

Tick Watch

By Siiri Bennett, MD, State Epidemiologist, Maine Center for Disease Control and Prevention



Lyme disease remains the most common tick-borne disease in Maine with 1,171 cases reported in 2015. While ticks may be active any time the temperature is above freezing, they are most active in warmer months. May is Lyme Disease Awareness Month in Maine, and we ask you to please help us stress the importance of tick education. Specifically, we ask you to encourage patients to partake in "tick watch" when spending time outside. This includes daily tick checks, wearing protective clothing, using EPA approved repellents, and using caution in areas where ticks may be.

Important Things to Remember:

- Lyme disease is preventable by avoiding contact with infected ticks and tick infested areas.
- Lyme disease is caused by the bacteria *Borrelia burgdorferi*, which is transmitted through the bite of an infected deer tick (*Ixodes scapularis*). The tick must be attached to an individual for a minimum of 24 hours for transmission.
- The most common early symptom of Lyme disease is an *erythema migrans* (EM), a "bull's eye" rash that appears 3-30 days after transmission (seen in about 60 to 80 percent of cases nationwide). Other early symptoms include: fatigue, fever, headaches, arthralgia, and myalgia.
- Disseminated symptoms include: arthritis including joint swelling, Bell's palsy and other cranial neuritis, encephalitis, lymphocytic meningitis, radiculoneuropathy, and second- or third-degree atrioventricular block.
- Antibiotic therapy is effective for the treatment of Lyme disease. Clinical treatment guidelines are available at the Infectious Diseases Society of America (IDSA)'s website.

Ixodes scapularis can transmit Lyme disease and two other tick-borne infections that are endemic in Maine: anaplasmosis and babesiosis. Cases of both of these diseases are on the rise in Maine. Babesiosis cases increased in 2015 and cases of Anaplasmosis remained steady. The majority of tick-borne illnesses occur during the summer months when ticks and humans are active outdoors. If you see a patient with "summer flu," especially if their WBC is low - think anaplasmosis and send samples for PCR testing.

Thank you for your invaluable help in preventing tick-borne diseases here in Maine.

Resources:

- IDSA treatment guidelines available at <http://cid.oxfordjournals.org/content/43/9/1089.full>
- Lyme disease case report form available on the web at <http://www.maine.gov/lyme> under Resources for Physicians
- "Tick-Borne Disease in Maine: A Physicians Reference Manual" is available online at <http://www.maine.gov/lyme> under Tick Resources. Paper copies can be requested through disease.reporting@maine.gov
- University of Maine Cooperative Extension Tick ID Lab submission instructions found at <http://extension.umaine.edu/ipm/tickid/>
- To continue getting updates throughout May please like our Facebook page at <https://www.facebook.com/MaineCDC>

By Daniel Oppenheim, MD, Co-Chair MMA Public Health Committee & Peter Wilk, MD, Maine Physicians for Social Responsibility Board Member

In 1986, the *New England Journal of Medicine* devoted an entire issue to the health consequences from any use of nuclear weapons. Then editor of the NEJM Dr. Arnold Relman authored an editorial entitled: "The Physicians' Role in Preventing Nuclear War" in which he declared:

"What we physicians urgently need to be telling our government and our fellow citizens is that even 1 percent (or less) of the total destructive power now in possession of the superpowers is enough to doom our two countries and inflict untold damage on the rest of the world.... That is why most physicians, although we have no special expertise in foreign policy or diplomacy, agree that our government ought to be exploring every possible initiative to achieve an agreement on the early reduction of nuclear stockpiles."

This is still true today. Although our nuclear stockpiles have been reduced significantly since 1986, in a nuclear war with Russia involving just a fraction of current arsenals, millions of Americans would be killed and our entire economic, medical and public health infrastructure would be destroyed.

Yes, there are many urgent national security threats that must be dealt with these days. However, these horrific weapons are simply unusable in addressing any of them.

We have also learned that detonation of a smaller number of warheads anywhere in the world (for example in a war between India and Pakistan) would result in catastrophic consequences for all of us. In a series of articles published over the past nine years in the *Journal of Atmospheric Chemistry and Physics* and the *Journal of Geophysical Research*, Drs. Robock, Toon and others document the likely impact of a so-called "limited nuclear war" on climate and global food production, putting the entire world's population at grave risk of mass starvation.

For those reasons, along with the World Medical Association and the American Medical Association, the Maine Medical Association has adopted a series of resolutions on this set of issues, culminating in a 2010 commitment to "work cooperatively with other organizations and individuals interested in the prevention of the devastating consequences of the detonation of nuclear weapons to further public education, public policy and legislation to that end."

Physicians across the country are once again stepping up to address this threat.

- This past June in Chicago, the AMA adopted a resolution urging "the U.S. and all national governments to continue to work to ban and eliminate nuclear weapons." In addition, the AMA reaffirmed its commitment to "collaborate with relevant stakeholders to increase public awareness and education on the topic of the medical and environmental consequences of nuclear war."
- On October 14th, the NEJM published an article by Drs. Ira Helfand and Victor Sidel summarizing the current state of affairs. They observed that most of the world has acted "as though the danger of nuclear war were a thing of the past. To the extent that we have considered the matter, we have focused on the possibility that terrorists or "rogue states" such as North Korea and Iran will acquire nuclear weapons. Although these are important threats, it is critical that we understand that the greatest danger is posed by the arsenals of the countries that already have nuclear weapons. There remain in the world today more than 15,000 nuclear warheads, 95% of which are in the arsenals of the United States and Russia. Of these warheads, some 2000 are on hair-trigger alert. They can be fired in less than 15 minutes and can destroy their targets across the globe 30 minutes later."
- On November 11th the AMA released the text of a letter to Secretary of State John F. Kerry, noting the imperative for physicians to speak out on this issue. "As physicians, we have a clear duty and responsibility to preserve and safeguard the health of our patients and consecrate ourselves to the service of humanity... Therefore, the AMA supports good faith efforts to eliminate nuclear weapons and urges the Administration to continue the process of bilateral and verifiable nuclear arms reduction."

When considering the catastrophic health consequences of any potential use of nuclear weapons, the only appropriate response is prevention. As Drs. Helfand and Sidel urged at the end of their article, we physicians have unique credibility and we must act in concert with the resolutions adopted by the WMA and AMA to "educate our patients, the general public and our political leaders about the medical consequences of nuclear war and the urgent need to abolish these weapons before they are used."

For more information or to help with this educational effort, please check out Maine Physicians for Social Responsibility Maine's website (www.psrmaine.org) or call PSR Maine's Executive Director, Karen D'Andrea at 210-0084.

**Connie Adler, MD
Installed in Maine Women's
Hall of Fame**

On Saturday, March 19, Connie Adler, MD became the first physician installed in the Maine Women's Hall of Fame. Established in 1990 by the Maine Federation of Business and Professional Women, the Hall is dedicated to women who have met three specific criteria, including significantly improving lives of women in Maine. Congratulations Dr. Adler!



MMA WELCOMES OUR NEWEST CORPORATE AFFILIATE:

Maine Quality Counts

WE APPRECIATE THEIR SUPPORT!

Get the Inside Story

Delivering quality diagnostic imaging services at centers and hospitals throughout Maine and the surrounding area.

Bangor | Bar Harbor | Belfast | Biddeford | Bridgton | Brunswick | Damariscotta
Dover-Foxcroft | Manchester | Lewiston-Auburn | Scarborough | Skowhegan

Part of the CDI national provider network for medical imaging and related services.

207.468.2275 myCDI.com/ME