# Mpox Vaccination
# (猴痘疫苗接種)

10 September 2024

# History of *Orthopoxviridae*

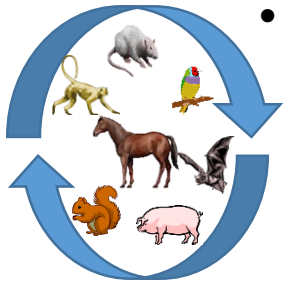
- Monkeypox virus (MPXV) is of the *Orthopoxviridae* (正痘病毒屬) genus, belonging to the family *Poxviridae* (痘病毒科). It was first isolated in the laboratory from lesions found on imported primates in Copenhagen in 1958.
- The *Orthopoxviridae* genus includes other Orthopoxviruses (OPXV) present in animal host reservoirs that include cowpox viruses (牛痘病毒) (CPXV), vaccinia virus (痘苗病毒) (VACV), and variola virus (天花病毒) (VARV).

**1580-1350 BC <18000**
- Smallpox Virus (VARV)
- Horsepox Virus (HPXV)
- Cowpox Virus (CPXV)
- Vaccinia Virus (VACV)

**1898**
- Myxoma virus (MYXV)

**1930**
- Mousepox Virus (ECTV)

**1958**



Primary MPXV hosts

**Monkeypox Virus (MPXV)**

**1960**
- Swinepox (SWPX)

**1980-2017**
- Clade I
- Clade II

**2019**
- Turkepox Virus (TPV)
- Fowlpox Virus (FPV)
- Pigeonpox Virus (PPV)

**2022**
- Clade IIa
- Clade IIb

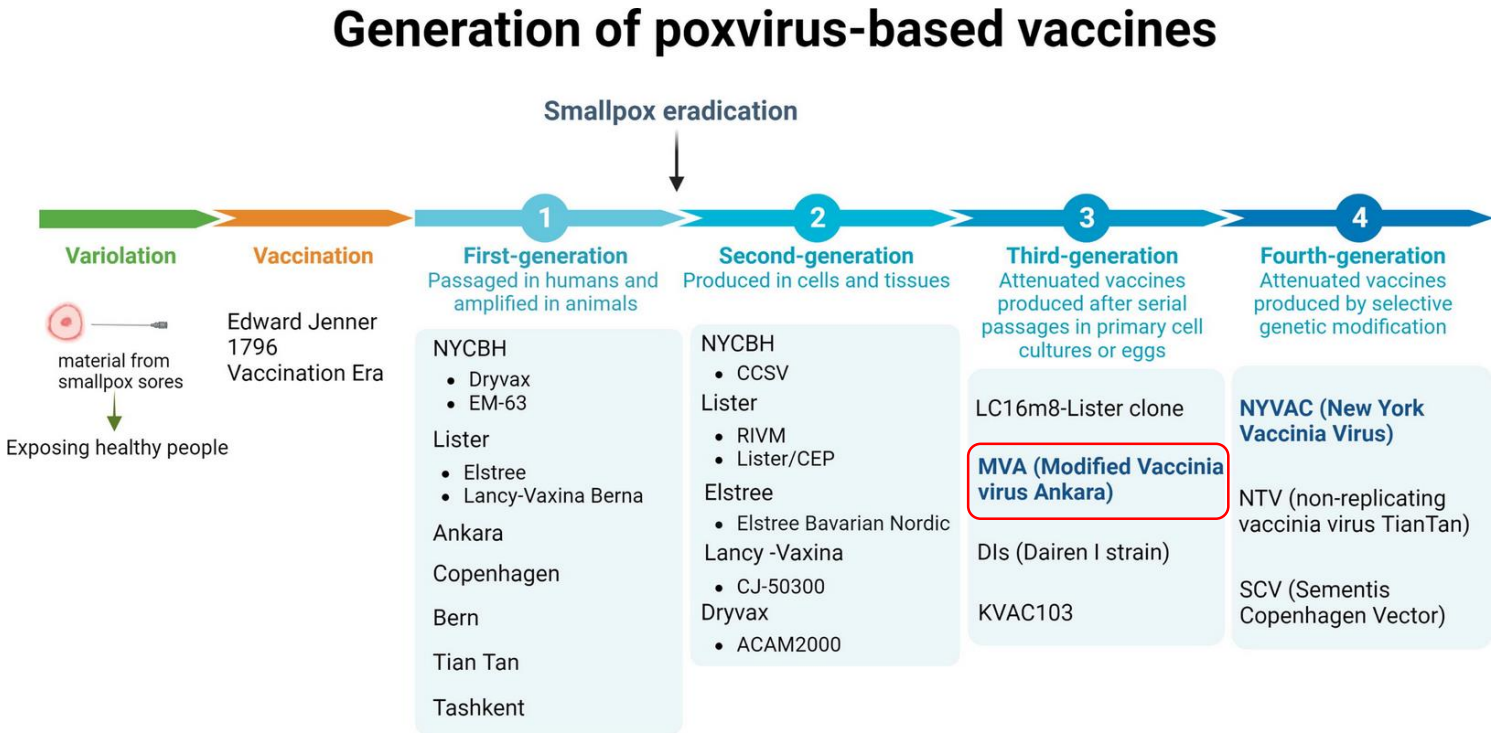
**2023 Sep**
- Clade Ib

Source:

- Brown B. Immunopathogenesis of Orthopoxviridae: Insights into Immunology from Smallpox to Monkeypox (Mpox). Preprints.org; 2023. DOI: 10.20944/preprints202307.0673.v1.

# Generation of Poxvirus-based Vaccines

- MPXV is more than 90% identical in its coding region to other orthopoxviruses (OPXVs). Due to this significant homology, cross-immunity to MPXV could have been achieved as consequence of vaccinia virus (VACV) vaccination against smallpox.
- Following the eradication of smallpox declared by the WHO in May 1980, the first-generation of smallpox vaccine is no longer available with the cease of smallpox vaccination programmes worldwide (since 1 January 1981 in Hong Kong).





Sources:

- Perdiguero B, Pérez P, Marcos-Villar L, Albericio G, Astorgano D, Álvarez E, Sin L, Gómez CE, García-Arriaza J, Esteban M. Highly Attenuated Poxvirus-Based Vaccines Against Emerging Viral Diseases. J Mol Biol. 2023 Aug 1;435(15):168173. doi: 10.1016/j.jmb.2023.168173. Epub 2023 Jun 8. PMID: 37301278; PMCID: PMC10249371.
- Scientific Committee on Emerging and Zoonotic Diseases and Scientific Committee on Vaccine Preventable Diseases. Consensus Interim Recommendations on the Use of Monkeypox Vaccines in Hong Kong (As of 16 June 2022)

# WHO - Mpox Vaccine Options

- MVA-BN is the modified Ankara strain of vaccinia virus developed by Bavarian Nordic and marketed as Imvanex™, Imvamune™ or Jynneos™ in the European Union, Canada and the USA, respectively.

| Vaccine (Manufacturer) | Licensed for Smallpox (country, type, Date | Licensed for mpox (country, type, date) | Considerations | Presentation | Injection materials |
|---|---|---|---|---|---|
| MVA-BN (Bavarian Nordic) Third generation | EU (Imvanex): has been authorised under exceptional circumstances (2013)<br>Canada (Imvamune): Full MA (2013)<br>USA (Jynneos): Full MA (2019) | USA (Jynneos): Full MA (2019)<br>Canada (Imvamune): Full MA (2019)<br>EU (Imvanex): has been authorized under exceptional circumstances (2022) | Two doses four weeks apart.<br>Liquid-frozen formulation, approved for use in the general adult population.<br>The USA has granted Emergency authorization for use in individuals 18 years and below (August 2022). | Liquid frozen or lyophilized (freeze-dried)<br>Single dose vials (Multidose vials possible | Needle and syringe (sub-cutaneous administration) |
| LC16 (KM Biologics) Third generation | Japan - Full MA (1975) | Japan: MA (August 2022) | Single dose.<br>Approved for use in infants and children (all ages) as well as adults | Freeze-dried Multidose vials | Bifurcated needle |
| ACAM2000 (Emergent BioSolutions) Second Generation | Multiple countries - Approved | USA - EIND for PEPV | Single dose.<br>Approved for use in adults aged 18 – 64 years of age. | Freeze-dried Multidose vials | Bifurcated needle |

MA: market authorization.
EIND: Emergency investigational new drug programme of the US FDA
PEPV: post-exposure preventive vaccination

Source:
WHO - Vaccines and immunization for monkeypox Interim guidance 24 August 2022
https://iris.who.int/bitstream/handle/10665/361894/WHO-MPX-Immunization-2022.2-eng.pdf?sequence=1&isAllowed=y

# JYNNEOS (Smallpox and Mpox vaccine)


- Manufactured by Bavarian Nordic
- Not registered in Hong Kong
- A third-generation vaccine based on a live, attenuated non-replicating *orthopoxvirus*, Modified Vaccinia Ankara (MVA), incapable of replicating in the human body yet able to elicit a potent immune response.
- MVA is cultured in Chicken Embryo Fibroblast cells and a serum-free medium. It is purified and filtered from the cells using various methods, including benzonase digestion.
- MVA does not contain mpox virus and cannot cause or spread mpox.
- JYNNEOS is approved for the prevention of smallpox and monkeypox disease in adults 18 years of age and older determined to be at high risk for smallpox or monkeypox infection.
- The US Food and Drug Administration (FDA) has issued an Emergency Use Authorization (EUA) for the emergency use of JYNNEOS for:
  - Active immunization by intradermal injection for prevention of mpox disease in individuals 18 years of age and older determined to be at high risk for mpox infection.
  - Active immunization by subcutaneous injection for prevention of mpox disease in individuals less than 18 years of age determined to be at high risk for mpox infection.

# Neutralizing Antibody Response After Vaccination with JYNNEOS

## STUDY 7 – A RANDOMIZED, OPEN-LABEL STUDY CONDUCTED AT US MILITARY FACILITIES IN SOUTH KOREA[15]

Study design: Healthy, smallpox vaccine-naive adults aged 18-42 years (N=433) received either 2 doses of JYNNEOS (n=220) administered 28 days apart or 1 dose of ACAM2000® (Smallpox [Vaccinia] Vaccine, Live) (n=213).

Primary endpoint: Geometric mean titer (GMT) of vaccinia-neutralizing antibodies assessed by Plaque Reduction Neutralization Test (PRNT) at "peak visits" defined as 2 weeks after second dose of JYNNEOS and 4 weeks after single dose of ACAM2000.

Peak visit neutralizing antibody responses induced by JYNNEOS were non-inferior to those elicited by ACAM2000.

**Comparison of Vaccinia-Neutralizing Antibody Responses Following Vaccination with JYNNEOS or ACAM2000 in Healthy Smallpox Vaccine-Naïve Adults 18 Through 42 Years of Age, Study 7, Per Protocol Set for Immunogenicity**

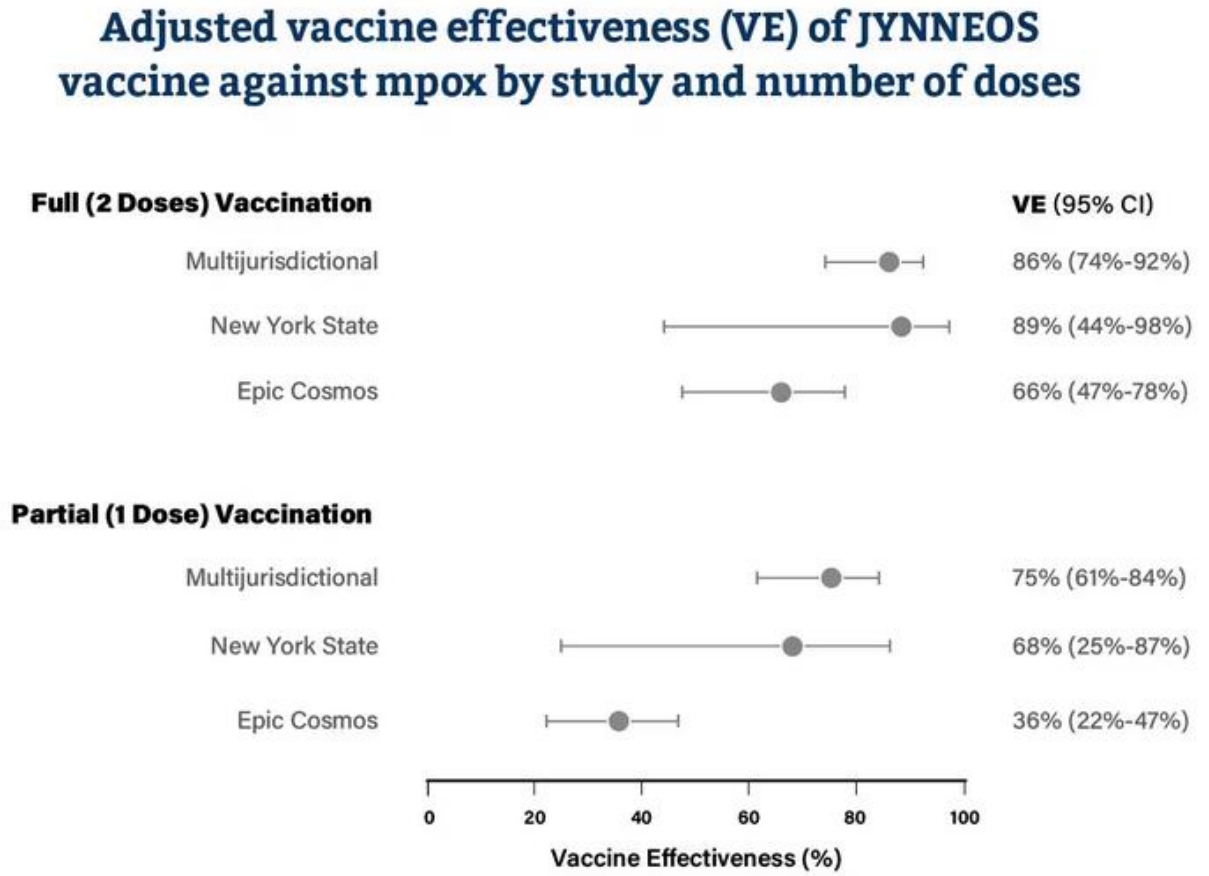
| Time Point | JYNNEOS (N=185) GMT [95% CI] | ACAM2000 (N=186) GMT [95% CI] |
|---|---|---|
| Pre-vaccination | 10.1 [9.9, 10.2] | 10.0 [10.0, 10.0] |
| Post-vaccination "Peak Visit" | 152.8* [133.3, 175.0] | 84.4* [73.4, 97.0] |

*Non-inferiority of the "peak visit" PRNT GMT for JYNNEOS compared to ACAM2000 was demonstrated as the lower bound of the 1-sided 97.5% CI for the GMT ratio (JYNNEOS/ACAM2000) was >0.5.

Source: https://jynneos.com/

# JYNNEOS - Vaccine Effectiveness (VE)

- JYNNEOS vaccine is effective at reducing the risk of mpox, with two doses providing the best protection.
- VE measures how well vaccination works under real-world conditions to protect people against infection, symptomatic illness, hospitalization, and death.
- Data from 3 case-control studies suggested the VE of JYNNEOS against mpox ranges from 66-89% for full (2 doses) vaccination.
- People who have been vaccinated can still get mpox, but vaccination may make illness less severe.




Source:
CDC – Jynneos Vaccine Effectiveness
https://www.cdc.gov/poxvirus/mpox/cases-data/JYNNEOS-vaccine-effectiveness.html

# CHP-JSCs – High-risk Target Groups for Pre-exposure Vaccination

- Pre-exposure vaccination is recommended for individuals at high risk of exposure.
- Under the programme, the following high-risk target groups of Hong Kong residents can receive Mpox vaccination on a voluntary basis.

1. 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;
2. Healthcare workers responsible for caring of patients with confirmed Mpox;
3. Laboratory personnel working with zoonotic pox viruses; and
4. Animal care personnel with high risk of exposure in case of Mpox occurrence in animals in Hong Kong

Source:
Mpox Vaccination Programme
https://www.chp.gov.hk/en/features/106090.html

# HA - Voluntary Pre-exposure Prophylaxis Against Mpox

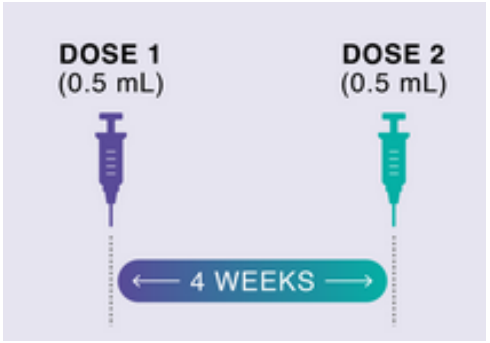
- HA will offer mpox vaccination to
  1) Healthcare workers (HCWs) working in the following areas:

| | |
|---|---|
| **Commence on 26 Sep 2022** | A&E |
| | GOPC |
| | Tier 1 isolation ward |
| | Microbiology laboratory |
| | Special medical clinic |

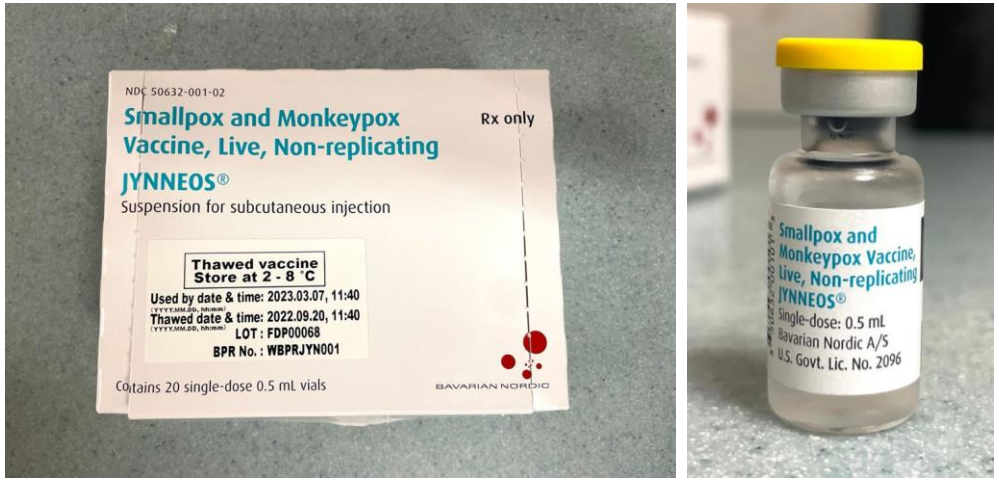
  2) Eligible clients managed by PMH's IDSM service and QEH's HIV clinical service (commence on 5 Oct 2022)

# Dosing and Administration

- Recommended number of doses
  - One dose for persons with previous smallpox vaccination:
    - Born in Hong Kong before 1 January 1981; or
    - Born outside Hong Kong before May 1980
  - Two doses at least 28 days apart for persons without history of smallpox vaccination
- Administration
  - 0.5 ml via subcutaneous administration



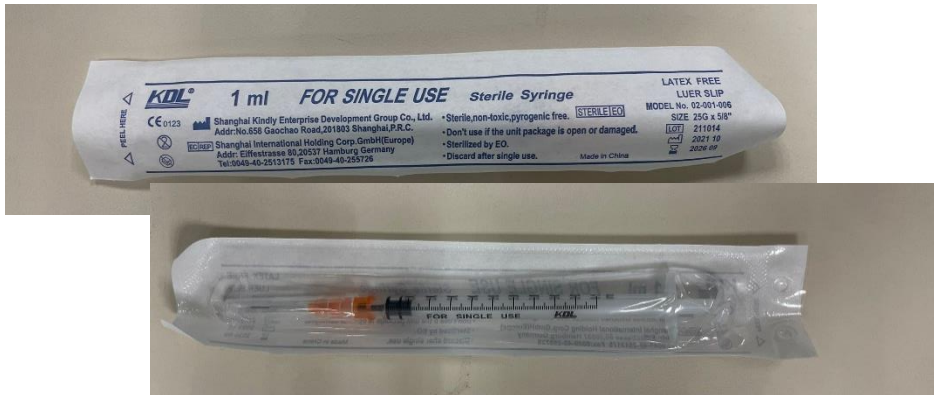

After thrawing,
- Vaccines should be stored between 2-8˚C for up to 24 weeks







Jynneos Monkeypox vaccine (20 vials/box)




Sterile 1ml syringe with 25G x 5/8" needle, Luer Slip (100 pcs/box) - for subcutaneous administration

Source:
CHP. Scientific Committee on Emerging and Zoonotic Diseases and Scientific Committee on Vaccine Preventable Diseases. Consensus Interim Recommendations on the Use of Monkeypox Vaccines in Hong Kong (As of 15 September 2022)

# Possible Side Effects

- Possible side effects include:
  - muscle pain
  - headache
  - fatigue
  - nausea
  - chills, and fever
  - pain, redness, swelling, firmness and itching at the site of injection

- Remote chance to cause a severe allergic reaction:
  - Usually occur within a few minutes to a hour after getting a dose of the vaccine
  - Signs include difficulty breathing, swelling of face and throat, a fast heartbeat, a bad rash all over the body, dizziness and weakness
  - Observe for 15 minutes after vaccination or 30 minutes if they have a history of anaphylaxis to gentamicin, ciprofloxacin, chicken or egg protein

| Reaction | JYNNEOS N=2943 % | PLACEBO N=980 % |
|---|---|---|
| **Local** | | |
| Pain | 84.9 | 19.1 |
| Pain, Grade 3* | 7.4 | 1.0 |
| Redness | 60.8 | 17.7 |
| Redness ≥100 mm | 1.5 | 0 |
| Swelling | 51.6 | 5.6 |
| Swelling ≥100 mm | 0.8 | 0 |
| Induration | 45.4 | 4.6 |
| Induration ≥100 mm | 0.3 | 0 |
| Itching | 43.1 | 11.7 |
| Itching, Grade 3* | 1.6 | 0.2 |
| **Systemic** | | |
| Muscle Pain | 42.8 | 17.6 |
| Muscle Pain, Grade 3† | 2.6 | 0.7 |
| Headache | 34.8 | 25.6 |
| Headache, Grade 3† | 2.4 | 2.1 |
| Fatigue | 30.4 | 20.5 |
| Fatigue, Grade 3† | 3.0 | 1.3 |
| Nausea | 17.3 | 13.1 |
| Nausea, Grade 3† | 1.5 | 1.2 |
| Chills | 10.4 | 5.8 |
| Chills, Grade 3† | 1.0 | 0.3 |
| Fever‡ | 1.7 | 0.9 |
| Fever, Grade ≥3‡ | 0.2 | 0 |

*Grade 3 pain defined as spontaneously painful.
†Grade 3 itching, muscle pain, headache, fatigue, nausea, and chills defined as preventing routine daily activities.
‡Fever defined as oral temperature ≥100.4°F (≥38°C), Grade ≥3 fever defined as ≥102.2°F (≥39.0°C).

Source: Monkeypox Vaccination Fact Sheet, CHP, DH
Package Insert of JYNNEOS, REVISED 06/2021

# Serious Adverse Events

**Serious Adverse Events (SAEs)**

Among the smallpox vaccine-naive subjects, SAEs were reported for 1.5% of JYNNEOS recipients and 1.1% of placebo recipients.

Causal relationship to JYNNEOS could not be excluded for 4 SAEs (all non-fatal):

- Crohn’ s disease
- Sarcoidosis
- Extraocular Muscle paresis
- Throat tightness

**Cardiac Adverse Events of Special Interest (AESIs)**

Cardiac AESIs were reported to occur in 1.3% (95/7,093) of JYNNEOS recipients and 0.2% (3/1,206) of placebo recipients who were smallpox vaccine-naive.

- Cardiac signs or symptoms
- ECG changes determined to be clinically significant,
- Troponin-I elevated

# Contraindications and Precautions

- The vaccine contains tromethamine, sodium chloride and water for injections
- It may also contain trace amounts of chicken protein, benzonase, gentamicin and ciprofloxacin from the manufacturing process
- Jynneos is contraindicated in those who have had a sudden life-threatening allergic reaction to a previous dose of, or to any components of the Jynneos vaccine
- If a confirmed anaphylactic reaction has been experienced after a previous dose, specialist advice should be sought
- Postpone the vaccination if an individual is acutely unwell, until they have fully recovered
- Minor illnesses without fever or systemic symptoms are not valid reasons to postpone vaccination
- This is to avoid confusing the differential diagnosis of any acute illness by wrongly attributing any signs or symptoms to the adverse effects of the vaccine
- Individuals who are unwell should be assessed to determine whether they are displaying symptoms of mpox

Training for healthcare practitioners. Vaccination against monkeypox using the MVA-BN vaccine, UK Health Security Agency, 7 September 2022

# Reporting of AEFIs

- Responsible healthcare personnel are advised to inform the vaccine recipients what to expect after receiving the vaccine (common side effects) and referred them to the Mpox vaccine fact sheet for the relevant information.

- Responsible healthcare personnel should also encourage vaccine recipients to tell healthcare professionals such as doctors and pharmacists of the suspected adverse event occurred after immunisation so that they can report to DH the suspected adverse event after vaccination.

- All suspected serious adverse events should be reported via AIRS AEFIs.

# Mpox Vaccination Fact Sheet

ENG

## Mpox Vaccination Fact Sheet

### What is Mpox?

Mpox (also kwown as Monkeypox) is caused by a virus named Mpox virus. 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 do 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. 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

Possible side effects include muscle pain, headache, fatigue, 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 Mpox Vaccine?

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 Mpox Vaccine?

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.

### Can Mpox Vaccine be co-administered with other vaccines?

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 doctor.

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 Vaccination to me / my child / my ward** under the Mpox vaccination programme; 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 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)

Centre for Health Protection | Department of Health

For further information on Mpox, please visit the website at

https://www.chp.gov.hk/en/features/105683.html

Version date : 16 January 2023

https://www.chp.gov.hk/files/pdf/mpox_vaccination_factsheet_eng.pdf

CHIN

## 猴痘疫苗接種須知

### 什麼是猴痘?

猴痘是一種由猴痘病毒引起的疾病。症狀包括在感染猴痘後的首數天出現發燒、劇烈頭痛、肌肉痛和淋巴結腫大。在發燒後約 1 至 3 天，口腔內會出現潰瘍，身體其他部位會出現皮疹。皮疹通常會於 10 天至兩星期內從斑丘疹發展到水疱、膿疱，然後是結痂，而在身體所有部位的皮疹一般會同步發展。病徵一般持續 14 至 21 天，患者通常會自行痊癒。在過去的猴痘爆發中，患者的死亡率介乎 1-10%。

當人與受感染的動物、受感染的人、或受污染的物件接觸，便可能受感染。人類如果被野生動物咬傷或抓傷，或直接接觸其體液，都可能會受感染。長期面對面接觸引致的飛沫傳播，或直接的體液接觸（例如透過性接觸），亦可能令病毒人傳人。

### 什麼是猴痘疫苗?

JYNNEOS* 疫苗適用於預防猴痘和天花，適用於 18 歲或以上有較高感染風險群組。18 歲以下人士若有高風險暴露史，經審慎評估風險及效益後，可考慮安排暴露後接種疫苗作緊急使用。此疫苗含有與猴痘病毒和天花病毒存在關聯的痘苗病毒，但該病毒已被弱化，無法在人體細胞中自我複製，也不能擴散到身體的其他部位或傳播給其他人。

* 此疫苗是根據衞生署衞生防護中心轄下的疫苗可預防疾病科學委員會和新發現及動物傳染病科學委員會（聯合科學委員會）的建議在特定群組人士上作緊急使用。

聯合科學委員會暫不建議大規模接種猴痘疫苗。專家們建議為曾與確診病例有高風險暴露史的人士作暴露後疫苗接種，以及以自願形式為高暴露風險群組接種疫苗，包括：

1. 有高風險性行為的人士，例如多個性伴侶、性工作者、或過去十二個月內有性傳播感染史；
2. 負責照顧猴痘確診病人的醫護人員；
3. 處理動物傳染痘病毒的實驗室人員；
4. 當本港動物出現猴痘個案時有較高暴露風險的照顧動物人員。

### 如何接種猴痘疫苗?

基礎免疫為 2 劑次 #，至少相隔 28 天

# 曾接種過天花疫苗的人士（1981 年 1 月 1 日之前在香港出生的人士和 1980 年 5 月之前在香港以外地區出生的人士），只需接種一劑猴痘疫苗。

接種途徑：前臂內側皮內注射 0.1 ml^，如不適合皮內注射，則於上臂皮下注射 0.5 ml。

^ 因應本地疫苗供應情況，對免疫功能正常的成年人（有蟹足腫史的人士除外），可用皮內注射 0.1ml 作為替代方案。

### 可能出現的副作用

可能出現的副作用包括肌肉疼痛、頭痛、疲勞、噁心、發冷和發燒，以及注射部位的疼痛、發紅、腫脹、變硬和痕癢。

接種疫苗後出現嚴重的過敏反應屬罕見情況，通常會在接種疫苗後的幾分鐘到一小時內發生。因此，接種後需觀察 15 分鐘。嚴重過敏反應的症狀可能包括：呼吸困難、臉部和喉嚨腫脹、心跳加速、全身出疹和頭暈乏力。

接受皮內注射的人士，注射部位的輕微發紅或腫脹感可能會長達數月，亦有可能出現硬塊或皮膚變色。

詳情請參閱 JYNNEOS 的藥廠指引。

### 愛滋病病毒(HIV)感染者和免疫力弱人士可否接種猴痘疫苗?

可以。海外研究顯示在 HIV 感染者發現的局部和全身性副作用，與非 HIV 感染者相比，出現率相近甚或更低。由於 HIV 感染者和免疫力弱人士在感染猴痘後容易出現併發症，因此強烈建議他們接種猴痘疫苗。

### 懷孕或哺乳期可否接種疫苗?

於懷孕或哺乳期接種 JYNNEOS 的資訊依然有限。現有數據不足以判斷對懷孕期間與疫苗相關的風險。暫不確定 JYNNEOS 疫苗是否存在於母乳中。

動物試驗並無證據顯示疫苗對發育中的胎兒存在傷害。

### 猴痘疫苗能否與其他疫苗同時接種?

猴痘疫苗需在 mRNA 新冠疫苗接種之前或之後至少相隔 4 週。

### 接種疫苗後的異常事件報告

若出現的副作用使你擔心，請聯絡你的醫生。

在你就醫時，請確保將接種疫苗的詳情告知醫護人員，並向他們出示你的接種疫苗記錄卡（如有）。他們會進行適當的評估，如有需要，會向衞生署呈報任何判斷為在醫學上需關注的接種疫苗後異常事件，讓衞生署採取進一步行動和評估。

☐ 我已閱讀及明白此疫苗接種須知內的所有內容，並同意在猴痘疫苗接種計劃下向本人注射 JYNNEOS 疫苗；及衞生署與政府合作的相關機構查閱及使用（i）本人 / 本人的子女 / 受監護者 ** 的個人資料及（ii）由醫院管理局及醫護人員持有屬於本人 / 本人的子女 / 受監護者 ** 的臨床資料，以便衞生署持續監測與接種 JYNNEOS 疫苗有關的安全及臨床事件，惟有關資料必須為此目的而查閱及使用。

** 請刪去不適用的部分

衞生防護中心 | 衞生署

更多有關猴痘資訊，請瀏覽網站：

https://www.chp.gov.hk/tc/features/105683.html

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https://www.chp.gov.hk/files/pdf/mpox_vaccination_factsheet_chi.pdf

# Frequently asked questions

1. **Can Mpox Vaccine be co-administrated with other vaccines?**
   - Vaccines for preventing Mpox should be given at least 4 weeks before or after an mRNA COVID-19 vaccine.

2. **Can Human Immunodeficiency Virus (HIV)-infected and immunocompromised persons receive Mpox Vaccine?**
   - 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 received Mpox vaccination.

3. **Can pregnant or lactating women receive Mpox Vaccine?**
   - 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