, Dr Bonnie Wong (right), and the Chairman of the Scientific Committee on AIDS and STI, Dr Lee Cheuk-kwong (left), held a press conference on November 26 to provide the public with an update on the situation of HIV/AIDS and the latest recommendations for HIV testing in Hong Kong respectively.