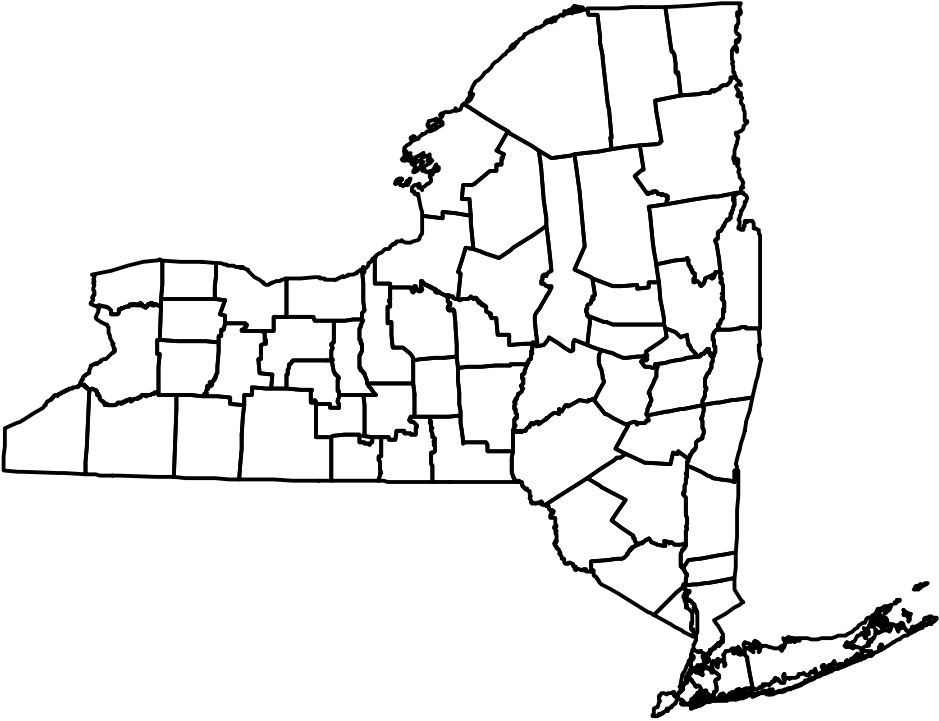


**Sub-County Health Data Report
For County Health Rankings-Related Measures
2016**

County: Schuyler



Office of Public Health Practice -
Bureau of Chronic Disease Evaluation and Research -

New York State Department of Health

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Introduction

County Health Rankings Model

The County Health Rankings & Roadmaps¹ (CHR&R) program, a collaboration of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, aims to build awareness of the factors that influence health, and to aid in community health improvement by providing a snapshot of health outcomes and factors important to health along with actions a community can take to improve health for all. The CHR&R website provides snapshots for nearly all U.S. counties, including data on measures for how long and how well residents live and a comparison of how a county's health ranks relative to others in its respective state.

Sub-county Data Report

A New York State Department of Health research team adapted a selected set of core County Health Rankings measures to generate this report for sub-county level geographies and populations in New York State. This project was funded by the County Health Rankings & Roadmaps program. It aims to enhance local health data to help localities with community health assessment and improvement planning associated with the state's Prevention Agenda.²

This report provides county-specific count data and survey data for 11 measures, including county totals, sub-county populations (such as race/ethnicity, age group, Medicaid status, education level) and sub-county geographies (ZIP codes and minor civil divisions where data are available).

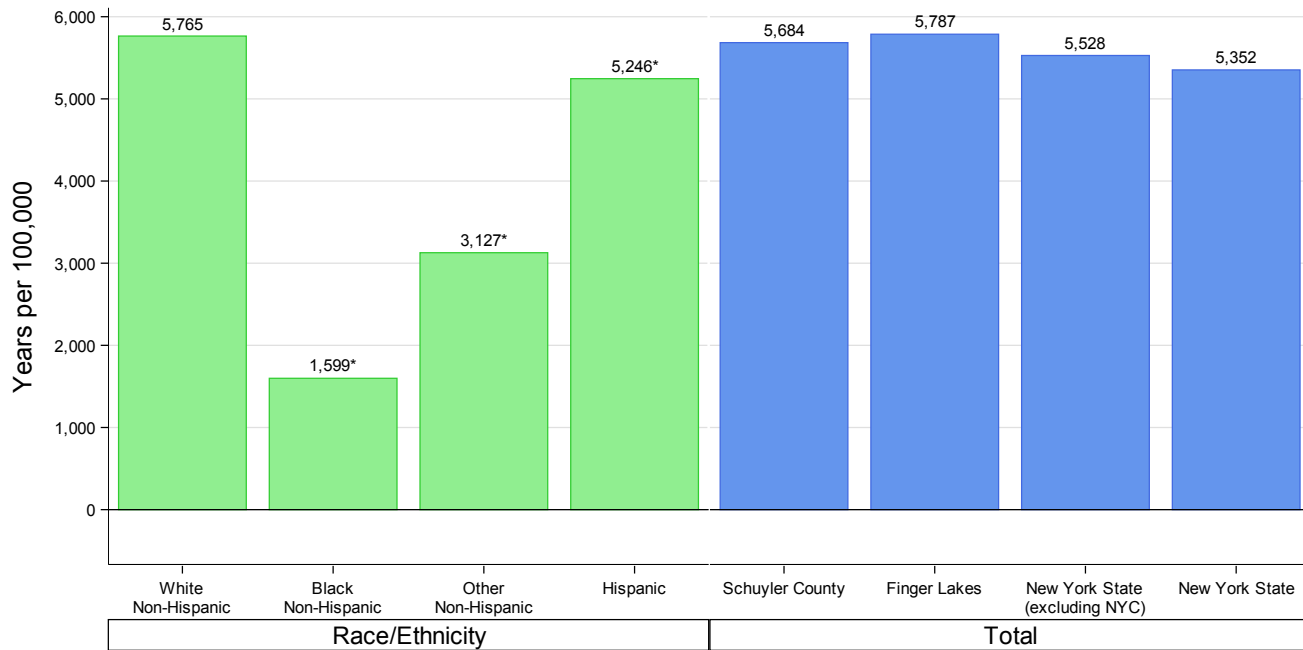
This report can be used to assess community health needs and plan health interventions, and specifically to identify health disparities within counties. For more sub-county level data, please visit the New York State Prevention Agenda Tracking Dashboard.³

¹ <http://www.countyhealthrankings.org/>

² http://www.health.ny.gov/prevention/prevention_agenda/2013-2017/

³ <https://www.health.ny.gov/prevention/agendadashboard>

Age-adjusted years of potential life lost before age 75 per 100,000 population
 2009-2013
County: Schuyler



County sub-population	Total premature deaths	Years of potential life lost rate
Race/Ethnicity		
White Non-Hispanic	366	5,765
Black Non-Hispanic	1	1,599*
Other Non-Hispanic	1	3,127*
Hispanic	2	5,246*
Total		
Schuyler County	372	5,684
Finger Lakes	21,025	5,787
New York State (excluding NYC)	178,012	5,528
New York State	292,218	5,352

*: Less than 10 deaths, therefore rate may not be stable (RSE > 30%).

 Data Source: New York State Vital Records

Age-adjusted years of potential life lost before age 75 per 100,000 population

ZIP codes, 2009-2013

County: Schuylar

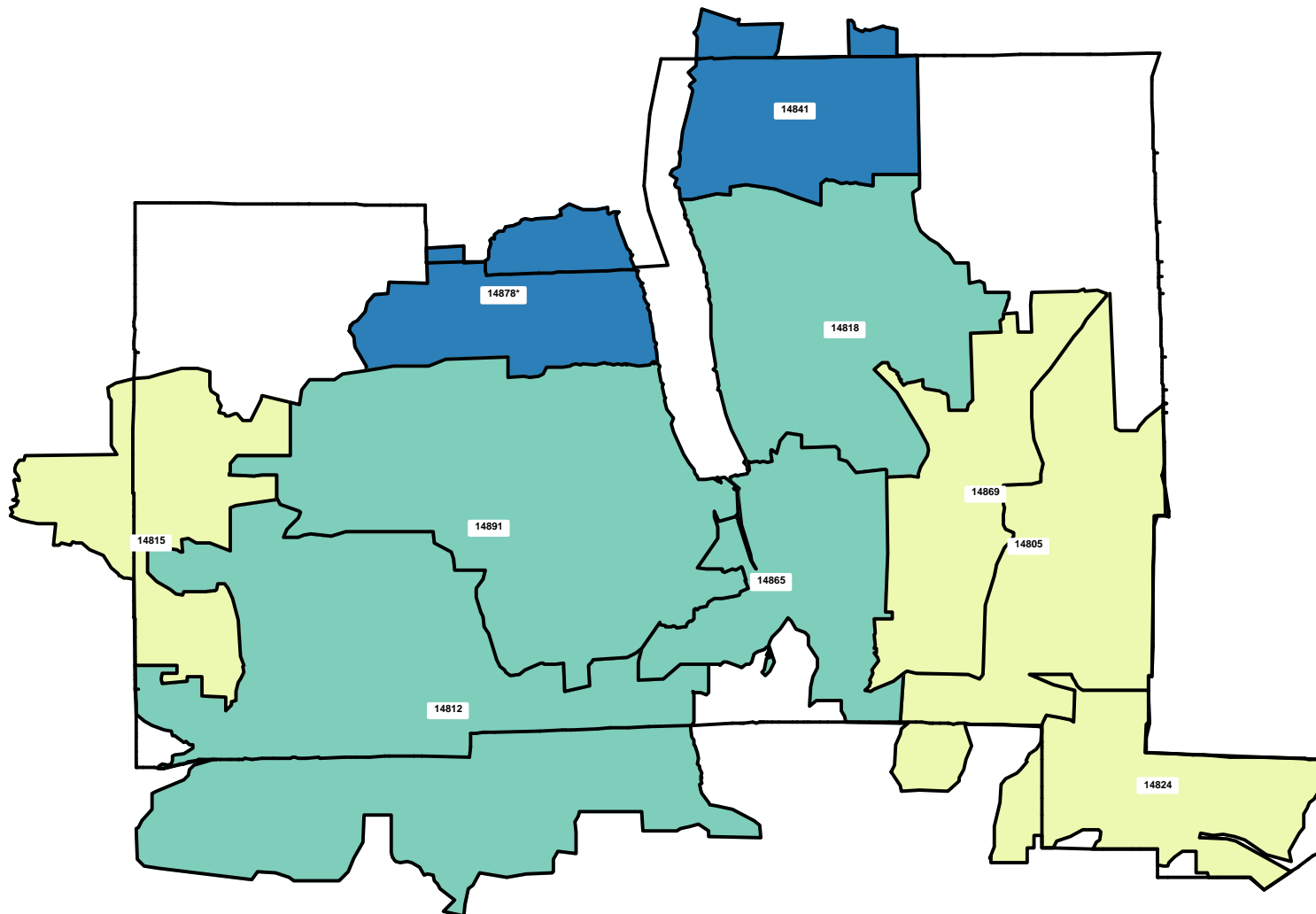
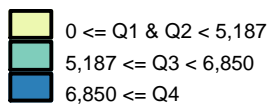
Years of potential life lost

Schuylar County: 5,684

New York State: 5,352

New York State excluding NYC: 5,528

Quartile Distribution: NYS excl. NYC



*: Less than 10 deaths, therefore rate may not be stable (RSE > 30%).

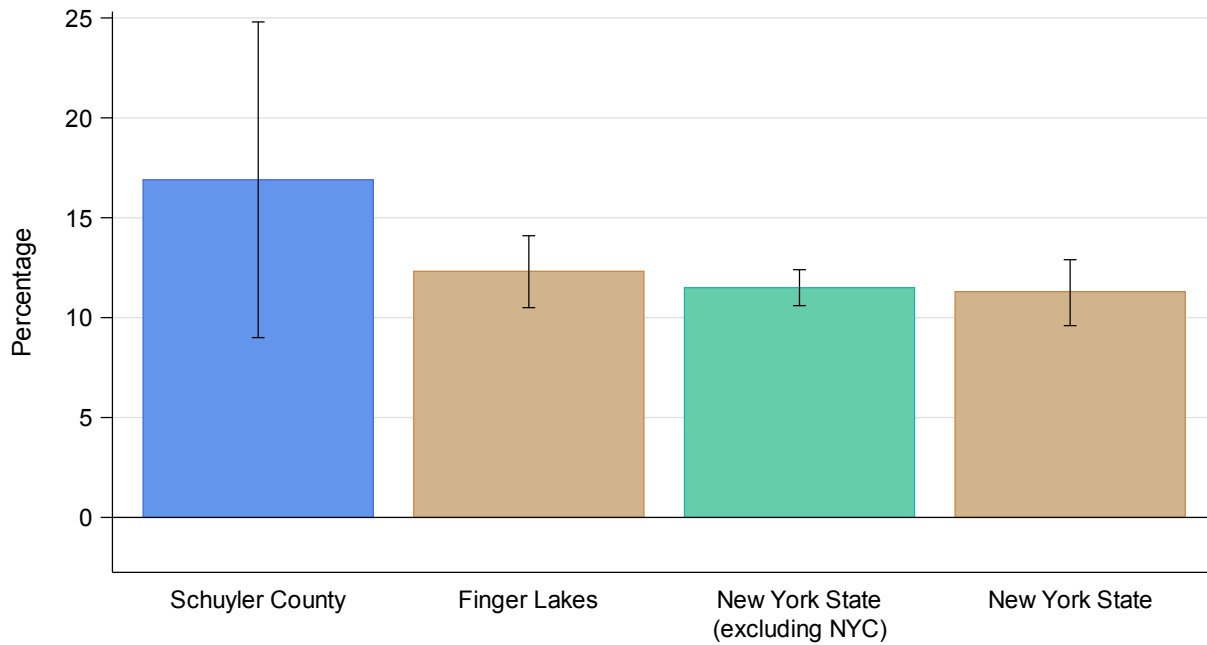
Age-adjusted years of potential life lost before age 75 per 100,000 population
 ZIP codes, 2009-2013
County: Schuyler

County sub-population	Total premature deaths	Years of potential life lost rate
ZIP code		
14805	20	3,325
14812	60	6,007
14815	13	4,619
14818	33	6,232
14824	13	4,835
14841	24	6,933
14865	83	6,649
14869	24	4,697
14878	9	7,111*
14891	75	5,284
Total		
Schuyler County	372	5,684
Finger Lakes	21,025	5,787
New York State (excluding NYC)	178,012	5,528
New York State	292,218	5,352

*: Less than 10 deaths, therefore rate may not be stable (RSE > 30%).
 s: Data do not meet reporting criteria.

 Data Source: New York State Vital Records

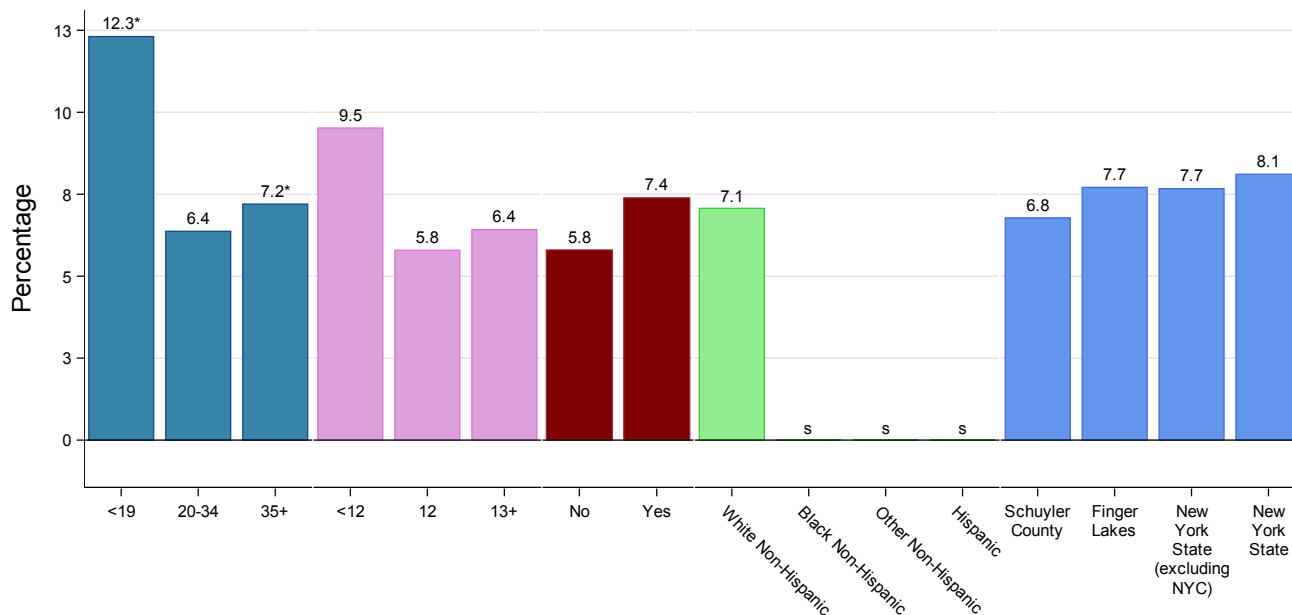
Percentage of adults who reported that their mental health was poor or not good
 April 2013 - March 2014
County: Schuyler



County Sub-population	Percentage	95% Confidence Interval
Total		
Schuyler County	16.9	(9 - 24.8)
Finger Lakes	12.3	(10.5 - 14.1)
New York State (excluding NYC)	11.5	(10.6 - 12.4)
New York State	11.3	(9.6 - 12.9)

Description: Percentage of adults who reported that their mental health was poor or not good on at least 14 of the past 30 days. "Poor" and "not good" mental health days include days when there was stress, depression, and problems with emotions.
 Data Source: New York State 2013-2014 Expanded Behavioral Risk Factor Surveillance Survey (eBRFSS)

**Percentage of live births with low birthweight (<2,500 grams)
2007-2013
County: Schuyler**



Age Group	Education	Medicaid	Race/Ethnicity	Total
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County sub-population	Total low birthweight births	Total live births	Percentage
Age Group			
<19	8	65	12.3*
20-34	64	1,004	6.4
35+	9	125	7.2*
Education			
<12	18	189	9.5
12	21	363	5.8
13+	41	639	6.4
Medicaid Status			
No	37	638	5.8
Yes	40	541	7.4
Race/Ethnicity			
White Non-Hispanic	81	1,146	7.1
Black Non-Hispanic	s	2	s
Other Non-Hispanic	s	29	s
Hispanic	s	17	s
Total			
Schuyler County	81	1,195	6.8
Finger Lakes	7,622	98,883	7.7
New York State (excluding NYC)	66,331	864,456	7.7
New York State	138,178	1,704,380	8.1

Percentage of live births with low birthweight (<2,500 grams)

ZIP codes, 2007-2013

County: Schuylar

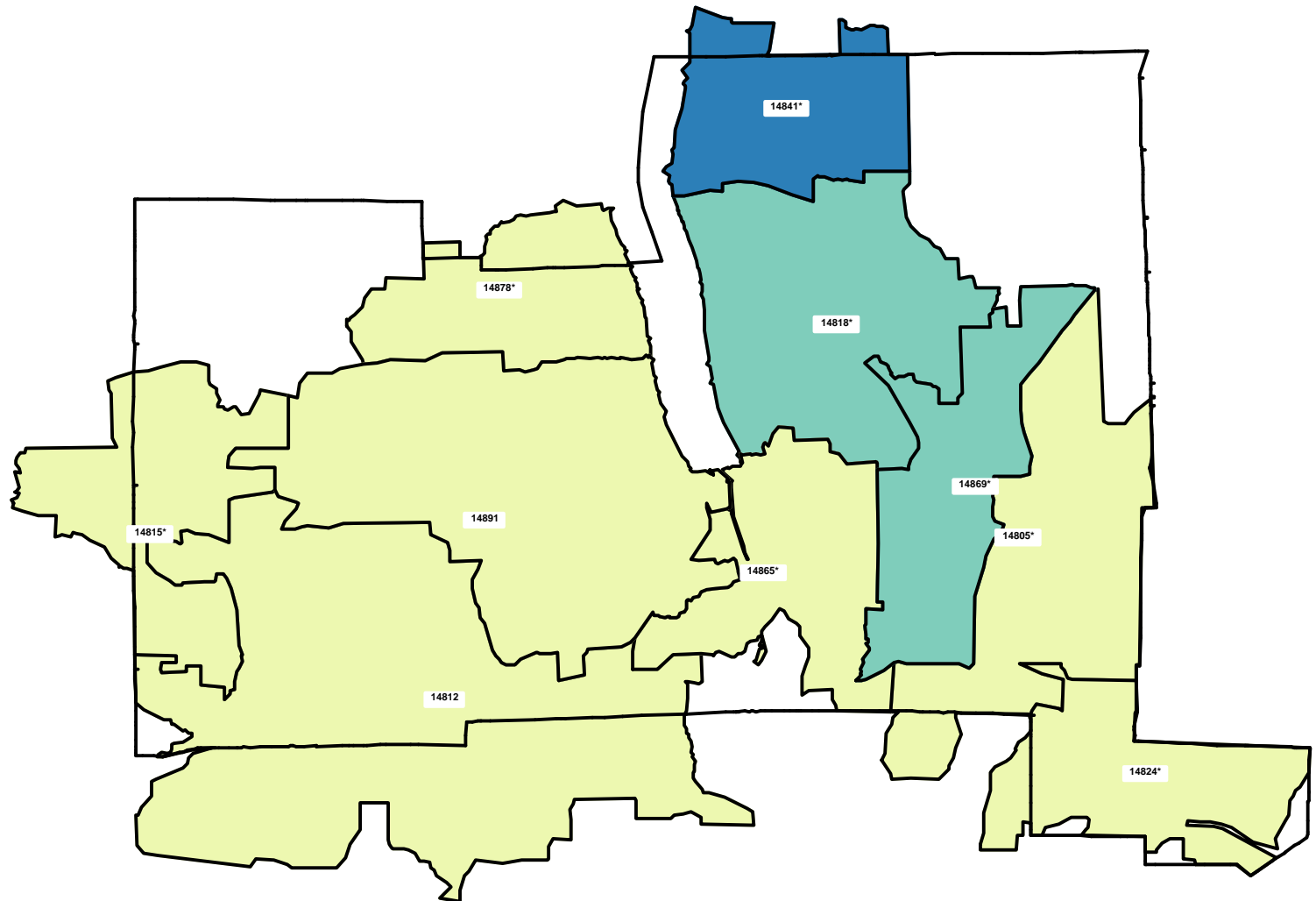
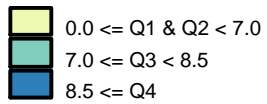
Low birthweight

Schuylar County: 6.8

New York State: 8.1

New York State excluding NYC: 7.7

Quartile Distribution: NYS excl. NYC



*: Less than 10 low birthweight births, therefore rate may not be stable (RSE > 30%).

Data Source: New York State Vital Records

Percentage of live births with low birthweight (<2,500 grams)
 ZIP codes, 2007-2013
County: Schuyler

County sub-population	Total low birthweight births	Total live births	Percentage
ZIP code			
14805	3	80	3.8*
14812	18	269	6.7
14815	3	60	5.0*
14818	9	117	7.7*
14824	3	54	5.6*
14841	7	50	14.0*
14865	8	148	5.4*
14869	7	90	7.8*
14878	0	48	0.0*
14891	16	253	6.3
Total			
Schuyler County	81	1,195	6.8
Finger Lakes	7,622	98,883	7.7
New York State (excluding NYC)	66,331	864,456	7.7
New York State	138,178	1,704,380	8.1

*: Less than 10 low birthweight births, therefore rate may not be stable (RSE > 30%).

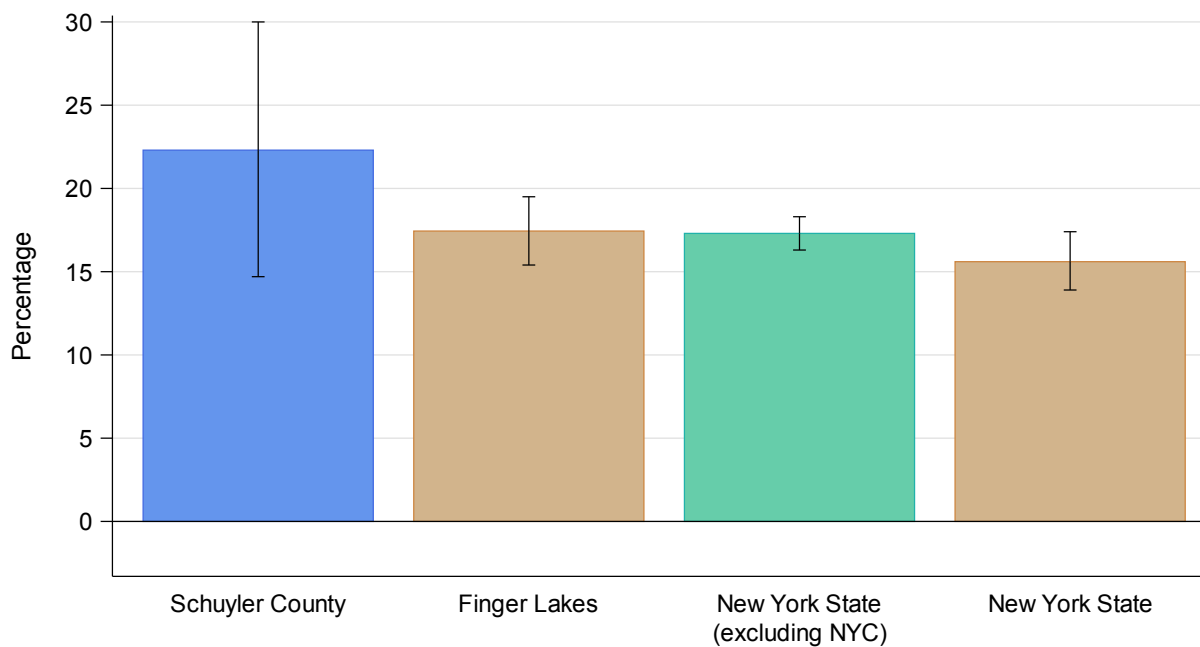
s: Data do not meet reporting criteria.

 Data Source: New York State Vital Records

Percentage of adults who are current smokers

April 2013 - March 2014

County: Schuyler

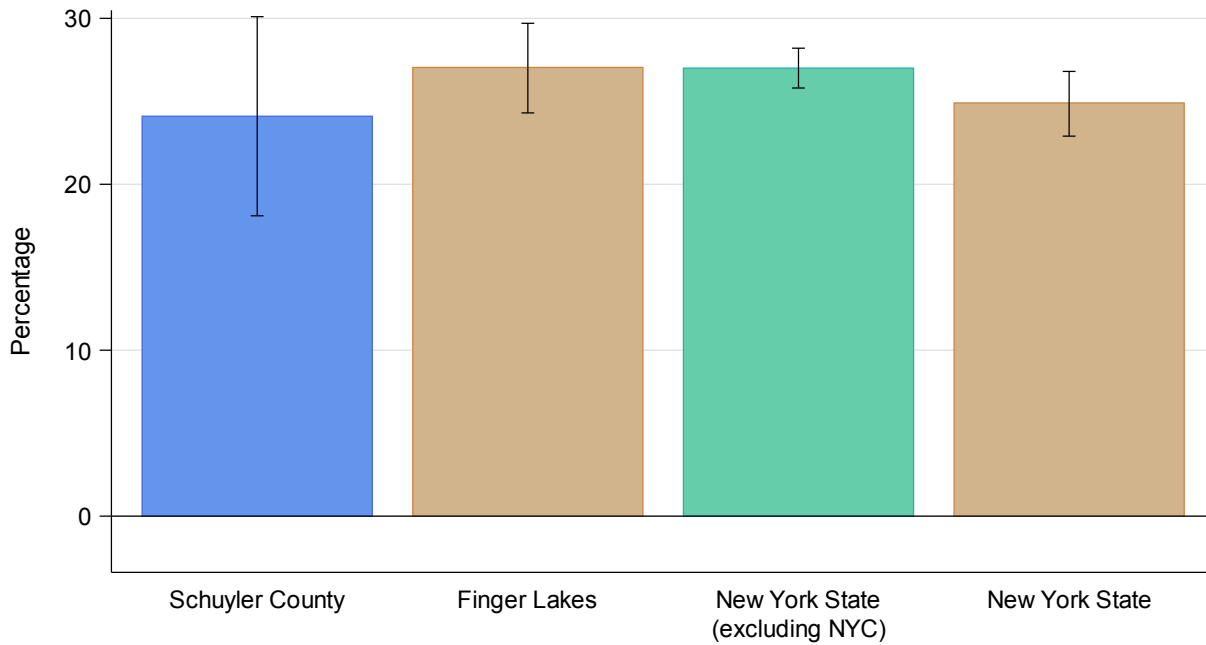


County Sub-population	Percentage	95% Confidence Interval
Total		
Schuyler County	22.3	(14.7 - 30)
Finger Lakes	17.4	(15.4 - 19.5)
New York State (excluding NYC)	17.3	(16.3 - 18.3)
New York State	15.6	(13.9 - 17.4)

Description: Percentage of adults who report smoking at least 100 cigarettes in their lifetime, and currently smoke on at least some days.

Data Source: New York State 2013-2014 Expanded Behavioral Risk Factor Surveillance Survey (eBRFSS)

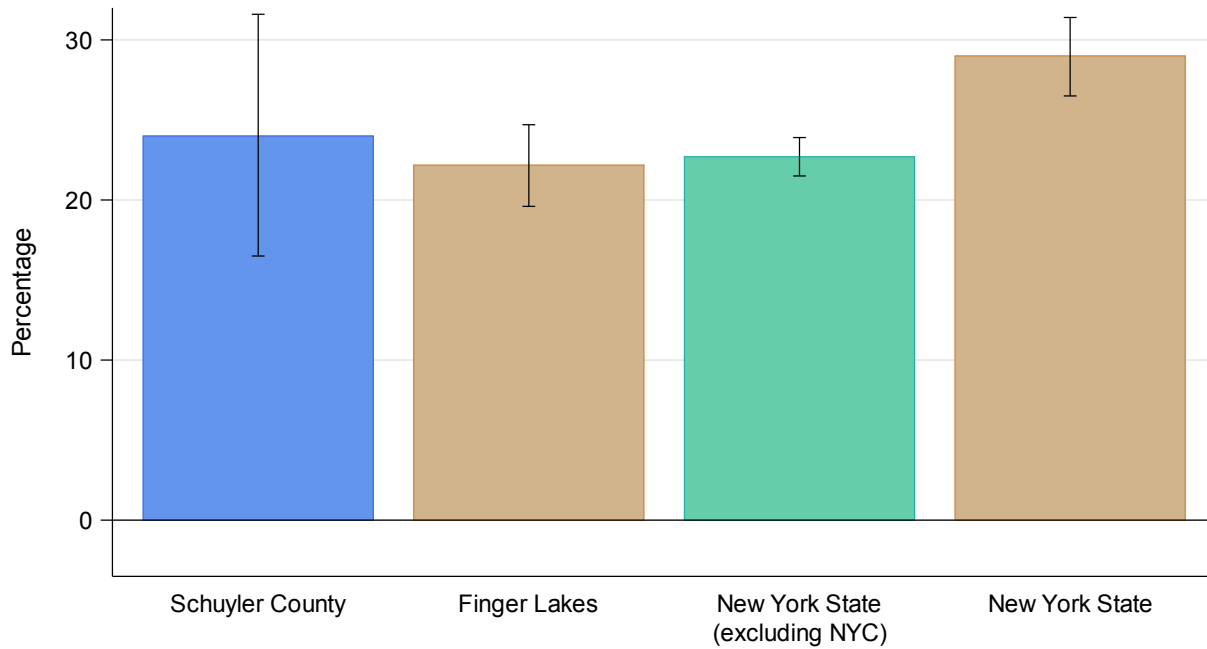
Percentage of adults who are obese
 April 2013 - March 2014
County: Schuyler



County Sub-population	Percentage	95% Confidence Interval
Total		
Schuyler County	24.1	(18.1 - 30.1)
Finger Lakes	27.0	(24.3 - 29.7)
New York State (excluding NYC)	27.0	(25.8 - 28.2)
New York State	24.9	(22.9 - 26.8)

Description: Percentage of adults who are obese (i.e., body mass index greater than or equal to 30.0) based on self reported weight and height.
 Data Source: New York State 2013-2014 Expanded Behavioral Risk Factor Surveillance Survey (eBRFSS)

Percentage of adults who are food insecure
 April 2013 - March 2014
County: Schuyler



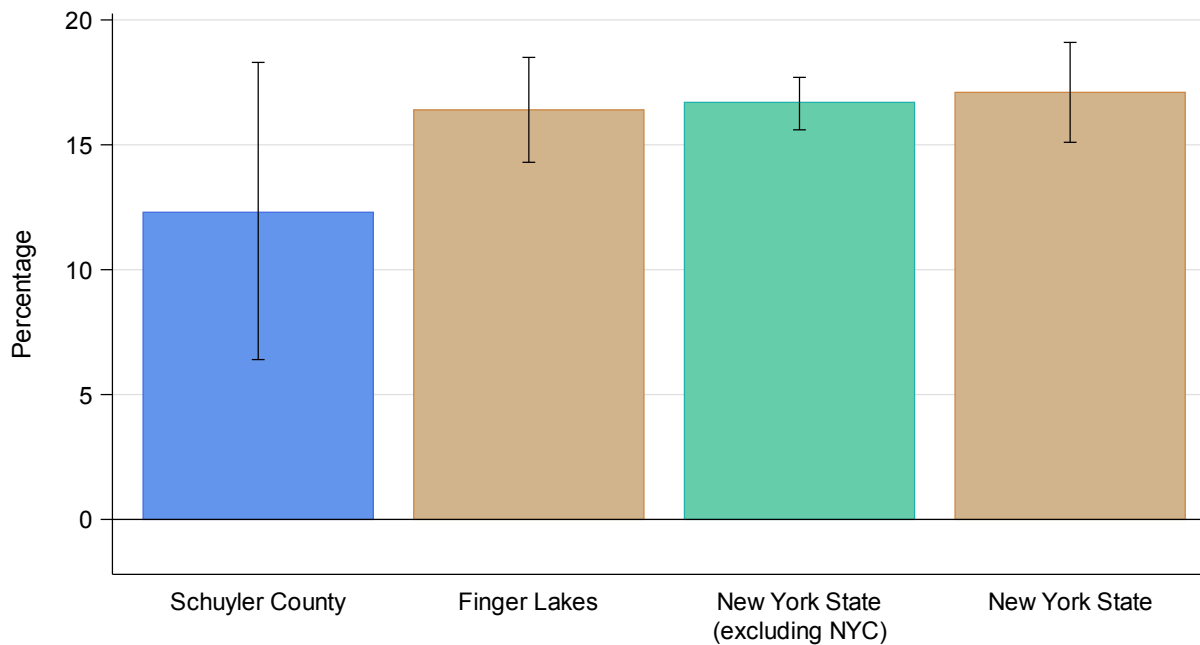
County Sub-population	Percentage	95% Confidence Interval
Total		
Schuyler County	24.0	(16.5 - 31.6)
Finger Lakes	22.2	(19.6 - 24.7)
New York State (excluding NYC)	22.7	(21.5 - 23.9)
New York State	29.0	(26.5 - 31.4)

Description: Percentage of adults who report being always, usually, or sometimes stressed about having enough money to buy nutritious meals.
 Data Source: New York State 2013-2014 Expanded Behavioral Risk Factor Surveillance Survey (eBRFSS)

Percentage of adults who report heavy or binge drinking

April 2013 - March 2014

County: Schuyler

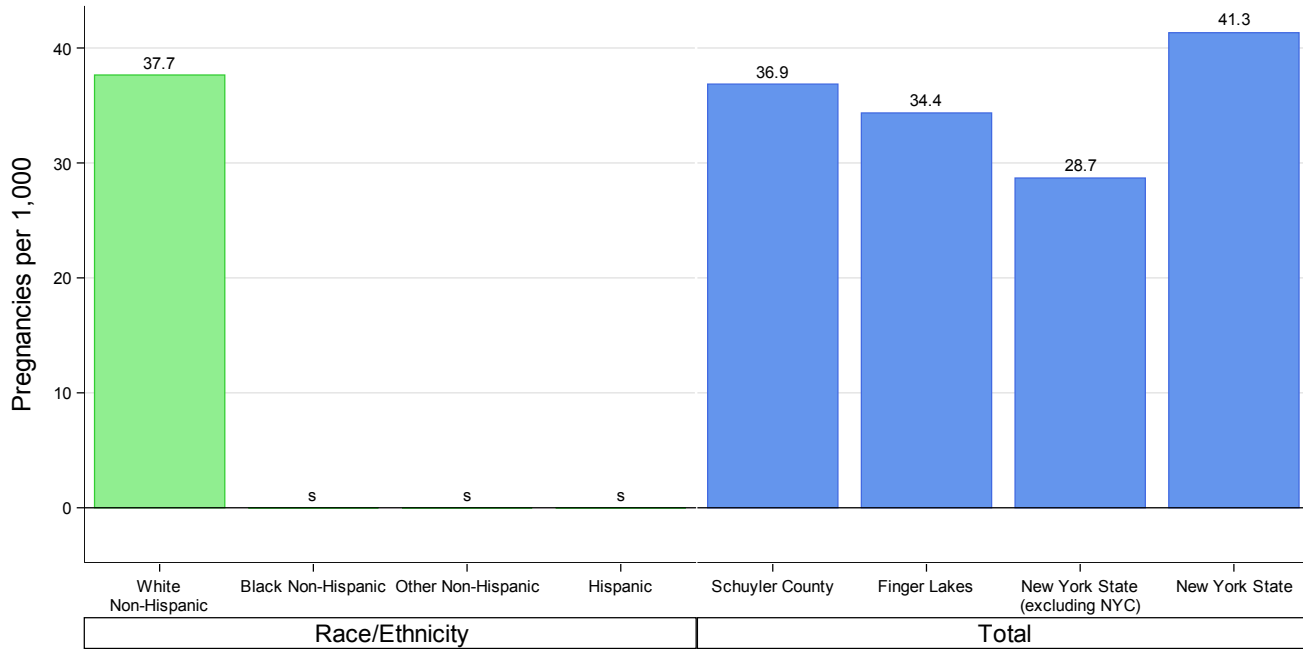


County Sub-population	Percentage	95% Confidence Interval
Total		
Schuyler County	12.3	(6.4 - 18.3)
Finger Lakes	16.4	(14.3 - 18.5)
New York State (excluding NYC)	16.7	(15.6 - 17.7)
New York State	17.1	(15.1 - 19.1)

Description: Heavy or binge drinking is defined as: (a) consuming 5 (men) / 4 (women) or more drinks on an occasion during the past 30 days, or consuming greater than 2 (men) / 1 (women) alcoholic beverages per day in the past 30 days.

Data Source: New York State 2013-2014 Expanded Behavioral Risk Factor Surveillance Survey (eBRFSS)

Teen pregnancy rate per 1,000 female population aged 15-19 years
 2011-2013
County: Schuyler



County sub-population	Total teen pregnancies	Teen pregnancy rate
Race/Ethnicity		
White Non-Hispanic	61	37.7
Black Non-Hispanic	s	s
Other Non-Hispanic	s	s
Hispanic	s	s
Total		
Schuyler County	63	36.9
Finger Lakes	4,649	34.4
New York State (excluding NYC)	33,900	28.7
New York State	79,156	41.3

s: Data do not meet reporting criteria.

 Data Source: New York State Vital Records

Teen pregnancy rate per 1,000 female population aged 15-19 years
ZIP codes, 2011-2013
County: Schuyler

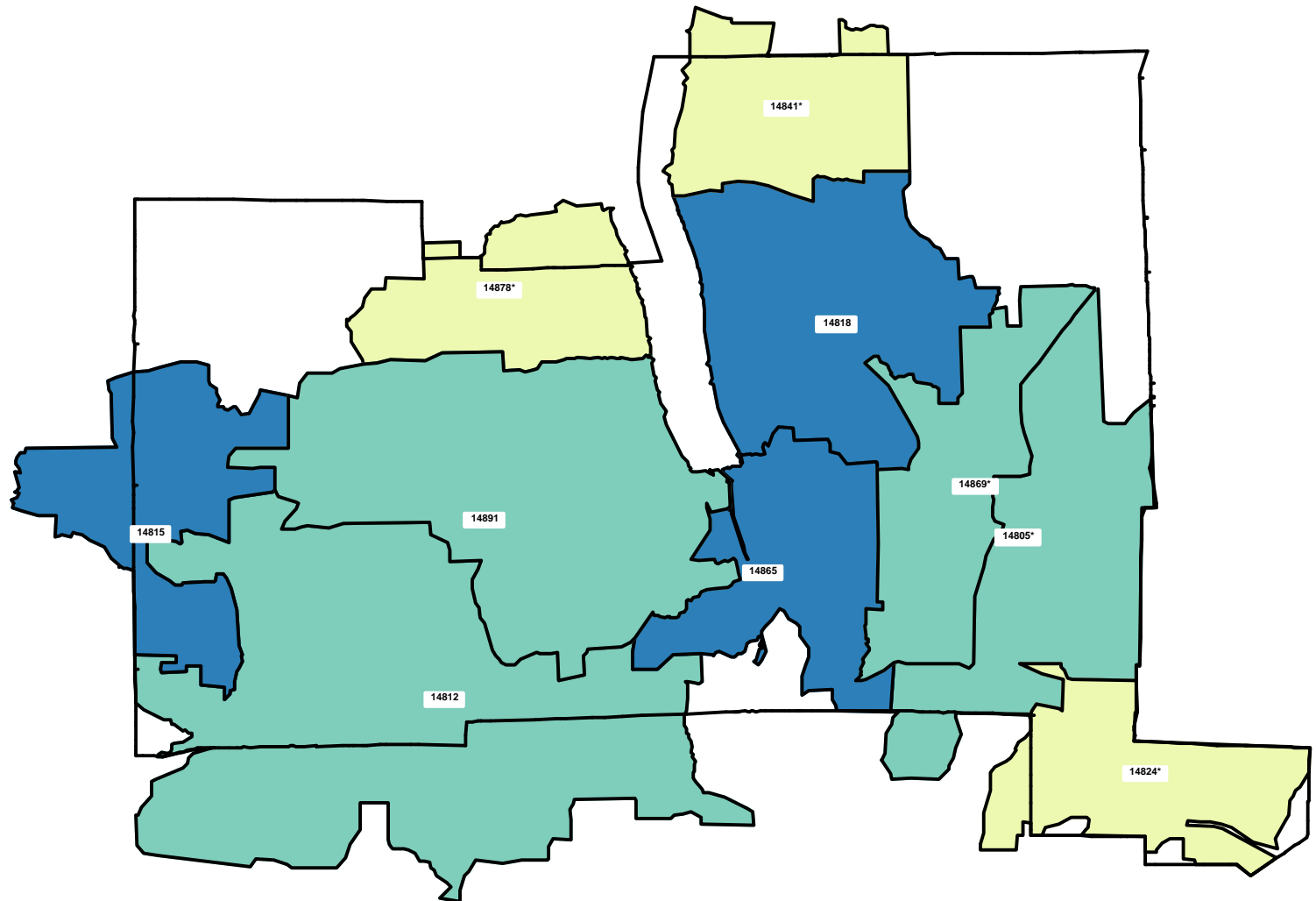
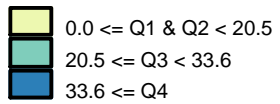
Teen pregnancy

Schuyler County: 36.9

New York State: 41.3

New York State excluding NYC: 28.7

Quartile Distribution: NYS excl. NYC



*: Less than 10 teen births, therefore rate may not be stable (RSE > 30%).

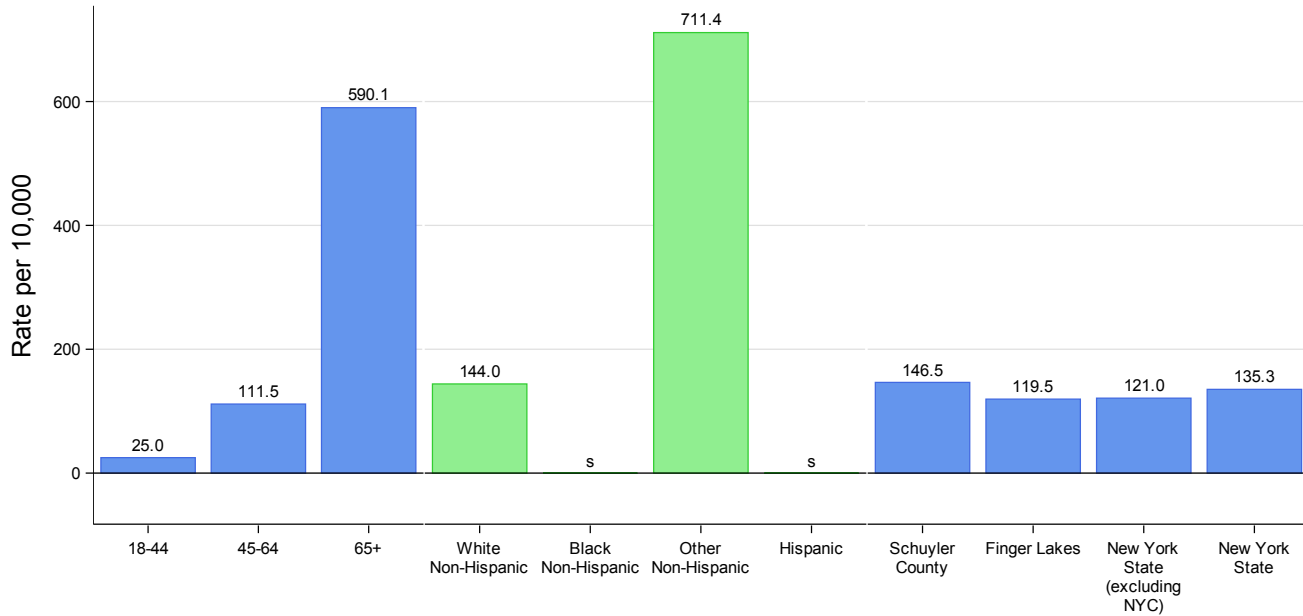
Teen pregnancy rate per 1,000 female population aged 15-19 years
 ZIP codes, 2011-2013
County: Schuyler

County sub-population	Total teen pregnancies	Teen pregnancy rate
ZIP code		
14805	6	22.7*
14812	26	31.0
14815	12	46.3
14818	17	45.8
14824	0	0.0*
14841	0	0.0*
14865	20	45.0
14869	7	25.6*
14878	0	0.0*
14891	18	21.4
Total		
Schuyler County	63	36.9
Finger Lakes	4,649	34.4
New York State (excluding NYC)	33,900	28.7
New York State	79,156	41.3

*: Less than 10 teen births, therefore rate may not be stable (RSE > 30%).
 s: Data do not meet reporting criteria.

 Data Source: New York State Vital Records

**Age-adjusted preventable hospitalization rate per 10,000 population aged 18 and over
2011-2013
County: Schuyler**



Age Group (Crude Rate)	Race/Ethnicity	Total
County sub-population	Total preventable stays	Preventable hospitalization rate
Age Group (Crude Rate)		
18-44	42	25.0
45-64	196	111.5
65+	582	590.1
Race/Ethnicity		
White Non-Hispanic	795	144.0
Black Non-Hispanic	s	s
Other Non-Hispanic	20	711.4
Hispanic	s	s
Total		
Schuyler County	820	146.5
Finger Lakes	40,760	119.5
New York State (excluding NYC)	363,688	121.0
New York State	666,554	135.3

s: Data do not meet reporting criteria.

Data Source: Statewide Planning and Research Cooperative System (SPARCS)

Age-adjusted preventable hospitalization rate per 10,000 population aged 18 and over

ZIP codes, 2011-2013

County: Schuyler

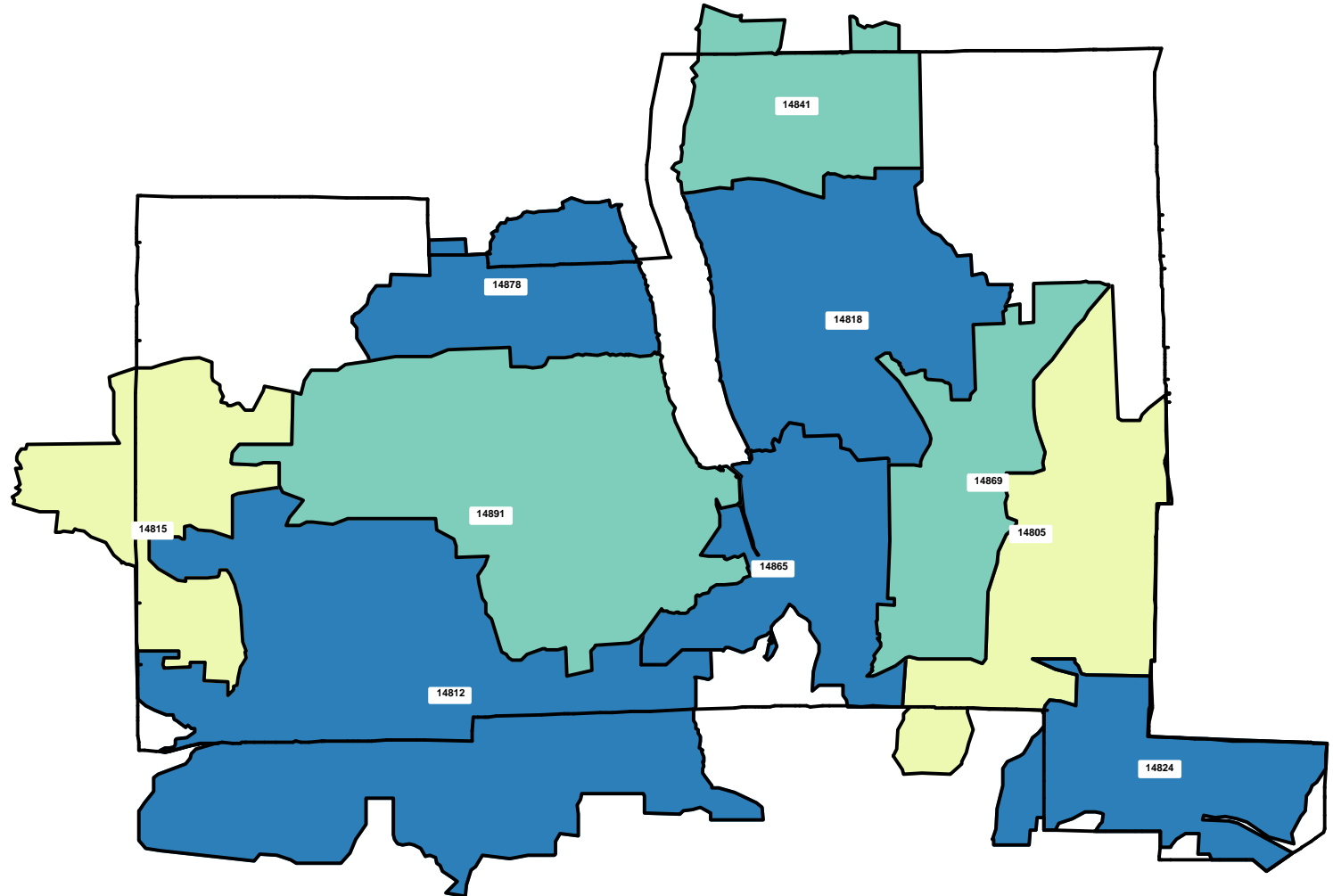
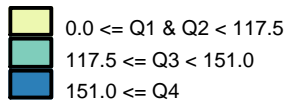
Preventable hospitalization

Schuyler County: 146.5

New York State: 135.3

New York State excluding NYC: 121.0

Quartile Distribution: NYS excl. NYC



*: Less than 10 preventable hospital stays, therefore rate may not be stable (RSE > 30%).

Data Source: Statewide Planning and Research Cooperative System (SPARCS)

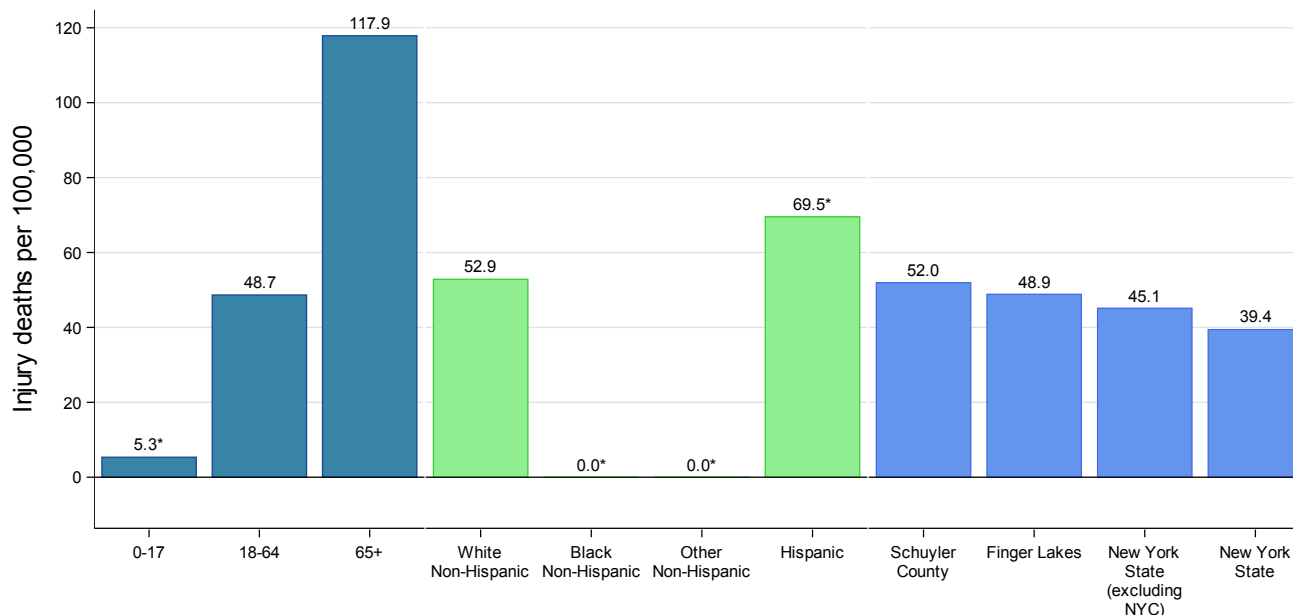
Age-adjusted preventable hospitalization rate per 10,000 population aged 18 and over
ZIP codes, 2011-2013
County: Schuyler

County sub-population	Total preventable stays	Preventable hospitalization rate
ZIP code		
14805	33	112.4
14812	143	172.5
14815	27	101.1
14818	85	177.1
14824	29	171.1
14841	37	127.4
14865	251	241.5
14869	50	144.4
14878	38	162.2
14891	175	132.4
Total		
Schuyler County	820	146.5
Finger Lakes	40,760	119.5
New York State (excluding NYC)	363,688	121.0
New York State	666,554	135.3

*: Less than 10 preventable hospital stays, therefore rate may not be stable (RSE > 30%).
s: Data do not meet reporting criteria.

Data Source: Statewide Planning and Research Cooperative System (SPARCS)

Injury mortality rate per 100,000 population
2009-2013
County: Schuyler



Age Group	Race/Ethnicity	Total
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County sub-population	Total injury deaths	Mortality rate
Age Group		
0-17	1	5.3*
18-64	28	48.7
65+	19	117.9
Race/Ethnicity		
White Non-Hispanic	47	52.9
Black Non-Hispanic	0	0.0*
Other Non-Hispanic	0	0.0*
Hispanic	1	69.5*
Total		
Schuyler County	48	52.0
Finger Lakes	3,115	48.9
New York State (excluding NYC)	25,297	45.1
New York State	38,472	39.4

*: Less than 10 deaths, therefore rate may not be stable (RSE > 30%).

Data Source: New York State Vital Records

Injury mortality rate per 100,000 population

ZIP codes, 2009-2013

County: Schuyler

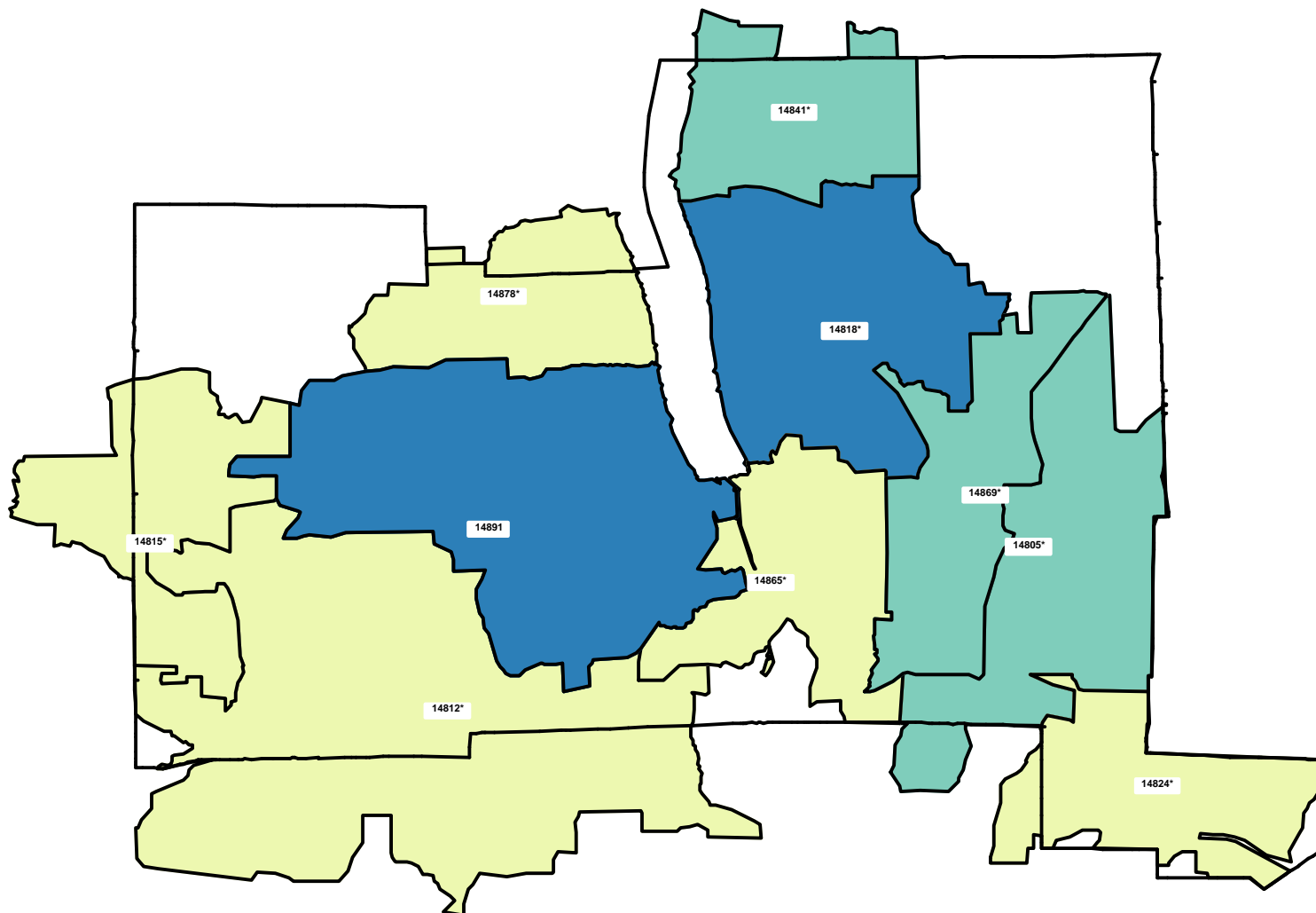
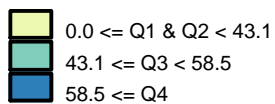
Injury mortality

Schuyler County: 52.0

New York State: 39.4

New York State excluding NYC: 45.1

Quartile Distribution: NYS excl. NYC



*: Less than 10 deaths, therefore rate may not be stable (RSE > 30%).

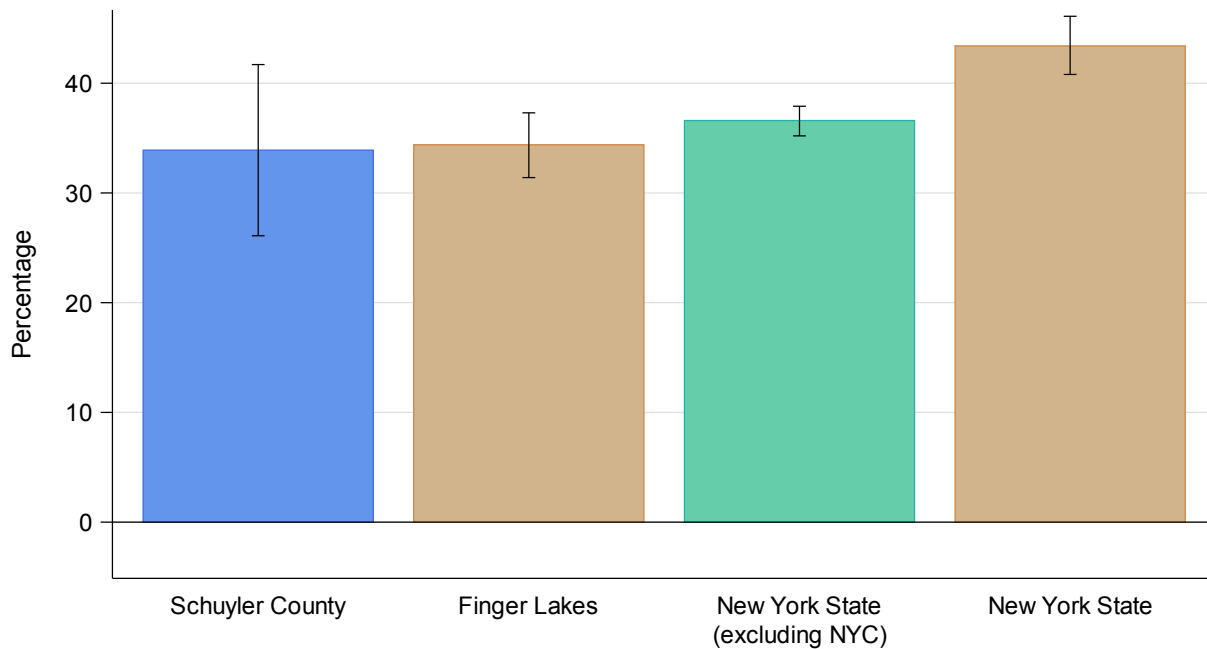
Injury mortality rate per 100,000 population
 ZIP codes, 2009-2013
County: Schuyler

County sub-population	Total injury deaths	Mortality rate
ZIP code		
14805	3	49.0*
14812	3	16.5*
14815	2	40.2*
14818	7	79.8*
14824	0	0.0*
14841	2	44.8*
14865	3	23.2*
14869	3	46.2*
14878	1	25.2*
14891	13	59.7
Total		
Schuyler County	48	52.0
Finger Lakes	3,115	48.9
New York State (excluding NYC)	25,297	45.1
New York State	38,472	39.4

*: Less than 10 deaths, therefore rate may not be stable (RSE > 30%).
 s: Data do not meet reporting criteria.

 Data Source: New York State Vital Records

Percentage of adults who are housing insecure
 April 2013 - March 2014
County: Schuyler



County Sub-population	Percentage	95% Confidence Interval
Total		
Schuyler County	33.9	(26.1 - 41.7)
Finger Lakes	34.4	(31.4 - 37.3)
New York State (excluding NYC)	36.6	(35.2 - 37.9)
New York State	43.4	(40.8 - 46.1)

Description: Percentage of adults who report being always, usually, or sometimes stressed about having enough money for their rent or mortgage.
 Data Source: New York State 2013-2014 Expanded Behavioral Risk Factor Surveillance Survey (eBRFSS)

Methods

Measures

<i>Measure</i>	<i>Description</i>	<i>Data Source</i>	<i>Years</i>	<i>Level of Analysis</i>
Premature death	Premature Death is the years of potential life lost before age 75 (YPLL-75). Every death occurring before the age of 75 contributes to the total number of years of potential life lost. For example, a person dying at age 25 contributes 50 years of life lost, whereas a person who dies at age 65 contributes 10 years of life lost to a county's YPLL. The YPLL measure is presented as a rate per 100,000 population and is age-adjusted to the 2000 US population.	New York State Vital Records	2009-2013	Race/ethnicity, ZIP code, county total
Poor mental health	Percentage of adults who reported that their mental health was poor or not good on at least 14 of the past 30 days. "Poor" and "not good" mental health days include days when there was stress, depression, and problems with emotions.	New York State 2013-2014 Expanded Behavioral Risk Factor Surveillance Survey (eBRFSS)	April 2013 - March 2014	Minor civil division (where data available), county total
Low birthweight	The percentage of births born weighing less than 2,500 grams (excludes births with unknown birthweight).	New York State Vital Records	2007-2013	Race/ethnicity, age group, Medicaid status, education, ZIP code, county total
Adult smoking	Percentage of adults who report smoking at least 100 cigarettes in their lifetime, and currently smoke on at least some days.	eBRFSS	April 2013 - March 2014	Minor civil division (where data available), county total
Adult obesity	Percentage of adults who are obese (i.e., body mass index greater than or equal to 30.0) based on self-reported weight and height.	eBRFSS	April 2013 - March 2014	Minor civil division (where data available), county total
Food insecurity	Percentage of adults who report being always, usually, or sometimes stressed about having enough money to buy nutritious meals.	eBRFSS	April 2013 - March 2014	Minor civil division (where data available), county total
Excessive drinking	Heavy or binge drinking is defined as: (a) consuming 5 (men) / 4 (women) or more drinks on an occasion during the past 30 days, or consuming greater than 2 (men) / 1 (women) alcoholic beverages per day in the past 30 days.	eBRFSS	April 2013 - March 2014	Minor civil division (where data available), county total
Teen pregnancies	Teen pregnancy rate per 1,000 female population aged 15-19 years. Pregnancies are the sum of the number of live births, induced terminations of pregnancies, and all fetal deaths.	New York State Vital Records	2011-2013	Race/ethnicity, ZIP code, county total

<i>Measure</i>	<i>Description</i>	<i>Data Source</i>	<i>Years</i>	<i>Level of Analysis</i>
Preventable hospital stays	The number of preventable hospitalizations per 10,000 population aged 18+ years. This rate is age-adjusted to the 2000 US population. The Prevention Quality Indicators (PQIs) are a set of measures developed by the federal Agency for Healthcare Research and Quality for use in assessing the quality of outpatient care for "ambulatory care sensitive conditions." This rate is defined as the combination of the 12 PQIs that pertain to adults: (1) short-term complication of diabetes; (2) long-term complication of diabetes; (3) uncontrolled diabetes; (4) lower-extremity amputation among patients with diabetes; (5) hypertension; (6) congestive heart failure; (7) angina; (8) chronic obstructive pulmonary disease; (9) asthma; (10) dehydration; (11) bacterial pneumonia; (12) urinary tract infection. The PQIs estimate the number of potentially avoidable hospital admissions, and therefore a lower rate is desirable.	Statewide Planning and Research Cooperative System (SPARCS)	2011-2013	Race/ethnicity, age group, ZIP code, county Total
Injury deaths	Injury Deaths is the number of deaths from intentional and unintentional injuries per 100,000 population. Deaths included are those with an underlying cause of injury (ICD-10 codes *U01-*U03, V01-Y36, Y85-Y87, Y89).	New York State Vital Records	2009-2013	Race/ethnicity, age group, ZIP code, county total
Housing insecurity	Percentage of adults who report being always, usually, or sometimes stressed about having enough money for their rent or mortgage.	eBRFSS	April 2013 - March 2014	Minor civil division (where data available), county total

Data Sources

New York State Vital Records

New York State (NYS) has two registration areas, New York City (NYC) and New York State exclusive of NYC (“NYS excl. NYC,” or “rest of state”). NYC includes the five counties of Bronx, Kings (Brooklyn), New York (Manhattan), Queens, and Richmond (Staten Island); the remaining 57 counties comprise NYS excl. NYC. The New York State Department of Health (NYSDOH) Bureau of Vital Records processes data from live birth, death, fetal death and marriage certificates recorded in NYS excl. NYC. Through a cooperative agreement, NYSDOH receives data on live births, deaths, and fetal deaths recorded in NYC from the New York City Department of Health and Mental Hygiene (NYCDOHMH) and on live births and deaths recorded outside of NYS to residents of NYS from other states and Canada.

Vital Event indicators for NYC geographical areas reported by the NYSDOH and the NYCDOHMH are different because the former includes possibly all NYC residents' events regardless of where they took place and the latter reports only events to NYC residents that occur in NYC. The indicators may also differ due to timing and/or completeness of data.

The measures in this report that are generated from Vital Statistics Records data are premature death, low birthweight, teen pregnancies, and injury deaths.

Statewide Planning and Research Cooperative System (SPARCS)

Information about hospitalizations is collected through the hospital inpatient discharge data system, known as SPARCS. Each hospitalization receives an ICD-9 code at discharge that indicates the primary reason for the hospitalization. Up to 14 other diagnosis codes may be recorded to further describe the hospitalization. Statistics in these tables are based on the primary diagnosis unless otherwise noted. This data system does not include information about events that did not result in a hospitalization, such as cases that were treated in a hospital emergency room only. Numbers and rates are based on the number of hospitalizations that occurred and not the number of individuals who were hospitalized. In this report, the preventable hospital stays measure is generated from SPARCS data.

New York State 2013-2014 Expanded Behavioral Risk Factor Surveillance Survey (eBRFSS)

The Expanded Risk Factor Surveillance System (eBRFSS) augments the CDC Behavioral Risk Factor Surveillance System (BRFSS) survey, which is conducted annually in NYS. The eBRFSS is a random-digit-dialed telephone survey among adults 18 years of age and older, representative of the non-institutionalized civilian population with landline and cellular telephones living in NYS. The goal of eBRFSS surveys is to collect county-specific data on preventive health practices, risk behaviors, injuries and preventable chronic and infectious diseases. Topics assessed by the eBRFSS include tobacco use, physical inactivity, diet, use of cancer screening services, and other factors linked to the leading causes of morbidity and mortality. In this report, the poor mental health, adult smoking, adult obesity, food insecurity, and excessive drinking measures were generated from eBRFSS data.

For the 2013-14 eBRFSS, survey data collection occurred in 58 geographic areas of NYS – the 57 counties outside NYC, plus the five counties of NYC counted as a single area. A standard questionnaire was used in all areas. Data collection for the 2013-14 eBRFSS took place during April 2013-March 2014. The goal was to complete at least 400 interviews in each area. The final number of interviews varies because of the sampling design of the survey and differential response rates. The 2013-14 eBRFSS survey was designed and implemented in a similar manner as the annual BRFSS surveys.

A respondent-level file containing data from the 2013-14 eBRFSS is available upon request. Requestors will need to complete a data request form, including a confidentiality agreement. The data request form can be obtained by calling the NYS BRFSS Coordinator at (518) 473-0673, or by sending an email to brfss@health.ny.gov.

Sub-County Geography and Population Selection

For the measures generated from the NYS Vital Records System and SPARCS data, sub-county level analyses were selected based on data availability, and utility for public health assessment and planning. ZIP codes were the resulting geographic unit selected for all measures from these data sources. While race/ethnicity was selected as a demographic unit of analysis for these measures, the other demographic unit selections varied by measure, and consisted of age group, Medicaid status, and education level.

For the survey data collected through the eBRFSS, county subdivisions – referred to as minor civil divisions (MCDs) – were chosen as the geographical unit to use in calculating health measure estimates. MCDs are legally incorporated municipal corporations, providing services to their residents and empowered to tax property within their boundaries to raise revenue. There are 1,023 MCDs in NYS, including 932 towns, 62 cities, 14 Native American reservations, 10 undefined MCDs consisting entirely of water, and five town-village governments.

Population data from the American Community Survey (2009-2013 ACS Total Population) for both county subdivisions (and counties) were used to select 18 MCDs outside NYC for this pilot. MCDs were selected if they comprised more than 30 percent of the estimated county population. These MCDs included seven towns and 11 cities, and covered 17 counties.

To distinguish these MCDs within the eBRFSS data file, the selected MCDs were assigned a group of respondent-level ZIP codes. The group of ZIP code assignments was made based on information within the 2010 Zip Code Tabulation Area (ZCTA) to County Subdivision Relationship file. Because ZCTAs were not coterminous with town and city boundaries, assignment of ZCTA to MCDs had to be based on percentage of population allocated. For this pilot, a ZCTA was assigned to an MCD if more than 50 percent of the population within the ZCTA resided within the MCD. The extent to which the population of a MCD was captured by the ZCTAs varied across the 18 MCDs used in the pilot and ranged from 68.5 percent (Schenectady City) to 100 percent (Amsterdam, Auburn, Buffalo, Troy and Cortland).

Data Interpretation and Limitations

Age-adjusted rates

What is age adjustment?

Age adjustment is a statistical process applied to rates of disease, death, injuries or other health outcomes which allows communities with different age structures to be compared.

Why do we do age adjustment?

Almost all diseases or health outcomes occur at different rates in different age groups. Most chronic diseases, including most cancers, occur more often among older people. Other outcomes, such as many types of injuries, occur more often among younger people. The age distribution determines what the most common health problems in a community will be. One way of examining the pattern of health outcomes in communities of different sizes is to calculate an incidence or mortality rate, which is the number of new cases or deaths divided by the size of the population. In chronic diseases and injuries, rates are usually expressed in terms of the number of cases/deaths per 100,000 people.

A community made up of more families with young children will have a higher rate of bicycle injuries than a community with fewer young children. A community with more older individuals will have higher rates of cancer than one with younger individuals. This is true even if the individuals in the two communities have the same risk of developing cancer or being injured. Epidemiologists refer to this as confounding, which happens when the measurement of the association between the exposure and the disease is mixed with the effects of some extraneous factor (a confounding variable). Age adjustment is a statistical way to remove confounding caused by age.

How is age adjustment done?

Age confounding occurs when the two populations being compared have different age distributions and the risk of the disease or outcome varies across the age groups. The process of age adjustment by the direct method changes the amount that each age group contributes to the overall rate in each community, so that the overall rates are based on the same age structure. Rates that are based on the same age distribution can be compared to each other without the presence of confounding by age. Adjustment is accomplished by first multiplying the age-specific rates of disease by age-specific weights. The weights used in the age adjustment of cancer data are the proportion of the 2000 U.S. population within each age group. The weighted rates are then summed across the age groups to give the age-adjusted rate.

Grouping ZIP Code Estimates Into Categories/Colors for the County Maps

County maps display ZIP code-level data geographically by quartile. Regional quartiles for the five boroughs (counties) of NYC and the remaining counties of NYS excl. NYC were calculated separately. A ZIP code's color on the map indicates its regional quartile.

For each of the measures, ZIP code estimates are grouped into three categories (yellow, green, and blue) based on their regional (i.e., NYC or NYS excl. NYC) quartile distribution ordered from best to worst:

- The YELLOW category includes ZIP codes that are performing the best (i.e., the 50 percent of ZIP codes with the lowest estimates; those in quartile 1 and quartile 2), and is the most favorable category.
- The GREEN category includes ZIP codes that are performing in the middle (i.e., the 25 percent of ZIP codes in quartile 3).

- The BLUE category includes ZIP codes that are performing the worst (i.e., the 25 percent of ZIP codes with the highest estimates; those in quartile 4), and is the least favorable category.

ZIP codes are shaded white on the map when their data are suppressed, or when the majority of the ZIP code’s population resides in a neighboring county.

Unstable Estimates

Multiple years of data were combined to generate more stable estimates when the number of events for an indicator was small (such as rare conditions). The relative standard error (RSE) is a tool for assessing reliability of an estimate. A large RSE is produced when estimates are calculated based on a small number of cases. Estimates with large RSEs are less reliable than those with small RSEs.

For count measures, the National Center for Health Statistics⁴ recommends that estimates with RSEs greater than 30 percent should be considered unreliable/unstable. This usually occurs when there are fewer than 10 events in the numerator. The RSE is calculated by dividing the standard error of the estimate by the estimate itself, then multiplying that result by 100. The RSE is expressed as a percentage of the estimate.

For eBRFSS measures, the estimate is considered to be unreliable/unstable when the width of the 95 percent confidence interval is greater than 20 percent or the RSE is greater than 30 percent.

For this report, an asterisk (*) indicates that a percentage or rate is unreliable/unstable.

Data Suppression

Results are not shown when issues of confidentiality, skewed data, or miscoding exist. Three types of data suppression are applied to this report: primary, secondary, and tertiary. Primary suppression rules vary depending on the data source and the measure.

<i>Data Source</i>	<i>Suppression Criteria</i>
Survey data (eBRFSS)	Numerator <10 or denominator >50
Death data (Vital Records)	Denominator population <50
Birth data (Vital Records)	Denominator total births <30
Adolescent pregnancy data (Vital Records)	Denominator population <50
Hospitalization data (SPARCS)	Numerator cases <6

Secondary suppression is applied when primary suppression affects only one group in a county. For example, if only one ZIP code in a county meets the primary suppression criteria for hospitalization data by having fewer than six preventable hospitalizations, then we applied secondary suppression to remove data for a second ZIP code that had the lowest denominator. This prevents the identification of data for the primarily suppressed ZIP code that could otherwise be calculated by subtracting the sum of hospitalizations for the remaining ZIP codes from the county’s total hospitalizations.

⁴ <http://www.cdc.gov/nchs/data/statnt/statnt24.pdf>

Tertiary suppression is applied to remove outlier estimates that result from coding errors (e.g., in patients' demographic information), or skewed distribution of cases by age groups that cause age adjustment to produce extreme values.

Data Limitations

eBRFSS Data: eBRFSS data for NYC are not available at the borough level. To obtain borough- and neighborhood-level NYC health data, please refer to the New York City Community Health Profiles⁵ from the NYCDOHMH.

SPARCS Data: Data are age-adjusted in this report for the preventable hospitalizations measure. At the ZIP code level, very unusual distributions in the population denominator and/or numerator (possibly due to multiple hospitalizations per individual) may result in extreme age-adjusted rates; therefore, these estimates are suppressed or should be interpreted with caution.

⁵ <http://www1.nyc.gov/site/doh/data/data-publications/profiles.page>

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