VOL 21 ISSUE N°9

Communicable Diseases Watch

Seroprevalence of measles in Hong Kong

Latest global situation of poliovirus and eradication

Global Disease Snapshot

Journal Publication Highlights

Highlights on infectious diseases and events, week 35 - 38:

- A local case of severe CA-MRSA
- Three local cases of psittacosis
- Two cases of listeriosis
- An imported confirmed case of severe paediatric scarlet fever
- Six local cases of necrotising fasciitis (NF) caused by *Vibrio vulnificus* infection
- A local case of *Streptococcus suis* infection
- Seasonal Influenza Vaccination 2025/26
- The 22nd Tripartite Meeting on Prevention and Control of Communicable Diseases

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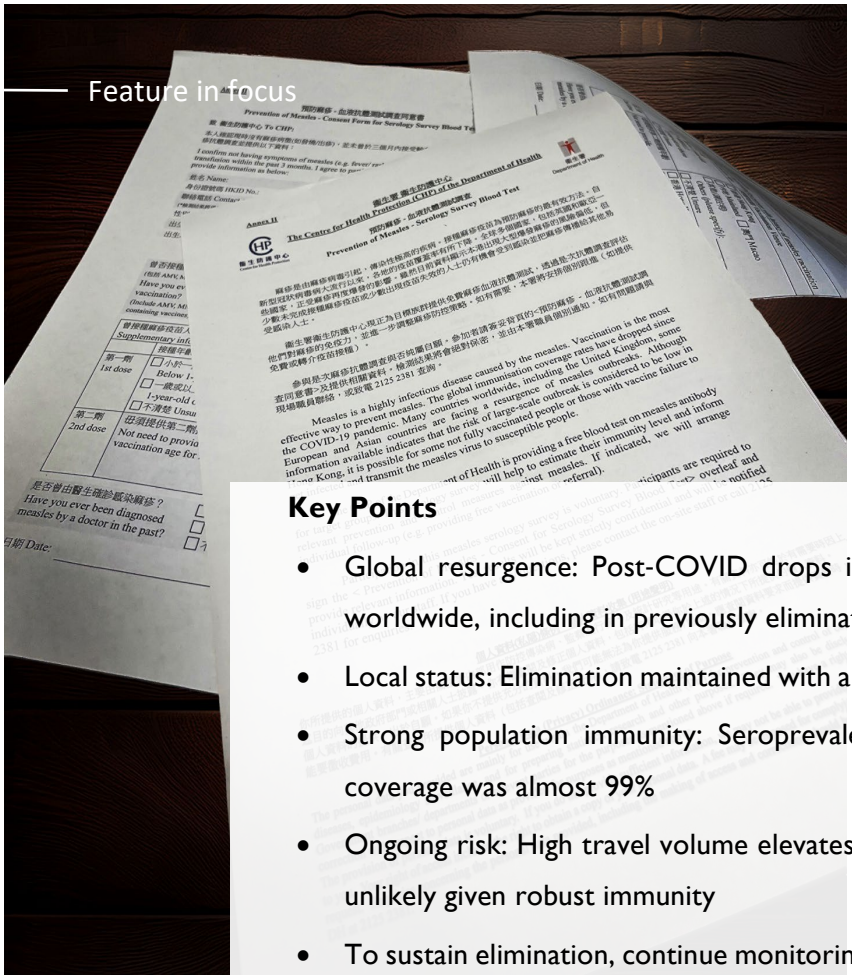

Feature in focus

Seroprevalence of measles in Hong Kong

Reported by Dr LAM Yuen-shan, Cynthis,
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Key Points

- Global resurgence: Post-COVID drops in vaccination coverage driven measles surges worldwide, including in previously eliminated regions
- Local status: Elimination maintained with a slight increase in confirmed cases in 2024–2025
- Strong population immunity: Seroprevalence exceeded 95% and childhood two-dose coverage was almost 99%
- Ongoing risk: High travel volume elevates importation risk, yet large local outbreaks are unlikely given robust immunity
- To sustain elimination, continue monitoring high-risk groups and maintain high vaccination coverage are essential

Introduction

Measles is a highly contagious disease caused by the measles virus, spreading from person to person via airborne respiratory droplets during coughing or sneezing. Typical symptoms include high fever, cough, conjunctivitis, runny nose, and a generalised maculopapular rash. Severe cases, particularly among infants and young children, can result in serious complications such as blindness, pneumonia, encephalitis, or even death. Vaccination is the most effective prevention, with two doses of measles-containing vaccine (MCV) offering approximately 97% protection[1]. Achieving herd immunity requires at least 95% of the population in the community to be immune to measles, typically through two-dose MCV vaccination.

Global situation

Globally, measles cases have resurged following the COVID-19 pandemic, with cases surging to 321 876 in 2023 and 359 589 in 2024 respectively. In 2025, the situation remains critical with 164 582 cases up to September 2025. Neighboring endemic countries such as the Philippines, Indonesia, Malaysia, and Viet Nam have reported increasing cases[2], as well as regions that had previously eliminated measles, including the United States, Canada, and some European countries[3,4].

This resurgence is largely attributed to substantial declines in vaccination coverage during the COVID-19 pandemic, when routine immunisation services were disrupted worldwide. The World Health Organization (WHO) reported that only 74% of children received two doses of the measles vaccine, and about 83% of the world's children received one dose of measles vaccine by their first birthday in 2023[5], which are far below the 95% threshold needed for herd immunity.

Local situation

Hong Kong was verified by the WHO as having eliminated measles in 2016 and has maintained this status since then. Local measles incidence remains at a very low level during the post-elimination era except an importation-related outbreak at the

airport in March 2019, which was swiftly contained through a targeted vaccination campaign for airport workers. After this outbreak, the Centre for Health Protection (CHP) of the Department of Health (DH) launched a territory-wide vaccination campaign targeting non-immune adults, especially foreign domestic helpers and individuals not born locally, with over 160 000 doses of Measles-Mumps-Rubella (MMR) vaccine administered.

The number of measles cases recorded in Hong Kong from 2020 to 2023 remained at a very low level (one to three cases per year). However, against the backdrop of a global resurgence, Hong Kong has recorded an increased number of measles cases over the past two years (10 cases in 2024 and eight cases in 2025 as of September 25). Of these 18 cases, eight were imported, and the remaining were locally acquired infections, including a cluster of six epidemiological linked cases reported in June 2025.

Population immunity in Hong Kong

Seroprevalence surveys

The Public Health Laboratory Services Branch (PHLSB) of CHP, has carried out annual serological surveys since 2001 using archived serum samples to monitor measles antibody seropositive rates among different age groups in Hong Kong. Over the years, seroprevalence has consistently exceeded 95% across all age groups[6] (Table 1), indicating robust population-level immunity.
^Between 50 and 200 samples were collected from each age group

Table 1 – Percentage of serum specimens tested positive for measles antibodies by age groups in annual serological surveillance 2020-2024^.

Year	Age group (years)									
	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	>49
2020	99	99.5	97	95	97	95	96	98	99	98
2021	97	98.5	98	99	96	95	96	100	96	98
2022	96	99	100	96	98	98	100	98	98	100
2023	96	97.5	99	99	97	98	98	100	100	100
2024	95	97.5	99	98	99	97	96	98	97	100

Immunisation coverage surveys

Moreover, Hong Kong has persistently maintained a very high coverage of two doses of MCV under the Childhood Immunisation Programme over the years. Immunisation coverage surveys among preschool children born between 2012 and 2020 revealed that the MCV coverage reached up to 99% or above.

Risk assessment

Despite Hong Kong's strong immunity profile, the global resurgence of measles poses ongoing risks of importation and localised outbreaks, particularly among susceptible subpopulations. People who have not completed measles vaccination (such as non-locally born persons including new immigrants, foreign domestic helpers, overseas employees and people coming to Hong Kong for studies) are at risk of being infected and spreading measles to other people who do not have immunity against measles, such as children under one year old who have not yet received the first dose of the measles vaccine.

The 2019 airport outbreak highlighted potential existence of pockets of the population with lower levels of immunity, which might lead to outbreaks if not identified early. In this outbreak, 33 persons were affected, two-thirds of cases involved young adults aged between 20 and 29 years; about 36% had a documented history of receiving at least two doses of MCV. This raised concerns about possible waning immunity from vaccines received in childhood during an era of low measles incidence.

In order to obtain a more comprehensive picture of the measles immune status among high risk groups in Hong Kong, the CHP conducted a supplementary seroprevalence study in 2024-2025, focusing on four specific groups: foreign domestic helpers, non-local university students and staff, airport workers, and locally born young adults (aged 20-34 years), so as to identify and mitigate any immunity gaps.

The supplementary seroprevalence study

Methodology

Between February 2024 and July 2025, the CHP recruited voluntary participants of the aforementioned four groups at various venues including university campuses, airport terminals, disciplinary training colleges, office buildings and shopping malls. Recruitment involved partnership with the Hong Kong Red Cross Blood Transfusion Service during blood donation events and on-site blood testing booths (Photos).

Photos – Supplementary seroprevalence study conducted at airport terminals (upper left and lower left), disciplinary training colleges (upper middle) office buildings (upper right), shopping malls (low middle) and university campuses (lower right)

Participants completed a standardised self-administered questionnaire capturing demographic details and measles immunisation or infection history. Serum specimens were collected for measles IgG antibody testing by immunoassay; equivocal or negative results were further tested by plaque reduction neutralisation test (PRNT). Specimens positive by either test were considered seropositive; negative by PRNT were seronegative.

Result

A total of 1 312 participants were recruited. Their ages ranged from 18 to 73 years. Among them, 1 292 (98.5%; 95% confidence interval 97.7–99.1) were seropositive for measles antibodies. Seropositivity rates for each group are summarised in Table 2.

Table 2 – Seropositivity of measles antibodies and age by specific groups.

Specific Group	Sample size	Age range (median)	Seropositive % (95% CI)
(1) Foreign domestic helpers	141	27 – 62 (42)	99.3 (96.1 – 100)
(2) Non-local university students/staff	142	18 – 62 (23)	99.3 (96.1 – 100)
(3) Airport workers	603	19 – 73 (35)	98.0 (96.5 – 99.0)
(4) Locally born young adults	426	20 – 34 (27)	98.6 (97.0 – 99.5)
Total	**1 312**	**18 – 73 (31)**	**98.5 (97.7 – 99.1)**

Further sub-group analysis among the 426 locally born young adults confirmed seroprevalence rates above 95% across all age strata. Seropositivity rates of measles antibodies of all studied groups are shown in Figure 1.

As a follow-up measure for participants who tested negative for measles antibodies, CHP offered mop-up MMR vaccination to 11 (55%) seronegative participants.

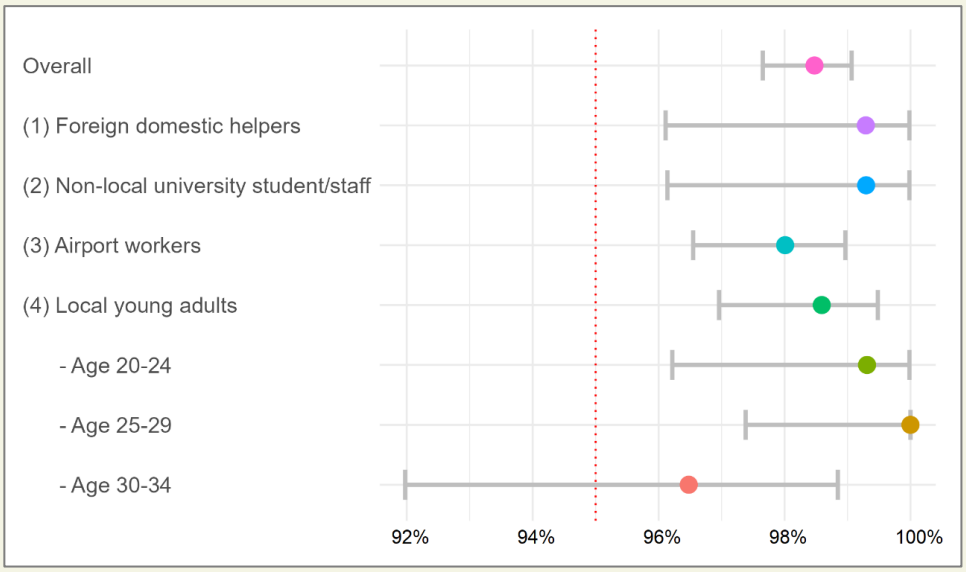
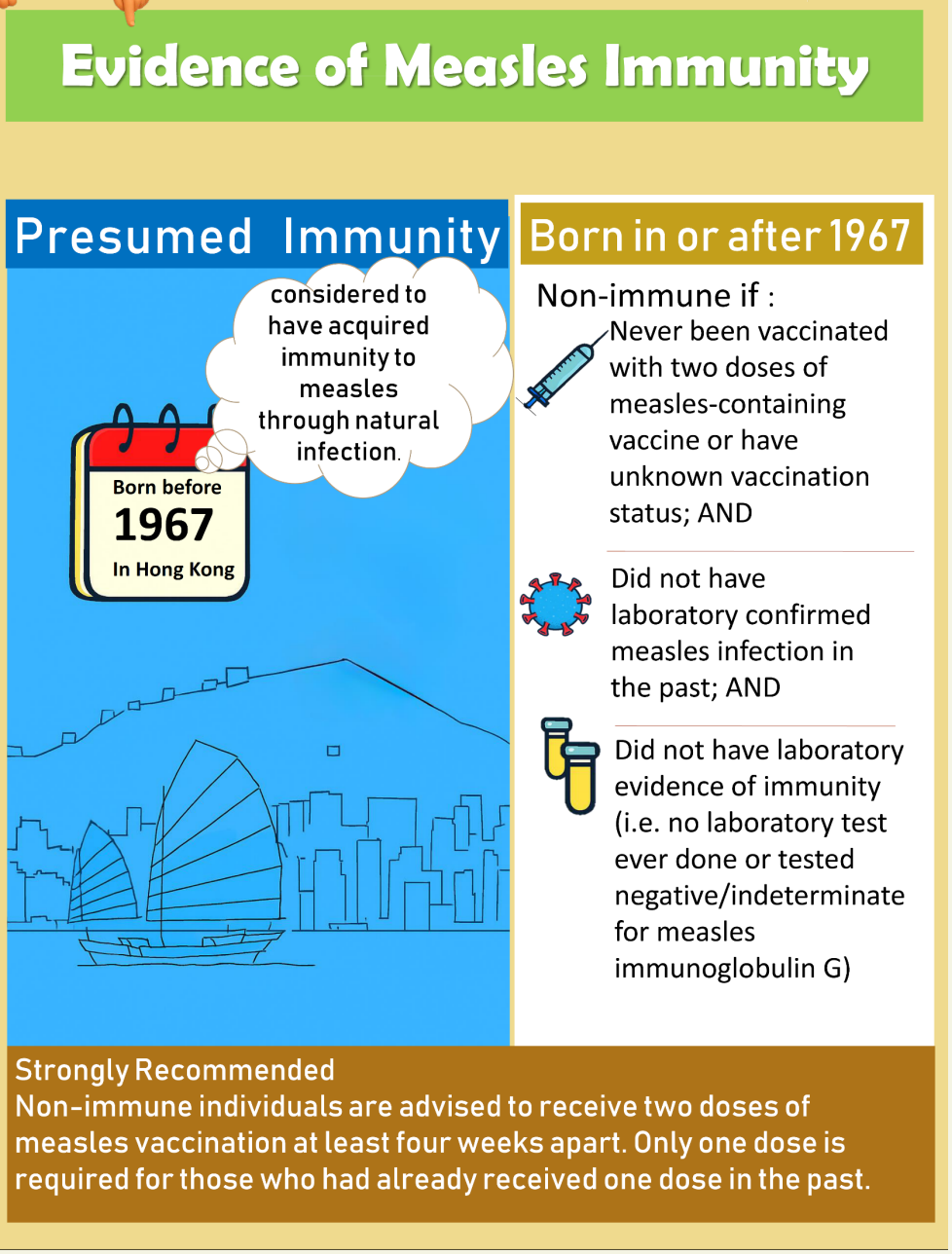


Figure 1 – Seropositivity of measles antibodies among all groups.

Conclusions

- Measles antibody seroprevalence exceeded 95% across all studied groups in Hong Kong, surpassing the required herd immunity threshold.
- These results are consistent with routine serological surveillance conducted by the PHLSB over the years and confirm a high level of population immunity.
- High international travel volume increases the risk of measles importation, but large-scale local outbreaks are less likely given the high immunity levels.
- Continued monitoring of high-risk groups and sustained high vaccination coverage are critical to maintaining measles elimination status.

Evidence of Measles Immunity



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Feature in focus

Latest global situation of poliovirus and eradication

Reported by Dr LEE Tsan-ho, Peter, Medical and Health Officer, Vaccine Preventable Disease Section, Surveillance Division, Communicable Disease Branch, CHP

Image generated by AI

Key Points

- Polio vaccination has substantially reduced transmission of poliovirus globally.
- For wild poliovirus (WPV), only type 1 WPV is still in circulation in two endemic countries: Afghanistan and Pakistan. Despite control measures like immunisation activities, challenges to poliovirus eradication remain in these two countries.
- Circulating vaccine-derived poliovirus (cVDPV) which stems from live attenuated oral polio vaccines continues to affect multiple countries across different continents.
- High vaccination coverage and robust surveillance system contribute to Hong Kong's polio-free status which was certified in 2000.
- The timeline of Polio Eradication Strategy 2022–2026 formulated by Global Polio Eradication Initiative has been extended to 2029 to enable more effective implementation of activities which are crucial to permanent interruption of poliovirus transmission globally.

Background

Poliovirus causes poliomyelitis which mainly affects children under five years of age. Poliomyelitis could result in permanent disability and death in severe cases. There are three serotypes of wild poliovirus (WPV): type 1, type 2, and type 3. The development of polio vaccination (both oral polio vaccine (OPV) and inactivated polio vaccine (IPV)) has significantly reduced transmission of WPV. Substantial decline in overall WPV cases has been realised: reported WPV cases dropped dramatically by over 99% from approximately 350 000 cases in 125 endemic countries in 1988 to 99 cases in two endemic countries (Afghanistan and Pakistan) only in 2024[1]. The World Health Organization (WHO) has declared global eradication of type 2 and type 3 WPV (WPV2 and WPV3) in 2015 and 2019 respectively.

Situation of WPV and its Eradication in Endemic Countries

Currently, only type 1 WPV (WPV1) remains in circulation in Afghanistan and Pakistan[2], the remaining two endemic countries.

Afghanistan

In 2025 (as of 31 August), Afghanistan reported four human cases of WPV1, significantly lower than 18 cases recorded in the same period in 2024. Despite multifold control measures, challenges persist, including a high positive rate of environmental samples during the low transmission season (November to April) and immunisation gaps associated with population movements and operational constraints. These factors continue to pose a risk of WPV1 spread. In addition to the routine immunisation programme, strategic interventions encompassed improvement of access to vaccination. One example is the national and sub-national vaccination campaigns in April 2025, in which 11.4 million children less than five years were immunised with bivalent OPV[3].

Pakistan

In the same period, Pakistan reported 24 human cases of WPV1, similar to 16 human cases recorded in the same period in 2024. Over 400 environmental samples were tested positive for WPV1 in 2025, with the number dropped from over 70 samples in January to around 55 samples in July. Despite supplementary immunisation activities, challenges such as population movements and under-immunisation of targeted population segments (e.g. children in epidemiologically critical areas)[4] continue to hinder control efforts, similar to the issues faced in Afghanistan.

Situation of circulating vaccine-derived poliovirus (cVPDV) and its control

In communities with low polio immunisation rates, live attenuated polioviruses in OPV can spread and mutate over time, potentially causing paralysis similar to WPV. These mutated polioviruses can then spread in communities, leading to cVDPVs.

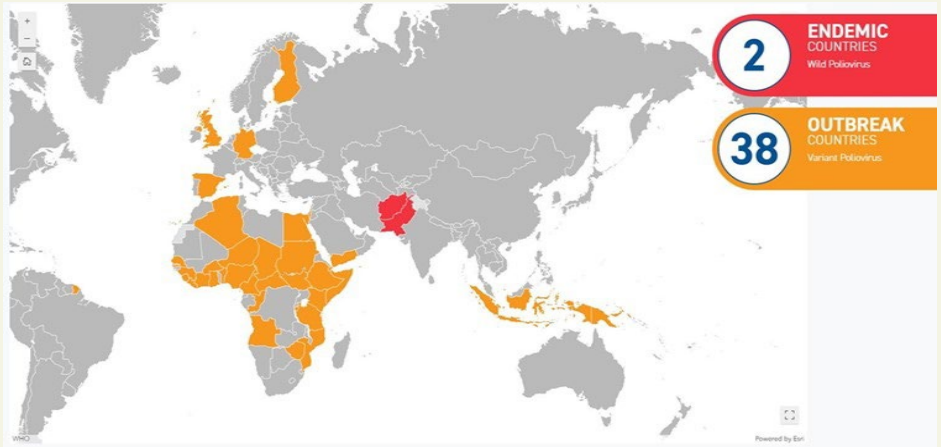

Figure 1 - Global poliovirus situation, as of 1 September 2025 (Source: WHO)[1,2].

Three types of cVDPVs, i.e. type 1 (cVDPV1), type 2 (cVDPV2) and type 3 (cVDPV3), have remained in circulation globally. These variant polioviruses have caused outbreaks in 38 countries in 2025. Among the three types, cVDPV2 affects the most countries, primarily in Africa, while environmental surveillance also detected cVDPVs in some developed countries in Europe (such as United Kingdom and Spain) in 2025[5] (Figure 1).

In the Western Pacific Region of the WHO, two countries have been affected by cVDPV in the past few years (Papua New Guinea (PNG) and Indonesia). In PNG, cVDPV2 was detected in both environmental samples and stool samples from healthy children in Lae City in Morobe Province in early 2025[6]. Genetic sequencing revealed linkage to the strain that had triggered the outbreak of cVDPV2 in Indonesia in 2024. The first human case of paralytic poliomyelitis caused by cVDPV2 in PNG was confirmed in Lae City in late August 2025. Other parts of PNG, including the National Capital District and Western Highlands Province, also reported cVDPV2 positive environmental samples. The Department of Health of PNG has launched supplementary immunisation activities using novel OPV and IPV since August 2025, with the second round scheduled in late September 2025[7].

Indonesia has made notable progress in combating the cVDPV2 outbreak first established in 2022. The outbreak extended into mid-2024 with 15 human paralytic poliomyelitis cases detected and 34 healthy children with stool samples tested positive for VDPV2/cVDPV2. Immunisation campaigns, which achieved satisfactory coverage rate (over 90% in the two rounds of supplementary immunisation activities as of November 2024), played a pivotal role in containing transmissions of cVDPV2[8]. The last case was detected in South Papua in late June 2024. In June 2025, the Outbreak Response Assessment team of the Global Polio Eradication Initiative (GPEI) concluded that sufficient evidence confirmed the interruption of cVDPV2 in Indonesia, formally closing the outbreak[9].

Local situation

Locally, Hong Kong was certified polio-free in year 2000 alongside other countries in the Western Pacific Region by the WHO. High vaccination coverage and robust surveillance systems are in place in Hong Kong. Under the Hong Kong Childhood Immunisation Programme, children are given IPV (in the form of combined Diphtheria, Tetanus, acellular Pertussis & Inactivated Poliovirus Vaccine) at two, four, and six months, followed by booster doses at 18 months, Primary one and Primary six. Polio vaccination coverage remains at a very high level. Hong Kong has also maintained a sensitive acute flaccid paralysis (AFP) surveillance system to detect poliomyelitis cases, targeting at least one non-polio AFP case per 100 000 children under 15 years annually. From 2020 to 2025 (as of June), the annualised non-polio AFP rate averaged 1.37 cases per 100 000 children.

Way Forward on global eradiation of poliomyelitis

The GPEI, first launched in 1988 as a multi-stakeholder initiative (WHO, Rotary International, United States Centers for Disease Control and Prevention, UNICEF, Gates Foundation and Gavi - the Vaccine Alliance), has significantly increased global polio vaccination coverage and reduced poliovirus transmission worldwide over the past decades. Despite these achievements, challenges persist, particularly in developing countries and areas with geographical or operational hurdles. To address these challenges, the GPEI formulated the Polio Eradication Strategy 2022–2026 (the Strategy), with emphasis placed on closing immunisation gaps and boosting responses like reducing incidences of missed poliovirus transmission through rigorous surveillance systems covering both human cases and environmental (e.g. wastewater) samples[10].

The strategy focuses on two primary goals:

- Goal 1: permanent interruption of all poliovirus transmission in the two aforementioned WPV1 endemic countries; and
- Goal 2: stopping cVDPV transmission and prevention of outbreaks in non-endemic countries.

Since the start of the strategic period (2022), persistent hurdles have hindered the eradication of WPV1 in the endemic countries and cVDPV globally. Major challenges include immunisation gaps like suboptimal access to vaccination, complicated with operational and geographical barriers that limit comprehensive vaccination programmes[11]. In response

the GPEI extended the timeline of the strategy to the end of 2029 (Figure 2), and made adjustments to enable more effective implementation and accountability, in order to achieve permanent interruption of WPV1 and cVDPV transmission and a polio-free world.

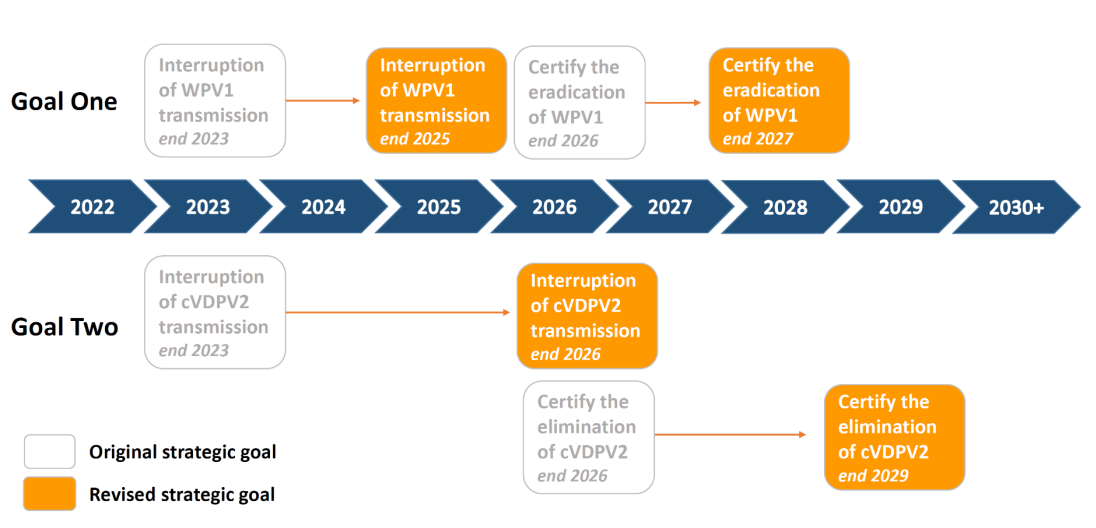

Figure 2 - Polio Eradication Strategy 2022 – 2026 timeline and its extension (Source: WHO)[13].

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Optimisation of wastewater surveillance for COVID-19 after resumption of normalcy in Hong Kong[1]

Mr Eugene LO, Ms Serana SO, Ms WONG Lok-tung, Ms Kirran Nazesh MOHAMMAD, Ms LAW Ka-yi, Ms CHAN Kam-suen, Dr Shirley TSANG, Dr Dawin LO, Dr KUNG Kin-hang, Dr Albert AU and Dr CHUANG Shuk-kwan, Communicable Disease Branch, CHP

COVID-19 is now managed as a common respiratory illness in Hong Kong. The Centre for Health Protection (CHP) of the Department of Health (DH) has optimised the sewage surveillance programme for improving cost-effectiveness and long-term sustainability. The study, published in *Epidemics*, described how reducing the number of sampling sites from 120 to 18 — one per district — significantly lowered operational costs by about 80% while maintaining high reliability ($R^2 > 0.97$) in monitoring SARS-CoV-2 trends and variants.

Launched in October 2020 through collaboration among the Environmental Protection Department, the Drainage Services Department, and the University of Hong Kong, this manhole-based sampling design initially covered approximately 80% of the population and enabled the detection of localised infection signals that consistently preceded clinical case notifications during the pandemic. With the shifting of the objectives of sewage surveillance from a tool for containment to routine surveillance of COVID-19 activity, the CHP evaluated several optimisation strategies to better use of available resources, including reducing sampling frequency, altering testing procedures, and shifting to wastewater treatment plant-based monitoring. The review found that reduced sampling network was the most practicable approach. Statistical analyses of data from April 2023 to March 2024 showed that the streamlined 18-site model, covering ~30% of the population, remained highly correlated with the full network. This optimisation ensures sustainability of the sewage surveillance programme in Hong Kong.

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Rising threats of MRSA and carbapenem-resistant acinetobacter in residential care homes for the elderly during COVID-19 in Hong Kong[1]

Dr Edmond MA[1], Ms WONG Shuk-Ching[2], Dr Vincent CHENG[2], Mr Enoch HSU[1], Dr CHEN Hong[1] and Dr Edwin TSUI
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[2] Queen Mary Hospital, Hospital Authority

The CHP, in collaboration with the Hospital Authority, conducted a point prevalence survey between July and November 2022 to assess multidrug-resistant organisms (MDROs) in 26 Residential Care Homes for the Elderly (RCHEs) in Hong Kong during the COVID-19 pandemic. Samples collected from 1 529 residents revealed prevalence rates of 33.9% for Methicillin-resistant *Staphylococcus aureus* (MRSA) (95% CI: 31.5 - 36.6%), 8.1% for Carbapenem-resistant *Acinetobacter* (CRA) (95% CI: 6.8 - 9.6%), and 0.8% for multidrug-resistant *Acinetobacter* (95% CI: 0.4 - 1.4%). Private RCHEs showed significantly higher MDROs prevalence than non-private ones, with CRA rates nearly doubled.

The COVID-19 pandemic likely exacerbated MDRO spread due to diverted infection control resources and the use of temporary quarantine facilities. These factors may have contributed to increased transmission within and between care homes, leading to increased prevalence of MDROs than previously reported local figures. Limitations of the study include lack of individual-level data, potential bias toward smaller institutions, and varying sample sizes between private and non-private RCHEs. Despite these, the study showed a continued increase in prevalence of MDROs. CHP will continue to closely monitor MDROs at RCHEs and strengthen infection control to protect the vulnerable elderly population from antimicrobial resistant pathogens.

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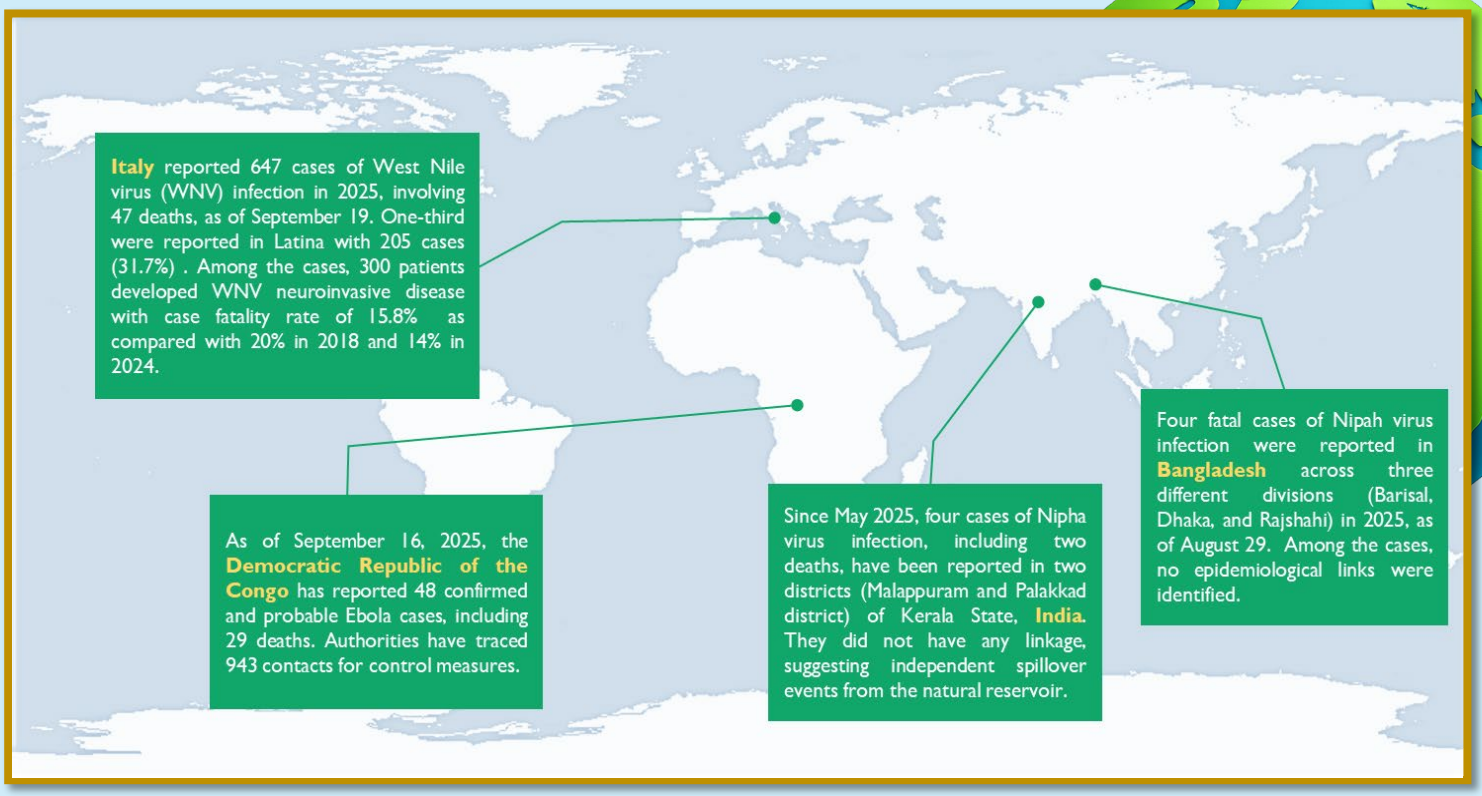
Global Disease Snapshot

Major Outbreaks and Emerging Infections



Source of information

World Health Organization: https://www.who.int/emergencies/disease-outbreak-news/item/2025-DON577

World Health Organization: https://www.who.int/emergencies/disease-outbreak-news/item/2025-DON582

World Health Organization: https://cdn.who.int/media/docs/default-source/documents/emergencies/who-appeal-drc-ebola-2025.pdf?sfvrsn=b694cf72_4&download=true

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News in Brief

A local confirmed case of severe CA-MRSA

The Centre for Health Protection (CHP) of the Department of Health recorded a local case of severe CA-MRSA on August 27, involving a 74-year-old man with underlying diseases residing in Southern District. He developed fever, desaturation, and shock on August 11 during hopsitalisation at a public rehabilitation hospital. He was then transferred to another public hospital on the same day for management. The clinical diagnosis was severe pneumonia. A sputum specimen collected on August 15 tested positive for CA-MRSA. His condition stabilised following antibiotic treatment. No other CA-MRSA cases were reported from the rehabilitation hospital where he had stayed during the incubation period. His household contacts remained asymptomatic.

Three local cases of psittacosis

The CHP recorded three local cases of psittacosis on August 25, September 11 and September 16, respectively.

The first case involved a 76-year-old female with underlying illness residing in Kwun Tong. She presented with cough, runny nose, sore throat, malaise, and loose stool on August 11, and was admitted to a public hospital on August 14. Chest X-ray showed right lower zone haziness. Her sputum collected on August 19 was tested positive for *Chlamydia psittaci* DNA. Her condition improved with antibiotics treatment, and she was discharged on August 25. She lives alone. She did not keep birds at home and denied any direct contact with birds. However, she reported seeing birds in a recreation ground near her home and outside the windows of her home.

The second case involved a 61-year-old male with good past health residing in Kwun Tong. He presented with fever, cough, sore throat, headache, myalgia, chills and malaise on September 1, and was admitted to a public hospital on September 7. Chest X-ray showed right upper zone haziness. His sputum collected on September 7 was tested positive for *Chlamydia psittaci* DNA. His condition was stable, and he was treated with antibiotics and discharged on September 22. He did not keep birds at home at home and denied any direct contact with birds. He reported having spotted birds in the vicinity of his residential building. His home contacts remained asymptomatic.

The third case involved a 52-year-old female with good past health residing in Tsuen Wan. She presented with fever, cough, sputum, shortness of breath and myalgia on September 1, and was admitted to a public hospital on September 8. Chest X-ray showed bilateral lung haziness. Her sputum collected on September 9 was tested positive for *Chlamydia psittaci* DNA. Her condition improved with antibiotics treatment, and she was discharged on September 15. She did not keep birds at home and denied any direct contact with birds. Her home contacts remained asymptomatic.

Case details were referred to Agriculture, Fisheries and Conservation Department (AFCD), Food and Environmental Hygiene Department (FEHD), and Leisure and Cultural Services Department (LCSD) for follow-up.

Two cases of listeriosis

The CHP recorded two cases of listeriosis on August 26 and September 5, respectively.

The first case involved a 54-year-old female with underlying illness residing in Kwun Tong. She was found to have deterioration in general condition during a routine follow-up for her underlying illness on August 15 and was admitted to a public hospital on the same day for treatment. She developed fever on August 24. Blood and peritoneal fluid collected on August 24 and August 26 respectively grew *Listeria monocytogenes*. She was treated with antibiotics. She succumbed on September 3. She had no travel history and no known high-risk exposure could be identified during the incubation period. Her household contacts remained asymptomatic.

The second case involved a 69-year-old female with underlying illness residing in Wong Tai Sin. She presented with fever, chills, myalgia, vomiting, neck stiffness, and pleuritic chest pain since September 1 and was admitted to a public hospital on September 2. Blood collected on September 2 grew *Listeria monocytogenes*. Her condition was stable, and she was treated with antibiotics. She had travelled to Shanwei in Guangdong Province during incubation period and had consumed ice cream and fresh juice during her stay in Shanwei. Her household contacts remained asymptomatic.

An imported confirmed case of severe paediatric scarlet fever

An imported case of severe paediatric scarlet fever was recorded on August 28. The case involved an 11-year-old Chinese boy with good past health, who travelled with his family to New Zealand from August 1 to 11. He developed fever, sore throat, cough and generalised rash on August 10. His rash gradually resolved after returning to Hong Kong. On August 18, he

developed fever again along with left arm pain, weakness and persistent cough, followed by erythematous rash with purpuric changes over his left forearm on August 22. He was admitted to a public hospital, where imaging revealed meningoencephalitis and abscess formation in the right frontal parietal lobes. Cultures from throat, skin blister and brain abscess were positive for *Streptococcus pyogenes*. Incision and drainage of brain abscesses were done. He received parenteral antibiotics, and his condition was stable. His household contacts remained asymptomatic and no recent respiratory disease outbreaks have been reported in his school. The CHP has provided health advice on the prevention and control of scarlet fever to his family and school.

Six local cases of necrotising fasciitis (NF) caused by *Vibrio vulnificus* infection

The CHP recorded six local cases of NF caused by *Vibrio vulnificus* (*V. vulnificus*) infection from September 1 to 18.

The first case involved a 76-year-old male with underlying illness residing in Yau Tsim Mong. He visited a wet market in Mongkok on August 29 morning wearing shorts and slippers. He purchased raw prawns and fish there. He handled the fish at home in the same morning without wearing gloves. He was not aware of any obvious skin injury. He presented with fever, left leg pain and swelling in the evening on August 29, and was admitted to a public hospital on August 30. Amputation of left leg was performed. He was treated with antibiotics and his condition improved from critical to stable. He was transferred to rehabilitation ward on September 18.

The second case involved a 90-year-old man with underlying illness residing in Tuen Mun. On September 6, he sustained a puncture injury to his right big toe when a marine fish he was handling at home slipped and fell onto his foot. It was purchased from a wet market in Tuen Mun. He did not cover the wound. He went swimming at a beach the next morning. He subsequently presented with fever, chills, rigors, nausea, diarrhea, myalgia, dizziness and swelling of right big toe on September 7 and was admitted to a public hospital on the same day. Excisional debridement of right lower leg was performed. He was treated with antibiotics and his condition was stable.

The third case involved a 78-year-old man with underlying illnesses residing in Tuen Mun. He sustained left index finger injury while handling raw fish at home on September 6 without wearing gloves. It was purchased from a wet market in Shenzhen. He subsequently presented with fever and swelling of left index finger on September 7 and was admitted to a public hospital on the same day. Excisional debridement of left index finger was performed. He was treated with antibiotics and his condition was stable.

The fourth case involved a 74-year-old male residing in the Eastern District. He had underlying illness and a chronic left leg wound which he applied dressing on his own every day. He purchased raw shrimps from a wet market in Chai Wan on September 8. He suffered from right middle finger injury when handling them at home on the same day without wearing gloves. After the finger injury, he continued to perform daily dressing with bare hands for his chronic left leg wound. He presented with painful swelling of right middle finger on September 9, and painful swelling of left foot on September 10. He developed seizure and shock on September 11 and was brought to a public hospital. Debridement of left lower limb was performed. He was treated with antibiotics and his condition was stable.

The fifth case involved a 61-year-old man with good past health residing in Yuen Long. He sustained left index finger injury while handling raw fish at a wet market in Yuen Long on September 10, and subsequently presented with swelling of left index finger on the same day. He was admitted to a public hospital on September 12. Amputation of left index finger was performed. He was treated with antibiotics and his condition was stable.

The sixth case involved a 62-year-old man with good past health residing in Yuen Long. He sustained right thumb injury while handling raw fish at another wet market in Yuen Long on September 14. He wore shorts and sneakers at the wet market. He and subsequently presented with fever and pain with swelling over right thumb and right leg on September 15. He was admitted to a public hospital on September 16. Right side above-knee amputation and right thumb amputation were performed. He was treated with antibiotics and his condition remained serious.

So far, a total of 13 cases of NF caused by *V. vulnificus* infection have been recorded in 2025 and all were recorded since May. The cases resided in seven different districts. The majority reported a history of contact with or handling raw seafood purchased in different markets. *V. vulnificus*, which is a common cause of NF, is more prevalent in warm weather, leading to seasonal surge during summer months. In the past 10 years (2015-2024), about 75% of the NF cases caused by *V. vulnificus* were recorded during May - September. The public, especially those with weakened immunity or chronic illnesses, should take the following measures to prevent *V. vulnificus* infection:

Proper wound care

- Clean wounds immediately and cover with waterproof dressings until healed.
- Provide prompt first aid for even minor wounds.
- Practice hand hygiene before and after touching wounds.
- Keep wounds away from seawater or raw seafood.
- Seek medical help if signs of infection appear (e.g., increasing redness, swelling, pain).

Food handling

- Avoid skin contact with dirty water in wet markets.
- Handle sharp seafood parts (e.g., fins, shells) carefully to prevent cuts.
- Wear gloves and cover wounds when touching raw seafood.
- Cook seafood thoroughly (shellfish until shells open); avoid raw oysters or shellfish.
- Prevent cross-contamination by separating ready-to-eat foods from raw seafood.

Figure 1 – Prevention of V. vulnificus infection.

A local case of *Streptococcus suis* infection

On September 13, the CHP recorded a sporadic case of *Streptococcus suis* (*S. suis*) infection involving a 76-year-old housewife with underlying illness residing in Kwun Tong. She presented with low back pain and abdominal pain since September 6, and was admitted to a public hospital on September 11. Blood culture grew *S. suis*. She was treated with antibiotics and her condition was stable. During incubation period, she purchased pork meat from a butcher stall in a wet market in Kwun Tong, and handled raw pork without wearing gloves at home during food preparation. She was not aware of any recent wounds, nor did she have any exposure history to livestock, farms, or abattoirs prior to the onset of her symptoms. Her home contact remained asymptomatic.

Seasonal Influenza Vaccination 2025/26

The Importance of Seasonal Influenza Vaccination

Seasonal influenza vaccination (SIV) has been scientifically proven to be one of the most effective means to prevent severe cases of seasonal influenza and its complications. It also reduces the risks of in-patient admission and mortality due to seasonal influenza. Serious infections or complications can also occur among healthy individuals. Therefore, all persons aged 6 months or above, except those with known contraindications, are recommended to receive the SIV for personal protection.

SIV Programmes for the 2025/26 Season

The Vaccination Subsidy Scheme (VSS) under Seasonal Influenza Vaccination Schemes has been commenced on September 22, 2025. The other vaccination programmes (including the SIV School Outreach Programme and the Residential Care Home Vaccination Programme) began on September 25, 2025.

This year, the SIV vaccination programme further expands the eligibility coverage to individuals aged 18 to 49 with chronic medical problems. Eligible persons can receive free or subsidised SIV under the programmes. The eligibility criteria and recommended vaccination venues are as follows:

- Persons aged 50 years or above:
  - General public: Vaccination by family doctors or District Health Centres (DHCs)
  - Persons with chronic illness: Vaccination by public or private clinics providing regular follow-ups
- Persons aged 18 to 49 years with chronic illness or intellectual/physical disability:
  - Vaccination by family doctors, DHCs, or public/private clinics providing regular follow-ups
- Children and adolescents aged 2 to under 18 years:
  - General children: Vaccination through the Seasonal Influenza Vaccination School Outreach Programme or by family doctors
  - Children with chronic illness: Vaccination by public or private clinics providing regular follow-ups
- Children aged 6 months to under 2 years:
  - Vaccination by family doctors or Maternal and Child Health Centres
- Pregnant women:
  - Vaccination by family doctors or public/private antenatal clinics

The Importance of Timely Vaccination

Prevention is better than cure. Since it takes about two weeks after vaccination for antibodies to develop in the body and provide protection against influenza virus infection, it is advised to get vaccinated before the arrival of the winter influenza season. The best time for vaccination is before winter starts. The earlier we get vaccinated, the better we can receive comprehensive protection against influenza in the coming year.

The Department of Health calls on everyone to receive SIV and encourages colleagues and family members to get vaccinated together to protect the health of ourselves, our families, and the community.

Get vaccinated once a year - The sooner the better. For more details, please visit the CHP webpage on SIV Programmes: https://www.chp.gov.hk/en/features/107880.html.

Figure 2 – Seasonal Influenza Vaccination Schemes.

The 22nd Tripartite Meeting on Prevention and Control of Communicable Diseases

The 22nd Tripartite Meeting on Prevention and Control of Communicable Diseases was held in Hong Kong on September 22, 2025, with participation of around 70 senior representatives from the health authorities of Guangdong, Hong Kong and Macao attended the meeting. They reviewed the progress of co-operation since the last meeting in December 2024, and exchanged views on current public health issues of mutual concern, including overview of key communicable diseases in the tripartite area; prevention and control of seasonal influenza and other vaccine-preventable diseases; current situation, and prevention and control of chikungunya fever and dengue fever; infection control in healthcare institutions, and prevention and surveillance of antimicrobial resistance. The meeting successfully reached a consensus on major areas, including strengthening information exchange and emergency response systems; deepening cooperation on diseases like chikungunya, dengue, influenza, antimicrobial resistance, and emerging infections; advancing scientific research with artificial intelligence-based early warning, evaluations of vaccine effectiveness, and sewage surveillance; optimising notification mechanisms using big data; conducting joint risk assessments for outbreaks and major cross-boundary events; organising joint exercises and drills; and maintaining professional staff exchanges in surveillance, epidemiology, and infection control.

Photo 1 - Photo shows the Deputy Director-General of the Guangdong Provincial Health Commission and Director of the Guangdong Provincial Disease Control and Prevention Administration, Dr Song Tie (left); the Director of Health, Dr Ronald Lam (centre); and the Head of the Centre for Disease Control and Prevention of the Health Bureau of the Macao, Dr Leong Iek-hou (right), after signing the meeting minutes.

Photo 2 - Photo shows Dr Song Tie (front row, seventh left); Dr Ronald Lam (front row, centre); the Acting Deputy Director of the Health Bureau of Macao, Dr Tai Wa-hou (front row, seventh right); the Controller of the Centre for Health Protection of the Department of Health, Dr Edwin Tsui (front row, sixth left), and other delegates of the meeting.