

Public Abstract

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Ph.D.

Anthropology

An Analysis of the 1875-1877 Scarlet Fever Epidemic of Cape Breton Island, Nova Scotia

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This project looks at a specific epidemic of scarlet fever on Cape Breton Island, Nova Scotia, Canada in the context of a larger, world-wide pandemic of scarlet fever that occurred between 1825 and 1885. An initial reading of the historic record suggests that the epidemic impacted the two main ethnic groups of the island, the Acadians and the Scots, in very different ways. The data are derived from public records on national censuses, provincial vital death records and parish records. Deeper analysis was done considering the temporal and socio-cultural context of cause of death reporting in order to examine if this initial reading is valid. A computer model was also created to analyze the effects of each factor on the overall course of the epidemic. The results show that although the two groups did experience the epidemic in different ways, this difference is partially attributed to the terms used to describe cause of death information. It is also a result of ethnic preferences for different occupations, fishing and farming, that are associated with different levels of person to person contact. The number of contacts people have per unit of time was found to be one of the major factors correlated to the epidemic experience. These results emphasize the importance of socio-cultural factors in an age where drug therapies are becoming less effective. They point to a need to understand the interactions between biology and behavior when examining such complex phenomena as human epidemics.