



**Department
of Health**

**AIDS
Institute**

• HIV/AIDS • STD • VIRAL HEPATITIS • LGBT HEALTH • DRUG USER HEALTH •

Chlamydia Infections in the School District Geographic Areas of New York State*, 2012-2014

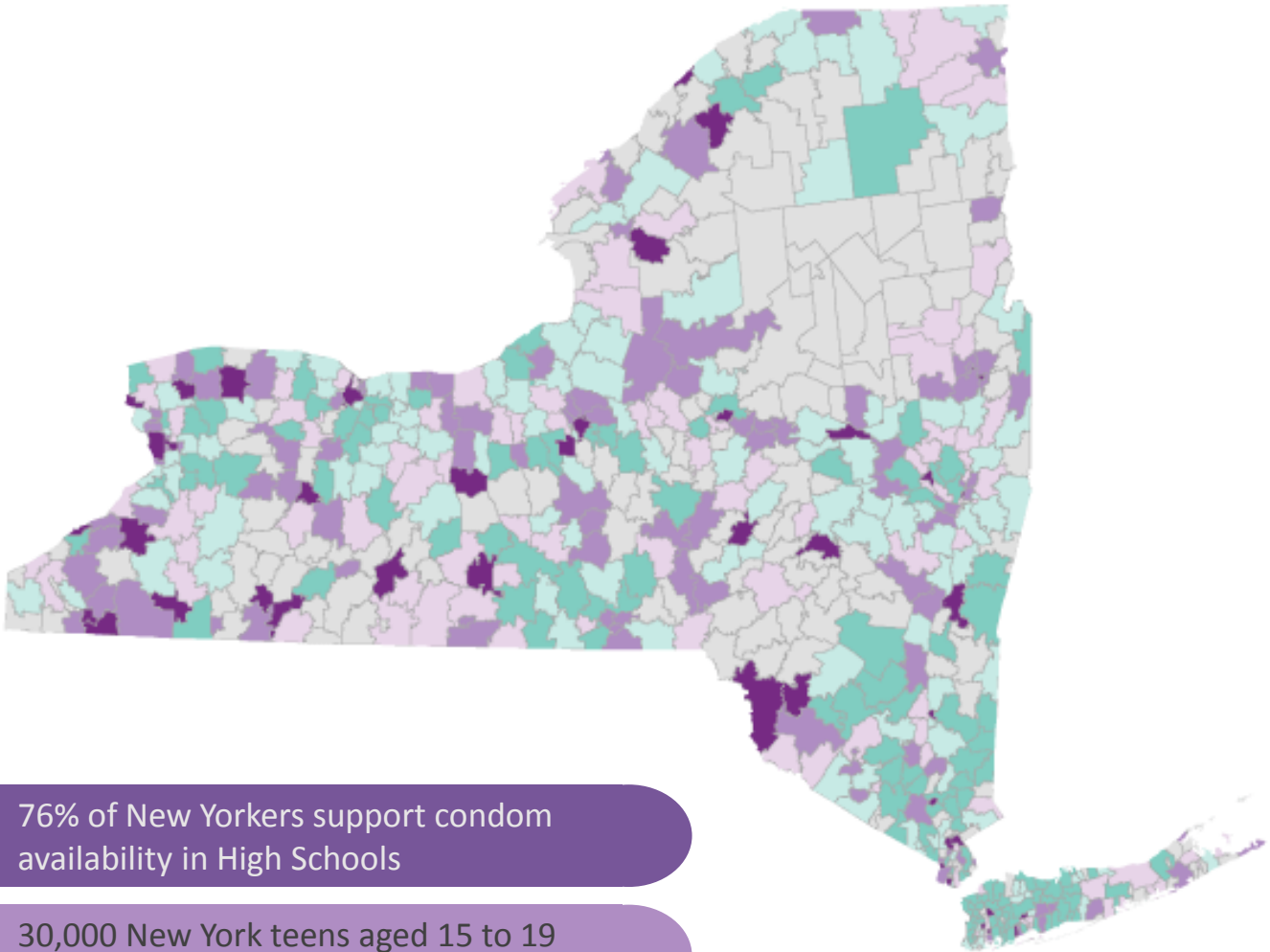
Special Populations Data Brief: Adolescents

**Bureau of STD Prevention and Epidemiology
Division of Epidemiology, Evaluation, and Research**

*Excludes New York City

Chlamydia Infections in the School District Geographic Areas of New York

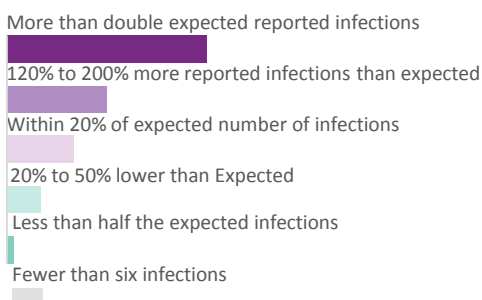
Comparison of the reported number of infections in school district geographic areas relative to the infection rate in New York State excluding New York City, Females, Age 10 to 19 years, 2012-2014



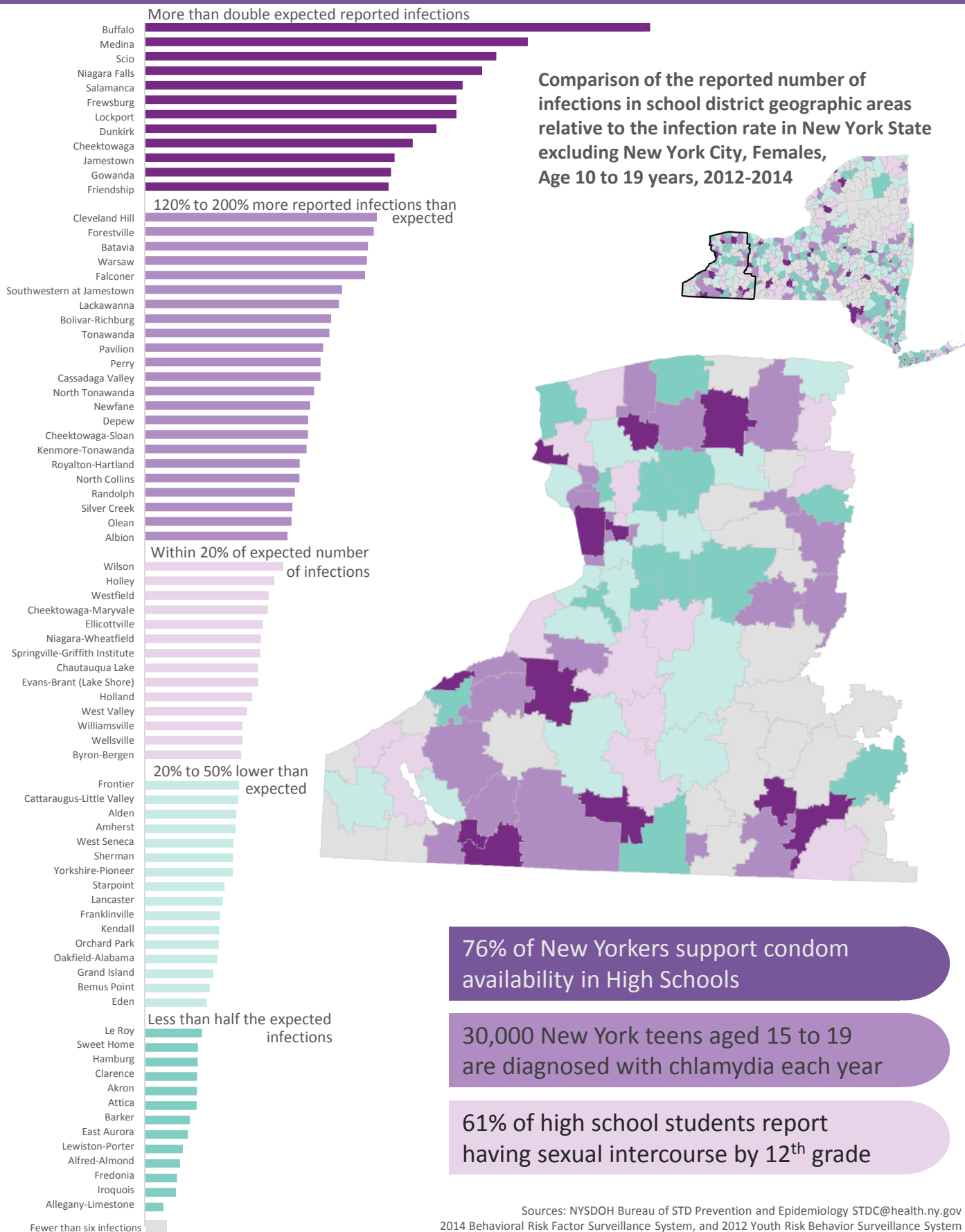
76% of New Yorkers support condom availability in High Schools

30,000 New York teens aged 15 to 19 are diagnosed with chlamydia each year

61% of high school students report having sexual intercourse by 12th grade



Chlamydia Infections in the School District Geographic Areas of the Buffalo Region



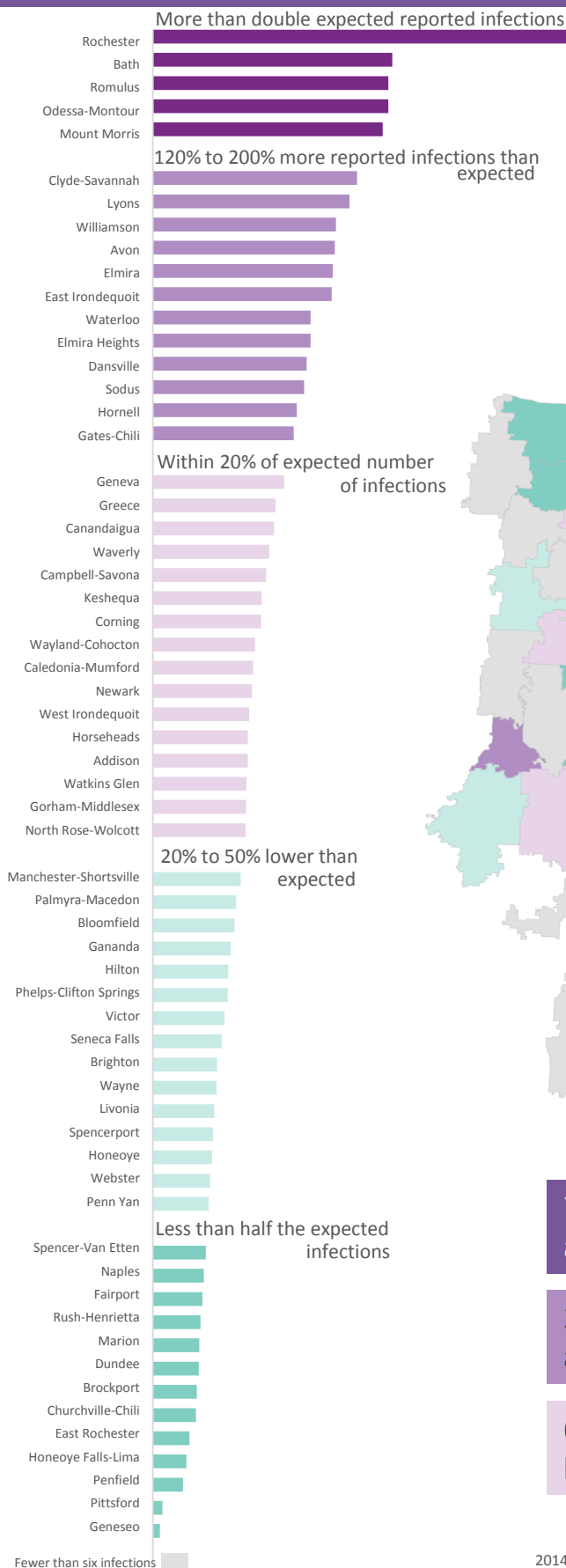
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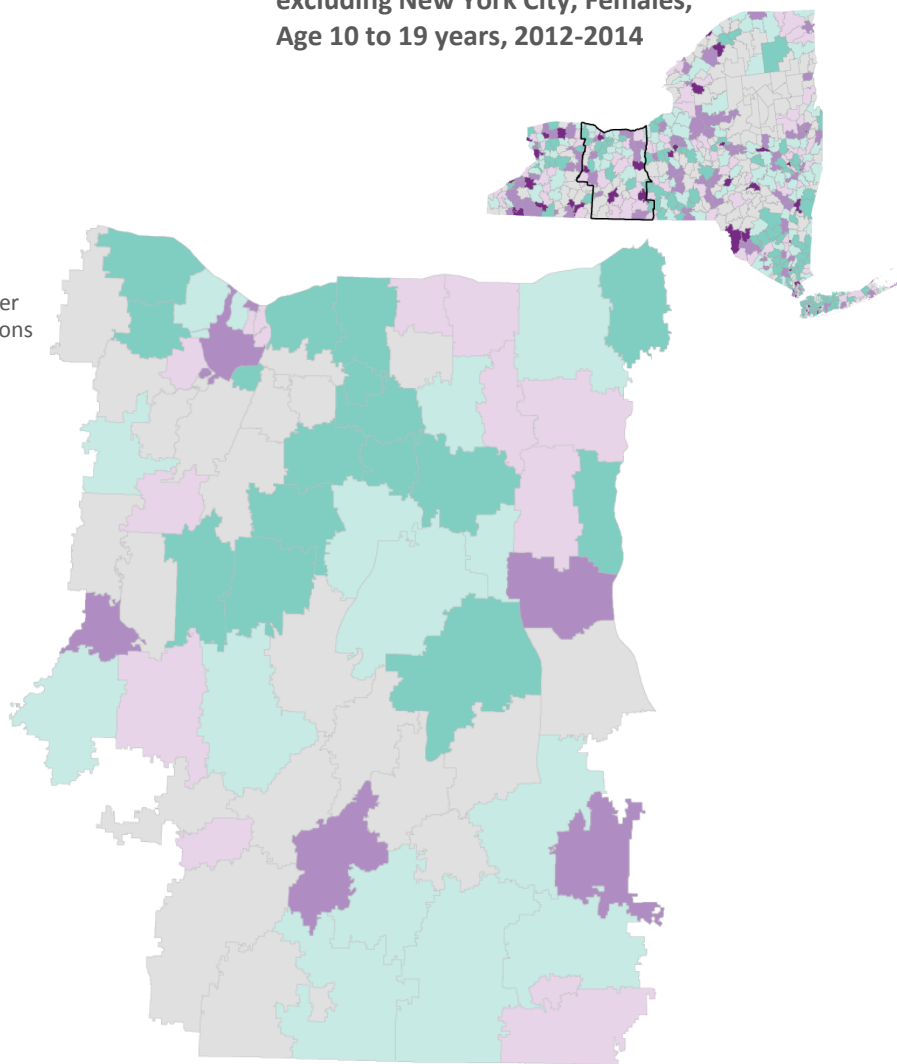
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Sources: NYSDOH Bureau of STD Prevention and Epidemiology STDC@health.ny.gov 2014 Behavioral Risk Factor Surveillance System, and 2012 Youth Risk Behavior Surveillance System

Chlamydia Infections in the School District Geographic Areas of the Rochester Region



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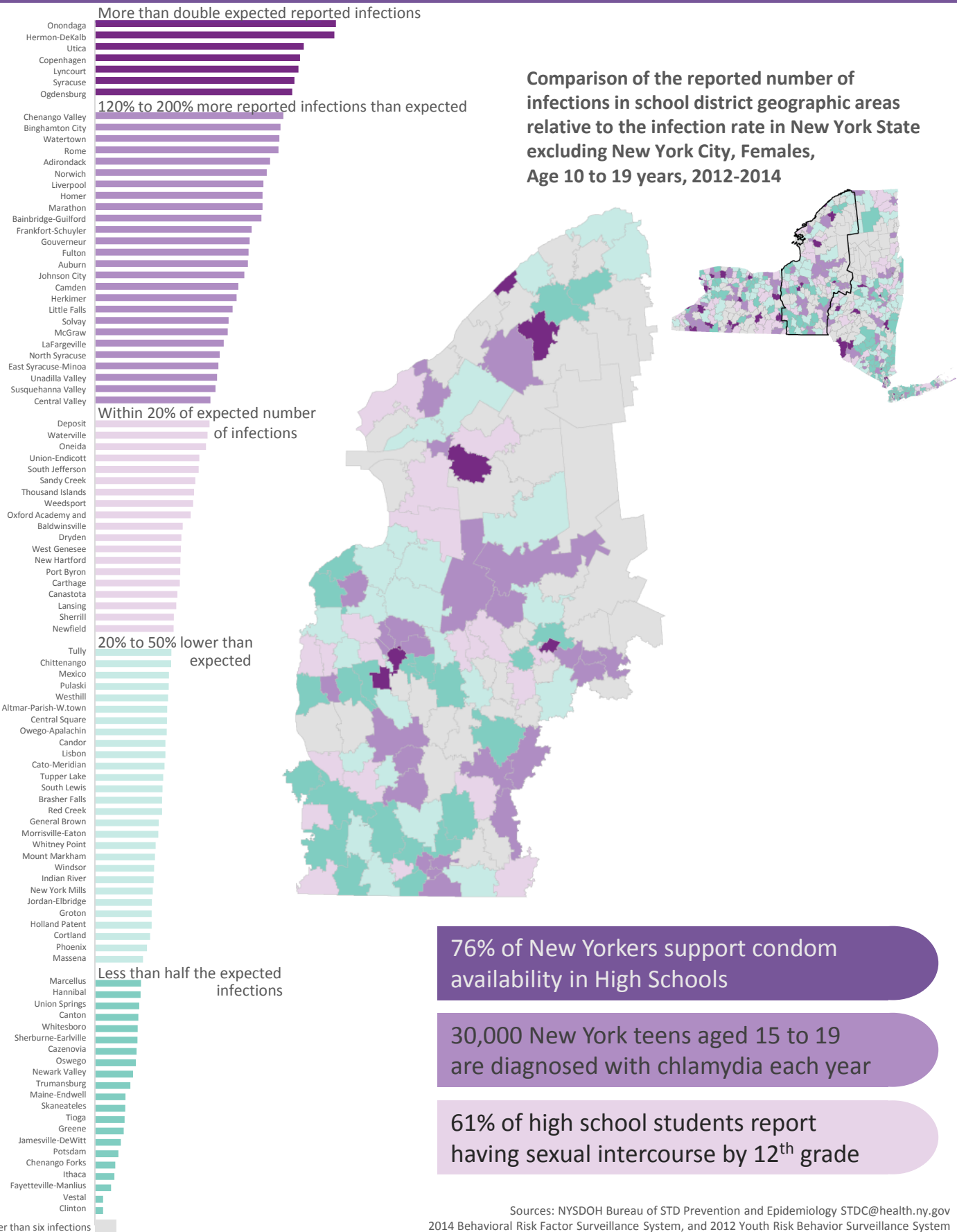


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Chlamydia Infections in the School District Geographic Areas of the Central NY Region



Chlamydia Infections in the School District Geographic Areas of the Capital District Region

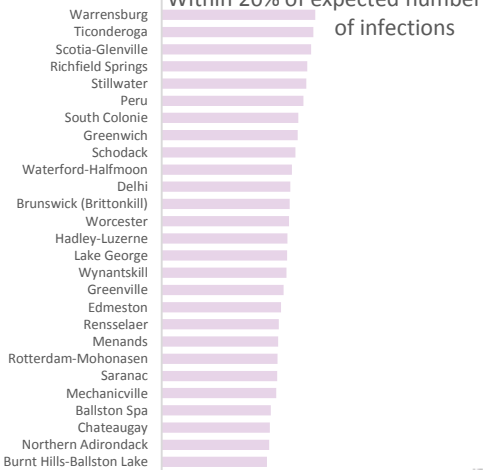
More than double expected reported infections



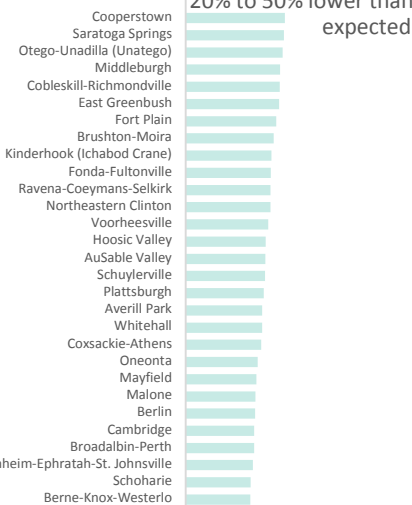
120% to 200% more reported infections than expected



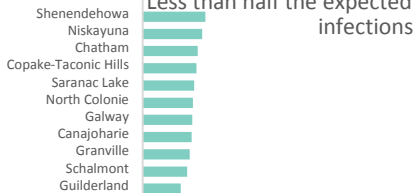
Within 20% of expected number of infections



20% to 50% lower than expected

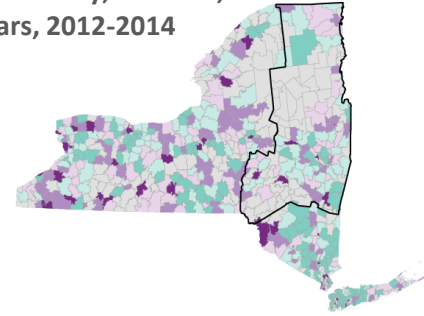
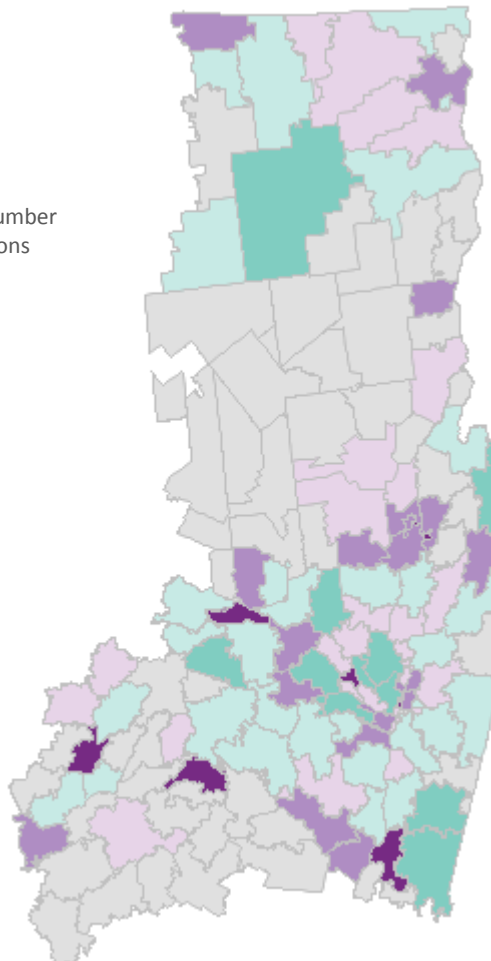


Less than half the expected infections



Fewer than six infections

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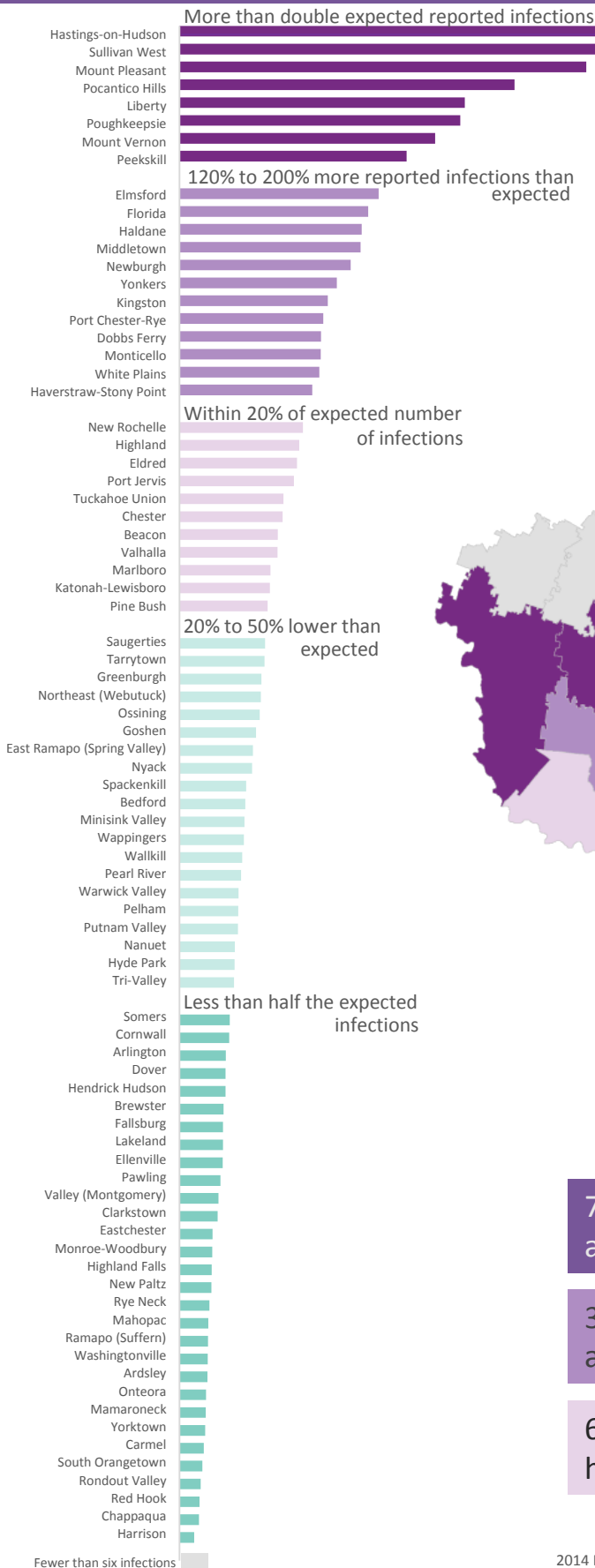
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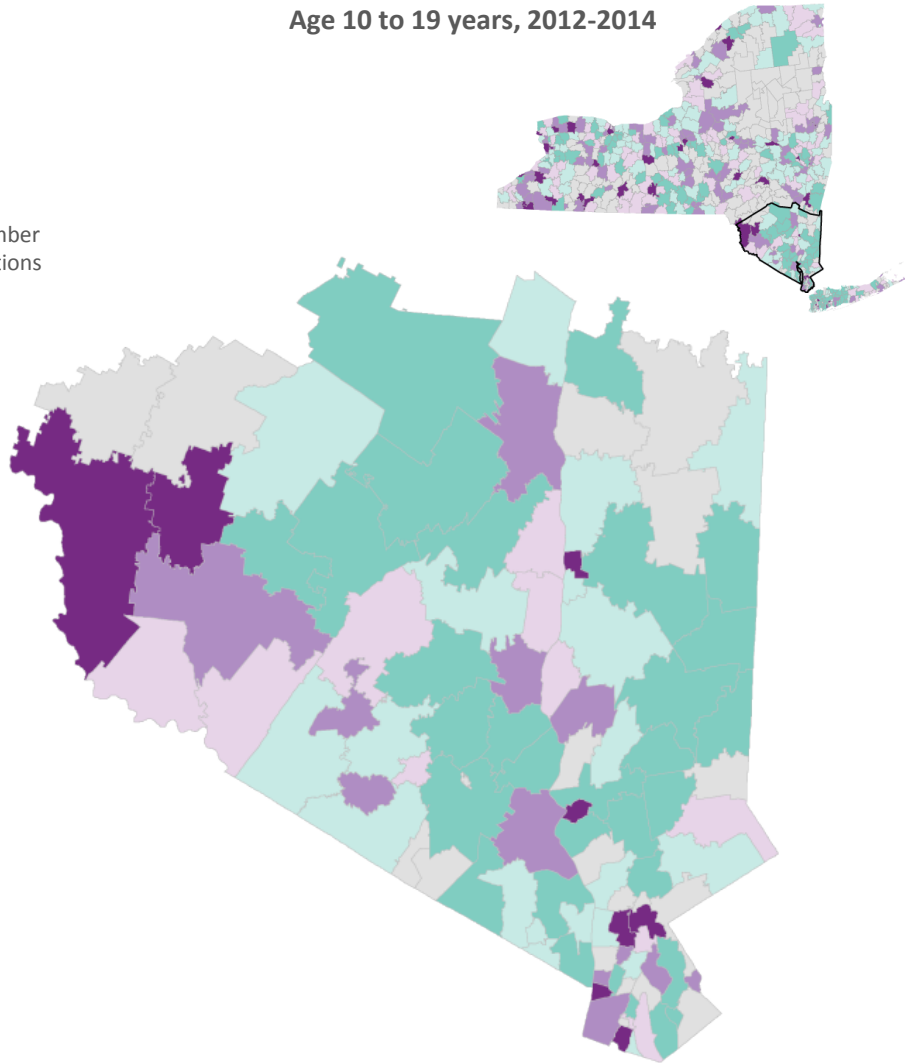
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Chlamydia Infections in the School District Geographic Areas of the Hudson Valley Region



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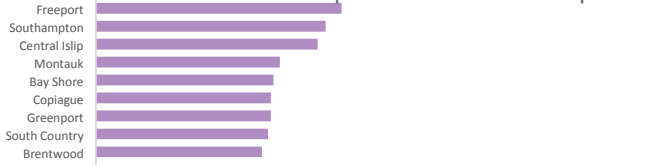
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Chlamydia Infections in the School District Geographic Areas of Long Island

More than double expected reported infections



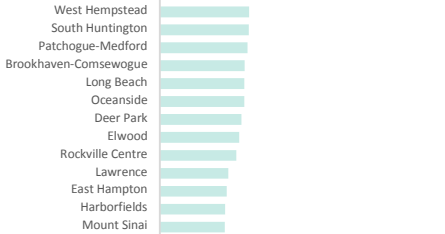
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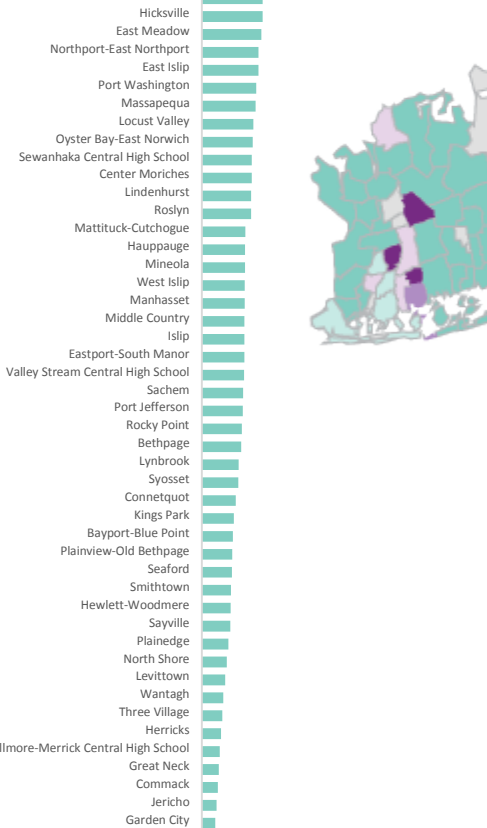
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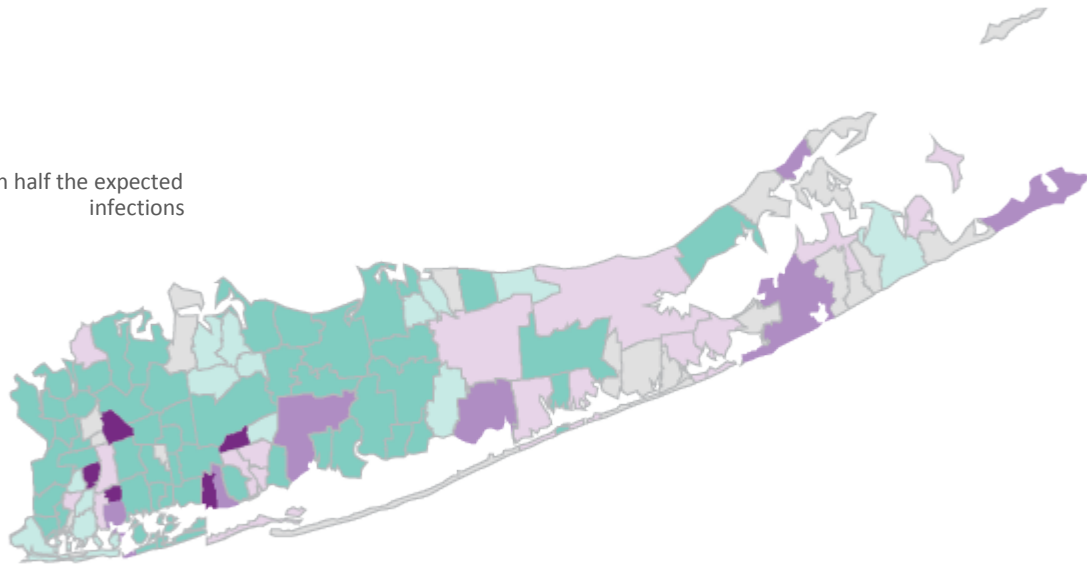
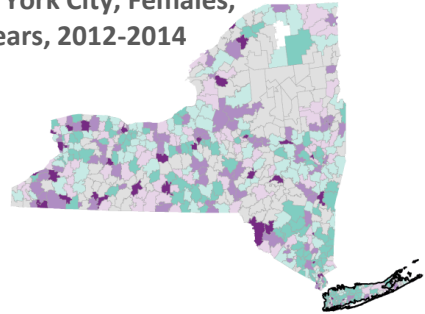


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Chlamydia Incidence in the School District Geographic Areas of the New York

Methods

All new Chlamydia diagnoses between 2012 and 2014 among females age 10 to 19 who lived in New York State excluding New York City were included in this study. New Chlamydia diagnoses were reported by laboratories and health care providers to the New York State Department of Health, as required by public health law. The street address of the patient was used to determine the school district geographic area to which each patient was assigned, by comparing the geographic coordinates of the street address to the maps of the specific school district geographic areas. As a result, the school district geographic area was determined based on the residence of the patient, not school attendance. The geographic boundaries of all Unified School Districts and Secondary School Districts for the 2013-2014 school year were obtained from the National Center for Education Statistics and US Census Bureau (<http://nces.ed.gov/programs/edge/geographicDistrictBoundary.aspx>). These geographic areas are updated yearly based on information provided by the State Education Department. Patients for whom the geographic coordinates were unknown were assigned to school district geographic areas based on other factors, such as ZIP Code.

The National Center for Education Statistics and US Census Bureau were also the source of information on the number of female residents age 10 to 19 years living within the boundaries of each school district geographic area between 2010 and 2014, (<http://nces.ed.gov/programs/edge/demographicACS.aspx>). In order to coincide with the Chlamydia incidence data, these population data relate to the residents of the geographic area, regardless of actual school attendance. For example, females who are 19 years of age are included even if they have already graduated from High School.

The number of expected Chlamydia diagnoses in each school district geographic area was calculated based on the number of females age 10 to 19 years that live in the school district geographic area and the proportion of all females age 10 to 19 in New York who are diagnosed with Chlamydia per year. The proportion of all females age 10 to 19 in New York who are diagnosed with Chlamydia per year is the incidence rate. The incidence rate multiplied by the relevant population of the school district geographic area provided the number of expected Chlamydia diagnoses. Since the incidence rate of Chlamydia varies by age, this calculation was done separately for the age groups 10-14, 15-17, and 18-19 years, then the expected number in each of these age groups was combined to determine the total expected number of cases.

The comparisons shown in the maps and charts are a comparison of the actual number of females age 10 to 19 years that were diagnosed with Chlamydia in the school district geographic area (observed) relative to the number expected. The observed number is divided by the expected number, then multiplied by 100, to develop a percentage ratio of the observed to expected Chlamydia diagnoses. A ratio with a value under 100% indicates there were fewer females diagnosed with Chlamydia than expected when compared to the state rate. A ratio greater than 100% indicates more diagnoses.

For confidentiality reasons, the number of observed and expected infections is not provided for geographic areas with fewer than six reported Chlamydia infections from 2012-2014.

Limitations

These analyses rely on diagnosed infections reported to the New York State Department of Health, primarily via mandated electronic laboratory reporting. It is believed that many people may have a Chlamydia infection without symptoms, so routine screening for Chlamydia during physician office visits may be the only way some young women with Chlamydia infection will be diagnosed and treated. This screening is recommended annually for sexually active women ages 16 to 24 years. Geographic areas with poorer screening will appear to have lower rates of Chlamydia infections, but in fact this would be due to more women having undiagnosed infection. Undiagnosed infection increases the risk of pelvic inflammatory disease and infertility.

Another limitation of the reported data on Chlamydia is related to the geographic location to which women are ascribed. As mentioned above, living within the school district geographic boundaries does not mean the women attend school in that district.