



# Primary Amoebic Meningoencephalitis

[Source: TH](#)

Kerala has issued technical guidelines for the diagnosis, management, and **prevention of [Primary amoebic meningoencephalitis \(PAM\)](#)** following recent cases of this rare but fatal infection.

- The Kerala Health Department has introduced SOPs for handling **acute meningitis cases**, potentially the first set of guidelines in India for this rare infection. The amoebic parasite [Naegleria fowleri](#) was identified in most cases, with **Vermamoeba vermiformis** implicated in one case.
- **Disease Characteristics:** PAM is caused by **Naegleria fowleri**, free-living amoebae in warm, stagnant freshwater and has a high mortality rate (>97%).
  - Known as the **“brain-eating amoeba,”** it infects the brain through the nasal passages, leading to severe brain tissue destruction.
  - Children are particularly vulnerable, though PAM does not spread from person to person or through swallowing contaminated water.
- **Symptoms and Diagnosis:** Symptoms include headache, fever, nausea, and vomiting. PAM diagnosis is challenging and often mistaken for **bacterial meningitis**.
  - Bacterial meningitis is an infection of the meninges, which is the protective covering for the **brain and spinal cord resulting in inflammation**. It is a serious and life-threatening condition.
- **Treatment:** Early diagnosis and timely initiation of an antimicrobial cocktail are crucial. The optimal drug regimen is still uncertain, and treatment involves a multidisciplinary team.
- **Prevention Measures:** Avoid exposure to stagnant freshwater, use nose plugs, and ensure proper chlorination and maintenance of swimming pools to prevent PAM.
- **Vermamoeba vermiformis** is a free-living amoeba found in natural and man-made environments, including freshwater sources.
  - It can host various pathogens and is linked to opportunistic diseases such as **encephalitis and epithelial disorders**.

Read more: [Naegleria fowleri: The "Brain-Eating Amoeba"](#)

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