

Invasive Pneumococcal Disease (IPD)

IPD Annual Incidence Rate

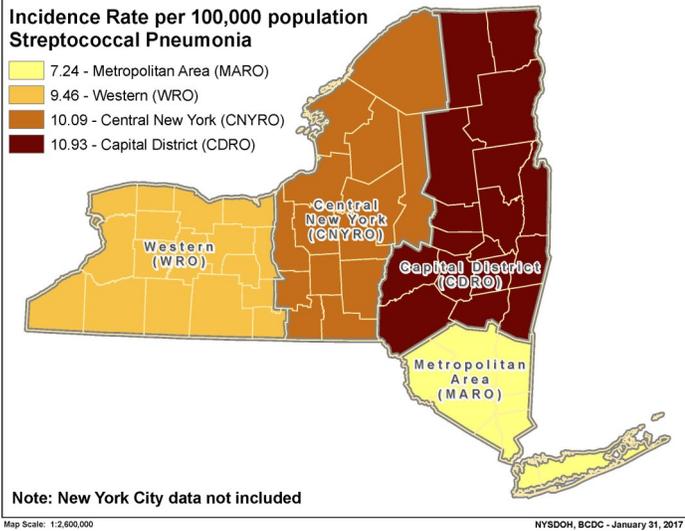
by Year and Region, NYS (excluding NYC), 2011-2015

Streptococcus pneumoniae is a bacterial organism that is a common cause of pneumonia and otitis media. When the organism is isolated from sterile sites such as blood and cerebral spinal fluid (CSF) it is referred to as invasive pneumococcal disease (IPD). Vaccines are licensed and recommended to help protect persons who are most at risk for IPD. The PCV13 vaccine protects against 13 serotypes of *Streptococcus pneumoniae*, and is recommended for use in infants, young children and all adults 65 years or older, as well as adults 19 years or older with conditions that weaken the immune system. The 23-valent polysaccharide vaccine, protects against 23 types of *Streptococcus pneumoniae*, is recommended for all adults 65 years or older, as well as those two years or older at high risk of disease. To learn more about pneumococcal disease please visit our [website](#).

Incidence rates of IPD in NYS, exclusive of New York City, have steadily declined from 10.56 cases in 2011 to 7.2 through 2015. This decline is in part due to the approval and licensure of the 13-valent pneumococcal conjugate vaccine (PCV13) in February 2010 for children less than five years old.

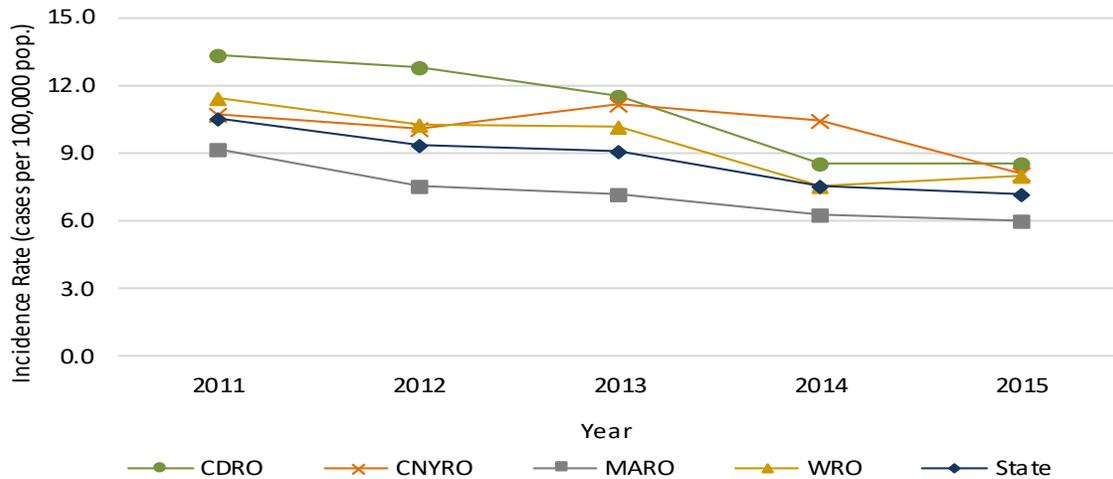
Of the 4,897 IPD cases,

- 89% were hospitalized;
- 9.8% of cases resulted in death.

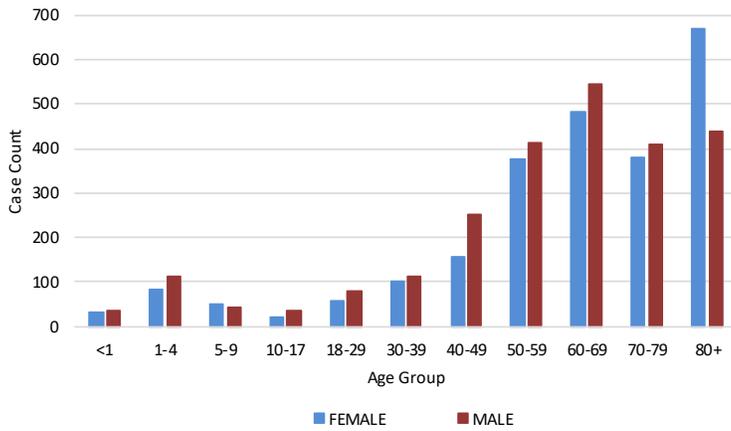


Cases and Incidence (per 100,000 population), NYS (excluding NYC), 2011-2015

Region	Cases and Incidence (per 100,000 population), NYS (excluding NYC), 2011-2015											
	2011		2012		2013		2014		2015		Total	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
CDRO	201	13.35	192	12.75	173	11.49	128	8.50	129	8.57	823	10.93
CNYRO	187	10.68	177	10.11	195	11.14	182	10.40	142	8.11	883	10.09
MARO	472	9.21	387	7.55	368	7.18	320	6.25	309	6.03	1856	7.24
WRO	323	11.44	289	10.24	286	10.13	212	7.51	225	7.97	1335	9.46
State	1183	10.56	1045	9.33	1022	9.12	842	7.52	805	7.19	4897	8.74



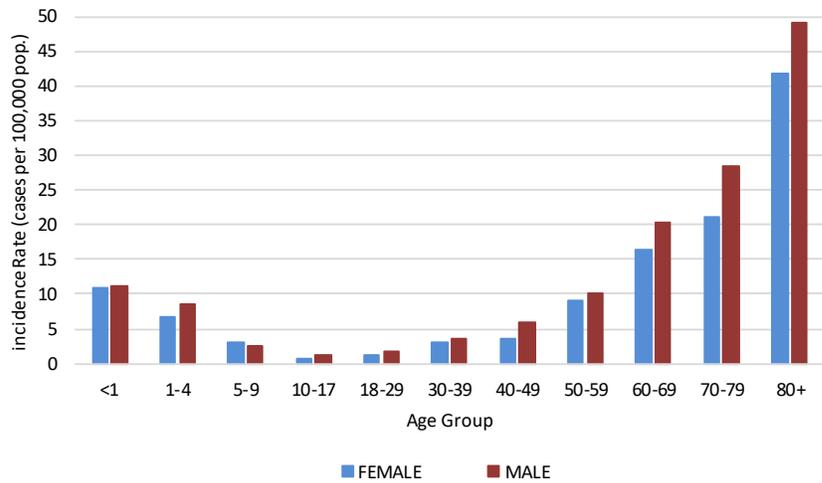
IPD 5-year Cumulative Frequency by Age Group and Gender, NYS (excluding NYC), 2011-2015



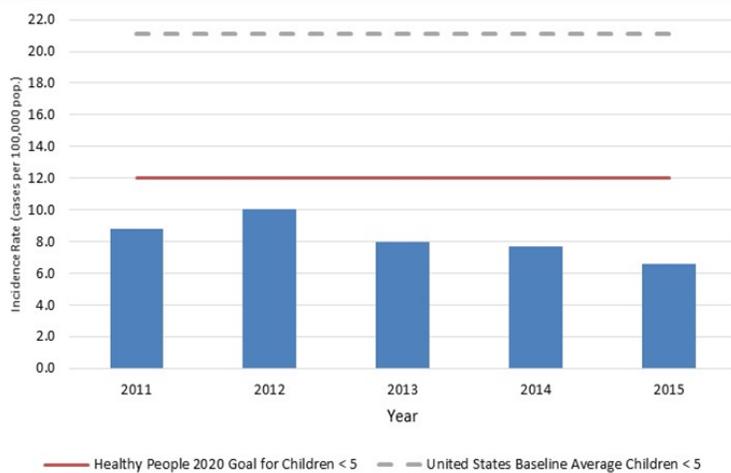
The burden of disease occurs mostly among adults 50 years and older, with cases increasing with age.

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

The highest incidence rates of IPD occur in children less than five years old and adults 60 years and older; those at highest risk for infection with *Streptococcus pneumoniae*.



IPD Annual Incidence Rate for Cases <5 Years Old in NYS (excluding NYC), the Healthy People 2020 Goal, and United States Baseline Average by Year, 2011-2015



In 2010, U.S. Department of Health and Human Services developed Healthy People 2020, the nation's new 10-year goals and objectives for health promotion and disease prevention. One of the goals included reducing the rate of IPD in children less than five years old. The five-year average incidence rate in the U.S. is 21.1 cases per 100,000. The target for the Healthy People 2020 goal is an incidence rate of 12.0 cases per 100,000. NY's incidence rate for children less than five years old has decreased in the past five years from 8.8 cases per 100,000 in 2011 to 6.6 cases per 100,000 in 2015.