

World Health Organization releases first technical brief on Encephalitis

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Encephalitis is an increasing global threat: Dr Ava Easton, Chief Executive, Encephalitis International



World Health Organization (WHO) and Encephalitis International have launched a critical Technical Brief on Encephalitis in London, which identified encephalitis (infectious and autoimmune) as an increasing global threat making it an urgent public health priority. The technical brief outlines the worldwide burden of encephalitis, key actions required to improve prevention, data collection and surveillance, diagnostics and treatment, after care and awareness, and research innovation.

“Encephalitis is an increasing global threat. Without urgent attention and investment we will see more needless death and disability from the condition”, said Dr Ava Easton, Chief Executive, Encephalitis International.

Encephalitis, a condition caused by infectious and autoimmune causes in individuals, is an often-deadly brain inflammation that can affect anyone regardless of age, sex or ethnicity. It can lead to severe neurological consequences, including permanent brain injury. It arises either from an infection invading the brain, such as Japanese Encephalitis, Scrub Typhus that are more prevalent in India or from the immune system mistakenly attacking the brain (autoimmune encephalitis).

WHO and Encephalitis International urge policymakers, public health professionals, healthcare providers, and researchers to engage with this brief and implement its recommendations to save lives and reduce disability associated with encephalitis. According to a recent survey in 2024, 1,548 Japanese Encephalitis cases were reported from 24 states and Union Territories.

Dr Ava Easton, added, "The WHO's recognition of encephalitis as a growing global threat marks a pivotal moment. We must act decisively to improve prevention, diagnosis, and care for those affected. Encephalitis disproportionately affects individuals in low-to-middle-income countries (LMIC), where healthcare resources are often limited. To support the implementation of the technical brief's recommendations, Encephalitis International has launched the "Countdown to Change" pilot appeal, aiming to raise £50,000 by 22 February 2025. Donations will fund initiatives to improve diagnostics, treatment, and aftercare for those affected globally."

"The WHO Encephalitis technical brief aims to focus attention on the increasing global threat of encephalitis, prevention strategies and existing gaps in the diagnosis, treatment and care which will help enable more people affected to receive the treatment and care they need to live fulfilling and healthy lives." said Dr Tarun Dua, Brain Health Unit, Department of Mental Health, Brain Health and Substance Use.

WHO Technical Brief Conclusion:

- Encephalitis is an increasing global threat with an urgent public health imperative, and represents a significant yet under-recognized global health challenge, marked by substantial mortality, disability burden, and economic impacts.
- Compounded by large population densities in resource-limited settings, proximity to animals through human encroachment, intensive farming practices, vaccine hesitancy, climate change, urbanization, and global trade, encephalitis is primed to further expand its reach.
- Trends of emerging and re-emerging viral outbreaks of encephalitis are increasing and identification and recognition of autoantibodies are contributing to the expanding number of autoimmune encephalitis cases.
- The true global burden of encephalitis is currently unknown – particularly in LMIC, however, the heavy costs associated with neurological sequelae and the impact on families are undisputed and increasingly being recognized.
- Central to reducing the burden of encephalitis are vaccination strategies, the establishment of robust surveillance systems, the strengthening of health systems.
- Progress in these areas should be underpinned by quality medical and public health research and the generation of new advances.
- Public awareness and education also play a pivotal role in reducing encephalitis deaths and disability along with increasing understanding and empathy for the condition and those affected, along with preventative measures.
- Prioritising encephalitis within global and national health agendas, mobilising resources for targeted interventions, and fostering collaboration among stakeholders can significantly reduce the potential global threat and disease burden. Together, these efforts promise to improve health outcomes, enhance the quality of life for those affected, and build resilient health systems capable of responding to this growing public health challenge.

Symptoms of encephalitis vary but can include:

- Infectious encephalitis (decreased or altered level of consciousness, personality/ behavioural change, fever and a headache);
- Autoimmune encephalitis (memory problems, psychiatric symptoms, decreased or altered level of consciousness and personality change).

Death rates following encephalitis can be high. Survivors may experience long-term challenges such as cognitive impairments, personality changes, epilepsy, and fatigue, making reintegration into daily life difficult. Treatment and cure depend on the underlying cause and may include antiviral medications for autoimmune causes and supportive care to manage long-term symptoms.

Encephalitis affects three people every minute globally, yet almost 77% of the population do not know what it is. The lack of awareness leads to delay in diagnosis and treatment, and poorer patient outcomes. By implementing the WHO's recommendations, we can work towards reducing the global impact of this debilitating condition.