2013.03 LYME DISEASE AND CO-INFECTIONS: EDUCATION AND RESEARCH FUNDING

Submitted by St. Paul Diocesan Council

Whereas, Lyme disease and its related co-infections are serious diseases that affect many Canadians each year and that can have serious health implications if left untreated; and

Whereas, the only current testing for Lyme disease is limited to a single strain, thereby leaving physicians having to make clinical diagnoses only; and

Whereas, an aggressive, long-term course of antibiotics, an effective treatment for late Lyme disease, is not encouraged by provincial colleges of physicians or by the Public Health Agency of Canada; and

Whereas, current federal funding of research into Lyme disease and related co-infections is limited to studies of strains endemic to the eastern United States, rather than strains endemic to Canada; therefore, be it

Resolved, that the Alberta Mackenzie Provincial Council of The Catholic Women's League of Canada, through the national council of The Catholic Women's League of Canada, urge the federal government to provide funding for research specifically into the strains of Lyme disease and related co-infections that occur in Canada; and, be it further

Resolved, that the Alberta Mackenzie Provincial Council of The Catholic Women's League of Canada, through the national council of The Catholic Women's League of Canada, encourage provincial councils to urge their provincial and territorial governments to provide doctors with better information about Lyme disease and related co-infections so that they are able to make more knowledgeable clinical diagnoses and prescribe appropriate treatments; and, be it further

Resolved, that this resolution be forwarded to the national council of The Catholic Women's League of Canada for consideration at its 93rd Annual Convention.

BRIEF: Lyme Disease and Co-Infections: Education and Research Funding

According to the Alberta Health website, "Lyme disease is a debilitating disease of humans, wildlife, and domestic animals" (Alberta Health 1). Each year, thousands of Canadians are exposed to Lyme disease through disease bearing ticks, and hundreds are diagnosed with it. In 2007 in British Columbia alone, there were 14 lab diagnoses and 221 clinical diagnoses (BC Centre 101 and Henry 2). In Quebec, over a period of 17 months in 2011 and 2012, there were 63 lab diagnoses of Lyme disease (Institut 5). The Public Health Agency of Canada considers the risk of contracting Lyme disease to be low, but notes that "the incidence of Lyme disease in Canada is increasing" (Public Health 7).

Serious long-term health implications that are associated with Lyme disease include cardiac problems, neurological problems, and arthritis, among others. There is cause to believe that some

diagnoses of Amyotrophic lateral sclerosis and Multiple Sclerosis are actually inaccurate diagnoses of Lyme disease.

There are many different strains of Lyme disease and they can be dis-similar enough that the testing method currently used will not identify them. The current two-tiered test involves an "ELISA screening test followed by a confirmatory Western blottest" (PublicHealth 4). However, some strains (for example, *Borrelia miyamoto 1*) cannot be identified by the Western blot test (Krause 291-93).

The lack of effective tests for various strains of Lyme disease results in doctors having to make clinical diagnoses; that is, the testing currently used is to *deny* a diagnosis, not to confirm one. These diagnoses rely on the doctor's physical assessment, whether the patient was in an area known to have the disease-carrying ticks, and the results of the screening and confirmatory Western blot test. Many doctors are understandably reluctant to make these kinds of clinical diagnoses because of their general unfamiliarity with Lyme disease; indeed, the Ontario Ministry of Health and Long-Term Care notes that one of the difficulties related to making clinical diagnoses is that "Lyme disease can show a wide range of symptoms, from fever, chills and fatigue in its early stages (resembling the flu) to joint pain, central nervous system disorders, partial facial paralysis and even heart irregularity" (Ontario 1).

Therefore, until more reliable tests exist, governments need to provide doctors with more and better information about Lyme disease. This is very important because the lack of effective tests for some strains of Lyme disease and inherent problems with clinical diagnoses "have held back progress toward consensus on effective medical treatment, even though the paramount importance of early diagnosis for successful resolution of symptoms is well recognized" (Sperling 1).

While early Lyme disease responds well to a short-term course of antibiotic therapy, late Lyme disease does not, and a long-term course is necessary. Current trends in the medical community are not supportive of long-term antibiotic therapy, which can result in increased resistance to antibiotics. Doctors are strongly encouraged by their provincial associations to avoid such long-term treatments. In general, this may be a sound practice, but for the treatment of late Lyme disease, it is not. Physicians' associations need to be made aware of the need for long-term antibiotic therapy in the treatment of late Lyme disease.

Currently, the federal government funds only one research project related to Lyme disease: the Canadian Institutes of Health Research funds a \$820,000 five-year research project to study the bacteria of a strain of Lyme disease endemic on the American east coast (Public Health 8). While this research is important in that it will lead to understanding of the pathogen that causes Lyme disease, it does not address the more acute need for research into accurate testing for and diagnosis of Lyme disease.

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ACTION PLAN:

- 1. Encourage provincial governments to provide doctors with more and better information on Lyme disease and its related co-infections.
- 2. Urge federal government to fund research into the strains of Lyme disease endemic to Canada.
- 3. Invite Lyme disease sufferers or experts to council meetings in order to learn more about Lyme disease.