

## LYMEPOLICYWONK: Annual Lyme costs now top \$3.1 billion—Time to wake up!

The CDC is likely to officially update its cost estimates for Lyme disease based on the new case numbers, but in the meantime, I've pulled together some rough estimates. The annual cost of Lyme disease in the US in 2002 was estimated at \$203 million by Dr. Zhang of the CDC. Today the annual cost is likely to exceed \$3.1 Billion. The increased cost reflects the CDC revision of case numbers from 30,000 to 300,000 and adjustments for inflation. The average cost of Lyme disease in 2002 was \$8,712, which would be \$10,343 in today's dollars. According to Zhang's study, the later we intervene with the disease, the higher the costs. In today's dollars the per person societal cost of Lyme when addressed at tick bite is \$400. If we wait until early Lyme disease, the cost per person increases 4-fold to \$1,658. By the time, we are dealing with late Lyme, the per person cost is through the roof-\$20,502.

Only 34% of these costs are medical costs, the remaining 64% are due to indirect medical costs (e.g. insurance copayments), nonmedical costs (e.g. care in the home), and loss of productivity (e.g. lost wages). As Dr. Cameron explained in his 2010 article, the cost of treating this disease is peanuts compared to the cost of denial. That's particularly true in late Lyme disease, where only 12% of the costs are medical and 88% are indirect medical, nonmedical, or loss of productivity. Loss of productivity, when patients aren't able to work, is the lion's share of this—a staggering 54%. For governments, these lost wages mean reduced taxes and, in the case of disability, increased costs for public support of patients who are unable to work. Denial of care merely shifts the burden of the disease from the insurer to the family, caretakers, and ultimately the government through lost tax revenues as people become less productive and lose their jobs.

Annual Cost of Lyme Disease in the US		
	Zhang based on 2002	2012 Dollars (Inflation Adj)
Late stage per person	\$16,199	\$20,502
Early stage per person	\$1,310	\$1,658
Tick bite per person	\$316	\$400
Per Person Direct Medical Costs	\$2,970	\$3,759
Per Person Indirect Medical Costs, Nonmedical Costs & Loss of Productivity	\$5,202	\$6,584
Average Per Person Annual Cost of LD	\$8,172	\$10,343
# of cases in US	23,763	300,000
Annual Cost of Lyme Disease in US	\$203 Million	\$3.1BILLION

Zhang's estimate of annual costs was based on 23,763 cases in 2002 multiplied by the average per person cost of Lyme disease, which, at that time was estimated to be \$8,172 in 2002 dollars. The CDC now estimates the number of annual cases to be 300,000. Using the inflation adjusted average case cost of \$10,343 per person, the total cost of Lyme disease now tops \$3.1 Billion annually in the US.

When I spoke at the Gibson forum in New York last year, I pointed out that it was time to recognize that our "do nothing" policy in Lyme disease was a failure. We don't treat the bite aggressively, we don't diagnose and treat to cure in early disease, and we aren't funding research into effective treatments for late disease. How many ways can we fail? And for how long? It's time to wake up and address the problem.

The LYME POLICY WONK blog is written by Lorraine Johnson, JD, MBA, who is the Chief Executive Officer of LymeDisease.org, formerly CALDA. Contact her at <u>lbjohnson@lymedisease.org</u>. On Twitter, follow me @lymepolicywonk.

## **References:**

Cameron, D. Proof That Chronic Lyme Disease Exists <a href="http://www.hindawi.com/journals/ipid/2010/876450/">http://www.hindawi.com/journals/ipid/2010/876450/</a>

Zhang X, Meltzer MI, Pena CA, Hopkins AB, Wroth L, Fix AD. Economic impact of Lyme disease. Emerging infectious diseases. 2006 Apr;12(4):653-60. <u>http://wwwnc.cdc.gov/eid/article/12/4/05-0602\_article.htm#tnF2</u>

LYMEPOLICYWONK: THE COST OF DENIAL—THE DOLLARS AND SENSE OF IT <a href="http://lymedisease.org/news/lymepolicywonk/620.html">http://lymedisease.org/news/lymepolicywonk/620.html</a>

"The Financial Burden of Lyme Disease" Presentation at Gibson Forum <u>http://lymedisease.org/news/lymedisease\_vidos/lorraine-johnson.html</u>