

Lyme Disease Survey 2004 - Pocopson Township, Chester County, PA

Conducted by: The Lyme Disease Association of Southeastern Pennsylvania, Inc.

Introduction:

A mail survey, asking about Lyme disease in the household, was sent to all residential addresses in Pocopson Township, Chester County, PA. Pocopson is a relatively small (year 2000-population of 3350) municipality in an area of high Lyme disease incidence in southeastern Pennsylvania.

Results:

From 838 valid addresses, 334 cards were completed and returned (40% response rate), representing 978 individuals ranging in age from 2 months to 102 years old. Just over one in five reporting individuals (21.3%) had had or currently have Lyme disease.

Total Households in Township	848
Undeliverable:	10
Total valid addresses:	838 (98.8%)
Surveys completed & returned	334 (40.0%)
Households with one or more cases of Lyme disease	158 (47.3%)
Number of individuals reported	978 (~30% of total township population)
Individuals who had/have Lyme disease	208 (21.3% of people reporting)

Discussion

This pilot project established that a far higher incidence of Lyme disease exists in Pocopson than indicated by official reports to the health department. The study reinforces the need for a more sophisticated survey to establish a statistically reliable estimate of the true incidence of Lyme disease in the region. The level of reported cases confirms an epidemic of Lyme disease exists in the region and needs to be given far more attention by the medical community as a serious and persistent illness.

Infection rate estimation:

We did not collect information on year of infection, so there is no way to determine a rate of disease per 100,000 residents. However, making the assumption that the majority of infections occurred over the past ten years, yields an infection rate of about 2130 per 100,000 residents. This is about 14 times the rate reported by the Chester County Health Department for the health district that includes the survey area. This is in line with the CDC statement that they believe that less than 1 in 10 cases are reported to health departments.

Continuing symptoms:

We offered a check box labeled "Still has symptoms," which was marked by 64 people, or 30.8% of the people who said they had had or still have Lyme disease. We did not ask about the length of treatment, or when it occurred, so we do not know how long these symptoms have persisted, but it shows that many people have unresolved problems from Lyme disease.

The next step:

LDASEPA plans to conduct a larger survey, conducted by a reputable research company and designed with input from a professional statistician. In addition to the type of data we collected in this pilot survey, we would include additional questions about year of infection and resolution of symptoms over time. We would also ask about other tick-borne co-infections.

The survey area would be larger, perhaps covering all of Chester County (population approximately 450,000), or possibly an expanded area to include additional areas of southeastern Pennsylvania.

About LDASEPA

This survey was conducted by the Lyme Disease Association of Southeastern Pennsylvania, Inc., an all-volunteer 501 (c)(3) not-for-profit corporation affiliated with the national Lyme Disease Association. LDASEPA is dedicated to education and support of people with Lyme and associated tick-borne diseases in our community. Our booklet, *Lyme Disease: The Basics*, has been requested by over 75,000 people throughout the United States and is now in its fourth printing.

This survey was designed and analyzed by LDASEPA Vice President Douglas W. Fearn, with input and support from the LDASEPA Board of Directors.