# Epidemiology and Latest Outbreak of Chikungunya Fever in Foshan

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31 July 2025





## Outline of Presentation

- Background
- Global situation
- Latest situation in Guangdong
- Local situation
- Updates on actions taken by CHP





# Background





# Background on Chikungunya Fever (CF)

- Chikungunya fever (CF) is a mosquito-borne viral disease caused by the ribonucleic acid alphavirus chikungunya virus (CHIKV)
- It was first identified in Tanzania in 1952
- The name "chikungunya" derives from the Kimakonde language of southern Tanzania, meaning "to become contorted," which describes the stooped posture of patients afflicted by its hallmark symptom of

severe joint pain





Capsic

RNA Viral

Membrane

Envelope

# Transmission of Chikungunya Fever

- CHIKV is mainly transmitted to humans through the bites of infective female Aedes mosquitoes
- When a mosquito bites a patient with CF, it may become infected and, after an extrinsic incubation period of about 2 - 9 days, transmit the virus to other individuals through subsequent bites
- The primary vector *Aedes aegypti* is not found in Hong Kong, but *Aedes albopictus*, which can also spread the disease, is a mosquito commonly found in the locality





# Symptoms of Chikungunya Fever (1)

- In symptomatic patients, disease onset is usually 3 8 days (range 2 12 days) after the bite of an infected mosquito
- Its symptoms are similar to those of dengue fever (DF) and Zika virus infection
- More than half of patients with CHIKV infection will experience symptoms that typically include acute onset of fever and severe joint pain





# Symptoms of Chikungunya Fever (2)

- The joint pain is typically symmetric and affects multiple joints especially small joints on limbs, such as those in the wrists, hands, ankles, and feet
- Larger joints like knees, elbows, shoulders, and hips can also be affected, though less commonly
- Other common symptoms include muscle pain, headache, nausea, fatigue, rash, and conjunctivitis





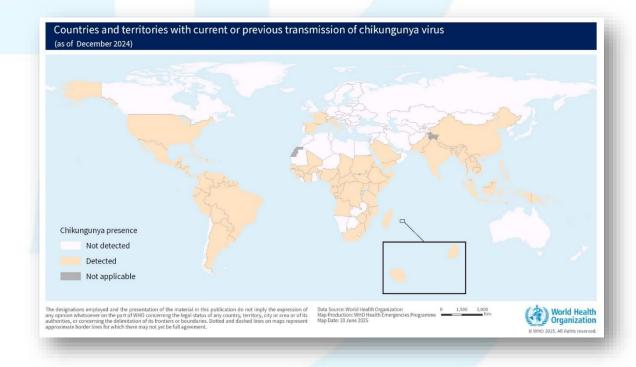
# Global situation





# Global situation of Chikungunya Fever

- According to the World Health Organization, CHIKV transmission has been recorded in more than 110 countries and territories across Asia, Africa, Europe and the Americas
- Exposing about 5.5 billion people to the risk of infection







# Latest global situation

- Since the beginning of 2025, and as of early June, approximately 220 000 CHIKVD cases and 80 CHIKVD-related deaths have been reported in 14 countries/territories
- The Americas have reported the highest number of CF cases, with Brazil reported over 140,000 cases, followed by Argentina reporting more than 2,500
- As of June 2025, over 33 000 CHIKVD cases were reported in Asia from India, Sri Lanka and Pakistan
- As of 16 July 2025, two countries in Europe have reported cases of CF this year: France (38 cases) and Italy (1 case)



# Latest situation in Guangdong





# Latest outbreak in Guangdong

- In mid-July 2025, the Guangdong Provincial Disease Control and Prevention Administration reported an outbreak of CF linked to imported cases in Shunde District (順德區) of Foshan City (佛山市), initially involving nearly 500 local cases
- In the subsequent weeks, there has been a significant increase in the number of cases in Shunde District and the outbreak spread to neighboring districts in Foshan City
- Most recently, other cities in Guangdong Province also reported cases





# Latest outbreak in Guangdong

- As of 26 July, a total of 4,824 cases were reported in Guangdong Province. In the week (20 to 26 July), new cases were reported in:
  - 2,882 in Foshan City (mostly in Shunde District);
  - 22 in Guangzhou (廣州);
  - 18 in Zhongshan (中山);
  - 3 each in Dongguan (東莞), Zhuhai (珠海), and Heyuan (河源);
  - 2 each in Jiangmen (江門), Yangjiang (陽江), and Zhaoqing (肇慶); and
  - 1 each in Qingyuan (清遠), Shenzhen (深圳), and Zhanjiang (湛江)
- All cases were mild, with no severe cases or deaths





## Imported CF cases in Macao

- The Health Bureau of Macao SAR reported 6 imported CF cases since mid-July 2025.
- The cases were imported from
  - Shunde District, Foshan City (3);
  - Nanhai District of Foshan City (1);
  - The Philippines (1); and
  - Sri Lanka (1)

### 衛生局接獲1例輸入性基孔肯 雅熱病例報告

來源: 衛生局(SS)

發布日期: 2025年7月29日 21:00





# Local situation





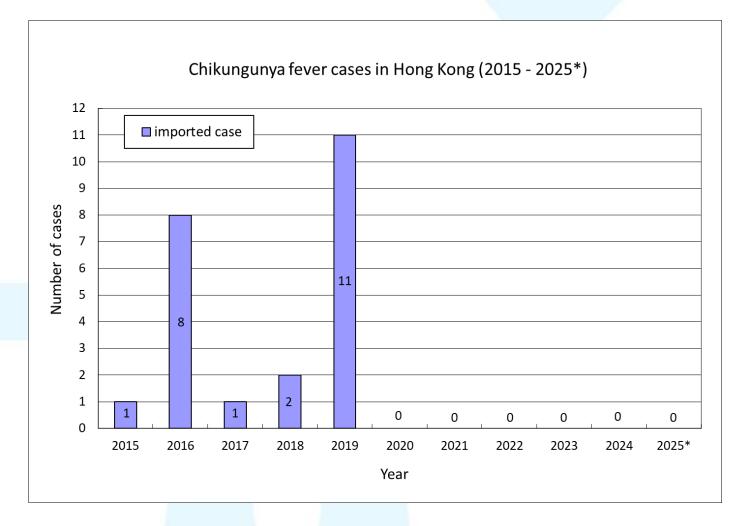
# Local situation of Chikungunya Fever

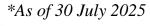
- CF has been listed as a notifiable infectious disease in Hong Kong since March 2009
- Between 2015 and 2025\*, 23 confirmed CF cases were recorded in Hong Kong, ranging from zero to 11 cases per year

  \*As of 30 July 2025
- All of them were imported cases
- The last case was recorded in November 2019
- There have been no confirmed CF cases in Hong Kong since 2020













## Epidemiology of local CF cases

- The cases involved 11 males and 12 females aged between 8 and 69 years (median: 45 years)
- All had travel history to Southeast Asian countries during the incubation period
- The majority of cases presented with fever (100%), joint pain (91%) and rash (57%)
- Except a family cluster consisting of four cases with travel history to Thailand recorded in 2019, all cases were sporadic infections with no other epidemiologically linked cases





# Country of importation of imported cases recorded in Hong Kong (2015 – 2025\*)

Country/ area of infection	Number of cases
India	8
Thailand	8
Myanmar	3
The Philippines	3
Undetermined	$oldsymbol{1}$ (travelled to multiple countries during incubation period)
Total	23

\*As of 30 July 2025





# Actions taken by CHP





## Risk Assessment

- Risk of importation of CF cases is high:
  - Hong Kong is an international travel hub
  - Frequent travel between Guangdong, Hong Kong and Macao
- Risk of local transmission arising from imported cases cannot be excluded:
  - Increase in temperature and rainfall in summer, which would worsen mosquito breeding
  - Compared to DF, members of the public and healthcare professionals are in general less familiar with CF



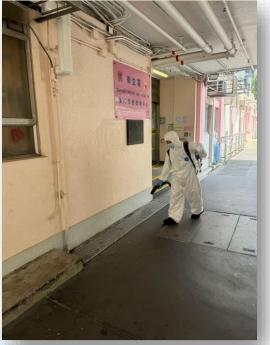


# Enhanced Measures by DH (1)

- Solicit support of PCSC for vector control
- Port health measures and travel advice
- Maintain surveillance
- Epidemiological investigation for reported cases











# Enhanced Measures by DH (2)

- Enhancing local testing capabilities
- Arranging mosquito-free environment for treatment
- Supply of medicines
- Reminder to healthcare professionals to report CF cases







16 July 2025

Dear Doctor

#### An Outbreak of Chikungunya Fever Reported in Guangdong

We would like to draw your attention to an outbreak of chikungunya fever (CF) reported in Shunde District of Foshan City, Guangdong Province (廣東省佛山市 順德區) and urge you to remain vigilant against this disease

On 15 July, the Guangdong Provincial Disease Control and Prevention Administration (廣東省疾病預防控制局) reported an imported-related outbreak of CF in Shunde (順徳) District of Foshan City. Epidemiological investigation with active case finding revealed 478 confirmed cases, primarily concentrated in three rural towns: Lecong Town (樂從鎮), Beijiao Town (北滘鎮), and Chencun Town (陳村鎮) of Shunde All of them were mild cases. The health authority in Guangdong Province have implemented control measures and public health education to prevent further

CF outbreaks are ongoing worldwide. In 2025, as of May, approximately 220,000 cases and 80 CF-related deaths have been reported in the Americas, Africa,

CF has been listed as a statutory notifiable disease in Hong Kong since March 2009. In the past ten years (2015-2024), the Centre for Health Protection (CHP) recorded 23 confirmed cases, ranged from zero to 11 cases per year. All of them were imported infections from endemic areas including India, Indonesia and Thailand. The most recent case, imported from India, was recorded in November 2019

CF is most commonly transmitted to humans through the bites of infective #生料準中心が衛生者 female Aedes mosquitoes. The primary vector Aedes aegypti is not found in Hong Kong, but Aedes albopictus, which can also spread the disease, is a mosquito The Centur for Health commonly found in the locality. The incubation period ranges from 2 to 12 days, professional arm of the commonly 3 to 8 days.

香港九龍亞哲老街 147C 號 3 檔 3/F, 147C Argyle Street, Kowloon, Hong Kong

#### st Chikungunya Fever

ate of the recent outbreak of chikungunya 市) of Guangdong Province, and urge you to ssed that the risk of importation of CF to v of local transmission

authorities in Guangdong reported a total of tricts of Foshan City, namely Shunde Distric anhai District (南海區), Sanshui District (三 fajority of the cases were reported in Shunde were mild, with no severe cases or deaths. rted CF cases from Foshan City.

orldwide. According to the World Health recorded in more than 110 countries/regions cases and 80 CF-related deaths have been rope and Asia. Around one third of the estimated to be infected with CF. There had t Asia, Bangladesh, and India, as well as cases orted in France and Italy

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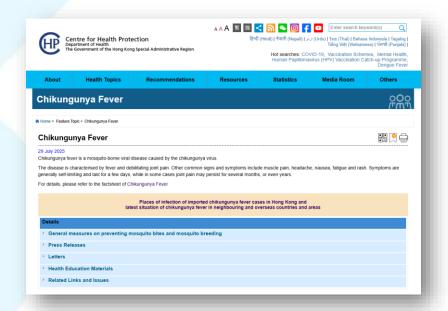




# Enhanced Measures by DH (3)

- Risk communication and publicity
  - Issued press releases
  - Issued letters to schools and institutions
  - Set up of Chikungunya thematic webpage
  - Enhancing public education on the prevention of CF through various online and offline channels







Department of Health

### **End of Presentation**

Thank you



