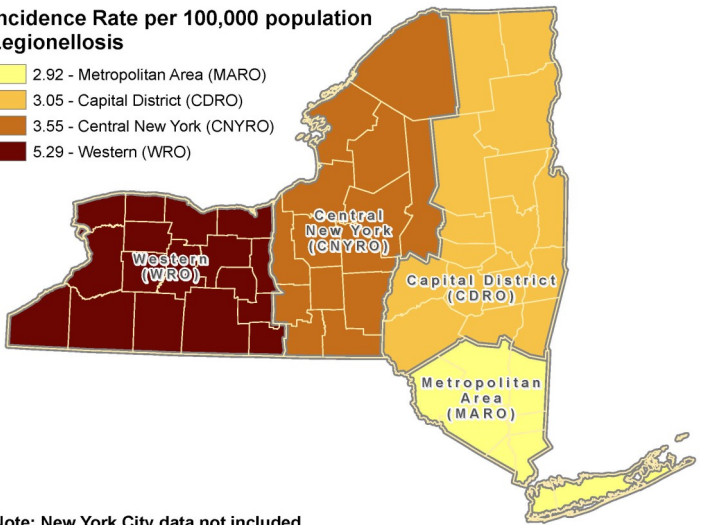


Legionellosis

Incidence Rate per 100,000 population Legionellosis

- 2.92 - Metropolitan Area (MARO)
- 3.05 - Capital District (CDRO)
- 3.55 - Central New York (CNYRO)
- 5.29 - Western (WRO)



Note: New York City data not included

Map Scale: 1:2,500,000

NYSDOH, BCDC - May 18, 2017

Legionellosis Annual Incidence Rate by Year and Region, NYS (excluding NYC), 2011-2015

Legionellosis is a bacterial disease which may cause pneumonia. To learn more about legionellosis please visit our [website](#).

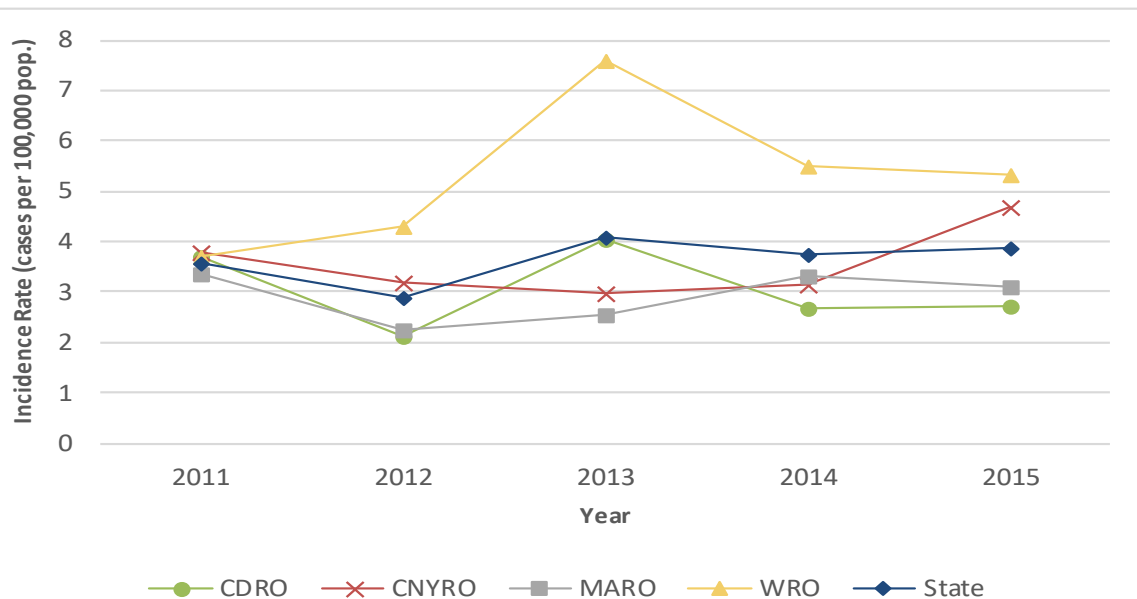
The overall incidence of legionellosis from 2011-2015 in NYS, exclusive of New York City, was 3.6 cases per 100,000 persons, much higher than the national incidence rate of 1.1/100,000 (2012 rate). Rates of legionellosis are highest in the Northeast and Mid-Atlantic regions of the United States.

Regional increases in legionellosis rates have occurred in NYS, some of which are attributed to outbreaks and cluster investigations.

Of the 2,036 legionellosis cases from 2011-2015:

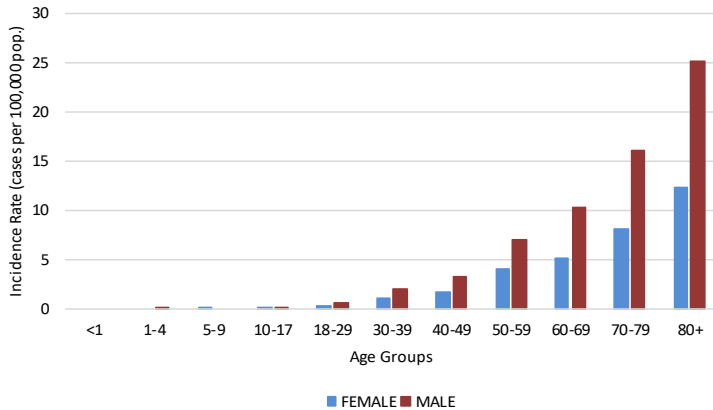
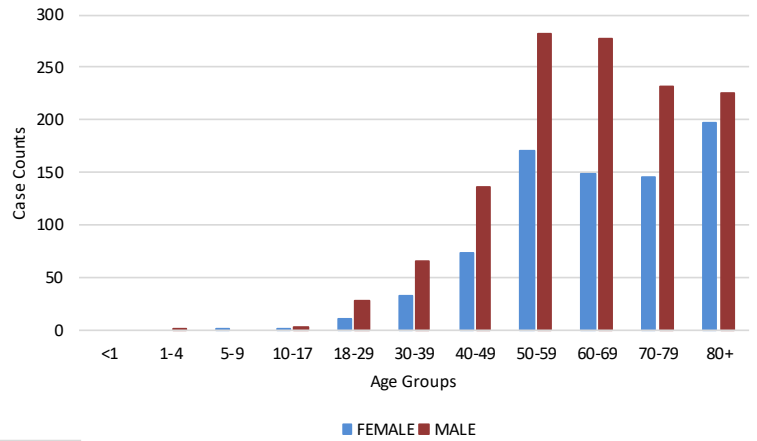
- 96% were hospitalized,
- death was reported in 7% of cases, this is lower than the percentage reported nationally of 10.4% (2012 rate).

Region	Case and Incidence Rates (per 100,000 pop.), NYS (excluding NYC), 2011-2015											
	2011		2012		2013		2014		2015		Total	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
CDRO	56	3.72	32	2.13	61	4.05	40	2.66	41	2.72	230	3.05
CNYRO	66	3.77	56	3.20	52	2.97	55	3.14	82	4.68	311	3.55
MARO	173	3.38	116	2.26	130	2.54	171	3.34	159	3.10	749	2.92
WRO	105	3.72	121	4.29	214	7.58	155	5.49	151	5.35	746	5.29
State	400	3.57	325	2.90	457	4.08	421	3.76	433	3.87	2,036	3.63



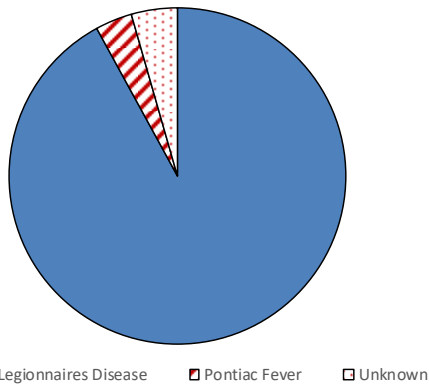
Legionellosis 5-Year Cumulative Frequency by Age Group and Gender, NYS (excluding NYC), 2011-2015

Person over 50 years of age account for over 80% of legionellosis cases. The risk of contracting legionellosis is greater for smokers (current or past), persons with chronic lung diseases, persons with an immunocompromising condition or those taking medication that suppress the immune system.



Legionellosis 5-Year Average Incidence Rate by Age Group and Gender, NYS (excluding NYC), 2011-2015

Incidence increases with increasing age, with those over 80 years of age most heavily affected. Across all age groups incidence is greater in males than females, which is consistent with national trends.



Legionellosis Case Counts, by Patient Clinical Classification, NYS (excluding NYC), 2011-2015

There are two distinct clinical manifestations of legionellosis, Legionnaires disease and Pontiac fever. Symptoms of both infections are similar, although Legionnaires' disease also involves a diagnosis of pneumonia. In NYS excluding NYC, 92% of legionellosis infections are classified as Legionnaire's disease.

Legionellosis Case Counts by Month Diagnosed, NYS (excluding NYC), 2011-2015

The number of legionellosis cases reported in NYS, excluding NYC, increases during the summer and early fall months, which is consistent with national trends. Potential reasons for this seasonal distribution include environmental factors (rainfall, humidity) and increased testing by clinicians during summer months. Aerosolized water is a major risk factor and data shows that a large percentage of cases report this exposure, however our NYS data reveals a large number of unknowns and therefore is less reliable.

