

Melioidosis

Source: TH

A recent study highlights how **climate conditions**, particularly **monsoon-related factors**, influence the spread of **melioidosis**.

- Melioidosis: It is a bacterial infectious disease, linked to rainfall, temperature, and humidity.
 - It is caused by *Burkholderia pseudomallei* and primarily acquired by inoculation, inhalation and/or ingestion of soil- and water-dwelling environmental saprophytes.
- South Asia (endemic to Bangladesh and Sri Lanka), including India, accounts for 44% of global melioidosis cases, with Odisha as a hotspot due to its agriculture and extreme weather.
 - It is primarily found in Northern Australia and Southeast Asia.
- Symptoms range from mild skin infections to severe pneumonia and sepsis, with a fatality rate of up to 50% in septic cases.
 - It is **not transmitted** from **animals to humans**, and **human-to-human** transmission is **rare**.
- Melioidosis can be treated with antibiotics but it trouble doctors because:
 - Diverse Symptoms: Causes a wide range of infections, from mild skin issues to severe pneumonia and sepsis.
 - Diagnostic Challenges: Often misidentified as Pseudomonas aeruginosa, a more common bacterium, leading to inappropriate treatment.
 - Complex Treatment: Needs prolonged therapy (12-20 weeks) with a risk of recurrence if not treated properly.

What is 'Melioidosis'?

- 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

Read More: Climate Change & Infectious Diseases

PDF Refernece URL: https://www.drishtiias.com/printpdf/melioidosis