

Naegleria fowleri (a brain eating amoeba): are we aware of this?

Naegleria fowleri is a free living, universally distributed amoeba, which is mostly found in natural, stagnant, warm water bodies such as ponds, lakes, etc. It is also reported to be present even in indoor water bodies, such as swimming pools within a temperature range of 40–45°C. *N. fowleri* infects the central nervous system of human body by entering through the nose during swimming and outdoor baths in natural stagnant water bodies, leading to meningoencephalitis. It is a condition of inflammation of cerebral tissues and membranes of the brain and is mostly fatal in nature. Casualties due to *N. fowleri* infections are reported all across the globe including a few in India but only seven survivors in the entire world have been reported till 2015 (refs 1–4).

Clinical symptoms of *N. fowleri* infection may be seen usually within the first 24 h to 8 days of infectivity in the form of severe fever with headache, chills, photophobia, confusion, etc. and in

adverse cases, coma⁵. The infection may be conventionally diagnosed by sampling and analysing the presence of *N. fowleri* in the cerebral spinal fluid of the suspect with the help of trichrome or Giemsa staining technique, followed by magnetic resonance imaging of brain to detect any possible abnormalities in midbrain and subarachnoid⁵.

Though *N. fowleri* infections are more often treated with antibiotics, prevention is better than cure, as there is no known permanent cure that exists till date¹. Water activities in freshwater bodies and, most importantly, abandoned ones should be avoided during summers when the temperature of water is higher. Proper chlorination of water bodies should be done on regular basis to prevent the growth of *N. fowleri*. It is also recommended to use nose clips during any outdoor water activities, which would decrease probability of the passage of *N. fowleri* through the nose.

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Foreign origin plastic litter predominate in Great Nicobar Island, a Biosphere Reserve

Great Nicobar Island is the southernmost island of Andaman & Nicobar Islands with an area of about 1044 sq. km (Figure 1). The population of the island is 8069 (2011 census), largely inhabited in the south-eastern part. This island is home to one of the most primitive tribes of India – *Shompens*. The island encompasses the Great Nicobar Biosphere Reserve (GNBR) that includes the Galathea National Park and the Campbell Bay National Park. The Biosphere Reserve was included in UNESCO-MAB (Man and the Biosphere Programme) Network in May 2013.

The island harbours a wide spectrum of ecosystems comprising tropical wet evergreen forests, mountain ranges and coastal plains. This island's rich flora and fauna with its high endemism for giant robber crab, crab-eating macaque, megapode bird, etc. play a vital role as a reservoir of biodiversity. This island is one of the major nesting grounds in

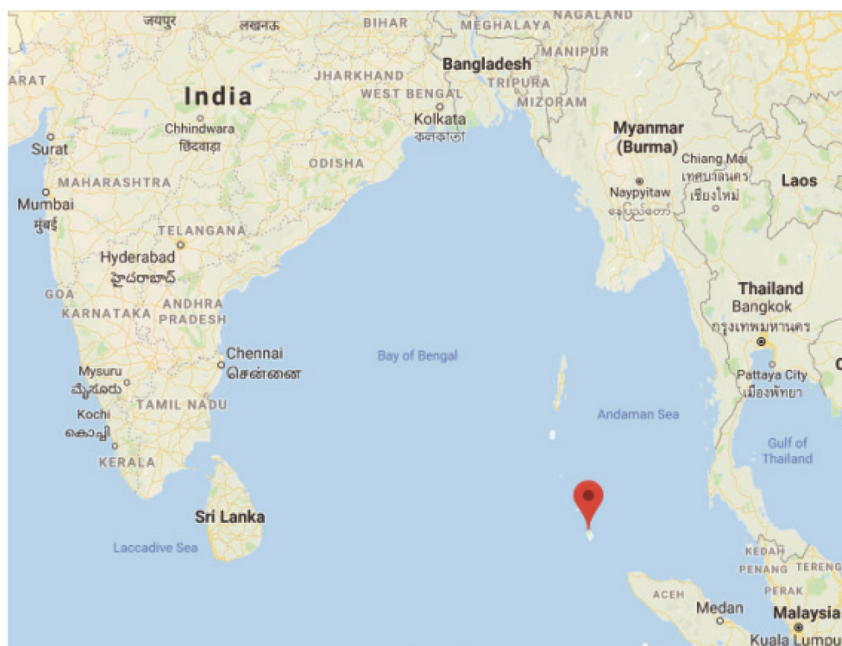


Figure 1. Map showing the location of Great Nicobar Island (Source: Google Maps).