

# Hong Kong's mpox situation and public health measures

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Centre for Health Protection

7 December 2023





## Outline

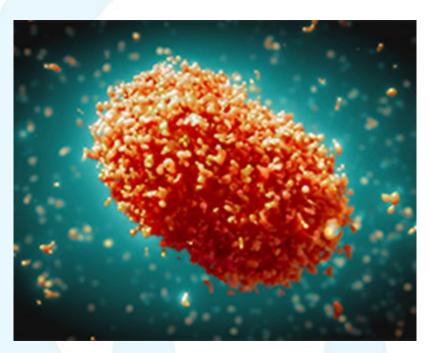


Photo from WHO website

- Preparedness & response plan
- Enhanced surveillance
- Case / contact management
- Local situation
- Mpox vaccination
- Risk communication





HEALTH & COMMUNITY

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### Monkeypox response plan set

June 10, 2022



The Government today gazetted the inclusion of monkeypox as a statutorily notifiable infectious disease and launched a preparedness and response plan which will be activated promptly if monkeypox emerges or causes an outbreak in Hong Kong.

Noting that Hong Kong has not recorded any confirmed monkeypox human infection cases so far, the Centre for Health Protection said such cases have been reported in some endemic and non-endemic countries recently and the World Health Organization (WHO) has urged governments around the world to be well-prepared.

To enhance Hong Kong's surveillance and response capability on the disease, the Government published a notice in the gazette to include monkeypox as a scheduled infectious disease under the Prevention & Control of Disease Ordinance (Cap 599) and identify it as a specified disease under the Prevention & Control of Disease Regulation (Cap 599A).

According to the regulation, medical practitioners are required to notify the Department of Health if they suspect any monkeypox case.

As for the preparedness and response plan, it adopts a three-tier response level of Alert, Serious and Emergency which will be activated based on risk assessment and the health impact brought by monkeypox on the community.



### The Preparedness and Response Plan for Mpox

- Rolled out on 10 June 2022.
- A three-tier response level system for representing the risk of mpox affecting Hong Kong and its health impact to the community: Alert, Serious and Emergency
- Plan developed taking reference from similar plans for other communicable diseases with public health significance
- Following an imported case of mpox recorded on 5 September 2022, the Government activated the Plan to Alert level, reflecting a low immediate health impact to local population

Preparedness and Response Plan for Monkeypox
The Government of the Hong Kong Special Administrative Region
(2022)

#### A. Introduction

Monkeypox is a zoonosis caused by monkeypox virus. Infection could occur when a person comes into contact with the virus from infected animals, infected humans or contaminated materials. Humans could get infected from various wild animals, such as some species of non-human primates and rodents, etc., through bite or scratch, or direct contact with their body fluids. According to the World Organisation for Animal Health (WOAH), so far there is no documented evidence of domestic animals, such as cats and dogs, being affected by monkeypox virus. There is also no evidence or reports of livestock infected with monkeypox virus. Human-to-human transmission is also possible through respiratory droplets during prolonged face-to-face contact or direct contact with body fluids. Transmission can also occur via the placenta from mother to fetus (congenital monkeypox). The incubation period is usually from 6 to 13 days, with a range from 5 to 21 days. The longest documented chain of transmission in a community was nine successive person-to-person infections.

2. The virus was first discovered in 1958 at an animal facility in Denmark. The nature reservoir of monkeypox virus remains unknown, though wild rodents are the most likely. Since first reported in humans in 1970 in the Democratic Republic of Congo, most of the reported outbreaks have occurred in Central and West Africa where the disease is endemic. In 2003, the first monkeypox outbreak outside of Africa was recorded in the United States of America affecting over 70 cases which was linked to contact with infected pet prairie dogs. These pets had been housed with Gambian pouched rats and dormice imported from Ghana. Monkeypox has also been reported in travellers from Nigeria to Israel in September 2018, to the United Kingdom in September 2018, December 2019, May 2021 and May 2022, to Singapore in May 2019, and to the United States of America in July and November 2021. Since May 2022, cases of monkeypox have been reported in non-endemic countries in Europe, North America and Australia. According

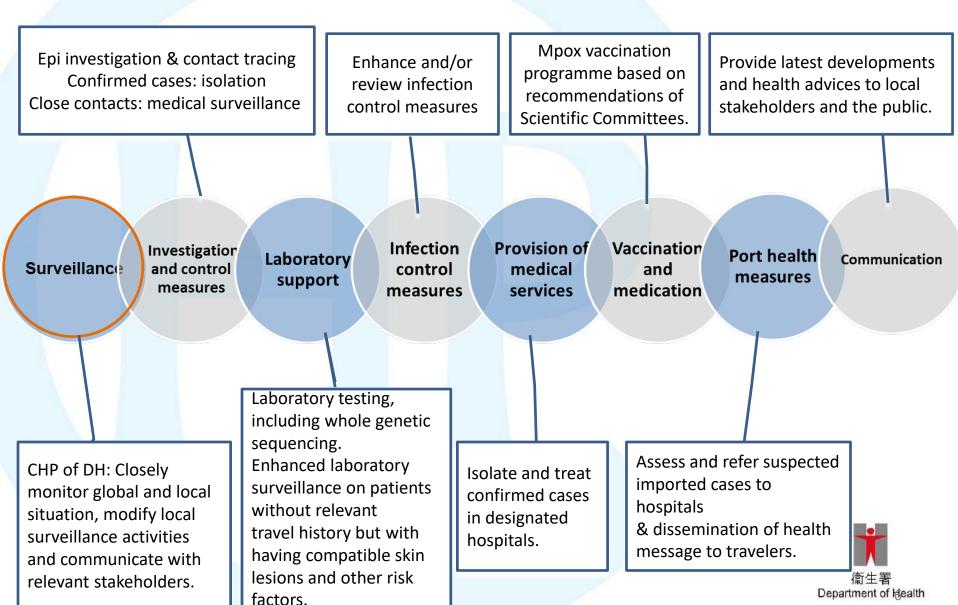


### The Preparedness and Response Plan for Mpox

- Adopts three-tier response level (Alert, Serious and Emergency) which will be activated based on risk assessment and the disease's health impact on the community
- Defines the corresponding command structures to be set up at each response level, activation and standing down mechanism and public health actions to be taken at each response level
- Provides the framework of a response system for agreed and co-ordinated efforts amongst different government departments and organisations



### What had been done at Alert level?





# Mpox has been listed as a statutorily notifiable infectious disease under Cap. 599 Prevention and Control of Disease Ordinance since 10 June 2022

#### PART 2

#### NOTIFICATION OF INFECTIOUS DISEASES

#### 4. Duty of medical practitioners to notify Director

- (1) If a medical practitioner has reason to suspect the existence of a case of a scheduled infectious disease, whether or not the person infected has died, he shall notify the Director immediately.
- (2) A notification under subsection (1) must be in a form specified by the Director and be signed by the medical practitioner.
- (3) If after notifying the Director, the medical practitioner verifies either that the scheduled infectious disease existed or that it did not exist, he shall immediately notify the Director.
- (4) A person who contravenes subsection (1) or (3) or knowingly gives the Director any information that is false in a material particular commits an offence and is liable on conviction to a fine at level 2.



## Central Notification Office (CENO) 使簡生防護中心











#### **CENO On-line**

https://cdis.chp.gov.hk/CDIS CENO ONLINE/ceno.html

Fax 2477 2770

Tel 2477 2772

Email diseases@dh.gov.hk

Mail 3/F, 147C Argyle

Street, Kowloon

Outside office hours, report urgent cases to Medical Control Officer MCO (7116 3300 call 9179)





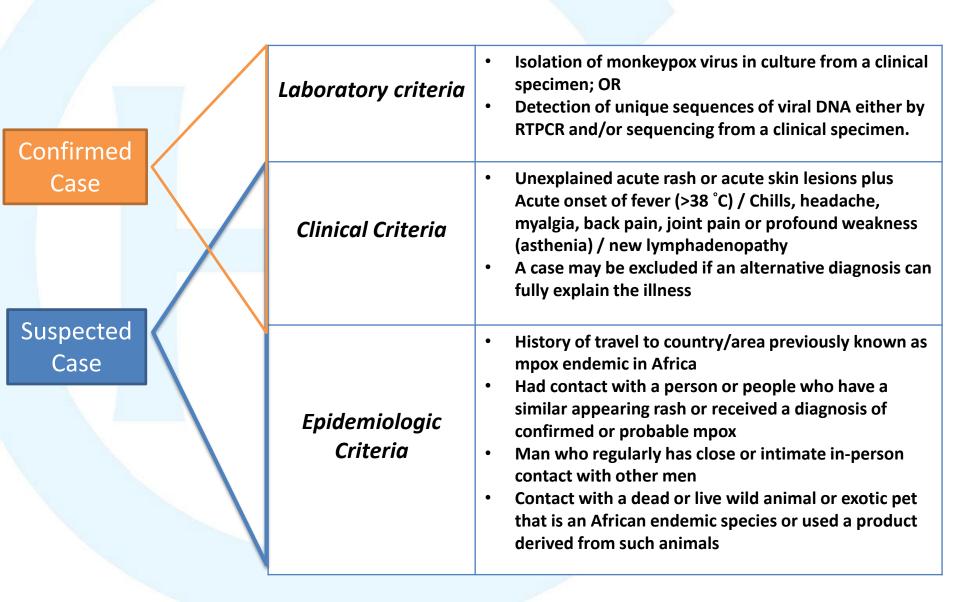
## **Enhanced surveillance and investigation**

- Established reporting criteria of mpox with reference taken from WHO, CDC and ECDC
- Promulgated to doctors for reporting of suspected cases fulfilling reporting criteria
- As a statutory notifiable disease since 10 June 2022
- All inbound travellers at Hong Kong International Airport must undergo temperature checks and perform health declaration
  - If the patient develops mpox-related symptoms, public hospitals will follow up as necessary and report to CHP





### **Reporting Criteria and Case Definition**





### **Enhanced Laboratory Surveillance**

Enhanced laboratory surveillance targeting patients without relevant travel history while having compatible skin lesions and other risk factor on voluntary basis since 2 August 2022





Communicable Disease Branch

保障市氏腱序 Protecting Hong Kong's healt

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看檔數 Our Ref. : (102) in DH CDB/8/103/1
適檔數 Your Ref :
話 Tel. :
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2 August 2022

Dear Private Medical Practitioners.

#### Enhanced Laboratory Surveillance on Monkeypox

Following my previous letter dated 25 July 2022, I would like to inform you about enhanced laboratory surveillance on monkeypox in response to further detection of cases outside Hong Kong, and solicit your support to collect specimens from relevant patients.

As at 27 July 2022, the World Health Organization (WHO) recorded 19,178 laboratory confirmed cases of monkeypox and 73 probable cases, including five death, from 78 countries/areas during 1 January to 27 July 2022. WHO commented that, with the exception of countries/ areas of West and Central Africa, the ongoing outbreak of monkeypox continues to primarily affect men who have sex with men (MSM) who have reported recent sex with one or multiple partners, and there is no signal suggesting sustained transmission beyond these networks. While Hong Kong has not recorded any confirmed human case of monkeypox so far, at least 60 cases has been reported in at least seven countries / areas within the Western Pacific region and the risk of importation of undetected cases into Hong Kong leading to local transmission exists in Hong Kong.

According to the experience of United Kingdom, patients could present with atypical symptoms like unexplained genital, ano-genital or oral lesion(s) (for example, ulcers, nodules) or proctitis. Systemic symptoms including fever, lymphadenopathy and myalgia are common but do not always precede mucocutaneous manifestations and approximately 10% of patients do not exhibit any systemic symptoms. As such, enhanced laboratory surveillance on monkeypox targeting patients without relevant travel history while having compatible skin lesions and other risk factor on voluntary basis would be warranted.



## Case / Contact Management

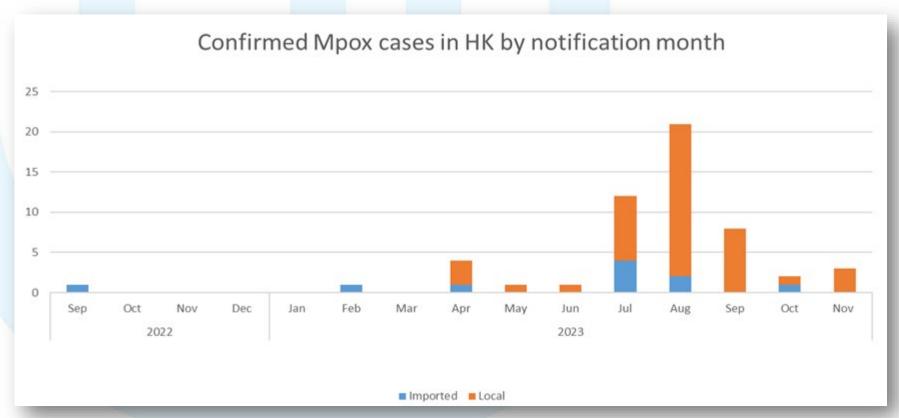
- Containment strategy with Isolation of the confirmed cases, contact tracing and management of close contacts
- At present
  - Confirmed mpox cases would be isolated/cohorted together in the isolation wards of public hospitals, until all infectious lesions are resolved
  - Identified close contacts of mpox cases
    - Medical surveillance for 21 days
      - Counting from the date of last exposure
      - No need to stay in quarantine facilities
    - Advised to refrain from sexual contact for 21 days after last contact with the case and to seek prompt medical attention when symptoms arise
    - Post-exposure vaccination prophylaxis will be offered

Department of Health

## **Local Situation**



- 54 mpox cases in Hong Kong as of 30 November 2023
- 10 imported cases and 44 local cases
- Mainly involved MSM with history of high-risk sexual behaviors during the incubation period, including having sex with strangers
- Most were local infection cases of unknown origin, indicating that mpox may be spreading among local high-risk groups



### **Case Characteristics**

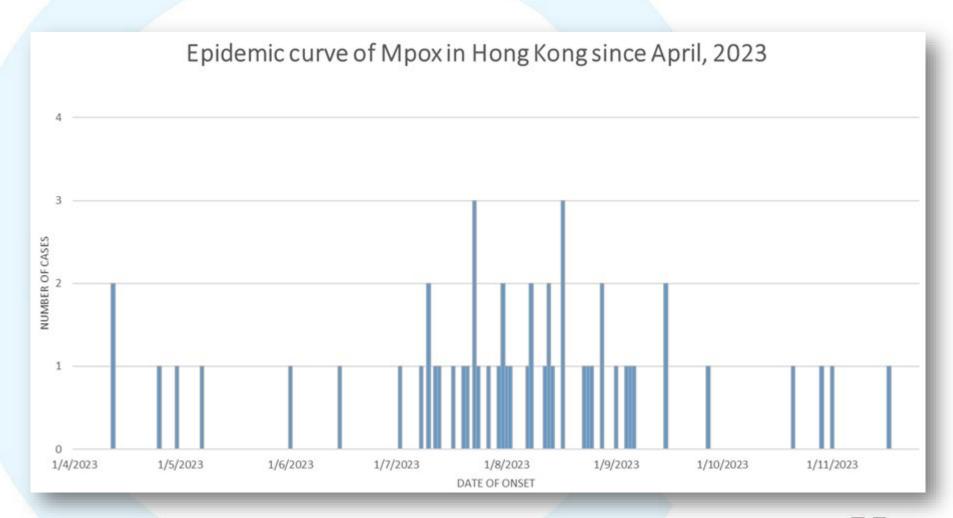


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Parameter		Number	%
Ethnicity	Chinese	48	88.9%
	Non-Chinese	6	9.2%
Age	Range (Median)	20-59 (37)	
Gender	Male	54	100.0%
	Female	0	0.0%
Sexual orientation	Bisexual	7	13.0%
	Heterosexual	2	3.7%
	MSM	45	83.3%
HIV status	HIV carrier	20	37.0%
	Non-HIV carrier	32	59.3%
	Unknown	2	3.7%
Vaccination history	1 dose smallpox + 2 doses mpox	1	1.9%
,	2 doses mpox	11	20.4%
	1 dose smallpox + 1 dose mpox	2	3.7%
	1 dose Smallpox vaccine	5	9.3%
	1 dose Mpox vaccine	4	7.4%
	Unvaccinated	31	57.4%
Importation status	Local	44	81.5%
	Imported	10	18.5%

匍生者 Department ofjЫealth

## **Local Situation**









## **Investigation Results – Clusters**

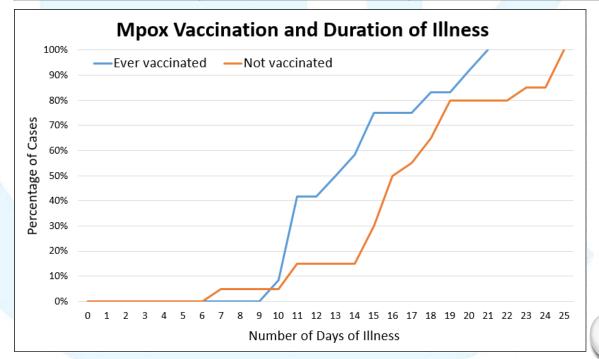
- Among 54 cases, 3 with definite epi linkage identified
  - Each affecting 2 persons
- Contact tracing identified 17 close contacts
  - 8 sexual contacts
    - 3 (38%) turned out to be infected
  - 9 household contacts
    - 0 (0%) turned out to be infected



## Effects of past vaccination

Analysis of 41 cases reported in August 2023

Vaccination status	No. with systemic symptoms	No. without systemic symptoms	Duration of illness in days (median)*
Ever vaccinated	0	12	10-21 (13.5)
Not vaccinated	28	1	7-25 (16.5)



Vaccination protects one from systemic symptoms and shortens the duration of illness (*p* < 0.05)





## **Epi Investigation Findings**

- Mainly affected MSM with anonymous sex partners met via geospatial apps
- Main route of Mpox transmission is through sexual contact
- Relatively low risk of household transmission
- Traditional contact tracing may be difficult to stop the spread of the infection in the community as many refuse to disclose or were engaging in sexual activities with anonymous sex partners
- Mpox vaccination is highly effective to protect patients from developing systemic symptoms, and significantly shortens the duration of illness
  - Vaccination of high risk groups is important



- Joint Scientific Committee (JSC) recommendations
  - Mass pre-exposure vaccination not recommended
  - Subject to availability of monkeypox vaccines, postexposure vaccination for contacts of cases is recommended, in the order of exposure risk from high to low, with an appropriate third-generation vaccine, ideally within 4 days of first exposure (and up to 14 days in the absence of symptoms) to prevent the onset of disease





Department of health

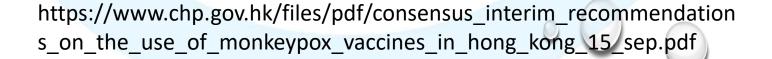
## **Mpox Vaccination**

- Joint Scientific Committee (JSC) recommendations
  - Due to limited supply of monkeypox vaccine, prioritisation of the target groups for voluntary preexposure vaccination could be considered in the following order:
    - Individuals at high risk of exposure, including gay, bisexual and other MSM with certain high risk sexual practices (e.g. multiple sexual partners and chemsex) or history of STI within the past 12 months
    - Other high risk groups (e.g. sex workers, participants in group sex or persons having multiple casual sexual contacts and/or sexual partners)
    - HCWs responsible for caring of mpox patients

https://www.chp.gov.hk/files/pdf/consensus\_interim\_recommendation s\_on\_the\_use\_of\_monkeypox\_vaccines\_in\_hong\_kong\_15\_sep.pdf



- Joint Scientific Committee (JSC) recommendations
  - Laboratory personnel working with zoonotic pox viruses based on risk assessment including proper use of PPE;
  - Other staff responsible for decontamination of environment contaminated by monkeypox confirmed case and hence at risk for occupational exposure, following case by case assessment; and
  - Animal care personnel with high risk of exposure, in case of monkeypox occurrence in animals in HK.
  - Immunocompromised individuals within each group listed above should be accorded higher priority in case of vaccine shortage, due to possible severe complications following mpox infection







- Joint Scientific Committee (JSC) recommendations
  - Vaccination schedule
    - 1 dose would be sufficient for indicated persons with previous smallpox vaccination (persons born in HK before 1 Jan 1981\* and persons born outside HK before May 1980).
    - Where indicated, persons without history of smallpox vaccination born after the aforesaid time could receive 2 doses with a time interval of at least 28 days apart.



<sup>\*</sup>Cessation of smallpox vaccination under childhood immunization programme in HK



- Joint Scientific Committee (JSC) recommendations
  - Dosage
    - Follow manufacturer's recommendations on dosing interval and contraindications.
    - If there is limited vaccine supply locally, intradermal route using one fifth of the volume of a full dose could be considered for immunocompetent adults\* as an alternative dosing regime and antigen-sparing measure.
    - Pre-exposure vaccination against mpox is recommended to be given at least 4 weeks before or after an mRNA COVID-19 vaccine, if possible, so as to allow better differentiation on association of vaccine type should there be occurrence of adverse events. Yet post-exposure protection should be prioritized and recent receipt of mRNA vaccine should not delay post exposure vaccination if the protection is urgent

\*Intradermal administration of modified vaccinia vaccine can be used for individuals living with HIV who are on antiretroviral therapy with undetectable viral load and CD4 count > 200 cells/mm³











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#### **Mpox Vaccination Programme**



♠ Home > Feature Topic > Mpox Vaccination Programme

#### **Mpox Vaccination Programme**







#### 1 December 2023

While the Scientific Committee on Vaccine Preventable Diseases and the Scientific Committee on Emerging and Zoonotic Diseases (JSC) under the Centre for Health Protection (CHP) of the DH do not recommend a mass Mpox (also known as monkeypox) vaccination programme, the JSC updated its consensus interim recommendations on September 15 2022 and recommended, among others, the use of third-generation vaccine for post-exposure prophylaxis for contacts of confirmed cases as well as pre-exposure vaccination for individuals at high risk of exposure. According to the recommendation by the JSC, a two-dose regime is required while those who have received smallpox vaccine will only need one dose.

Eligibility: Under the programme, the following high-risk target groups of Hong Kong residents can receive Mpox vaccination on a voluntary basis:

- Individuals with high risk sexual practices, e.g. men who have sex with men (MSM), having multiple sexual partners, sex workers, history of sexually transmitted infection within the past 12 months;
- Healthcare workers responsible for caring of patients with confirmed Mpox;
- Laboratory personnel working with zoonotic pox viruses; and
- Animal care personnel with high risk of exposure in case of Mpox occurrence in animals in Hong Kong

Currently, vaccination will be provided for high-risk target groups at

- 1. Walk-in Service: ALL Social Hygiene Service Clinics (namely Chai Wan SocHS, Wan Chai Male SocHS, Wan Chai Female SocHS, Yau Ma Tei Male SocHS, Yau Ma Tei Female SocHS, Yung Fung Shee SocHS, Fanling SocHS and Tuen Mun SocHS). For details of the clinics, please refer to the following websites: www.dh.gov.hk/english/tele/tele chc/tele chc shcf.html and www.dh.gov.hk/english/tele/tele chc/tele chc shcm.html.
- 2. Such service would also be provided to clients at:
- Department of Health's Kowloon Bay Integrated Treatment Centre
- Hospital Authority's (HA) Special Medical Clinics at Queen Elizabeth Hospital and Princess Margaret Hospital





Hong Kong Pride Parade 香港同志遊行 2022年10月7日 . 3

- #猴痘 #Monkeypox #Mpox #Vaccine
- #疫苗接種 #高風險群組記得預約打

#### 猴痘疫苗接種計劃開始咗啦!

如果你係高風險群組 ( e.g. 擁有多名性伴侶、性工作者、過去一年有性傳播感染史 ) 就可以考慮接 種。疫苗可以預防感染,減輕病情。為保護自己,保護身邊人,仲唔快啲預約!

#### 【猴痘疫苗接種計劃】

時間: 2022年10月5日開始

a. 現顋診於指定衞生署 / 靨院管理局(靨管局)的高風險目標群組-可聯絡衞生署轄下指定社會衞 生科診所,衞生署九龍灣的綜合治療中心及醫院管理局(醫管局)伊利沙伯醫院和瑪嘉烈醫院的特 別內科診所了解接種安排。

b. 其他高風險目標群組人士 - 可於10月3日起透過電郵 (mpv\_booking@dh.gov.hk) 或電話 (2547 1900)預約到指定猴痘疫苗接種中心接種疫苗。

更多疫苗接種詳情:https://www.chp.gov.hk/tc/features/106090.html 想知多啲有關猴痘資訊:https://www.chp.gov.hk/tc/features/105683.html

The monkeypox vaccination program has started!

If you are in the high-risk target groups (e.g. multiple sexual partners, sex workers, history of sexually transmitted infection within the past 12 months), you can consider getting vaccinated to prevent infection! Protect yourself and the people around you. Hurry up to make an appointment!

#### [ Monkeypox Vaccination Program ]

Date: Start from October 5, 2022

#### Targets:

a. Target clients of the designated clinics under the Department of Health (DH)/Hospital Authority (HA) - can contact the designated social hygiene clinics under the DH, the Integrated Treatment Centre in Kowloon Bay of the DH and the HA Special Medicine Clinics at Queen Elizabeth Hospital and Princess Margaret Hospital for vaccination arrangements.

b. Other high-risk target groups - can make an appointment for vaccination at designated monkeypox vaccination centres via email (mpv\_booking@dh.gov.hk) or telephone (2547 1900) from October 3 2022.

More vaccination detail: https://www.chp.gov.hk/en/features/106090.html

For more information on monkeypox: https://www.chp.gov.hk/en/features/105683.html



From 5 October 2022 to 29 October 2023, >**14 000** doses of vaccines administered





## **Risk Communication**

- Thematic webpage
- Factsheet
- Press release
- Letter to doctors
- List of affected countries/areas & Map of global distribution of Mpox confirmed cases
- Communicating with neighbouring and international health authorities



### **Thematic Webpage**



#### Mpox (also known as monkeypox)





Mpox (also known as monkeypox) is a zoonosis caused by monkeypox virus. First discovered in 1958 in monkeys kept for research, hence the virus was named 'monkeypox virus'.

Human infection of monkeypox was given its name since 1970 when the first case was reported in the Democratic Republic of Congo (then known as Zaire). From that time, most of the reported monkeypox outbreaks have occurred in Central and West Africa, and some outbreaks outside Africa were found to be related to the imported animals or travelers from Africa. Since May 2022, there has been a multi-country outbreak of monkeypox reported from many countries in widely disparate geographical areas globally.

For more information on the clinical features, mode of transmission, incubation period, management and prevention, please refer to the factsheet on Mpox.

#### Details

- Preparedness and Response Plan
- Recommendations of Scientific Committees
- Press releases
- Mpox Vaccination Programme
- Letters to doctors (English only)
- Health Education Materials
  - Factsheets
  - · Health Education Materials
  - · Frequently asked questions
- List of affected countries/areas
  - · List of affected countries/areas
  - · Map of global distribution of Mpox confirmed cases



### **Factsheet**



♦ Home > Health Topics > Communicable Diseases > Mpox (also known as monkeypox)

#### Communicable Diseases Non-Communicable Diseases and Healthy Living Healthy Life Course Organ Donation Travel Health Health and Hygiene Antimicrobial Resistance



Poisoning



The Centre for Health Protection is a professional arm of the Department of Health for disease prevention and control





#### Mpox (also known as monkeypox)







Click here to view the thematic webpage of Mpox

### 1 March 2023

Mpox (also known as monkeypox) is a zoonosis caused by monkeypox virus. First discovered in 1958 in monkeys kept for research, hence the virus was named 'monkeypox virus'.

Human infection of monkeypox was given its name since 1970 when the first case was reported in the Democratic Republic of Congo (then known as Zaire). From that time, most of the reported monkeypox outbreaks have occurred in Central and West Africa, and some outbreaks outside Africa were found to be related to the imported animals or travelers from Africa. Since May 2022, there has been a multi-country outbreak of monkeypox reported from many countries in widely disparate geographical areas globally.

On 28 November 2022, WHO recommended "mpox" as a synonym of the disease of "monkeypox" in English. Mpox becomes a preferred term in English, replacing monkeypox, after a transition period of one year.

The symptoms are similar to those of smalloox, but in milder forms. The first few days after infection with more are characterised by fever, intense headache, myalgia and lymphadenopathy. Severe swollen lymph nodes before the appearance of rash could be a distinctive feature of mpox. Lesions in mouth and body appear about 1 to 3 days after onset of fever. The lesions progress from maculopapules to vesicles, pustules and followed by crusts within a period of 10 days to two weeks and the lesions typically progress simultaneously at all parts of the body.

Taking reference from the global mpox outbreak in 2022, patients may present with atypical symptoms like unexplained genital, anogenital or oral lesion(s) (for example, ulcers, nodules) or proctitis in sexually active adults.

Mpox is usually a self-limited disease with symptoms lasting from 14 to 21 days. The case fatality in previous outbreaks has been between 1% and 10%

#### Mode of transmission

Infection could occur when a person comes into contact with the virus from infected animals, infected humans or contaminated materials. Humans could get infected from various wild animals, such as some species of primates, rodents and squirrels, etc., through bite or scratch, or direct contact with their body fluids. Human-to-human transmission is also possible through respiratory droplets during prolonged face-to-face contact or direct contact with body fluids.

The incubation period is usually from 6 to 13 days, with a range from 5 to 21 days.

In principle, treatment of mpox includes the control of symptoms, management of complications and the prevention of long-term sequelae. Secondary bacterial infections should be treated as indicated. An antiviral agent known as tecovirimat that was licensed by the European Medicines Agency for mpox in 2022, but it is not yet widely available

#### Prevention

The Government has procured a third generation vaccine called "JYNNEOS" by making reference to the earlier recommendations of the Scientific Committee on Vaccine Preventable Diseases and the Scientific Committee on Emerging and Zoonotic Diseases as preexposure and post-exposure vaccination. The vaccine has arrived in Hong Kong in September 2022 to be used in the Mpox Vaccination Programme. "JYNNEOS" has been licensed by the U.S. Food and Drug Administration (FDA) for the protection of mpox in 2019.

To reduce the risk of infection, members of the public travelling to places affected by monkeypox virus should:

- Avoid close, skin-to-skin contact with sick people or people with a rash that looks like mpox.
- · Avoid contact with objects and materials that a person with mpox has used, such as eating utensits or cups, bedding, towels, or clothing:
- Avoid contact with sick or dead animals:
- · Implement appropriate infection control precautions when taking care of ill people or handling animals, such as wearing protective clothing and equipment including gloves and surgical masks;
- . Maintain hand hygiene. Clean hands with liquid soap and water when they are visibly soiled or likely contaminated with blood and body fluid. When hands are not visibly soiled, they could be cleaned with 70-80% alcohol-based handrub:
- · Thoroughly cook all animal products before eating; and
- · Seek medical advice promptly for any suspicious symptoms.

#### e-Resources

#### **Mpox Vaccination Fact Sheet**

Mpox (also known as Monkeypox) is caused by a virus named Monkeypox. Symptoms include fever, intense headache, muscle ache and swollen lymph node in the first few days of infection. Lesions in mouth and body appear about 1 to 3 days after onset of fever. The lesions progress from maculopapules to vesicles, pustules and followed by crusts within a period of 10 days to two weeks and the lesions typically progress simultaneously at all parts of the body. It is usually self-limiting with symptoms lasting from 14 to 21 days. The case fatality in previous Mpox outbreaks has been between 1-10%.

A person may catch the virus from infected animals (e.g. through bite, scratch and direct contact with their body fluids), infected humans (e.g. through respiratory droplets during prolonged face-to-face contact or direct contact with body fluids, such as during sexual contact) or contaminated materials

#### ★ What is Mpox Vaccine?

JYNNEOS\* is a vaccine indicated for prevention of smallpox and Mpox disease in adults 18 years of age and older determined to be at high risk for smallpox or Mpox infection; post-exposure vaccination for individuals aged less than 18 with high risk exposure could be offered in emergency situation on case by case basis following a careful evaluation of risks and benefits. The vaccine is made using weakened live vaccinia virus and cannot cause smallpox or Mpox.

\*JYNNEOS is indicated for emergency use on persons in target groups in accordance with the recommendations from the Scientific Committee on Vaccine Preventable Diseases and the Scientific Committee on Emerging and Zoonotic Diseases (JSC) under the Centre for Health Protection of the Department of Health.

JSC does not recommend mass Mpox vaccination programme. They recommend the use of vaccine for post-exposure prophylaxis for contacts of confirmed cases as well as pre-exposure vaccination for individuals at high risk of exposure on a voluntary basis, including:

- 1. Individuals with high risk sexual practices, e.g. multiple sexual partners, sex workers, history of sexually transmitted infection within the past 12 months;
- 2. Healthcare workers responsible for caring of patients with confirmed Mpox;
- 3. Laboratory personnel working with zoonotic pox viruses; 4. Animal care personnel with high risk of exposure in case of Mpox occurrence in animals in Hong Kong.

#### ★ How Mpox Vaccine is given?

Administer two doses# at least 28 days apart.

#One dose would be sufficient for persons with previous smallpox vaccination (persons born in Hong Kong before 1 January 1981 and persons born outside Hong Kong before May 1980).

0.1ml between the layers of the skin (intradermally) injection into volar surface of your forearm or at the deltoid muscle. If not suitable to receive intradermal injection, 0.5 ml subcutaneous injection to your upper arm.

Depending on vaccine supply locally, intradermal injection with 0.1ml of JYNNEOS would be considered for immunocompetent adults as an alternative dosing regime except for persons with history of keloid scar.

Possible side effects include muscle pain, headache, fatique, nausea, chills, and fever, along with pain, redness, swelling, firmness, and itching at the site of injection.

There is a remote chance that the vaccine could cause a severe allergic reaction. A severe allergic reaction would usually occur within a few minutes to 1 hour after getting a dose of the vaccine. For this reason, you should stay for observation for 15 minutes after vaccination. Signs of a severe allergic reaction can include difficulty breathing, swelling of your face and throat, a fast heartbeat, a bad rash all over your body, dizziness and weakness.

Persons who received JYNNEOS intradermally may experience minimal redness or firmness at the injection site lasting up to several months, some also reported small, firm lumps or discoloration of the skin.

Please refer to Package Insert of JYNNEOS for further information.

#### : Can Human Immunodeficiency Virus (HIV)-infected and immunocompromised persons receive

Yes. Local and systemic adverse reactions were reported at similar or lower frequencies in HIV-infected subjects as compared to those seen in non-HIV-infected individuals in overseas study. As those HIV-infected and immunocompromised are prone to complications after catching Mpox, they are strongly advised to receive Mpox vaccination.

#### Can pregnant or lactating women receive

Data are not available to assess the effects of JYNNEOS in the pregnant or lactating women. Available human data on JYNNEOS administered to pregnant women are insufficient to inform vaccine-associated risks in pregnancy. It is not known whether JYNNEOS is excreted in human milk. These animal studies revealed no evidence of harm to the fetus.

#### i Can Mpox Vaccine be co-administered

Vaccines for preventing Mpox should be given at least 4 weeks before or after an mRNA COVID-19 vaccine.

#### Reporting of adverse events after immunization

If your side effects are worrying you, please contact your

If you do seek medical attention, make sure you tell the healthcare professionals about your vaccination details and show them your vaccination record card if available Healthcare professionals will then make proper assessment and, if necessary, report any adverse events following immunization that is deemed medically significant to the Department of Health for further action and assessment.

I have read and understood all information as provided in the factsheet, and I consent to the administration of JYNNEOS I have read and understood all information as provided in the factsheet, and is consent to the administration of yardinary and the Department of Health and the yardinary and the Department of Health and the relevant organizations' access to and use of (i) my personal data contained herein and (ii) my / my child / my ward\*\* clinical data relevant organizations' access to and use of (ii) my personal data contained herein and (iii) my / my child / my ward\*\* clinical data was the provided of t held by the Hospital Authority and the relevant healthcare professionals, for the purpose of continuously monitoring the safety and clinical events associated with JYNNEOS Vaccination by the Department of Health insofar as such access and use are necessary for the purpose.

(\*\*Please delete inappropriate part)













### **Press Release**



### The Government of the Hong Kong Special Administrative Region **Press Releases**

In response to media enquiries and reports about the isolation arrangement for Mpox patients, the Centre for Health Protection (CHP) of the Department of Health (DH) today (August 18) emphasised that the key control strategies for Mpox are in line with the recommendation of the World Health Organization (WHO), and are necessary at this stage to safeguard public health in Hong Kong.

Currently, confirmed Mpox cases would be isolated/cohorted together in the isolation wards of public hospitals, until all infectious lesions are resolved and the patients become non-infectious. This is to eliminate any chance that confirmed Mpox cases could further spread the disease in the community and to ensure that the public would not be exposed to the risk of Mpox infection.

"The suggestion by some quarters that Mpox infections pose little health hazard and transmission risk, and the inference that the control measures currently in place are disproportionate or unnecessary, are counterproductive to stopping the spread of the Mpox infection in Hong Kong and are untenable and irresponsible from the public health perspective," a Government spokesman said.

"The WHO recommends transmission-based precautions for suspected or confirmed Mpox cases; screening, triage, early recognition and isolation measures in health facilities. Containment approach based on the WHO's recommendation aiming to cut transmission links in the community has also been adopted by other health authorities," the spokesman added.



The Centre for Health Protection (CHP) of the Department of Health (DH) said today (November 1) that it is investigating a confirmed Mpox (also known as Monkeypox) case, and urged the public to heighten vigilance and avoid close physical contact with persons suspected of contracting Mpox. Meanwhile, high-risk target groups are advised to receive Mpox vaccination.

The case involves a 56-year-old male patient with an underlying illness. He had developed vesicles since October 29, and visited the Wan Chai Male Social Hygiene Clinic of the DH on October 30. He is in stable condition and arrangements were made for him to be admitted to Princess Margaret Hospital.

An initial investigation revealed that the patient had high-risk exposure in Hong Kong during the incubation period with no travel history. No epidemiological linkages between this case and other confirmed cases recorded in Hong Kong earlier have been found so far. The CHP is continuing its epidemiological investigations of the case and will report the case to the World Health Organization.

A total of 52 confirmed Mpox cases have been recorded in Hong Kong so far. The CHP appeals again to high-risk target groups to receive Mpox vaccination with a view to lowering the risk of infection or the possibility of having more severe symptoms after infection. Persons who experience Mpox symptoms (including rashes, fever, chills, swollen lymph nodes, exhaustion, muscle pain, and severe headaches) or suspect themselves of being infected are advised to seek medical attention and receive treatment at once, and they should not engage in activities with others during which other people may have contact with their skin rash or body fluids. Members of the public should maintain good personal and hand hygiene to prevent virus transmission or infection through contact. They should also avoid close physical contact with persons or animals suspected of infection.

The CHP had earlier set up an Mpox telephone hotline (2125 2373). The hotline operates from Monday to Friday (excluding public holidays) from 9am to 5pm, which enables those who suspect or are concerned they have had high-risk contact with confirmed patients, in particular men who have sex with men or those who have sexual practices with strangers, to make enquiries and receive relevant health advice.

The Government has activated the Alert level of the preparedness and response plan for the disease in September last year and will continue to assess the risk in view of the latest scientific evidence and situation, and implement corresponding control measures.





### **Letters to Doctors**





Communicable Disease Branch

保障市民健康 Protecting Hang Kang's health

本學書號 Our Ref. : (2) in DH CDB/8/103/1 宋商楊號 Your Ref : 話 Et. : 在 章 Fax No. :

23 May 2022

Dear Doctor,

#### Vigilance against monkeypox

I would like to draw your attention to the latest surge of overseas monkeypox cases and enlist your support in the notification and prevention of the disease.

Monkeypox is a zoonosis caused by monkeypox virus, and most of the reported monkeypox outbreaks have occurred in Central and West Africa. Infection could occur when a person comes into contact with the virus from infected animals, infected humans or contaminated materials. Humans could get infected from various wild animals, such as some species of primates, rodents and squirrels, etc., through bite or scratch, or direct contact with their body fluids. Human-to-human transmission is also possible through respiratory droplets during prolonged face-to-face contact or direct contact with body fluids.

Recently, cases of monkeypox have been reported in non-endemic countries in Europe, North America and Australia. As at 21 May 2022, 92 laboratory confirmed cases and 28 suspected cases of monkeypox from those non-endemic countries have been reported to the World Health Organization (WHO). According to the WHO, cases have mainly but not exclusively been identified amongst men who have sex with men seeking medical help in primary care and sexual health clinics.

Monkeypox is usually a self-limited disease with symptoms lasting from 14 to 21 days. The first few days after infection with monkeypox are characterised by fever, intense headache, myalgia and lymphadenopathy. Severe swollen lymph nodes before the appearance of rash could be a distinctive feature of monkeypox. Lesions in mouth and body appear about 1 to 3 days after onset of fever. The lesions progress from maculopapules to vesicles, pustules and followed by crusts within a period of 10 days to two weeks and the lesions typically progress simultaneously at all parts of

#### Mpox (also known as monkeypox) - Letters to Doctors



Date	Subject	
27 July 2023	Updated case definition for reporting mpox cases in Hong Kong (№ 98.96 KB)	
21 April 2023	Confirmation of the Third Case of Mpox (Monkeypox) in Hong Kong ( 140.32 KB)	
6 February 2023	Detection of the Second Case of Mpox (Monkeypox) in Hong Kong (28.95 KB)	





## List of affected countries/areas & Map of global distribution of Mpox confirmed cases

#### Countries/areas affected by mpox 受猴疗影響的國家/地區

Last updated: 22 November 2023 最後更新日期: 2023 年 11 月 22 日

As of 31 October 2023, 91788 laboratory confirmed cases of mpox (also known as monkeypox), including 167 deaths, have been reported to World Health Organization (WHO) from 116 countries/areas since 1 January 2022. The 10 most affected countries/areas globally are: United States of America (30771), Brazil (10967), Spain (7647), France (4161), Colombia (4090), Mexico (4065), The United Kingdom (3820), Peru (3812), Germany (3757), and China (1935). Cases reported from these countries account for 81.7% of the cases reported globally.

自 2022 年 1 月 1 日至 2023 年 10 月 31 日,世界衛生組織(世衛)接收到 116 個國家,地區呈報 91788 例實驗室確診 程度病例,其中包括 167 例死亡個家。全球最多猴痘病例的 10 個國家/地區包括美 國 (30771)、巴西 (10967)、西班牙 (7647)、法國 (4161)、哥倫比亞 (4090)、墨西哥 (4065)、英國 (3820)、称魯 (3812)、德國 (3757) 和中國 (1955)。這些國家的病例括全球報告病例的 81.7%。

#### Countries/areas previously known as mpox endemic in Africa 非洲地區已知猴痘流行的國家/地區

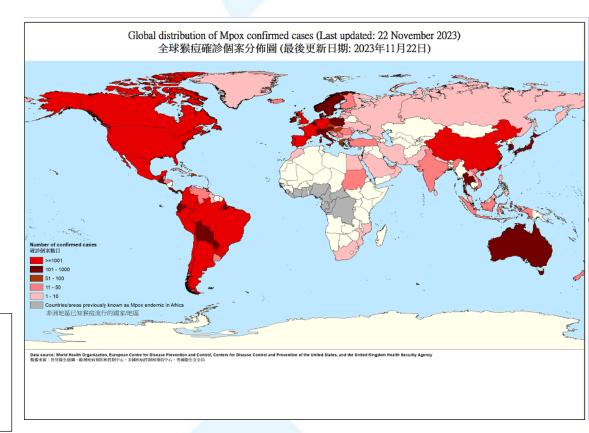
Before this multi-country outbreak since May 2022, mpox endemic countries in Africa include Benin, Cameroon, the Central African Republic, the Democratic Republic of the Congo, Gabon, Ghana, Cote d'Ivoire, Liberia, Nigeria, the Republic of the Congo, Sierra Leone, and South Sudan.

2022年5月多個國家爆發發痘之前,非洲地區發痘流行的國家包括貝寧、喀麥隆、中非共和國、剛果民主共和國、加蓬、加納、科特迪瓦、利比里亞、尼日利亞、剛果共和國、塞拉利昂和南蘇 中。

#### Other countries/areas with mpox cases reported outside Hong Kong 香港以外其他報告發痘個案的國家/地區

Since May 2022, cases of confirmed mpox have been reported from the countries where mpox is not usually or had not previously been reported. These countries/areas are listed below. 12.3.4 2022 年 5 月起聚痘個案在一些聚痘不常見或者之前未報告過聚痘的國家出現。這些國家/地區列

1.	Andorra 安道爾	56. Lebanon 黎巴嫩
2.	Argentina 阿根廷	57. Lithuania 立陶宛
3.	Aruba 阿魯巴	58. Luxembourg 盧森堡
4.	Australia 澳洲	59. Macao 澳門
5.	Austria 奥地利	60. Mainland China 中國大陸
6.	Bahamas 巴哈馬	61. Malaysia 馬來西亞
7.	Bahrain 巴林	62. Malta 馬耳他
8.	Barbados 巴巴多斯	63. Martinique馬提尼克島
9.	Belgium 比利時	64. Mexico 墨西哥
10.	Bermuda 百慕達	65. Moldova (Republic of) 摩爾多瓦共和國
11.	Bolivia 玻利維亞	66. Monaco 摩納哥





<sup>1</sup> https://worldhealthorg.shinyapps.io/mpx\_global/

<sup>&</sup>lt;sup>2</sup> https://www.ecdc.europa.eu/en/publications-data/data-monkeypox-cases-eueea

<sup>3</sup> https://www.cdc.gov/poxvirus/monkeypox/response/2022/world-map.html

https://www.info.gov.hk/gia/general/202209/06/P2022090600594.htm?fontSize=1

## Reporting to the WHO



#### Mpox (monkeypox) Case Reporting Form (CRF) - Version 4

#### List of changes from previous version:

- Removed variables:
  - PlaceOfNotification
  - DateOfNotification
  - AgeMonth
  - o Gender
  - SexWorker
  - CD4Cells
  - o HIVPrEP
  - o SmallpoxVaccine
  - o DateSmallpoxVaccine
  - MonkeypoxVaccine
  - MonkeypoxVaccine1
  - DateMpxVaccine1
  - o BrandMpxVaccine1
  - MonkeypoxVaccine2
  - DateMpxVaccine2
  - o BrandMpxVaccine2
  - o ClinicalManifestation
  - ClinicalManifestationOther
  - DateOfRash
  - ConcurrentSTI
  - MonkeypoxTreatment
  - Complications
  - ComplicationsOther
  - o EpidemiologicalLink
  - ExposureSetting

WHO Mpox - Case Reporting Form -2023/09/29

- o ExposureSettingDetails
- NumberSexPartners
- o TravelCountryRegion
- SpecimenType
- LabMethod
- SpecimenOther
- GenomicCharacterization
- o AccessionNumber
- Renamed variables
  - SexualOrientation has been renamed SexualBehavior
- Variable categories changed
  - SexualBehavior categories have been reduced from the previous under SexualOrientation: HETERO = heterosexual, MSM = MSM/homosexual or bisexual male, LESBIAN = women who have sex with women, BISEXUAL = Bisexual, O = Other, UNK = Unknown or undetermined
  - o TravelCountry allows the entry of only the last country visited in the last three weeks
  - o Clade categories have been reduced from the previous: Clade I, Clade IIa, Clade IIb

No	Information	Variable	Description	List		
Section	Section 1. Case demographics					
1	Record ID	RecordID	Unique case identifier	KMP2023000008		
2	Reporting Country	ReportingCountry	The country reporting the case	HKSAR		
3	Case classification	CaseClassification	Classification of the case	☐ Confirmed ☐ Probable ☐ Unknown		
4	Date of diagnosis	DateOfDiagnosis	First date of clinical or lab diagnosis	DATE 2023/08/14		
5	Age in years	Age	Age of case in years (report 0 if < 1 year)	34		
6	Sex	Sex	Sex at birth of the reported case	☐ Female ☐ Male ☐ Other ☐ Unknown		

WHO Mpox - Case Reporting Form -2023/09/29



## Infection control training

## Hong Kong Training Portal on Infection Control and Infectious Disease





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Home / Training Activites / Training Detail

## Infectious Disease and Infection Control Forum: Update on Monkeypox and Infection Control Recommendations



Topic	Infectious Disease and Infection Control Forum: Update on Monkeypox and Infection Control Recommendations
Course Type	Web-based: Zoom Webinar
Content	To provide an update on global and local situation of Monkeypox, latest knowledge on route of transmission, and familiarize with the infection control recommendations and clinical management when handling Moneypox cases.
Date	10 June 2022
Venue	G/F, Centre for Health Protection, 147C Argyle Street, Kowloon
Organizer	Organized by Infectious Disease Control Training Centre, Hospital Authority (HA IDCTC)/ Infection Control Branch (ICB), Centre for Health Protection (CHP)
Target Group	Healthcare professionals (including doctors, nurses and allied healthcare workers) in Hospital Authority, Department of Health and private health care sector



# Communicating with Neighbouring and International Health Authorities







Enter search keyword(s)



हिन्दी (Hindi) | नेपाली (Nepali) | ८५७ (Urdu) | ไทย (Thai) | Bahasa Indonesia | Tagalog |

Hot searches: Vaccination Schemes, Mpox, COVID-19, Mental Health, Dengue Fever

About	Health Topics	Recommendations	Resources	Statistics	Media Room	Others
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	↑ 猴痘 Mpox	Мрох	
		允许证	5	記抗生素 Matebraia Aprillation	World Antimicrobial Resis Awareness Week 2023	tance
					Walking Challenge under Day Campaign	10,000 Steps a
	1	Mpo	Mp	Health Behaviour Survey 2023	Health Behaviour Survey	2023
			< >	Together, We Fight the Virus:	Together, We Fight the Vi	rus!



In Hong Kong, there are several important mosquito-borne diseases including dengue fever, Japanese encephalitis and malaria.

To prevent mosquito-borne diseases, members of the public need to protect themselves from mosquito bites and prevent their proliferation.

For details, please refer to the webpages of dengue fever, Japanese encephalitis and malaria.





General Public



Health Professionals



Institutions & Schools





## **End of Presentation**

**Thank You** 









# Spare





Department of Health

### The Preparedness and Response Plan for Mpox

- Alert Response Level immediate health impact on local population is low
  - e.g. when there is an imported human case and/or epidemiologically linked cases or an imported animal case
- Serious Response Level health impact on local population in Hong Kong is moderate
  - e.g. when there is evidence of apparently unlinked clusters of cases in the community or infected animals epidemiologically linked to human or imported animal cases
- Emergency Response Level health impact on local population in Hong Kong is high and imminent
  - e.g. when there is evidence of spread in a healthcare facility, or imminent risk of sustained transmission in the community; or finding of infected animals in the community which are not epidemiologically linked to human or imported animal cases

# Locally available vaccine – JYNNEOS



Department of Health

- Made using weakened live vaccinia virus.
- Indicated for prevention of smallpox and monkeypox disease in adults aged 18 years or above determined to be at high risk for smallpox or monkeypox infection
  - Post-exposure vaccination for individuals aged less than 18 with high risk exposure could be
    offered in emergency situation on case by case basis following careful evaluation of risks and
    benefits.
- Intradermal injection with 0.1ml would be considered for immunocompetent adults as an alternative dosing regime except for persons with history of keloid scar.
- Possible side effects include muscle pain, headache, fatigue, nausea, chills, and fever, along with pain, redness, swelling, firmness, and itching at injection site.
- Based on the suggested administration method by the JSC and the current vaccine procurement, it is expected about 120 000 individuals can receive vaccination under the programme.

https://www.chp.gov.hk/files/pdf/monkeypox\_vaccination\_factsheet\_eng.pdf