

## Lyme Testimony

Thank you for inviting me. I am John D. Goldman. I am an Infectious Diseases Specialist at UPMC PinnacleHealth and have been practicing in Harrisburg for over 20 years. My office is approximately one mile from here.

I was one of the Infectious Diseases Society of America (IDSA) representatives on the State Task Force on Lyme Disease and Related Tick-Borne Disease. Related Diseases. The Task force's purpose was to explore and identify recommendations related to education and awareness of Lyme disease. The task force's primary recommendations focused on increased and improved surveillance, prevention of tick exposure strategies and tactics, and Education and Awareness for Health Care Practitioners, patients, the general public, and other stakeholders.

The task for was purposely constructed to include a wide variety of stakeholders and a wide range of opinions. Panel members included patients, patient advocates, epidemiologists, entomologists, and physicians. Importantly, physician on the task force included representatives from the IDSA and the International Lyme and Associated Diseases association(ILADS). These organizations vary greatly in their approach to diagnosis and treatment of Lyme disease, and consequently, the diversity of opinions in the medical community on the diagnosis and treatment were represented on the committee.

Despite the diversity of opinions on the committee there was general agreement on a number of issues.

- 1) The incidence of Lyme disease has been increasing in Pennsylvania. The number of cases in the state has increased by roughly ten fold in the last 20 years. In addition, Lyme has spread throughout the state. Originally, Lyme was found primarily in the eastern part of the state and was less frequently seen in the central and western part of Pennsylvania. Over the last 20 years, the disease has spread progressively westward through the state and now is common in all parts of the state. In fact, Lyme disease has been found in every county in Pennsylvania.
- 2) There needs to be greater recognition of the diversity of presentations of acute Lyme disease. Specifically, that acute Lyme can present as erythema migrans (the classic bull's eye lesion), with a non-specific rash, or as a non-specific febrile illness without any skin findings and that Lyme disease needs to be included in the differential diagnosis of any non-specific febrile illness that occurs during the time of the year when Lyme is common (between April and October).
- 3) There needs to be a greater recognition of the limitations of Lyme serologic testing in acute Lyme disease. Specifically, that Lyme serologic testing is often falsely negative early in the disease and that serologies should not be

used to make treatment decisions in acute disease. In other words, treatment should be based on clinical suspicion rather than testing.

- 4) There needs to be greater recognition of the possibility of other tick-borne illnesses specifically: anaplasmosis, ehrlichia, rocky mountain spotted fever, and babesiosis and that although these diseases are all much less common than Lyme disease. They should be considered in the differential diagnosis of febrile illnesses that occur during season that Lyme occurs.

There are still many controversies in the diagnosis and treatment of Lyme disease and despite the consensus on the above issues the physician members of the committee still disagree on several issues.

- 1) The reliability of serologic testing in late stage disease and the use of unapproved laboratory tests. The IDSA members believe that CDC recommended two-stage testing is very accurate and very reliable in later stage disease. However, the ILADS physicians believe that serologic testing is unreliable and that diagnosis should be primarily based on clinical findings and advocate the use of novel tests.
- 2) The usefulness of prolonged courses of oral or intravenous antibiotics. The IDSA members believe that CDC recommended treatment regimes (generally 14-28 days of antibiotics) are effective and sufficient for the treatment of Lyme disease. In contrast, the ILADS physicians believe that prolonged courses of antibiotics (often extending for several months) are needed to treat "chronic" Lyme disease.
- 3) The frequency of co-infections. The IDSA physicians believe that these co-infections are relatively infrequent and that their diagnosis should be based upon approved tests. ILADS physicians believe that these co-infections are relatively common, that standard testing is unreliable, and that the use of novel testing methods is needed.

Lyme disease is increasing in Pennsylvania and is affecting more Pennsylvanians. Despite the diversity of opinions on the task force, there is strong agreement on the need for better education, better prevention, better diagnosis, and better treatment of the disease as reflected in the task force's recommendations. We urge that the legislature adopt the task force's recommendations which reflect a consensus among the diversity of opinions on Lyme.