



**衛生防護中心**  
Centre for Health Protection

**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)**

**Introduction**

On 15 September 2022, the Scientific Committee on Vaccine Preventable Diseases (SCVPD) and the Scientific Committee on Emerging and Zoonotic Diseases (SCEZD) under the Centre for Health Protection of the Department of Health (JSC) convened a meeting to revisit the interim recommendations related to the use of monkeypox vaccine in Hong Kong.

**Latest Global and Local Situation of Monkeypox**

2. On 23 July 2022, the World Health Organization (WHO) declared the global monkeypox outbreak as a public health emergency of international concern. WHO assesses the global risk as moderate, while the risk in the European Region was assessed high and as moderate in the African Region, Region of the Americas, Eastern Mediterranean Region and the South-East Asia Region. The risk in the Western Pacific Region is assessed as Low-Moderate.



3. According to the WHO, from 1 January to 12 September 2022, 57 605 laboratory-confirmed cases of monkeypox and 460 probable cases, including 22 deaths were reported 102 countries/areas in all six WHO Regions. With the exception of countries in West and Central Africa, the ongoing outbreak of monkeypox continues to primarily affect men having sex with men (MSM) who have reported recent sex with one or multiple partners. At present there is no signal suggesting sustained transmission beyond these networks.

4. Monkeypox has been listed as a statutory notifiable disease in Hong Kong since 10 June 2022. Subsequent to confirmation of an imported case on 6 September 2022, the Government activated the Alert level of the Preparedness and Response Plan for Monkeypox, reflecting a low immediate health impact caused by monkeypox on the local population. Meanwhile, the first shipment of the monkeypox vaccine is expected to arrive in Hong Kong within the month of September 2022.

### **Updated Recommendations on the Use of Monkeypox Vaccine**

5. The JSC reiterated that mass pre-exposure vaccination is not recommended for monkeypox. Subject to availability of monkeypox vaccines, post-exposure prophylaxis for contacts of cases is recommended, in the order of exposure risk from high to low, with an appropriate third-generation vaccine, ideally within four days of first exposure (and up to 14 days in the absence of symptoms) to prevent the onset of disease.

### ***Priority Groups for Pre-exposure Vaccination***

6. The JSC noted the updated guidance from the WHO published in August 2022 on vaccines and immunization for monkeypox to include individuals at high risk of exposure, importantly but not exclusively gay, bisexual and other MSM or persons with multiple sexual partners into the group recommended for pre-exposure vaccination. According to the WHO, at least 11 countries in Europe offer or plan to offer pre-exposure vaccination for people considered to be at the highest risk of exposure (e.g., men who have multiple male sexual partners and sex workers). Among those at the highest risk of exposure, some countries have placed particular focus on those who are at the

highest risk of severe complications (e.g., people with immune disorders).

7. Having reviewed the latest scientific evidences, recommendations by the WHO and overseas health authorities and taking local context into account, the JSC updated recommendations in respect of target groups for pre-exposure vaccination as set out in the ensuing paragraphs.

8. The latest global epidemiology of monkeypox showed that the dominant affected group was MSM who have multiple sexual partners. There are practical challenges to identify and reach sexual contacts in this group via contact tracing for post-exposure vaccination. Individuals at high risk of exposure, importantly but not exclusively gay, bisexual and other MSM or individuals with multiple sexual partners should be included as a target group for pre-exposure vaccination against monkeypox on a voluntary basis.

9. Due to limited supply of monkeypox vaccine, prioritisation of the target groups for voluntary pre-exposure vaccination could be considered in the following order:

- i. Individuals at high risk of exposure, including gay, bisexual and other MSM with certain high risk sexual practices or history of sexually transmitted infection within the past 12 months. Examples of high risk sexual practices include sex with multiple sexual partners and chemsex;
- ii. Other high risk groups in the community. Examples include sex workers, participants in group sex or persons having multiple casual sexual contacts and/or sexual partners;
- iii. Healthcare workers responsible for caring of patients with confirmed monkeypox, based on risk assessment including proper use of personal protective equipment (PPE);
- iv. Laboratory personnel working with zoonotic pox viruses based on risk assessment including proper use of PPE;
- v. 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
- vi. Animal care personnel with high risk of exposure, in case of monkeypox occurrence in animals in Hong Kong.

10. Immunocompromised individuals within each group listed above should be accorded higher priority in case of vaccine shortage, due to possible severe complications following monkeypox infection.

### *Administration of Monkeypox Vaccines*

11. First- or second-generation smallpox vaccines are not recommended for use in the context of monkeypox.

12. Third-generation vaccine is generally recommended for use in adults at this juncture. Post-exposure vaccination for individuals aged less than 18 with high risk exposure should be offered in emergency situation on case by case basis following a careful evaluation of risks and benefits.

13. Taking note of overseas practice, limited vaccine supply and cease of smallpox vaccination programmes worldwide after eradication of smallpox in May 1980 (and since 1 January 1981 in Hong Kong), one dose of third generation modified vaccinia vaccine for prevention of monkeypox would be sufficient for indicated persons with previous smallpox vaccination (persons born in Hong Kong before 1 January 1981 and persons born outside Hong Kong before May 1980). Where indicated, persons without history of smallpox vaccination born after the aforesaid time could receive two doses of third generation modified vaccinia vaccine with a time interval of at least 28 days apart.

14. The JSC noted a randomized control trial involving the use of a one-fifth dose given intradermally in immunocompetent adults achieved levels of neutralizing antibodies similar to those produced with standard doses given subcutaneously. Some countries, including the US, UK and Australia, are considering or have approved an intradermal route for administration of one fifth of the volume of a full dose of modified vaccinia vaccine as an alternate dosing regimen and antigen-sparing measure in light of current vaccine supply constraints.

15. The JSC recommends to follow the manufacturer's recommendations for use of monkeypox vaccines in terms of dosing interval

and contraindication on use. If there is limited vaccine supply locally, intradermal route for administration of one fifth of the volume of a full dose of modified vaccinia vaccine could be considered for immunocompetent adults\* as an alternative dosing regime and antigen-sparing measure.

\*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 above 200 cells/mm<sup>3</sup>.

16. The third generation modified vaccinia vaccine for pre-exposure vaccination against monkeypox is recommended to be given at least 4 weeks before or after an mRNA COVID19 vaccine, if possible, so as to allow better differentiation on the association of vaccine type should there be occurrence of adverse events. Nevertheless, protection from monkeypox exposure should be prioritized and recent mRNA vaccine receipt should not delay post exposure prophylaxis if the protection is urgent.

17. The aforesaid interim recommendations provide updates on previous recommendations regarding the use of monkeypox vaccine issued on 16 June 2022.

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