M 痘（MPOX）

M痘疫情在許多國家是進行式

- 我國自2022/6/23列為第二類法定傳染病
- M痘是可以預防的，潛伏期約為3-21天，大多數人約2-4週會痊癒，少數人(如孕婦、幼童、長者、嚴重免疫不全者等)感染後發生重症的可能性高
- 確診後可能造成身體極度不適或疼痛
- 雖然M痘可以影響任何人，傳播途徑包括人傳人(親密接觸或飛沫傳播)或動物傳人，但此波疫情主要傳播途徑為人傳人、親密接觸為主，且多數病例為男性

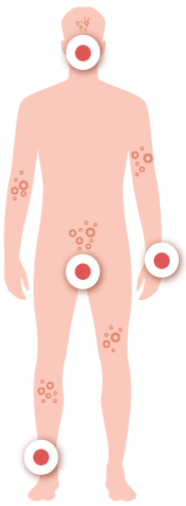
An outbreak of Mpox is occurring in many countries

- Taiwan Centers for Disease Control (TCDC) has declared Mpox as Category II of Notifiable Infectious Disease since June 23 2022.
- Mpox is preventable. The incubation period of Mpox is 3-21 days. Most people recover fully in about 2-4 weeks, but some people (for example, pregnant women, young children, elderly people, severely immunocompromised people, etc.), can get seriously ill.
- People with Mpox might experience serious discomfort or pain.
- Anyone can get Mpox. The transmission of Mpox includes person-to-person (close contact or respiratory droplets) and animal-to-human. The most common route for transmission of Mpox during this current outbreak is person-to-person and close contact. Adding to that, most cases are male.

常見症狀

- 臉部、四肢、生殖器出現不同型態的皮膚病灶
- 發燒、頭痛、精神不濟
- 淋巴結腫大(頸部、腋窩、腹股溝等處)
- 肌肉及背部痠痛
- 直腸出現疼痛腫脹
- 小便時疼痛或排尿困難

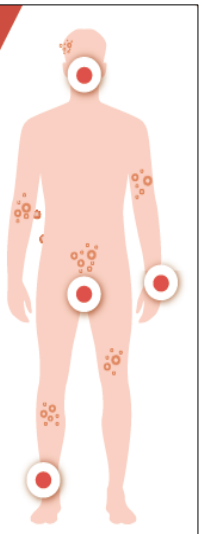




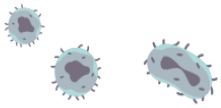
Symptoms of Mpox often include

- Different types of skin lesions on the face, extremities, and genitals
- Fever, Headache, Mental distress
- Swollen lymph nodes (neck, armpits, groin, etc.)
- Muscle and back pain
- Pain and swelling of the rectum
- Pain or difficulty when urinating.





M痘傳播途徑



- 人傳人:
  - 密切接觸病患的皮膚病灶處
  - 與病患發生親密接觸之性行為(口交、肛交或陰道交)
  - 接觸病患生殖器(陰莖、睾丸、陰唇及陰道)或肛門
  - 與病患進行擁抱、親吻或按摩
  - 接觸到病患呼吸道分泌物、損傷的皮膚或黏膜或被污染物品(包含衣服、床上用品、毛巾等個人物品)
  - 飛沫傳播: 需在長時間面對面接觸情境下較容易發生
  - 母子垂直感染:可經胎盤垂直傳染給胎兒，或於產程中因接觸而傳染
- 人畜共通傳染:直接接觸感染動物的血液、體液、損傷的皮膚或黏膜而被感染或食用受感染的動物肉類

Transmission routes for Mpox include:



- Person-to-person:
  - Close contact with the patient's skin lesions
  - Intimate sexual contact with a patient, including: oral, anal, or vaginal sex
  - Contact with the patient's genitals (penis, testicles, labia and vagina) or anus
  - Hugging, massaging, or kissing the patient
  - Contact with a patient's respiratory secretions, damaged skin, mucosa, or contaminated objects (including personal belongings such as clothing, bedding, or towel)
  - Respiratory droplet transmission: from prolonged face-to-face contact
  - Mother-to-child transmission: the virus might be transmitted to the fetus directly through the placenta, or through contact during delivery
- Animal-to-human :
  direct contact with the blood, body fluids, damaged skin, or mucosa of infected animals or having infected animals

如何保護自己預防感染

- 若您符合M痘疫苗接種對象，**請接種疫苗**
- **避免與不特定對象發生親密行為**
- 隨時隨地**注意自身狀況**並檢查是否出現疑似症狀
- 如出現疑似症狀，務必佩戴口罩儘速就醫，並告訴醫師**疑似M痘接觸史、高風險場域的暴露**
- 保持良好**手部衛生**(勤洗手、勿摸眼口鼻)
- 如家中有M痘病患，請做好**居家環境清潔及消毒**
- 若前往流行地區，避免與野生動物接觸和生食肉類



How to protect yourself from Mpox

- If you are eligible for a Mpox vaccination, **please get vaccinated**
- **Avoid intimate behaviors with multiple or strangers.**
- **Be aware of your own health condition** at all times, check for any symptoms that look like Mpox
- If Mpox-like symptoms occur, wear a mask and seek medical assistance as soon as possible. Inform the healthcare provider of your Mpox contact history or history of exposure at high-risk premises venues.
- **Practice good hand hygiene** (wash your hands regularly, avoid touching your eyes, nose, and mouth)
- If a member of the household has Mpox, **clean and disinfect the household environment well.**
- If you travel to endemic areas, avoid contact with wild animals and eating meat that is not thoroughly cooked



M痘疫苗



- 屬活性減毒非複製型疫苗，由於不會在哺乳類細胞內複製，可視為非活性疫苗，**安全性相對高**
- 我國建議接種對象包含:
  1. 與確診M痘個案曾性接觸之高風險接觸者
  2. 正痘病毒屬之實驗室操作人員
  3. 近6個月內曾有高風險性行為者(性病患者、多重性伴侶、性交易服務者、於營業場所發生性行為者等)
  4. 照顧M痘確診個案之醫護或清潔人員、協助採檢人員或執行疫苗接種作業人員



- 接種第 1 劑M痘疫苗**14天後**保護力才能達到4-8成，所以在**14天內**仍要留意避免風險行為
- 與第 1 劑間隔28天以上，**完成第2劑疫苗接種**，則可趨近於**9成保護力**
- 接種後的副作用包括注射部位疼痛、發紅、腫脹、全身肌肉痠痛等



Mpox vaccine



- The vaccine is produced with live, attenuated orthopoxvirus, Modified Vaccinia Ankara (MVA). Due to the fact that the virus does not replicate in mammal cells, it can be considered as an inactivated vaccine, and is a **relatively safe vaccine.**
- The recommended targets for vaccination:
  1. High risk contacts who have sexual partners diagnosed with Mpox
  2. Work with orthopoxviruses in a laboratory
  3. **Individuals who have engaged in risky sexual behavior in the past year** (such as people with multiple sexual partners,who are sex workers, and those who have engaged sex at commercial venues, etc.) ; **those who have had sexually transmitted diseases** ; or **Individuals who have a sexual partner with any of the above risks.**
  4. Healthcare providers or cleaning personnel caring for Mpox cases, personnel performing diagnostic tests and vaccinations.



- The effectiveness of the Mpox vaccine reaches 40% to 80% protection in **14 days** after the vaccination. Therefore, it is suggested that people who received vaccination shall avoid high-risk behaviors within **14 days** after getting vaccinated.
- The second dose should be given at least more than 4 weeks after the first dose. After the second dose, the effectiveness of the vaccine will reach approximately 90%.
- Pain, redness, and swelling where the shot was given and whole-body muscle soreness are the most common side effects of an Mpox vaccination.



資料來源：衛福部