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衛生防護中心  
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Department of Health

## Update on Global and Local Situation of Mpox

## A Review of Rickettsial Diseases in Hong Kong

## Global Disease Snapshot

### Highlights on infectious diseases and events, week 48 - 51:

- Guidelines on Prevention of Communicable Diseases in Residential Care Homes for the Elderly (4th Edition)
- DH participated in WHO's IHR Exercise Crystal 2025
- Two local cases of necrotising fasciitis (NF) caused by *Vibrio vulnificus* infection
- Two local cases of severe scarlet fever
- Four local cases of psittacosis
- A local case of listeriosis
- A case of brucellosis

Feature in focus

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# Update on Global and Local Situation of Mpox

Reported by Dr LAU Kin-lun, Kenny, Medical and Health Officer, and Dr MAK Ling-fung, Kenneth, Senior Medical and Health Officer, Communicable Disease Surveillance and Intelligence Section, Communicable Disease Branch, CHP

## Key Points

- Since 2022, over 172,000 mpox cases have been reported globally, with clade IIb virus dominating and clade Ib virus emerging in Africa since late 2023.
- Transmission is mainly through sexual contact among men who have sex with men (MSM).
- Hong Kong has recorded 83 cases since 2022, all were adult males with majority linked to MSM activity.
- The Mpox Vaccination Programme was launched in Hong Kong in late 2022 to provide protection against infection and severe disease in high-risk groups.
- Importation risk remains due to global travel, but the CHP will maintain its robust public health measures to mitigate the risks and prevent wider community transmission of mpox.

## Background

Mpox (also known as monkeypox) is a zoonotic disease caused by the monkeypox virus. The virus was first discovered in 1958 in monkeys kept for research, leading to its original name 'monkeypox virus'. The first human case was first reported

in the Democratic Republic of the Congo (DRC) in 1970. Historically, most outbreaks occurred in Central and West Africa, with occasional outbreaks outside Africa linked to imported animals or travellers from endemic regions in Africa.

Infection occurs when a person comes into contact with monkeypox virus from infected animals, infected humans or contaminated materials. Humans can acquire the infection from various wild animals, such as some species of primates, through bite or scratch, or direct contact with their body fluids. Human-to-human transmission occurs mainly through close physical contact with infected individuals via saliva or body fluids, such as sexual contact. The incubation period ranges from one to 21 days, usually from six to 13 days.

Initial symptoms include fever, intense headache, sore throat, myalgia, and lymphadenopathy. Rashes usually appear one to three days after onset of fever which progress from maculopapules to vesicles, pustules and finally crusts that eventually fall off. In other cases, the first symptom could be a rash. Lesions can start on the face and spread over the body, extending to the hands and feet. It can also start on other parts of the body where contact was made, such as the genitals, anus or mouth.

Mpox is typically self-limiting, with symptoms resolving within two to four weeks. However, immunocompromised individuals may experience prolonged illness. Children, pregnant women and persons with underlying medical conditions are at elevated risk for severe disease and mortality. Treatment is mainly on symptomatic relief while antiviral medications (e.g., tecovirimat) can be considered for severe cases under emergency situations.

## Global Epidemiology

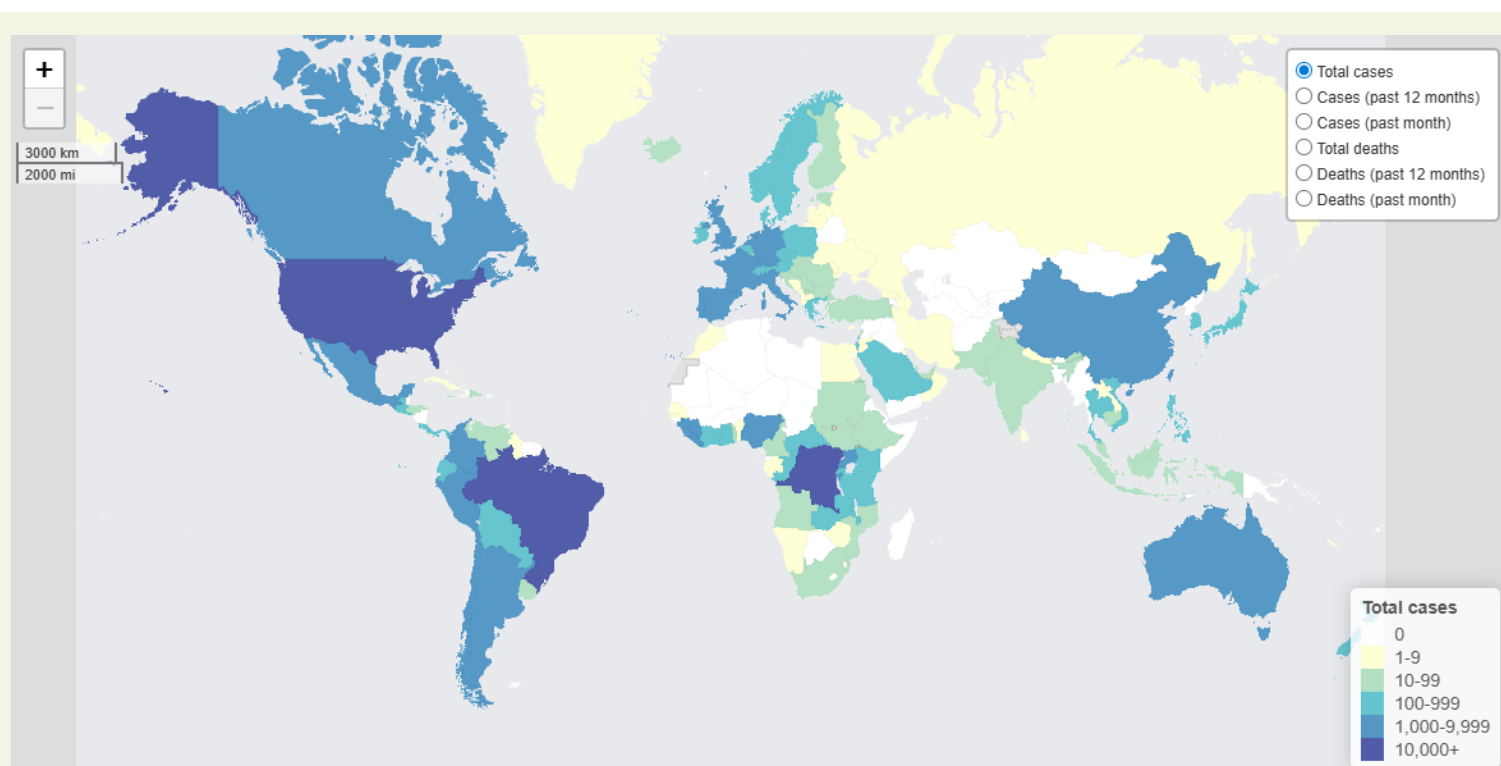


Figure 1 - Global distribution of confirmed mpox cases, as of October 2025.

## Multi-Country Mpox Outbreaks Starting in 2022

Since May 2022, multi-country outbreaks caused by clade IIb monkeypox virus have been reported in over 140 non-endemic countries globally. The World Health Organization (WHO) declared mpox as a Public Health Emergency of International Concern (PHEIC) for the first time during July 2022 to May 2023. Unlike historical outbreaks confined to endemic regions in Central and West Africa with sporadic zoonotic spillovers, this outbreak was characterised by sustained human-to-human

transmission, predominantly through sexual contact among MSM. Globally, the number of cases peaked in mid-2022, followed by a rapid decline due to behavioural changes in affected communities, targeted vaccination, and acquired immunity.

From January 1, 2022 to October 31, 2025, a cumulative total of 172 510 laboratory-confirmed cases of mpox have been reported to the WHO globally, with low overall mortality (<0.1% for clade IIb). Outside the WHO African region, the majority of mpox cases have occurred in adults (99%) and males (97%), with sexual transmission as the most common (88%) mode of transmission, and most cases (87%) identified among MSM. Co-infection with HIV was frequent (around 40%). Low-level clade IIb circulation persisted into 2025, mainly in urban sexual networks.

### Clade Ib Mpox Outbreak in Africa Starting in 2024

In 2024, Africa experienced a significant upsurge in mpox cases driven by a novel and more transmissible clade Ib monkeypox virus emerged in late 2023 in the DRC. This clade Ib virus spread rapidly in 2024 in Africa, particularly in DRC, with transmission sustained through sexual networks (including among sex workers) as well as household and close non-sexual contacts. The WHO declared a second PHEIC for mpox again from August 2024 to September 2025 in response to the upsurge in Africa involving clade Ib.

By late 2024, over 49 900 suspected cases and 1 100 deaths were reported across affected African countries. The outbreak situation has become stabilised in 2025. Following a sustained decline of cases, clearer understanding of mpox transmission dynamics and better response capacities in affected countries, the second PHEIC was terminated on September 5, 2025.

### Latest Developments

According to the WHO, following the termination of the second PHEIC on September 5, 2025, local transmission clusters of clade Ib mpox cases among MSM were noted in multiple countries outside Africa, indicating an expansion beyond travel-associated introductions. As of November 24, 2025, 43 confirmed clade Ib cases were reported across six WHO regions outside areas of sustained community transmission in Africa. Of note, 24 of these cases, reported in Italy, Malaysia, the Netherlands, Portugal, Spain, and the United States, had no recent travel history to affected regions, indicating local acquisition. Half of the 43 cases occurred among MSM, with transmission primarily linked to sexual networks. Other cases were associated with travel or household/secondary contacts. Many cases were mild or asymptomatic, potentially facilitating undetected spread. The WHO assesses the global public health risk from clade Ib as moderate for MSM with multiple partners (due to sexual amplification and potential subclinical infections) and low for the general population. Risks are elevated by waning immunity from prior clade IIb exposure or vaccination, limited vaccine access, and undiagnosed HIV.

### Local Epidemiology

As of December 16, 2025, Hong Kong has recorded 83 confirmed mpox cases since the first imported case in September 2022, including 15 cases in 2025. All cases were adult males aged 20 to 61, with the majority (96%) reporting MSM activity. About 33% of cases were HIV-infected patients. Sixteen patients (19%) had a history or concurrent sexually transmitted diseases. Almost all cases reported high-risk sexual behaviour during their incubation period, and are thus determined to be sexually-transmitted cases. Sixty-seven cases (81%) were locally acquired cases without recent travel history. The remaining 16 cases (19%) were imported cases.

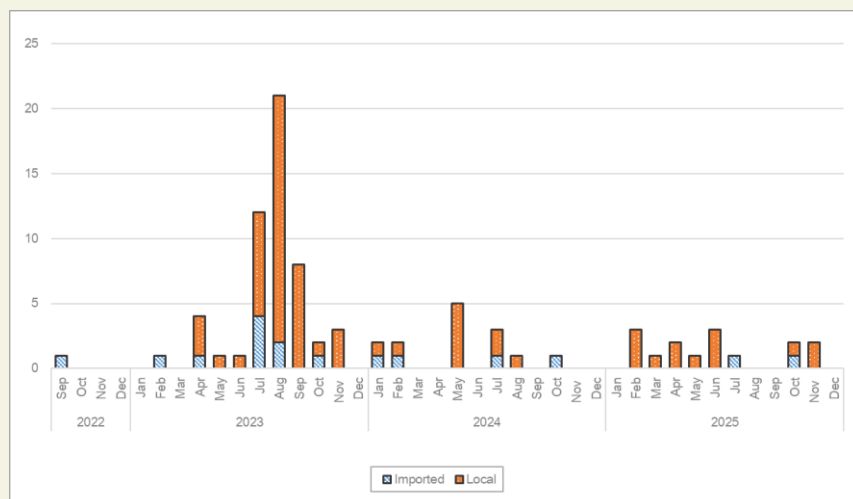


Figure 2 - Confirmed Mpox cases in Hong Kong since September 2022.



There was an upsurge in the third quarter of 2023, with most cases being locally acquired. The monthly number of reported cases reached its highest level of 21 in August 2023. Following a series of targeted public health measures, including targeted publicity on safer sex practice among high-risk populations and promotion of vaccination, the number of cases began to decrease in subsequent months. In 2024 and 2025, only sporadic cases were reported, with zero to five cases recorded per month.

Fifty-seven cases (69%) presented with lesions over their genital areas and 47 (57%) presented with systemic symptoms such as fever and lymphadenopathy. Overall, the median duration of illness (from onset to resolution of skin lesions) was 17 days (five to 26 days except two cases with prolonged hospitalisation for underlying diseases). All 83 cases have recovered fully without complications. Thirty-seven patients (45%) received at least one dose of smallpox or mpox vaccine. Amongst them, the duration of illness was shorter (median 15 days versus 18 days among the 46 unvaccinated patients [ $p=0.01$ ]). Vaccinated patients were significantly less likely to develop systemic symptoms than unvaccinated patients (odds ratio (OR) 0.24; 95% confidence interval 0.10 – 0.60) (Table 1).

Epidemiological investigations identified 21 close contacts among the cases, three of whom later tested positive during follow-up. Thus, the majority (96%) were sporadic, with three small clusters (each involving two cases). So far, no mpox cases imported from Africa or clade Ib cases have been recorded in Hong Kong. Genome sequencing showed that the virus circulating in Hong Kong is clade IIb.

Risk Assessment

Hong Kong, as a major international travel hub with extensive connections to worldwide destinations, faces the risk of importations of mpox cases due to frequent travel for business, tourism and family reasons. Ongoing community transmission in parts of South-East Asia such as Thailand, continues to sustain the risk of case importation.

Globally, although case numbers have declined in the past few months, clade Ib transmission has expanded beyond Africa, with evidence of local acquisition emerging in several non-endemic countries. This evolving situation underscores the ongoing importation risk. However, given the concentrated transmission pattern within specific high-risk groups (primarily MSM engaging in high-risk sexual practices), combined with robust public health measures, the risk of sustained or widespread mpox transmission in the broader Hong Kong community remains low.

Mpox Vaccination Programme in Hong Kong

Mpox vaccines provide protection against infection and severe disease. The WHO recommends targeted vaccination for high-risk groups, including individuals with high-risk sexual practices, certain health workers and frontline workers at risk of repeated exposure or laboratory and animal care personnel. Mass vaccination is not currently recommended. The third generation vaccine MVA-BN (JYNNEOS), a non-replicating live vaccine, has been recommended by the WHO in the current mpox outbreak.

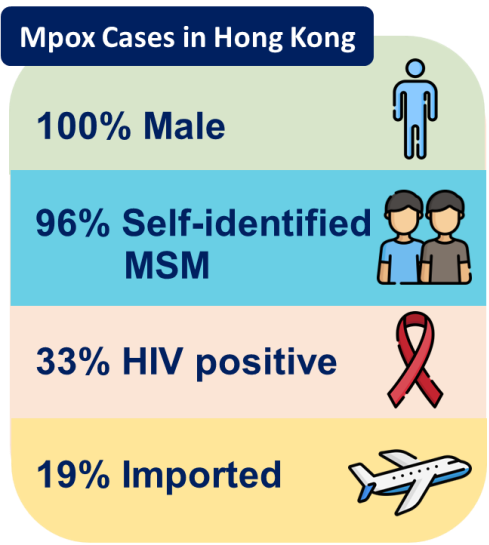


Figure 3 - Mpox cases in Hong Kong since September 2022 (n=83), as of December 16, 2025.

Table 1 - Comparison of duration of illness and disease severity in vaccinated and unvaccinated mpox patients.

Comparison of duration of illness and disease severity in vaccinated and unvaccinated mpox patients			
	Vaccinated cases	Unvaccinated cases	Statistical Analysis
Median duration of illness	15 days	18 days	$p=0.01$ (Mann-Whitney U test)
Systemic illness	17% (n=14)	40% (n=33)	OR 0.24 (95% CI: 0.10 – 0.60)
Mild illness (localised non-extensive rash with no systemic symptoms)	28% (n=23)	16% (n=13)	

After reviewing scientific evidence in 2022, the Centre for Health Protection (CHP) of the Department of Health's Scientific Committee on Vaccine Preventable Diseases and Scientific Committee on Emerging and Zoonotic Diseases has recommended the use of JYNNEOS as pre-exposure vaccination for individuals with high-risk sexual practices (e.g., having multiple sexual partners, sex workers, or having a history of sexually transmitted infection within the past 12 months), as well as post-exposure vaccination for close contacts of mpox cases. The Mpox Vaccination Programme was launched in Hong Kong in September 2022. As of October 2025, about 20 000 doses were administered to more than 11 000 persons.



## Conclusion

To address the risks posed by mpox, the CHP has developed a comprehensive Preparedness and Response Plan for Mpox, which delineates three response levels (Alert, Serious and Emergency) according to the risk of mpox affecting Hong Kong and its health impact on the community. Since the confirmation of the first imported case in September 2022, the Alert Response Level has been activated, with corresponding preventive measures implemented.

The termination of the PHEIC in September 2025 reflects a reduced global risk of mpox as assessed by WHO. Based on the latest risk assessment of WHO, the overall global public health risk of various mpox clades was low to moderate. Locally, reported cases have predominantly been sporadic and concentrated within high-risk groups, with all patients recovered without complications.

The CHP will maintain its robust public health measures to mitigate importation risks and prevent wider community transmission of mpox, including ongoing surveillance, targeted vaccination programme, and coordination with the WHO and other health authorities to ensure continued vigilance against the public health risk of mpox. To facilitate early detection and provide timely support, the CHP operates a telephone hotline (2125 2373) for those who suspect or are concerned that they may have had high-risk contact with confirmed cases to call the hotline to receive relevant confidential health advice.

## References

- <sup>1</sup> World Health Organization. (n.d.). *Emergencies: Situations*. World Health Organization. Retrieved December 16, 2025, from <https://www.who.int/emergencies/situations>
- <sup>2</sup> World Health Organization. (September 5, 2025). *WHO Director-General's opening remarks at the media briefing – 5 September 2025*. World Health Organization. <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing---5-september-2025>.
- <sup>3</sup> World Health Organization. (2025). *2022–25 Mpox outbreak: Global trends*. Geneva: World Health Organization. Retrieved December 16, 2025, from [https://worldhealthorg.shinyapps.io/mpox\\_global/](https://worldhealthorg.shinyapps.io/mpox_global/).
- <sup>4</sup> World Health Organization. (n.d.). *Mpox vaccination: Public advice*. World Health Organization. Retrieved December 16, 2025, from <https://www.who.int/news-room/public-advice/mpox-vaccination>.
- <sup>5</sup> Africa Centres for Disease Control and Prevention. (November 3, 2024). *Joint continental situation report on the Mpox epidemic in Africa: 23 September–03 November 2024*. Africa CDC. <https://africacdc.org/download/joint-continental-situation-report-on-the-mpox-epidemic-in-africa-23-september-03-november-2024/>.
- <sup>6</sup> World Health Organization. (December 2025). *Disease outbreak news: Mpox – Multi-country (DON587)*. World Health Organization. <https://www.who.int/emergencies/disease-outbreak-news/item/2025-DON587>.
- <sup>7</sup> World Health Organization. (n.d.). *Mpox vaccination: Public advice*. World Health Organization. Retrieved December 16, 2025, from <https://www.who.int/news-room/public-advice/mpox-vaccination>.



Feature in focus

# A Review of Rickettsial Diseases in Hong Kong

Reported by Mr Ian Siu-kiu YAU, Scientific Officer, and Dr HO Mei-lin, Senior Medical and Health Officer, Enteric and Vector-borne Disease Section, Communicable Disease Branch, CHP

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## Key Points

- Rickettsial diseases are primarily transmitted to humans through the bites of infected arthropod vectors, such as ticks, mites, lice and fleas.
- In the past 10 years, cases increased in summer and late autumn, linked to heightened activity of vectors and outdoor exposure.
- Most patients experienced mild to moderate illness and responded well to timely treatment. Severe complications are uncommon but possible, with two fatal cases recorded in the past 10 years.
- Protective clothing, use of insect repellents, avoiding vegetation, rat control and maintaining good personal hygiene are effective in reducing risk.

Rickettsial diseases are caused by a group of Gram-negative bacteria belonging to the family Rickettsiaceae. They are primarily transmitted to humans through the bites of infected arthropod vectors, such as ticks, mites, lice and fleas, or via contact with their faeces<sup>1</sup>.

In Hong Kong, the most commonly reported rickettsial diseases are spotted fever and scrub typhus, followed by urban typhus. Epidemic typhus has not been reported locally for several decades<sup>2</sup>.

## Background

Rickettsial diseases are traditionally classified into the spotted fever group and the typhus group. The typhus group is further subdivided into scrub typhus (caused by *Orientia tsutsugamushi*), urban typhus (caused by *Rickettsia typhi*) and epidemic typhus (caused by *Rickettsia prowazekii*). These diseases share overlapping clinical features but differ in their vectors, ecology and epidemiological patterns.

Symptoms are often non-specific, and overlap with other common febrile illnesses, typically including fever, chills, headache, myalgia, and rash. A characteristic eschar (a punched-out necrotic skin ulcer with surrounding erythema) at the site of the arthropod bite is frequently seen in spotted fever and scrub typhus, with surrounding lymph nodes becoming enlarged, swollen and tender. In severe cases, rickettsial infections can lead to serious complications (e.g. multi-organ failure) and death if untreated.

- ★ Spotted fever is primarily transmitted through the bites from infected **ticks** found in densely vegetated habitats with suitable animal hosts like dogs and rats. Human infection may also occur through contact of broken skin with crushed tick tissues or faeces.
- ★ Scrub typhus is acquired through the bites of infected **mites** that feed on the body fluids of animals such as rats in scrubby areas.
- ★ Urban typhus occurs when the faeces of infected **fleas** (commonly those living on rats and cats) get in contact with broken skin or mucous membranes, or when dried flea faeces are inhaled.
- ★ Epidemic typhus is transmitted when the crushed tissues or faeces of infected human body lice contaminate broken skin or when dried louse faeces are inhaled. Humans are incidental hosts only and do not play any role in maintaining the enzootic cycle<sup>3</sup>.

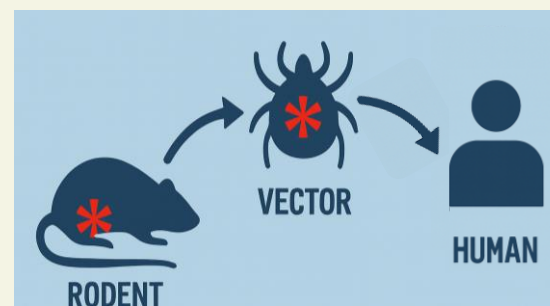


Figure 1 – A graphical presentation of the transmission of rickettsial diseases.

The incubation period for scrub, urban, and epidemic typhus is commonly seven to 14 days, while that of spotted fever is six to 15 days. Treatments for most rickettsial illnesses are similar, which include appropriate antibiotics and supportive care.

## Local situation

### Disease Trend and Seasonality

In Hong Kong, typhus and other rickettsial diseases are notifiable diseases under the Prevention and Control of Disease Ordinance (Cap. 599). From 2015 to 2024, the Centre for Health Protection (CHP) of the Department of Health recorded a total of 473 cases of typhus and other rickettsial diseases, with annual number of cases ranging from 27 to 63 (median: 48) (Figure 2). While year-to-year fluctuations were observed, there was no clear upward or downward trend. The majority of cases were spotted fever (43.8%) and scrub typhus (40.4%), with few cases of urban typhus and unclassified rickettsioses (i.e. cases without definitive species identification).



Cases occurred throughout the year, but with marked increase during the summer months (June to August), corresponding to periods of heightened mite and tick activity, and another rise in November and December when hiking activities increase during the period with cooler and favourable weather (Figure 3). This seasonal pattern highlights the influence of environmental and ecological factors on vector activity, as well as increased outdoor exposure among the public during peak periods.

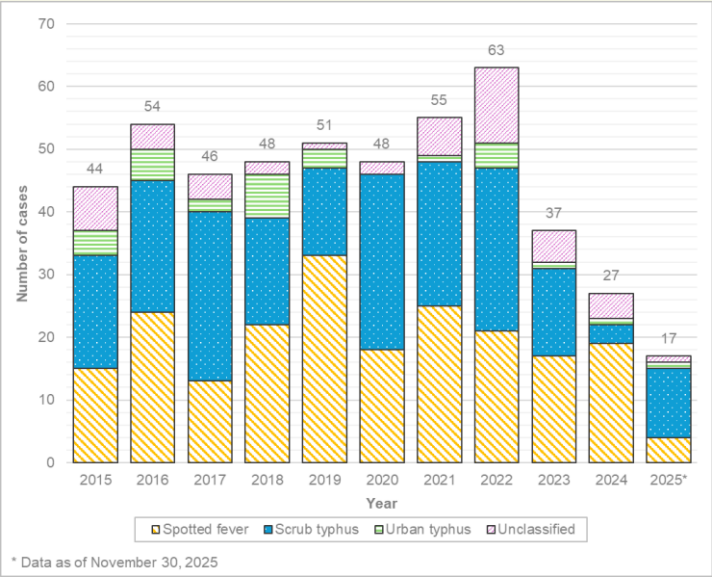


Figure 2 - Annual number of cases of rickettsial diseases recorded by the CHP, 2015-2025.

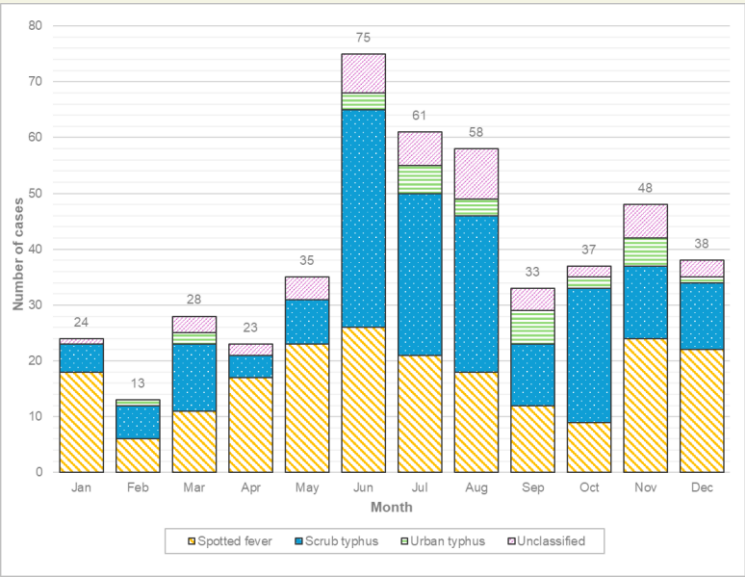


Figure 3 - Number of cases of rickettsial diseases recorded by the CHP during 2015-2024, by month.

Clinical and Epidemiological Characteristics

Spotted fever and scrub typhus accounted for vast majority of the cases. The main epidemiological and clinical features of the three rickettsial diseases recorded to the CHP from 2015 to 2024 are summarised in Table 1.

Most affected patients were adults, with median age of 58 years, 50 years and 45 years for spotted fever, scrub typhus and urban typhus respectively. The main presenting symptoms included fever, headache and myalgia. Skin rash was more common among spotted fever (92.3%) than scrub typhus (49.2%) and urban typhus (60.7%). Conjunctivitis and lymphadenopathy (i.e. enlarged lymph nodes) were present in a small proportion of cases. An eschar, a large punch-out skin ulcer at the site of bite by the vector, was identified in 24.6% of the scrub typhus cases, 19.3% of the spotted fever cases and 7.1% of the urban typhus cases. Nearly all patients required hospitalisation and the interval between symptom onset to hospital admission ranged from 4 to 6 days. Deranged liver function occurred in about one third of the cases for all three diseases. Two fatal cases were recorded, one case of spotted fever involving a 56-year-old male with good past health in 2020 and one case of scrub typhus involving a 62-year-old male with underlying illnesses in 2023. Both patients developed septic shock, disseminated intravascular coagulation and multiple organ failure, and subsequently died of rickettsial disease.

Table 1 - Epidemiological and clinical characteristics of patients, 2015 to 2024.

	Spotted fever	Scrub typhus	Urban typhus
Number of cases reported	207	191	28
Age range (median)	3-88 (58)	7-94 (50)	16-80 (45)
Number of days from symptom onset to admission (median)	1-30 (4)	1-59 (5)	1-10 (5.5)
Clinical features			
Fever	199 (96.1%)	187 (97.9%)	27 (96.4%)
Rash	191 (92.3%)	94 (49.2%)	17 (60.7%)
Headache	86 (41.5%)	90 (47.1%)	12 (42.9%)
Myalgia	87 (42.0%)	71 (37.2%)	12 (42.9%)
Conjunctivitis	12 (5.8%)	7 (3.7%)	1 (3.6%)
Lymphadenopathy	3 (1.4%)	18 (9.4%)	1 (3.6%)
Eschar	40 (19.3%)	47 (24.6%)	2 (7.1%)
Deranged liver function	75 (36.2%)	76 (39.8%)	10 (35.7%)
Required hospitalisation (% of total)	205 (99.0%)	191 (100.0%)	27 (96.4%)
Developed complications (% of total)	23 (11.1%)	39 (20.4%)	2 (7.1%)
History of hiking (% of total)	123 (59.4%)	92 (48.2%)	10 (35.7%)
Recalled history of bites (% of total)	69 (33.3%)	77 (40.3%)	7 (25.0%)

Most were sporadic cases, with one household cluster of spotted fever involving two members of the same household in 2017. Outdoor exposure was common: 59.4% of spotted fever, 48.2% of scrub typhus, and 35.7% of urban typhus cases reported a history of hiking. Overall, the findings demonstrated consistent epidemiological patterns, reinforcing the association between vegetated outdoor environments and rickettsial disease transmission in Hong Kong.

Situation in 2025

As of November 30, 2025, a total of 17 cases of typhus and other rickettsial diseases were recorded, comprising 11 cases of scrub typhus, four cases of spotted fever, one case of urban typhus and one non-classified case. All were sporadic cases. The age profile is consistent with previous observations, with median age of 55 years and 58 years for spotted fever and scrub typhus respectively. Fever was reported in majority of cases (90.9-100.0%), while rash remained a distinguishing feature of spotted fever (100.0%). Headache and myalgia were also frequently observed. Eschars were more prominent among spotted fever cases (50.0%) but less common in scrub typhus (18.2%). All patients required hospitalisation, and no complications were documented. Outdoor exposure patterns continued: 50% of spotted fever and 45.5% of scrub typhus cases reported a history of hiking. Overall, the epidemiological characteristics observed in 2025 aligned with the patterns from the previous decade, with scrub typhus and spotted fever remained as the predominant rickettsioses locally. Epidemiological and clinical features for cases in 2025 are summarised below in Table 2.

Table 2 - Epidemiological and clinical characteristics of patients, 2025\*.

	Spotted fever	Scrub typhus
Number of cases reported	4	11
Age range (median)	29-66 (55)	18-81 (58)
Number of days from symptom onset to admission (median)	6-7 (5.5)	3-11 (4)
Clinical features		
Fever	4 (100.0%)	10 (90.9%)
Rash	4 (100.0%)	6 (54.5%)
Headache	2 (50.0%)	6 (54.5%)
Myalgia	3 (75.0%)	5 (45.5%)
Conjunctivitis	0 (0.0%)	1 (9.1%)
Lymphadenopathy	0 (0.0%)	2 (18.2%)
Eschar	2 (50.0%)	2 (18.2%)
Deranged liver function	0 (0.0%)	4 (36.4%)
Required hospitalisation (% of total)	4 (100.0%)	11 (100.0%)
Developed complications (% of total)	0 (0.0%)	3 (27.3%)
History of hiking (% of total)	2 (50.0%)	5 (45.5%)
Recalled history of bites (% of total)	2 (50.0%)	4 (36.4%)

\* Data as of November 30, 2025

Conclusion

The epidemiological patterns of rickettsial diseases in Hong Kong has remained stable over the past decade. Spotted fever and scrub typhus continue to be the predominant infections, with urban typhus reported infrequently. The association with outdoor activities in vegetated environments underscores the role of vector ecology and human behaviour in disease transmission. Although most patients experienced mild to moderate illness and responded well to timely treatment, the potential for severe complications underscores the importance of maintaining clinical vigilance, particularly during peak seasons (i.e. warmer months). Public education on personal protective measures against arthropod bites and environmental vector control are essential in mitigating the impact of rickettsial diseases in Hong Kong.



Prevention on Typhus and Other Rickettsial Diseases



The vectors transmitting scrub typhus and spotted fever are mainly found in vegetated areas; preventive measures should be taken when visiting rural areas to avoid being bitten by these vectors.

**Pre-visit preparation:**

- ✦ Wear loose, light-coloured, long-sleeved tops and trousers
- ✦ Wear shoes that cover the entire foot, avoid wearing sandals or open shoes
- ✦ Tuck trousers into socks or boots to prevent arthropods from reaching the skin
- ✦ Use DEET-containing insect repellent on exposed parts of the body and clothing
  - ❖ Pregnant women and children of 6 months or older can use DEET-containing insect repellent. In general, use DEET of up to 30% for pregnant women and up to 10% for children.
- ✦ Avoid using fragrant cosmetics or skin care products
- ✦ If both insect repellents and sunscreen are used, apply insect repellents after sunscreen

**During the visit:**

- ✦ Stay on footpaths and avoid walking through vegetation. Do not brush along the vegetation at the sides of footpaths
- ✦ Avoid resting on vegetation, or at humid and dark places
- ✦ Do not hang clothing on trees or vegetation
- ✦ Do not feed wild or stray animals
- ✦ Re-apply insect repellents according to instructions

**If an attached tick is found on the body:**

- ✦ Gently remove it by grasping its head with tweezers or fine-tipped forceps close to the skin, then disinfect the bite area and wash hands with soap and water
- ✦ Do not crush or twist the tick during removal

**Control of vectors and the reservoir of the diseases are also useful preventive measures:**

- ✦ Disinfest your pets regularly
- ✦ Inspect and disinfest pet beddings regularly
- ✦ Trim vegetation particularly the grass in your premises
- ✦ To prevent rat infestation, the best method is to deprive their food and shelter. Store food and dispose of garbage properly. Holes at the wall and ceiling should be repaired and filled

Besides, maintaining good personal hygiene is effective to prevent the spread of epidemic typhus as lice can live on the human body.

For details about the use of insect repellents and the key points to be observed, please refer to 'Tips for using insect repellents' from <https://www.chp.gov.hk/en/features/38927.html>.

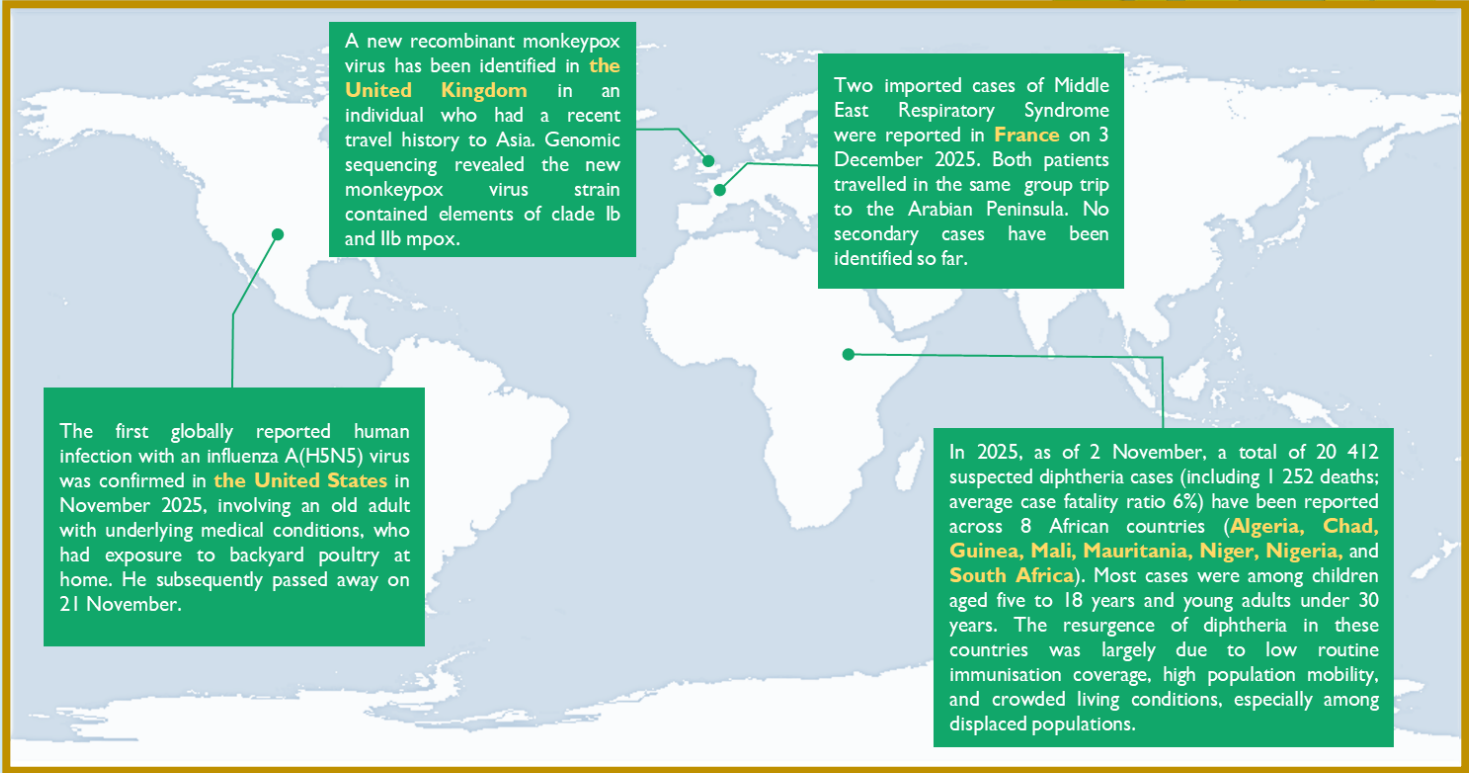
**References**

- <sup>1</sup> Centers for Disease Control and Prevention. Rickettsial Diseases [Internet]. 2025. Available from: <https://www.cdc.gov/yellow-book/hcp/travel-associated-infections-diseases/rickettsial-diseases.html#:~:text=Symptoms%20common%20to%20many%20rickettsial.within%201%20week%20of%20infection.>
- <sup>2</sup> Centre for Health Protection. Number of notifiable infectious diseases by month [Internet]. 2025. Available from: <https://www.chp.gov.hk/en/statistic/24012.html>.
- <sup>3</sup> Walker DH, Fishbein DB. Epidemiology of rickettsial diseases. Eur J Epidemiol. 1991 May;7(3):237-45. doi: 10.1007/BF00145672. PMID: 1884775.



# Global Disease Snapshot

## Major Outbreaks and Emerging Infections



### Sources of information

World Health Organization: <https://www.who.int/emergencies/disease-outbreak-news/item/DON588>; <https://www.who.int/emergencies/disease-outbreak-news/item/2025-DON590>

European Centre for Disease Prevention and Control: <https://www.ecdc.europa.eu/en/news-events/cases-middle-east-respiratory-syndrome-coronavirus-mers-cov-travellers>

Ministry of Health, France: <https://sante.gouv.fr/actualites-presse/presse/communiqués-de-presse/article/deux-cas-de-mers-cov-de-retour-de-l-etranger-identifiés-sur-le-territoire>

Washington State Department of Health: <https://doh.wa.gov/newsroom/grays-harbor-county-resident-dies-complications-avian-influenza>

UK Health Security Agency: <https://www.gov.uk/government/news/ukhsa-detects-first-case-of-clade-1b-mpox>

## News in Brief



### Guidelines on Prevention of Communicable Diseases in Residential Care Homes for the Elderly (4th Edition)

The fourth edition of the Guidelines on Prevention of Communicable Diseases in Residential Care Homes for the Elderly (RCHEs) is now made available on The Centre for Health Protection (CHP) website. It includes information on transmission of communicable diseases, advice on prevention, infection control measures including both standard and transmission-based precautions, as well as management of outbreaks of infectious diseases in RCHE settings. The guidelines were jointly developed by the Primary & Community Services of the Hospital Authority, Licensing Office of Residential Care Homes for the Elderly of the

Social Welfare Department, Elderly Health Service of the Department of Health (DH), Communicable Disease Branch and Infection Control Branch, CHP, DH.

Information on newly added statutory notifiable communicable diseases in recent years has been supplemented, including Zika Virus Infection, COVID-19, melioidosis and mpox. Information on preventive measures of some other communicable diseases, such as dengue fever, chikungunya fever, scabies, pulmonary tuberculosis and HIV infection, has also been enhanced. The sections on multi-drug resistant organisms (MDROs) have been updated in accordance with the latest infection control advice on MDROs for RCHEs promulgated by the CHP. In addition, the principles of proper environmental cleaning and disinfection are emphasised. Relevant training materials, such as posters and videos for donning and doffing personal protective equipment, have been updated as well, with QR codes and hyperlink available for easy access of health promotional materials. Furthermore, recommendations on crucial practices have been enriched, including food safety and hygiene, health checking of residents, linen handling vaccination for the residents, and mask recommendations for visitors to RCHEs. It is crucial that all staff members and residents of RCHEs understand their roles and comply with the measures for prevention of communicable diseases. By providing pragmatic recommendations to RCHE staff, it is expected that transmission of infections can be minimised in this high-risk setting.

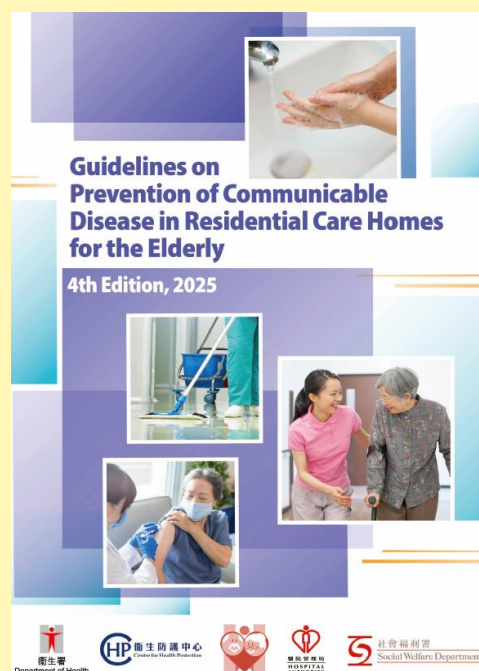


Figure – Cover of the Guidelines on Prevention of Communicable Diseases in Residential Care Homes for the Elderly (4th Edition).

### DH participated in WHO's IHR Exercise Crystal 2025

The CHP participated in the annual table-top International Health Regulations (IHR) Exercise Crystal organised by the World Health Organization (WHO)'s Regional Office for the Western Pacific (WPRO) on December 3. Representatives of Agriculture, Fisheries and Conservation Department (AFCD) and the Food and Environmental Hygiene Department (FEHD) also participated in the exercise. The IHR Exercise Crystal 2025 simulated a scenario of human outbreaks of a novel influenza A infection related to dairy farms, with sustained human-to-human transmissions and further spread to many countries. The Exercise provided an invaluable opportunity for Hong Kong to strengthen the cross-departmental collaboration mechanism against emerging respiratory diseases. Representatives of the CHP, the AFCD and the FEHD coordinated the cross-sectoral response according to the evolving scenario and reported to the WPRO. This Exercise also confirmed the smooth operation of the communication mechanism between Hong Kong, the WHO, and relevant health authorities under the IHR.



Photo 1 – CHP colleagues participated in the annual IHR Exercise Crystal organised by the WPRO, together with the representatives of the AFCD and the FEHD, to enhance emergency response mechanisms and cross-sectoral collaboration capabilities.



Photo 2 – The exercise host of the WPRO concluded the exercise with a debriefing to review the exercise's achievements. More than 30 countries and areas in the WPRO region participated in this year's exercise.

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

The CHP recorded two local sporadic cases of NF caused by *Vibrio vulnificus* (*V. vulnificus*) infection on November 27 and December 12 respectively.

The first case involved an 86-year-old male with underlying illnesses residing in Kowloon City. He bought a marine fish from a wet market in Kowloon City on November 20 and sustained an injury to his left ring finger while preparing it at home on the same day. He presented with painful swelling and redness of the left ring finger and palm on November 21 and was admitted to a public hospital on November 22. Excisional debridement and amputation of the infected finger were performed and his condition was stable after antibiotics treatment.

The second case involved an 86-year-old male with underlying illnesses residing in Wan Chai. He had a history visiting a wet market with seafood stalls in Causeway Bay before onset, but he could not recall any skin abrasion, contact with or consumption of raw seafood. He presented with sudden onset painful swelling of right ankle on December 10 and was admitted to a public hospital on December 11. He developed progressive right lower limb erythema with blisters. Multiple excisional debridement of right leg was performed. His condition was stable after antibiotics treatment.

### Two local cases of severe scarlet fever

The CHP recorded two local sporadic cases of severe scarlet fever on November 26 and December 10 respectively.

The first case involved a 6-year-old girl with good past health residing in Sai Kung. She developed fever, cough, runny nose and sore throat on November 20 then sandpaper rash on November 23, and was admitted to a public hospital on November 24. Blood sample collected on November 24 grew *Streptococcus pyogenes*. She subsequently developed septic shock and required intensive care. Inotropes and intravenous antibiotics were administered. Her condition improved and she was discharged on December 8. Both her household and school contacts remained asymptomatic.

The second case involved a 13-year-old boy with good past health residing in Yuen Long. He presented with fever, cough with sputum, shortness of breath, and intermittent chest discomfort on November 26, followed by repeated vomiting on November 28, and was admitted to a public hospital on the same day. He was complicated with fulminant myocarditis on November 29 and required intensive care. A tracheal aspirate collected on November 29 grew *Streptococcus pyogenes*. Sandpaper rash was noticed on December 6. His condition was stabilised after treatment. Both her household and school contacts remained asymptomatic.

### Four local cases of psittacosis

The CHP recorded four local cases of psittacosis in December (including a family cluster of two cases).

The first case involved a 68-year-old man with underlying illnesses residing in Tai Po. He developed fever, cough, shortness of breath and dizziness on November 26 and was admitted to a public hospital on December 1. Chest X-ray showed right middle zone haziness. His sputum collected on December 2 was tested positive for *Chlamydia psittaci* DNA. He was treated with antibiotics and his condition remained stable. He did not keep any birds at home. He worked as a cleaner and recalled seeing wild birds while working at outdoor areas. His household contacts and co-workers remained asymptomatic.

The second case involved a 69-year-old man with good past health residing in Kwun Tong. He developed fever, cough, shortness of breath, myalgia, headache and runny nose on November 30. He was noted to have lower limb weakness and slurring of speech on December 6 and was admitted to a public hospital on the same day. Bronchoalveolar lavage sample collected on December 8 was tested positive for *Chlamydia psittaci* DNA. His condition was serious. He did not keep any birds at home. According to his household contact, he has a private rooftop at home and wild birds were spotted there. There was no history of travel during the incubation period. His household contact remained asymptomatic.



The third and fourth cases involved a 48-year-old woman and a 50-year-old man from the same family. Both had good past health, residing in Kwai Tsing. The female patient developed fever, myalgia, and shortness of breath on December 2, while the male patient developed a fever on December 3. Both were admitted to a private hospital on December 7. Bronchoalveolar lavage samples collected from them on December 8 tested positive for *Chlamydia psittaci* DNA. Their conditions remained stable throughout, and they were discharged on December 14 after treatment with antibiotics. They did not keep birds at home. They reported seeing pigeons in the vicinity of their home frequently but they did not have direct contact with birds. The other household member remained asymptomatic.

Details of the cases were referred to the AFCD and FEHD for follow-up.

### **A local case of listeriosis**

The CHP recorded a local case of listeriosis on December 2, involving a 63-year-old male with underlying illnesses residing in North District. He was admitted to a public hospital on November 26 for stroke management. He developed fever on November 29 while in hospital and his blood specimen collected on November 30 grew *Listeria monocytogenes*. He was treated with antibiotics and his condition improved. During the incubation period, he had no travel history and no high-risk exposure could be recalled. His household contact remained asymptomatic.

### **A case of brucellosis**

The CHP recorded a case of brucellosis on December 18, involving a 63-year-old man residing in Central & Western District. From 2012 to 2022, he worked as an abattoir worker at a farm in Chinese Mainland. In 2021, he was diagnosed with brucellosis with spinal involvement, which was treated with surgery and antibiotics in Chinese Mainland. He moved to Hong Kong in 2022. He remained asymptomatic until he presented with left loin pain, fever, headache and hematuria on December 8. He was admitted to a public hospital on December 13. Blood culture collected yielded *Brucella* species. The clinical diagnosis was relapse of brucellosis. He was treated with antibiotics and was in stable condition. During incubation period, he had day trips to Shenzhen. He did not visit any farm or zoo, or have any high-risk exposure both in Hong Kong and Shenzhen. His household contacts in Hong Kong remained asymptomatic.