

Lyme Disease Surveillance in Massachusetts, 2013

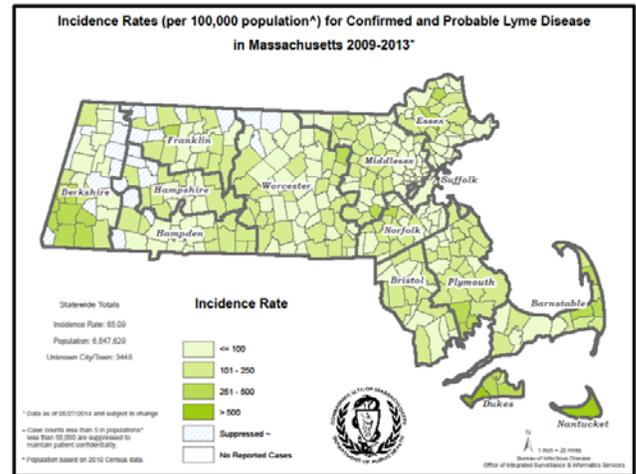
Massachusetts Department of Public Health

2013 Surveillance Highlights

- 4,080 confirmed Lyme disease cases and 1,585 probable cases were reported in Massachusetts in 2013 (total = 5,665), an increase of 12% from the number of confirmed and probable cases reported in 2012 (total=5,050).
- The highest incidence rates were among children aged 5-9 years and adults aged 65-74 years. The majority of cases had onsets in June, July, and August.
- 72% of confirmed cases reported an erythema migrans (“bull’s-eye”) rash.
- MDPH was unable to classify approximately 25% of all cases reported during 2013 due to insufficient clinical information.

The map to the right illustrates Lyme disease incidence rates (number of cases per 100,000 people) by city and town in Massachusetts from 2009-2013. It includes both probable and confirmed cases. The darker the shading, the higher the incidence.

Lyme disease is considered endemic in all of Massachusetts. Areas of high incidence include much of the eastern half of the state. Regions of particularly high incidence include Plymouth, Cape Cod and the Islands, and some areas in Middlesex, Essex, and southern Berkshire Counties. More isolated areas of high incidence occur in Franklin, Hampshire, and Worcester Counties.



County	2013 Confirmed Cases (#)	2013 Probable Cases (#)	Combined Incidence Rate for Confirmed and Probable Cases
Barnstable	186	88	127
Berkshire	84	46	99
Bristol	413	162	105
Dukes	32	38	423
Essex	405	154	75
Franklin	51	20	100
Hampden	167	57	48
Hampshire	112	35	93
Middlesex	720	267	66
Nantucket	47	16	619
Norfolk	460	150	91
Plymouth	631	233	175
Suffolk	81	49	18
Worcester	480	194	84
Unknown	211	76	-
State Total	4,080	1,585	65.09

The chart to the left shows the number and incidence rates of confirmed and probable cases, by county, per 100,000. Incidence rates of confirmed and probable cases in 2013 were higher for most counties, compared with 2012. Exceptions included Dukes County, where the incidence rate decreased from 502 to 423 per 100,000 and Suffolk County, which remained stable at around 18 per 100,000. Year to year variations may not be as significant as observing trends over time (see Figure 3).

Figure 1

Data as of 20MAY2014 and subject to change.

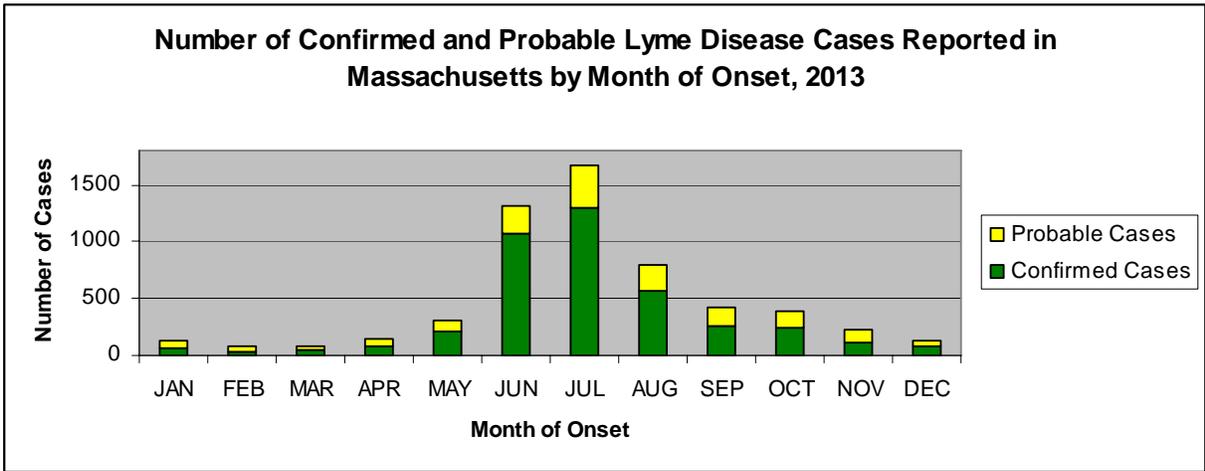


Figure 2

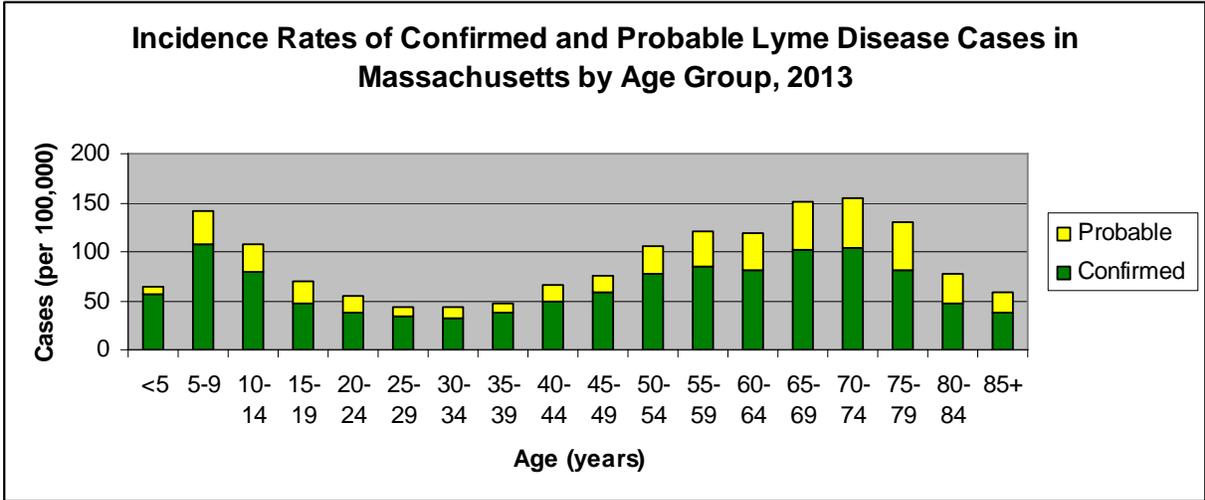
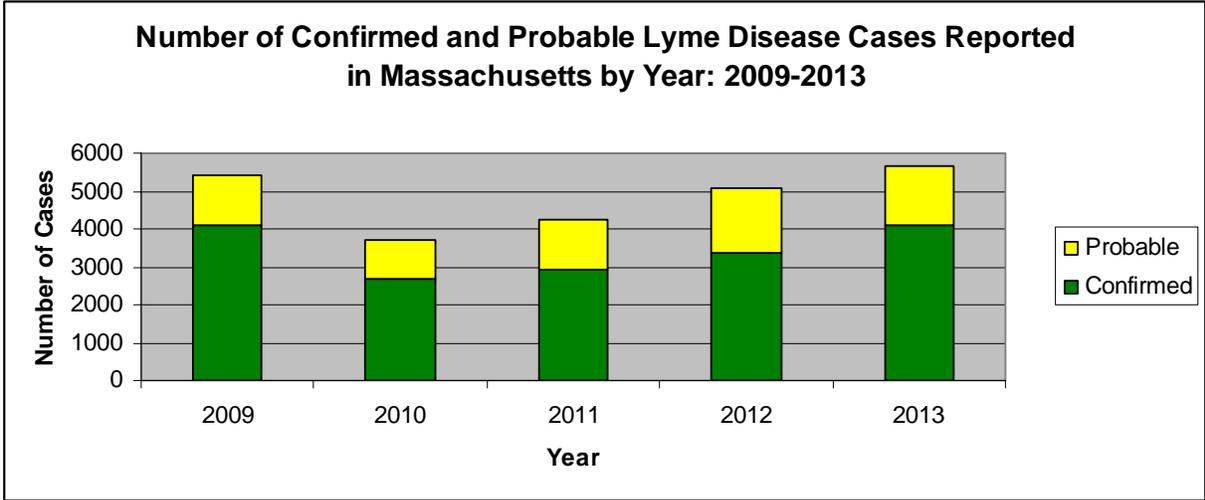


Figure 3



Data as of 20MAY2014 and subject to change.