# 類鼻疽 Melioidosis





# 病原體 Causative agent

- 由類鼻疽伯克氏菌引致
   Caused by the bacterium Burkholderia pseudomallei
- 廣泛存在於土壤和泥水中,特別是濕潤的黏土 Widespread in soils and muddy water, particularly common in moist clay soils
- 可以影響人類和動物,例如羊、豬、貓、狗等
   Can affect both humans and animals such as sheep, swine, cats, dogs, etc



# 類鼻疽流行地區 Endemicity of melioidosis

盛行於東南亞(例如新加坡、泰國)及澳大利亞北部
 Prevalent in Southeast Asia (e.g. Singapore and Thailand)
 and Northern Australia



#### 傳播途徑 Mode of transmission

- 接觸受污染的土壤 和水源(尤其是經 皮膚損傷/傷口)
- 吸入受污染的微塵 /水滴
- 飲用受污染的水
- 人傳人非常罕見
- 可以透過接觸患者 的血液或體液而傳 播

- Contact with contaminated soil and surface waters (especially through skin abrasions/wounds)
- Inhalation of contaminated dust/water droplets
- Ingestion of contaminated water
- Person-to-person transmission is rare
- May occur through contact with the blood or body fluids of an infected person

#### 傳播途徑 Mode of transmission

- 土壤和泥水中的類 鼻疽伯克氏菌在颱 風或暴風雨後可能 會暴露於地面
- 細菌在強風和暴雨 時更易傳播
- 受感染個案較常 於颱風或暴雨後 出現

- Burkholderia pseudomallei in the soil and muddy water may be exposed to the ground after typhoons or storms
- Bacteria would spread more easily with strong wind and storms
- Infection cases are more common after typhoons or storms



### 潛伏期 Incubation period

通常為1至4周,但可以介乎1天至數年
Usually from 1 to 4 weeks, but can range from 1 day to few years





#### 臨牀特徵 Clinical features

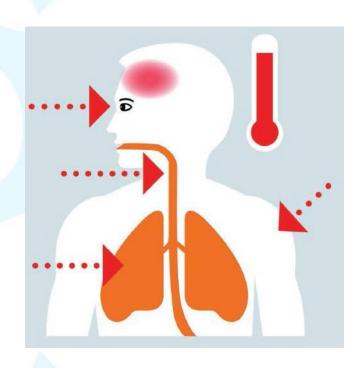
- 局部感染(例如皮膚膿腫)
   Localised infection (such as cutaneous abscess)
- 肺炎 Pneumonia
- 腦膜腦炎 Meningoencephalitis
- 敗血症 Sepsis
- 慢性化膿性感染
   Chronic suppurative infection



# 常見病徴 Common symptoms

- 發燒 Fever
- 頭痛 Headache
- 局部痛楚或腫脹
   Localised pain or swelling
- 潰瘍 Ulceration
- 胸痛 Chest pain
- 咳嗽 Cough
- 呼吸短促 shortness of breath
- 咳血 Haemoptysis
- 局部淋巴結腫大
   Swelling of regional lymph nodes





# 高風險群組 High risk groups

- 有長期病患,包括:
  - 糖尿病
  - 肺病
  - 肝病
  - 腎病
  - 癌症
  - 免疫功能受損的人
- •可能於職業環境中受感染:
  - 農務
  - 實驗室
  - 醫護工作

- Persons with underlying diseases, including:
  - Diabetes
  - Lung disease
  - Liver disease
  - Renal disease
  - Cancer
  - Immunosuppression
  - Occupational exposure:
    - Agricultural
    - Laboratory
    - Health-careworkers

### 治理方法 Management

抗生素 Antibiotics

 一些慢性感染可能需要較長期的治理 Long-term treatment may be necessary for some chronic infection cases



#### 預防方法 Prevention

- 現時沒有針對類鼻疽的預防疫苗
   No vaccine is available for melioidosis
- 市民應採取以下措施預防感染:
   The public should take the following preventive measures against infection:
  - 避免接觸受污染的土壤
     Avoid contact with contaminated soil





## 預防方法 Prevention (2)

進行有機會接觸土壤或泥水的活動時,穿著適當的防護衣物,例如佩戴手套,並穿上水靴。 高風險人士可以考慮另外佩戴外科口罩

Wear appropriate protective clothing or footwear when participating in activities with possible contact with soil or water, e.g. use gloves and wear boots. High risk individuals may consider to wear a surgical mask in addition





# 預防方法 Prevention (3)

接觸受污染的水或土壤後進行清洗或淋浴。
 Wash or shower after exposure to contaminated water or soil.



盡快清潔傷口,並以防水敷料覆蓋
 Always clean any wounds as soon as possible and cover any cuts or grazes with waterproof dressings



接觸土壤和進行園藝活動後,用肥皂和水洗手
 Wash hands with liquid soap and water after handling with soils or gardening





### 預防方法 Prevention (4)

- 類鼻疽可經受污染的土壤和水於颱風和暴雨期間及之後傳播 Melioidosis can be spread by contaminated soil and water during and after typhoons and storms.
- 在颱風和暴風雨期間應留在室內,避免前往可能發生水浸的 地區,也不要涉水或接觸泥水和泥土 Stay indoor during typhoons and storms, avoid travelling to areas with potential flooding, and not to wade or contact with muddy water and soil.

• 高風險人士應避免使用雨水渠道附近的道路, 以免接觸可能 由污水產生的氣溶膠。如不能避免曝露於該環境,高風險人 士應佩戴外科口罩、手套, 並穿上水靴 High risk individuals should avoid path near stormwater drains where aerosols may be generated from contaminated water. If possible exposure is inevitable, high-risk individuals should wear a surgical mask, gloves and boots.



# 預防方法 Prevention (5)

• 注意食物衞生,不要飲用未經煮沸的水 Observe food hygiene and avoid drinking raw water



• 外遊人士可透過戶外水上活動受到感染。避免接觸 可能受污染的水源(例如河流、池塘或湖泊)可減 低受感染的風險

Travellers can contract the disease through outdoor water sports. Risk of infection can be minimised by avoiding exposure to water sources (such as rivers, ponds or lakes) that might be contaminated

## 正確潔手 Proper hand hygiene

手部衞生是最有效防止疾病傳播的方法
 Hand hygiene is the single most important measure of reducing the spread of diseases





# 正確潔手 Proper hand hygiene



https://www.youtube.com/watch?v=tGV2dzIzUuQ&feature=youtu.be



#### 網上資源 e-Resources

- 新聞公報 Press release
- 給醫生的信 Letter to Doctors
- 中心網站 CHP website
- 中心 Facebook 專頁
   CHP Facebook page





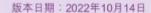




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#### 總結

#### 什麽是類鼻疽?



◆ 由類鼻疽伯克氏菌引致的疾病



◆ 人類可通過接觸受污染的土壤和水源 (尤其是經皮膚損傷/傷□)、吸入受污染的 微塵/水滴和飲用受污染的水而受到感染 有長期病患 或免疫功能受損 的人士 屬高危群組

#### 預防感染措施 8



清潔並以防水敷料 覆蓋傷口



進行有機會接觸土壤 或泥水的活動時, 穿著適當防護衣物, 並於活動後洗手



避免接觸 受污染土壤



注意個人及 食物衞生, 不要飲用 未經煮沸的水







#### Summary

#### What is 'Melioidosis'?



Version date: 14 October 2022

· A disease caused by the bacterium Burkholderia pseudomallei

Person-to-person transmission is rare



 Humans can become infected through contact with contaminated soil and surface waters (especially through skin abrasions/wounds); inhalation of contaminated dust/water droplets; and ingestion of contaminated water

Persons with underlying diseases or immunosuppression are the high risk groups

#### Preventive measures:



Clean cuts or grazes and cover with waterproof dressings



Wear appropriate protective clothing or footwear when participating in activities with possible contact with soil or waters, and wash hands afterwards



Avoid contact with contaminated soil



Observe personal and food hygiene and avoid drinking raw water







# 謝謝 Thank you

