NATIONAL ACADEMIES Sciences Engineering Medicine

The Evidence Base for Lyme Infection– Associated Chronic Illnesses Treatment

Lyme disease, the most common vector-borne disease in the United States, is primarily caused by the bacterium *Borrelia burgdorferi* and transmitted through the bite of infected blacklegged ticks. Most cases of Lyme disease are effectively treated through oral antibiotics. However, some patients develop persistent and debilitating symptoms including fatigue, pain, and other cognitive dysfunctions that last months to years. A National Academies committee is conducting a study to assess the current evidence base for the treatment of Lyme infection–associated chronic illnesses (Lyme IACI) to identify research priorities and opportunities.

What Are Lyme IACI? Who Do They Affect?

Lyme IACI encompass post-treatment Lyme disease syndrome; chronic Lyme disease; persistent Lyme disease; and other complex, chronic cases of illnesses associated with Lyme disease. There are no approved laboratory tests or objective biomarkers for diagnosing Lyme IACI, but an estimated 5–10 percent of the approximately 476,000 people treated for Lyme disease every year experience persistent symptoms.

How Will the Study Process Work?

The study committee will evaluate the scientific evidence, gather and analyze new information, and deliberate on consensus recommendations to address the study's charge. The committee will hold public information-gathering sessions to hear input from various fields and disciplines.

Why Are the National Academies Conducting a Study on Lyme IACI?

Lyme IACI can take a heavy toll on individuals' well-being and quality of life. More research is needed to advance knowledge of Lyme IACI treatment and diagnostics. Because symptoms of Lyme IACI are similar to other infectionassociated chronic illnesses like Long COVID and myalgic encephalomyelitis/chronic fatigue syndrome, research developments have the potential to be shared between these illnesses.

How Can People Contribute?

The committee will seek perspectives from individuals living with Lyme IACI via public comment at information-gathering meetings and other opportunities for written comment. The insights provided will be used by the committee in the development of the report and its recommendations.