

PROMOTE MENTAL HEALTH AND PREVENT SUBSTANCE ABUSE

MENTAL HEALTH IN SARATOGA

The Effect of Mental Health on the Population-NSDUH, Population 18+ Years of Age, 2013

| | Saratoga | Capital Region |
|---------------------------------------|----------|----------------|
| Any Mental Illness | 33,500 | 151,200 |
| At Least One Major Depressive Episode | 12,300 | 58,900 |
| Serious Mental Illness | 7,000 | 30,250 |
| Serious Thoughts of Suicide | 7,000 | 30,250 |

The Effect of Mental Health on the Population

| | Saratoga | Capital Region |
|---|----------|----------------|
| Number of adults with poor mental health for 14+ days in last month (2013-14) | 17,900 | 88,500 |
| Number of mental disease and disorder ED visits per year (2013) | 2,342 | 10,806 |
| Number of mental disease and disorder hospitalizations per year (2013) | 913 | 5,185 |
| Number of self-inflicted injury ED visits (15+ yrs.) per year (2013) | 155 | 728 |
| Number of self-inflicted injury hospitalizations per year (2013) | 198 | 818 |
| Number of suicide deaths per year (2013) | 32 | 108 |

The Effect of Mental Health on the Population-NSDUH, Estimated Prevalence, Population 18+ Years of Age, 2013

| | Saratoga | Capital Region | New York State |
|---------------------------------------|----------|----------------|----------------|
| Any Mental Illness | 19% | 20% | 19% |
| At Least One Major Depressive Episode | 7% | 7% | 6% |
| Serious Mental Illness | 4% | 4% | 4% |
| Serious Thoughts of Suicide | 4% | 4% | 4% |

Finger Lakes HSA SPARCS and V.S. Portal Codes

Mental Diseases and Disorders-primary diagnosis (ICD 9)

- **Psychosis (290-299)**
- **Neurotic disorders, personality disorders, and other nonpsychotic mental disorders (300-316)**
- **Mental retardation (317-319)**

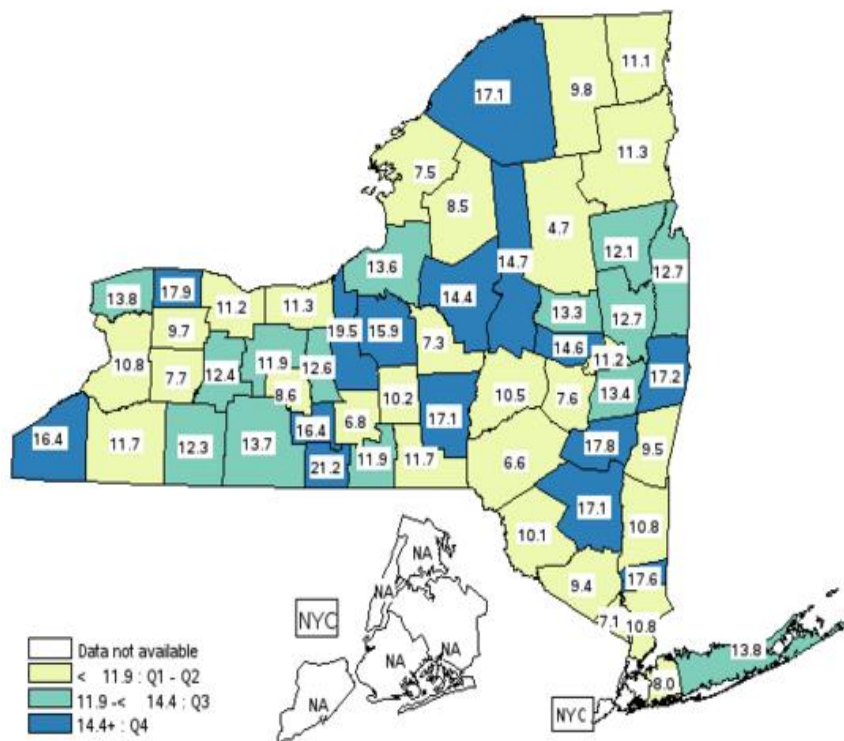
Excluding:

**291.0-291.9 - Alcohol induced mental disorders;
292.0-292.9 - Drug induced mental disorders;
303.0-303.9 - Alcohol dependence syndrome;
304.0-304.9 - Drug dependence syndrome.**

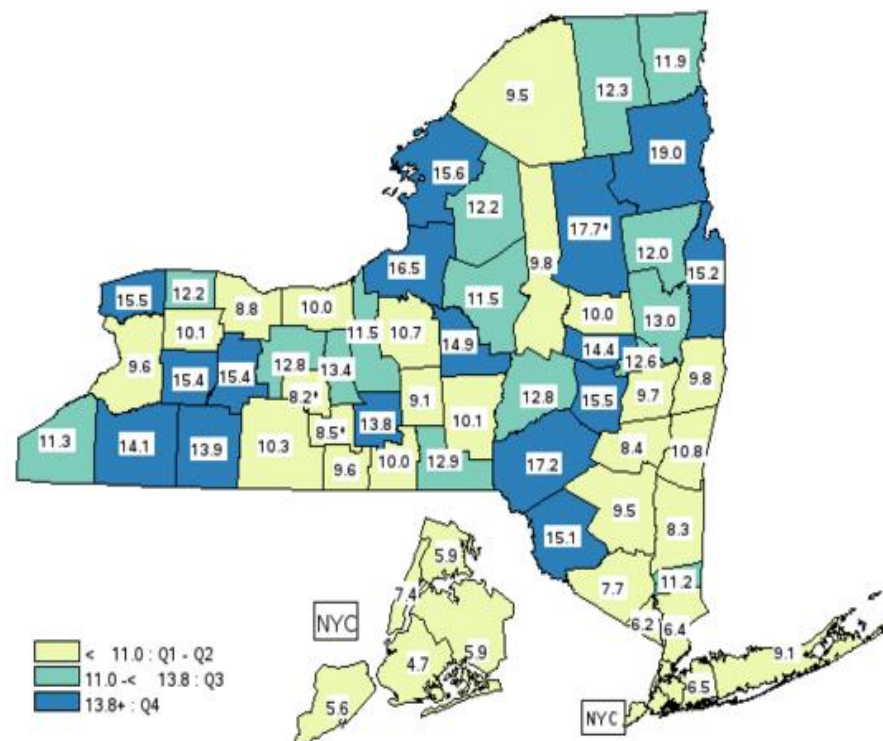
Mental Health Indicators and Significance Compared to New York State (excl. NYC)

| | Saratoga | | Capital Region | | Upstate |
|--|----------|-------------|----------------|--------|---------|
| % adults with poor mental health for 14+ days in last month (2013-14) | 12.7 | Higher | 13.5 | Higher | 11.8 |
| Adjusted mental disease and disorder ED Visits/10,000 (2011-2013) | 106.3 | Lower | 123.9 | Lower | 127.7 |
| Adjusted mental disease and disorder hospitalizations/10,000 (2011-2013) | 43.6 | Lower | 53.7 | Lower | 55.8 |
| Adjusted suicide mortality/100,000 (2011-2013) | 13.0 | Sig. higher | 10.8 | Higher | 9.6 |
| Adjusted self-inflicted injury ED visits (15+ yrs.)/10,000 (2011-2013) | 9.2 | Higher | 10.7 | Higher | 8.5 |
| Adjusted self-inflicted injury hospitalization/10,000 (2011-2013) | 8.9 | Sig. higher | 8.5 | Higher | 7.0 |

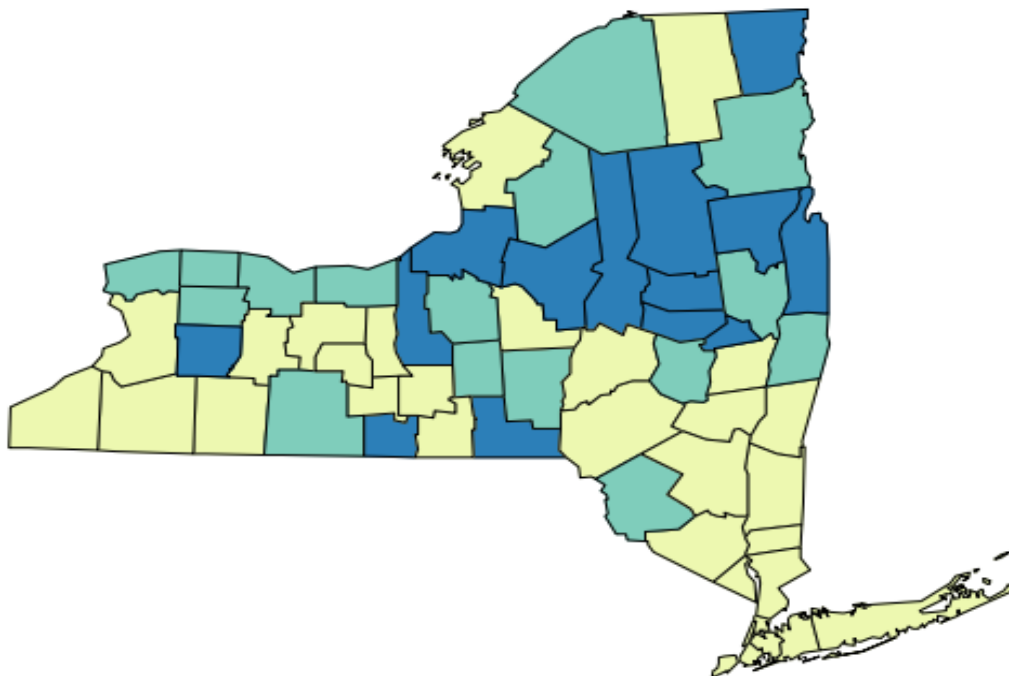
Age-adjusted % of Adults with Poor Mental Health for 14+ Days in the Last Month, 2013-2014



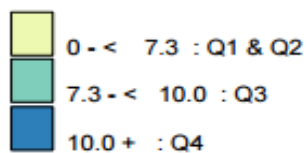
Age-adjusted Suicide Mortality Rate per 100,000, 2011-2013



Self-Inflicted Injury Hospitalization Rate per 10,000, 2011-2013



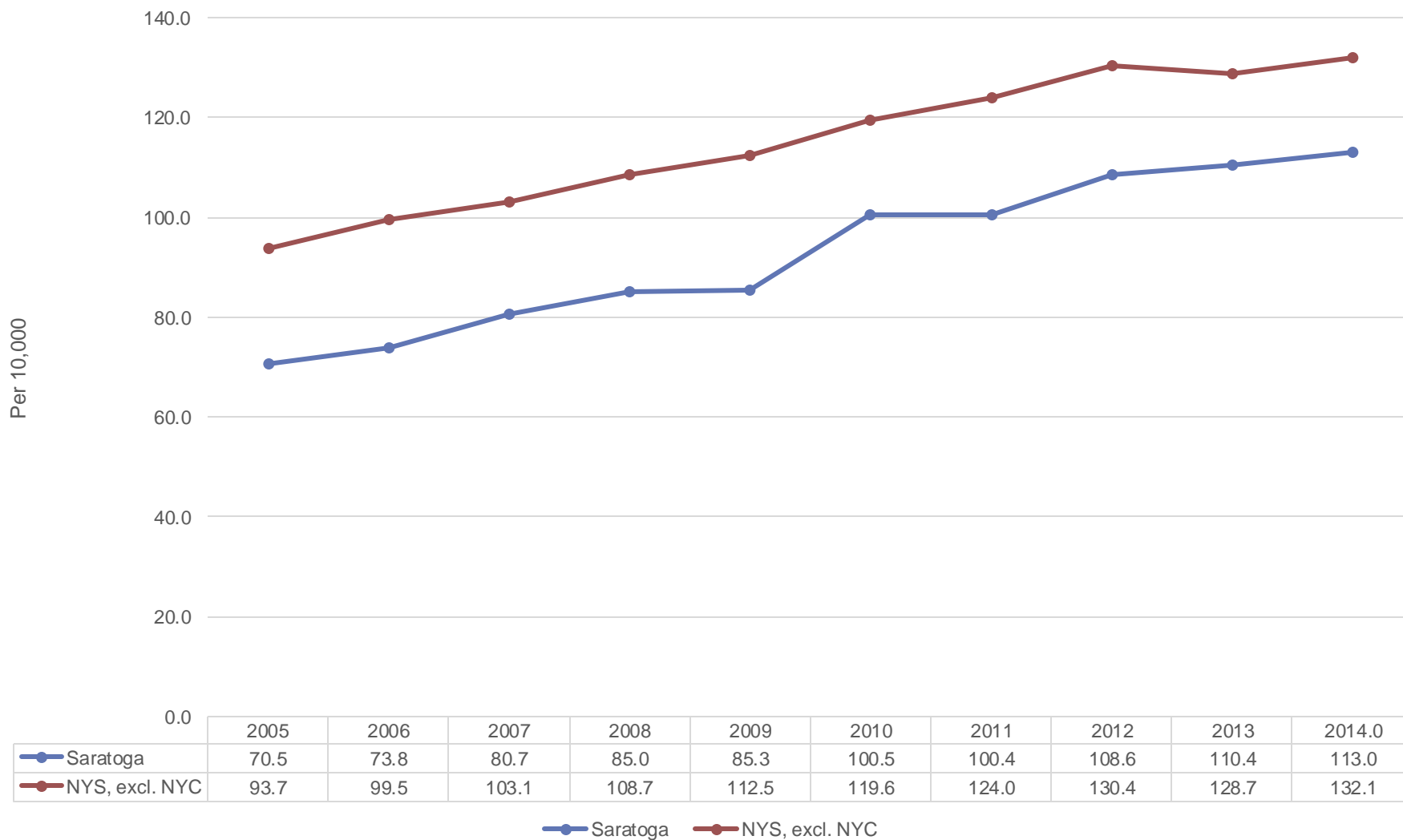
Hospital Discharge Rate
Counties Are Shaded Based On Quartile Distribution



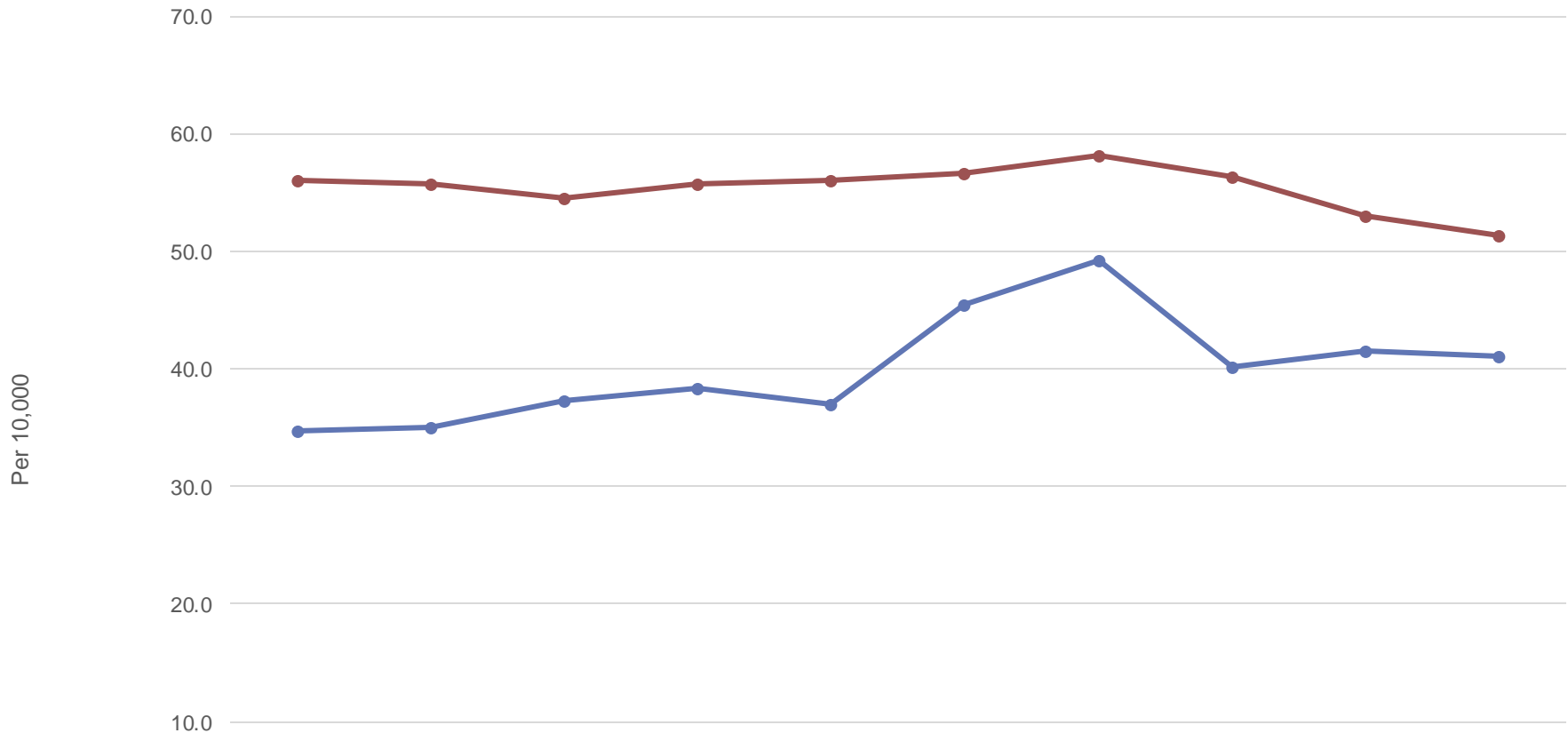
Adjusted Percentage of Adults with 14+ Poor Mental Health Days in Past Month, New York State (excl. NYC), Saratoga and Capital Region; 2003, 2008-2009, 2013-14

| | 2003 | 2008-09 | 2013-14 |
|----------------|------|---------|---------|
| Saratoga | NA | 10.2 | 12.7 |
| Capital Region | NA | NA | 13.5 |
| Upstate | 9.4 | 10.9 | 11.8 |

Age-adjusted Mental Diseases and Disorders ED Visit Rate per 10,000, NYS excl. NYC, and Saratoga County, 2005-2014



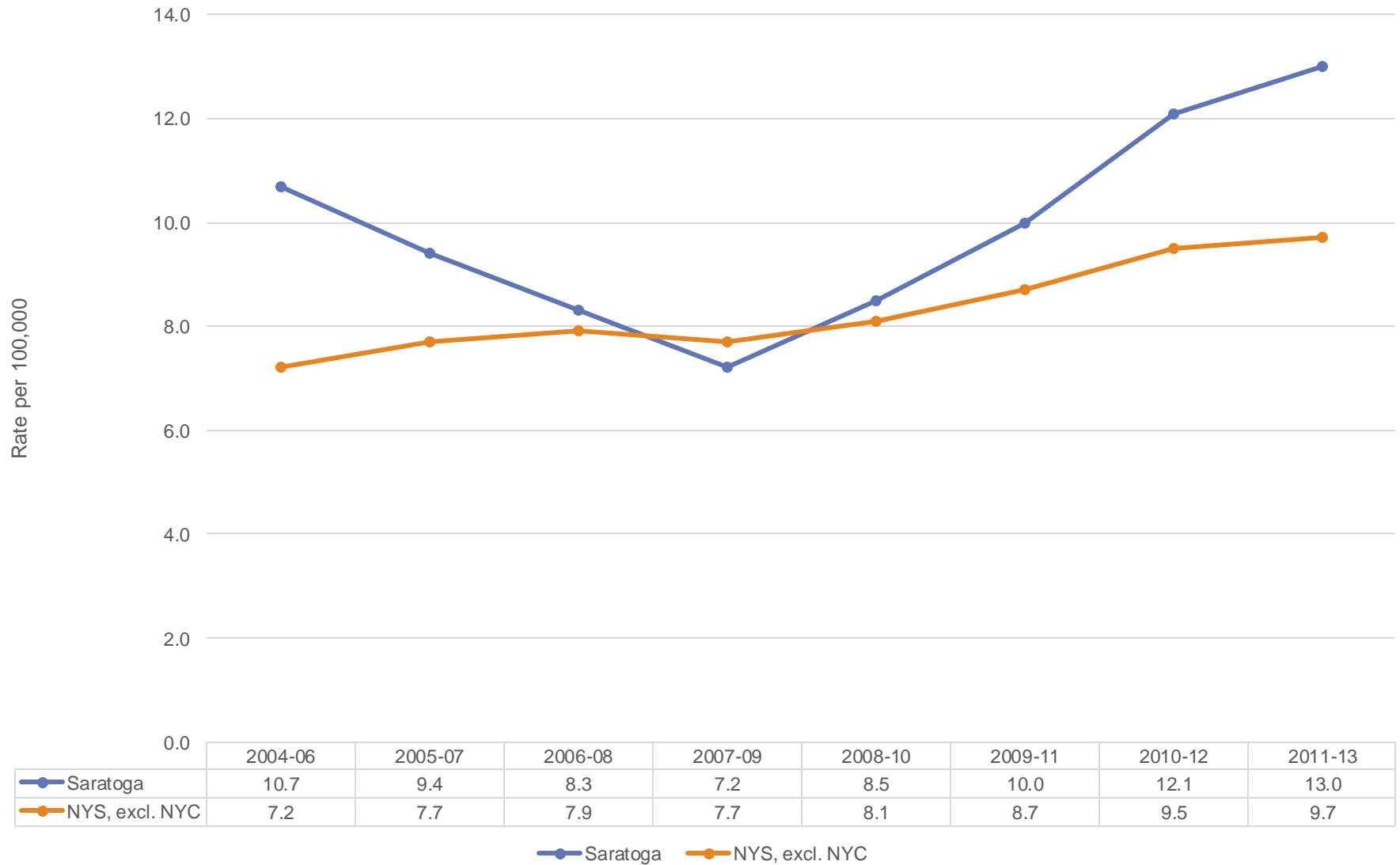
Age-adjusted Mental Diseases and Disorders Hospitalization Rate per 10,000, Saratoga and NYS excl. NYC, 2005-2014



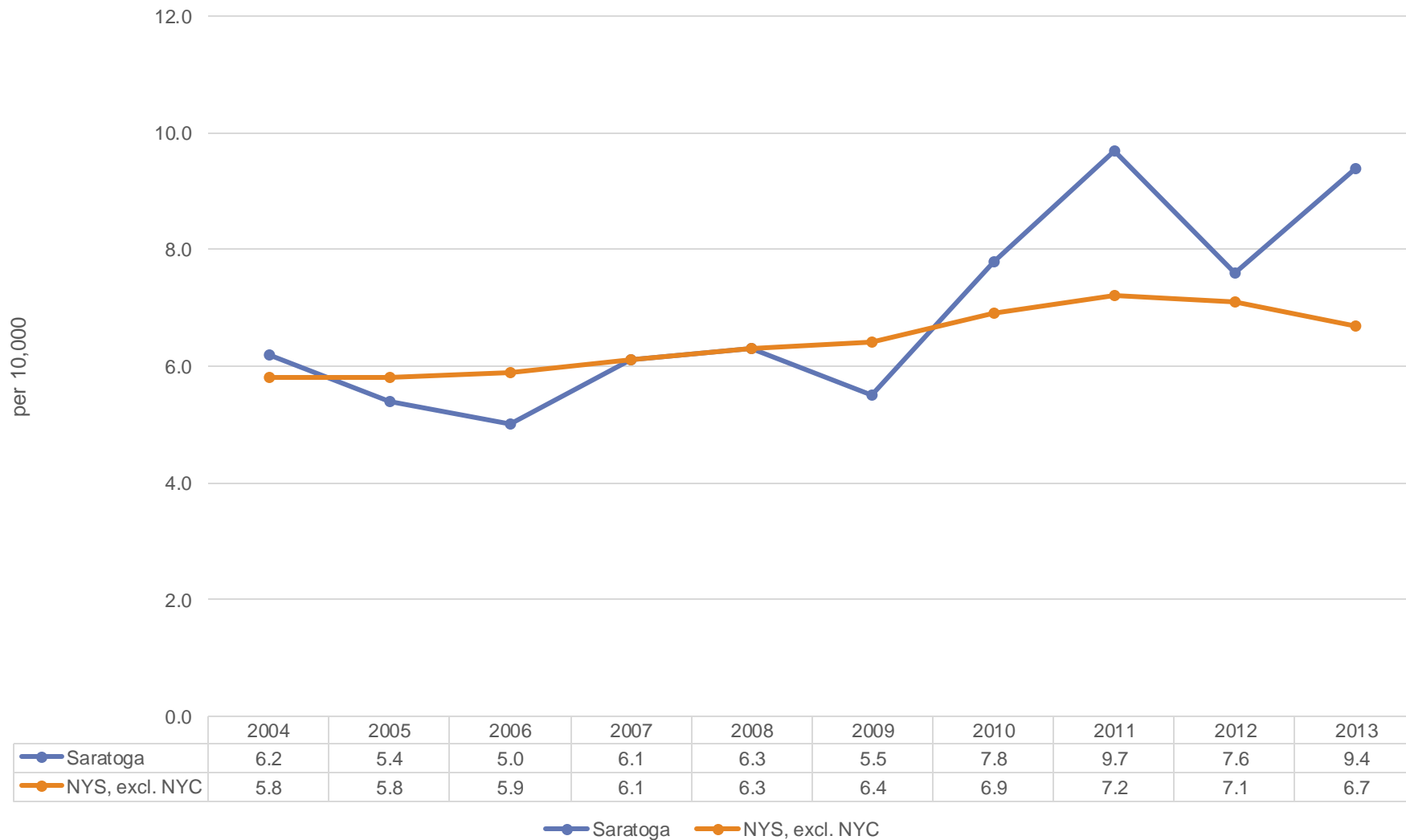
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|--------------------|------|------|------|------|------|------|------|------|------|------|
| —●— Saratoga | 34.8 | 35.1 | 37.3 | 38.3 | 37.0 | 45.4 | 49.2 | 40.2 | 41.6 | 41.1 |
| —●— NYS, excl. NYC | 56.1 | 55.8 | 54.5 | 55.7 | 56.0 | 56.6 | 58.2 | 56.4 | 53.1 | 51.4 |

—●— Saratoga —●— NYS, excl. NYC

Age-adjusted Suicide Mortality Rate per 100,000, Saratoga, and NYS, excl. NYC, 2004-2013



Age-adjusted Self-Inflicted Injury Hospitalization Rate per 10,000, Saratoga and NYS, excl. NYC, 2004-2013



EQUITY

**Age-adjusted % Adults with Poor Mental Health for 14+ Days in Last Month,
2013-14**

| <u>% Poor MH Days</u> | Saratoga | Capital Region | Upstate |
|-----------------------|-------------|----------------|---------|
| Male | 11.5 | 12.7 | 10.4 |
| Female | 13.1 | 13.5 | 12.1 |

Age-adjusted Mental Diseases and Disorders Rates per 10,000 by Gender, 2011-2013

| <u>Hospitalizations</u> | Saratoga | Capital Region | Upstate |
|-------------------------|----------|----------------|---------|
| Male | 41.1 | 53.9 | 56.1 |
| Female | 46.1 | 53.6 | 55.6 |

| <u>ED Visits</u> | Saratoga | Capital Region | Upstate |
|------------------|----------|----------------|---------|
| Male | 105.9 | 133.7 | 133.5 |
| Female | 106.6 | 114.1 | 121.9 |

Age-adjusted Mental Diseases and Disorders Rates per 10,000 by Race/Ethnicity, 2011-2013

| <u>Hospitalizations</u> | Saratoga | Capital Region |
|-------------------------|-------------|----------------|
| White non-Hispanic | 43.9 | 50.4 |
| Black non-Hispanic | 83.8 | 89.4 |
| Hispanic | 13.5 | 43.2 |

| <u>ED Visits</u> | Saratoga | Capital Region |
|--------------------|--------------|----------------|
| White non-Hispanic | 107.5 | 116.3 |
| Black non-Hispanic | 163.8 | 210.4 |
| Hispanic | 61.2 | 95.2 |

Age-adjusted Self-inflicted Injury Rates per 10,000 (ages 15+) by Gender, 2011-2013

| <u>Hospitalizations</u> | Saratoga | Capital Region | Upstate |
|-------------------------|----------|----------------|---------|
| Male | 7.9 | 8.1 | 7.0 |
| Female | 13.8 | 12.0 | 10.1 |

| <u>ED Visits</u> | Saratoga | Capital Region | Upstate |
|------------------|----------|----------------|---------|
| Male | 7.2 | 8.6 | 7.3 |
| Female | 11.2 | 12.9 | 9.7 |

Mental Health Indicators by Age, 2011-2013

| <u>Suicide</u> | Saratoga | Capital Region | Upstate |
|--------------------------------------|----------|----------------|---------|
| Adjusted suicide mortality/100,000 | 13.0 | 9.6 | 8.0 |
| Suicide mortality ages 15-19/100,000 | 13.9* | 5.4* | 6.3 |

| <u>Self-inflicted injury</u> | Saratoga | Capital Region | Upstate |
|---|----------|----------------|---------|
| Adjusted self-inflicted injury hospitalization/10,000 | 8.9 | 8.5 | 7.0 |
| Self-inflicted injury hospitalization ages 15-19/10,000 | 17.2 | 15.1 | 12.5 |

* Fewer than 10 events in the numerator, therefore the rate is unstable

Top Neighborhood Rates

Mental Diseases and Disorders

ED Visits*

- Saratoga County (106.3)
 - Saratoga Springs- 146.9
 - South Glens Falls- 144.0
 - Ballston Spa- 142.2
- Upstate- 127.7

Hospitalizations*

- Saratoga County (43.6)
 - South Glens Falls- 83.5
 - Saratoga Springs- 58.5
 - Ballston Spa- 51.2
- Upstate- 55.8

*per 10,000 population

Top Neighborhood Rates

Self-inflicted Injury (ages 15+)

ED Visits*

- Saratoga County (9.2)
 - North West- 17.8
 - Ballston Spa- 13.3
 - Waterford/Mechanicsville- 10.9
- Upstate- 8.5

Hospitalizations*

- Saratoga County (10.9)
 - North West- 16.4
 - South Glens Falls- 16.4
 - Saratoga Springs- 14.6
- Upstate- 8.6

*per 10,000 population

Mental Health Summary

Saratoga has an estimated:

- 33,500 adults (18+yrs.) with “Any Mental Illness”;
- 12,300 adults (18+yrs.) with “At Least One Major Depressive Episode”;
- 7,000 adults (18+yrs.) with “Serious Mental Illness”;
- 7,000 adults (18+yrs.) with “Serious Thoughts of Suicide”.

Mental Health Summary

Saratoga county annually has:

- 17,900 adults (18+yrs.) with poor mental health for 14+ days in last month;
- 2,342 Mental Disease/Disorder ED visits
- 913 Mental Disease/Disorder hospitalizations
- 155 Self-inflicted Injury ED visits;
- 198 Self-inflicted Injury hospitalizations;
- 32 deaths due to suicide.

Mental Health Summary

- Saratoga had a **higher** % of adults with poor mental health compared to ROS, the rate falling in the **3rd risk quartile** of all NYS counties;
- The % of adults with poor mental health days **increased** in Saratoga between 2008-09 and 2013-14;
- An estimated 19% of the County's adult population had a mental illness; 4% had a serious mental illness;

Mental Health Summary

- Saratoga had lower mental disease/disorder ED visit and hospitalization rates compared to ROS;
- Saratoga had **increasing** mental disease/disorder ED visit rates during the last decade, a 50% increase from 2005 to 2013;
- The County trend for mental disease/disorder hospitalization rates was static through 2009-10, increased to a peak in 2011, then decreased through 2014;
- Females had slightly higher mental disease/disorder ED visit and hospitalization rates compared to males;
- **BNH's** had **1.5 times** the ED Visit rates and **1.9 times** the hospitalization rates compared to the WNH population;
- High risk neighborhoods were **1.2. times** higher for mental disease/disorder ED visit rates and **1.0-1.5 times** higher hospitalization rates than ROS.

Mental Health Summary

- Saratoga had **sig. higher** suicide mortality (**3rd** risk quartile) and self-inflicted injury hospitalization (**3rd** risk quartile) rates compared to ROS;
- The County had a decreasing trend in suicide mortality through 2007-09, then **increasing** through **2011-13**;
- Saratoga's self-inflicted injury hospitalization trend was static through 2009, and then **increased through 2013**, overall a 50% increase in the hospitalization rate since 2004;
- High risk neighborhoods were **1.3 to 2 times** higher for self-inflicted injury ED, and **1.7 to 1.9 times** hospitalization rates than ROS.

SUBSTANCE ABUSE IN SARATOGA

The Effect of Substance Abuse on the Population-NSDUH, Population 12+ Years of Age, 2013

| | Saratoga | Capital Region |
|--------------------------------------|----------|----------------|
| Drug Dependence and Abuse | 5,700 | 25,200 |
| Needing/Not Receiving Drug Treatment | 3,800 | 16,800 |

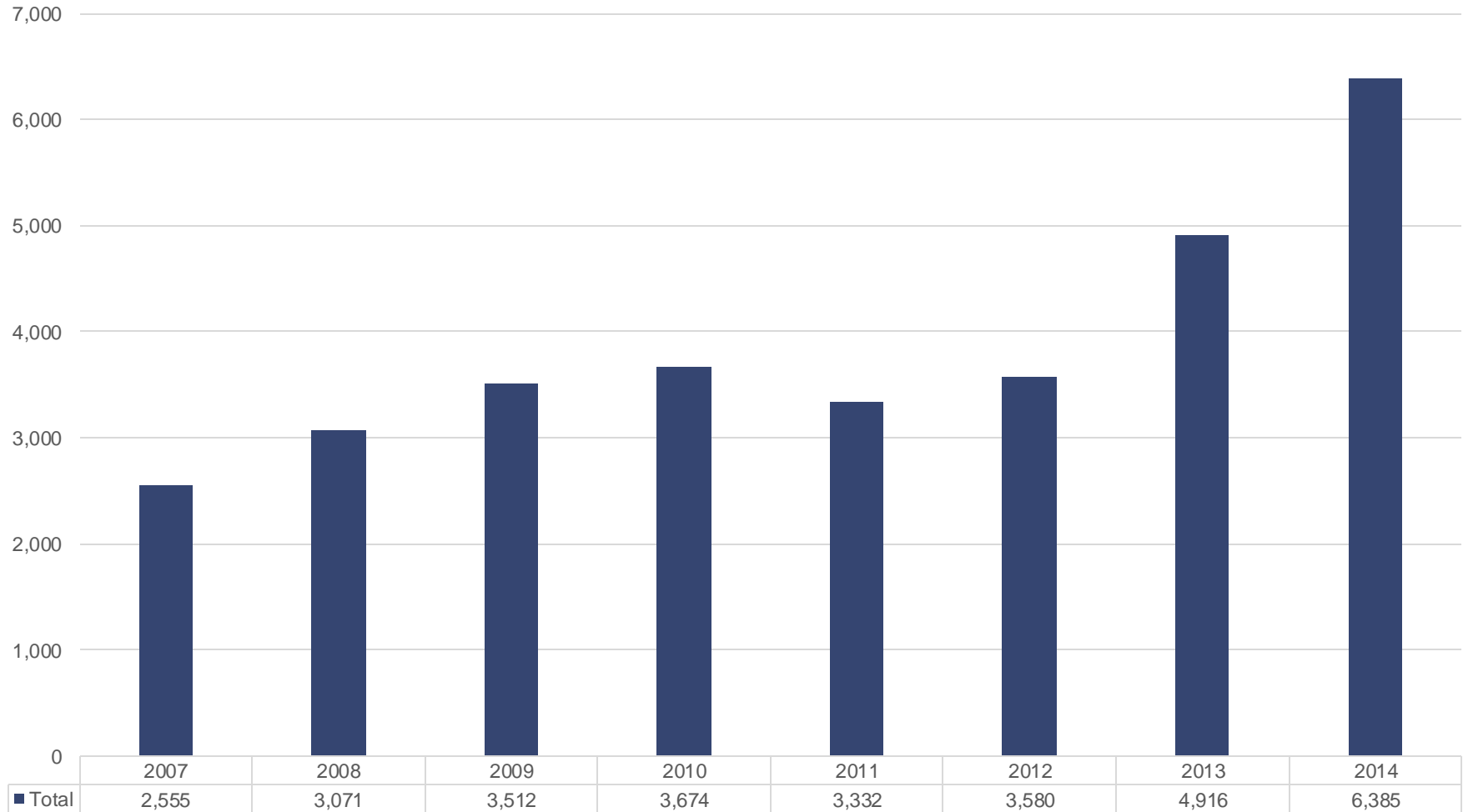
The Effect of Substance Abuse on the Population-NSDUH, Estimated Prevalence, Population 12+ Years of Age, 2013

| | Saratoga | Capital Region | New York State |
|--------------------------------------|----------|----------------|----------------|
| Drug Dependence and Abuse | 3% | 3% | 3% |
| Needing/Not Receiving Drug Treatment | 2% | 2% | 3% |

The Effect of Substance Abuse on the Population

| | Saratoga | Capital Region |
|---|----------|----------------|
| Number of substance abuse (any diagnosis) ED visits (2013) | 4,389 | 29,591 |
| Number of substance abuse (any diagnosis) hospitalizations (2013) | 3,513 | 18,789 |
| Number of drug-related hospitalizations per year (2013) | 296 | 1,927 |
| Number of newborn drug-related hospitalization per year (2013) | 18 | 110 |
| Number of substance abuse deaths per year (2013) | 3 | 45 |
| Number of opiate ED visits per year (2013) | 101 | 653 |
| Number of opiate hospitalizations per year (2013) | 66 | 382 |

Clients Receiving Heroin Dependency Treatment at OASAS Certified Chemical Dependency Treatment Programs, Capital Region (6 Counties), 2007-2014



■ Total

Finger Lakes HSA SPARCS and V.S. Portal Codes

- **Substance Abuse-Any diag. (ICD 9)**

291.0-291.9 - Alcohol induced mental disorders;
292.0-292.9 - Drug induced mental disorders;
303.0-303.9 - Alcohol dependence syndrome;
304.0-304.9 - Drug dependence syndrome;
305.0-305.9 – Nondependent abuse of drugs.

- **Substance Abuse Mortality (ICD 10)**

X 40-X 44 – Accidental Poisonings by Exposure to Noxious Substances

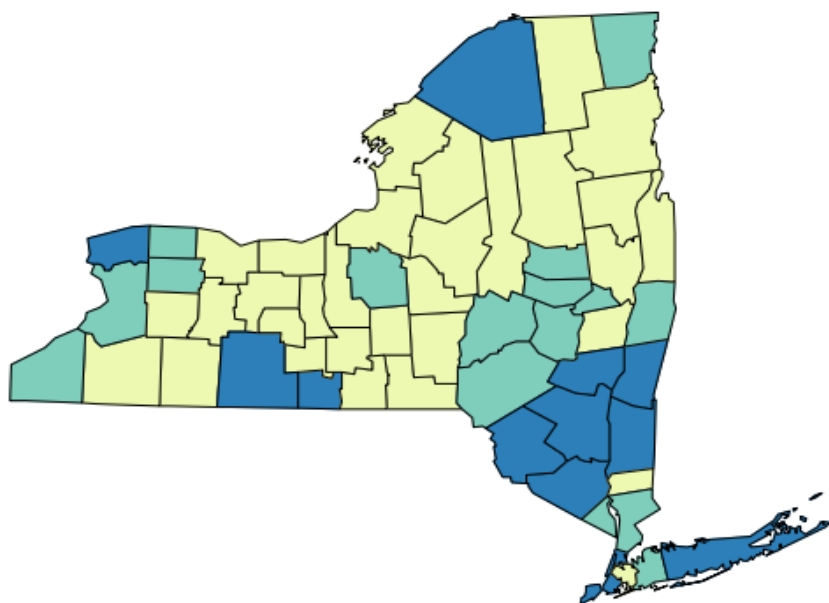
- **Substance Abuse-Opiates (ICD 9)**

304.0 – Opioid type dependence;
304.7 – Combinations of opioid type drug with any drug dependence;
965.0-965.2 – Opiate poisonings;
E850.0-E850.2 – Accidental opiate poisonings.

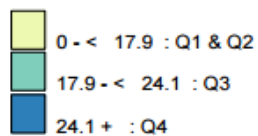
Substance Abuse Indicators and Significance Compared to New York State (excl. NYC), 2011-2013

| | Saratoga | | Capital Region | | Upstate |
|--|----------|------------|----------------|--------|---------|
| Adjusted drug-related hospitalizations/10,000 | 12.8 | Sig. lower | 18.0 | Lower | 21.1 |
| Newborn drug-related hospitalization rate/10,000 newborn discharges | 64.7 | Sig. lower | 116.7 | Lower | 123.4 |
| Adjusted substance abuse (any diagnosis) ED visit rate/10,000 | 272.9 | Lower | 359.4 | Higher | 302.4 |
| Adjusted substance abuse (any diagnosis) hospitalization rate/10,000 | 148.6 | Lower | 182.9 | Higher | 176.1 |
| Adjusted substance abuse mortality/100,000 | 1.9 | Lower | 3.8 | Lower | 9.3 |
| Adjusted opiate ED visit rate /10,000 | 5.7 | Lower | 7.1 | Higher | 6.8 |
| Adjusted opiate hospitalization rate /10,000 | 4.4 | Lower | 6.0 | Lower | 6.6 |

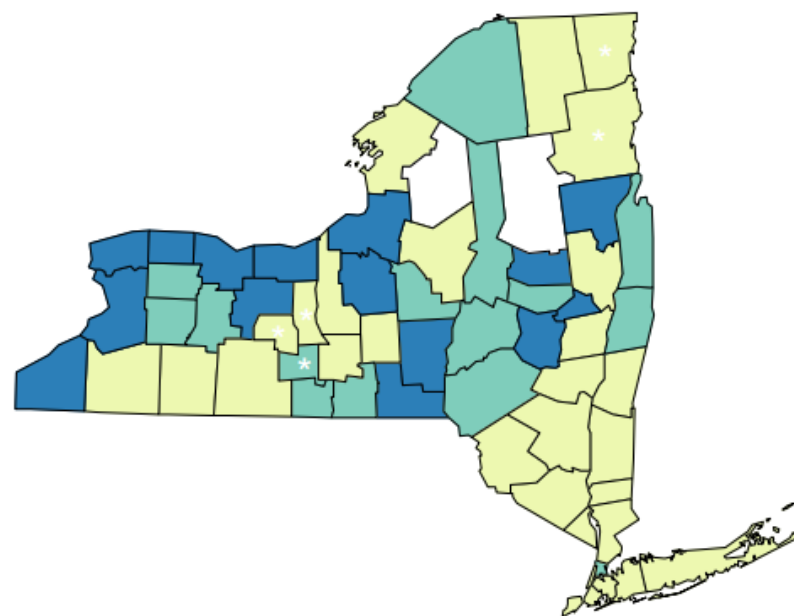
Age-adjusted Drug Hospitalization Rate per 10,000, 2011-2013



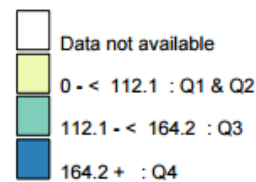
Hospital Discharge Rate
Counties Are Shaded Based On Quartile Distribution



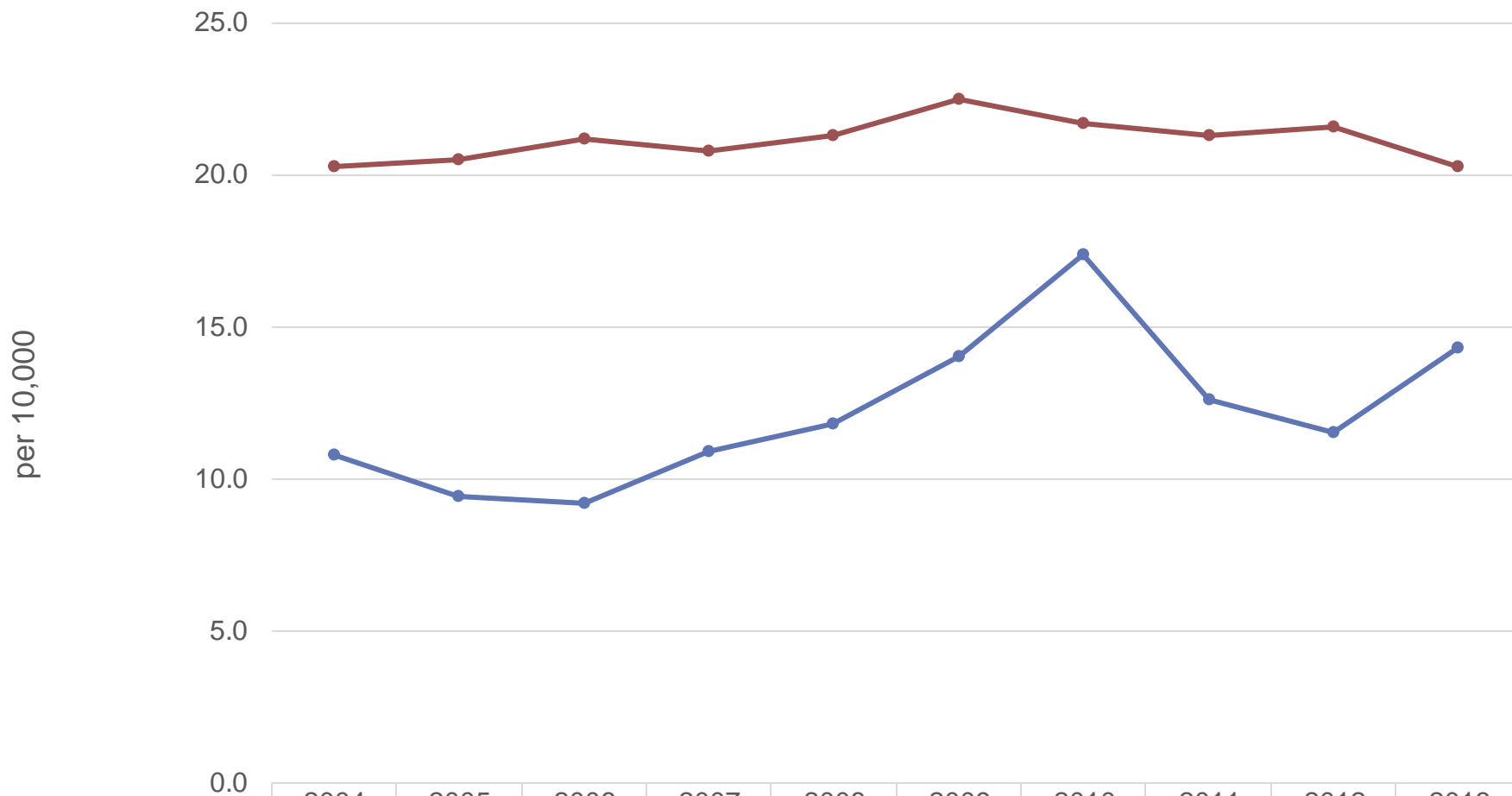
Newborn Drug-Related Discharge Rate per 10,000 Newborn Discharges 2011-2013



Drug-related Diagnosis Rate
Counties Are Shaded Based On Quartile Distribution
(* Fewer than 10 events in the numerator, therefore the rate is unstable)



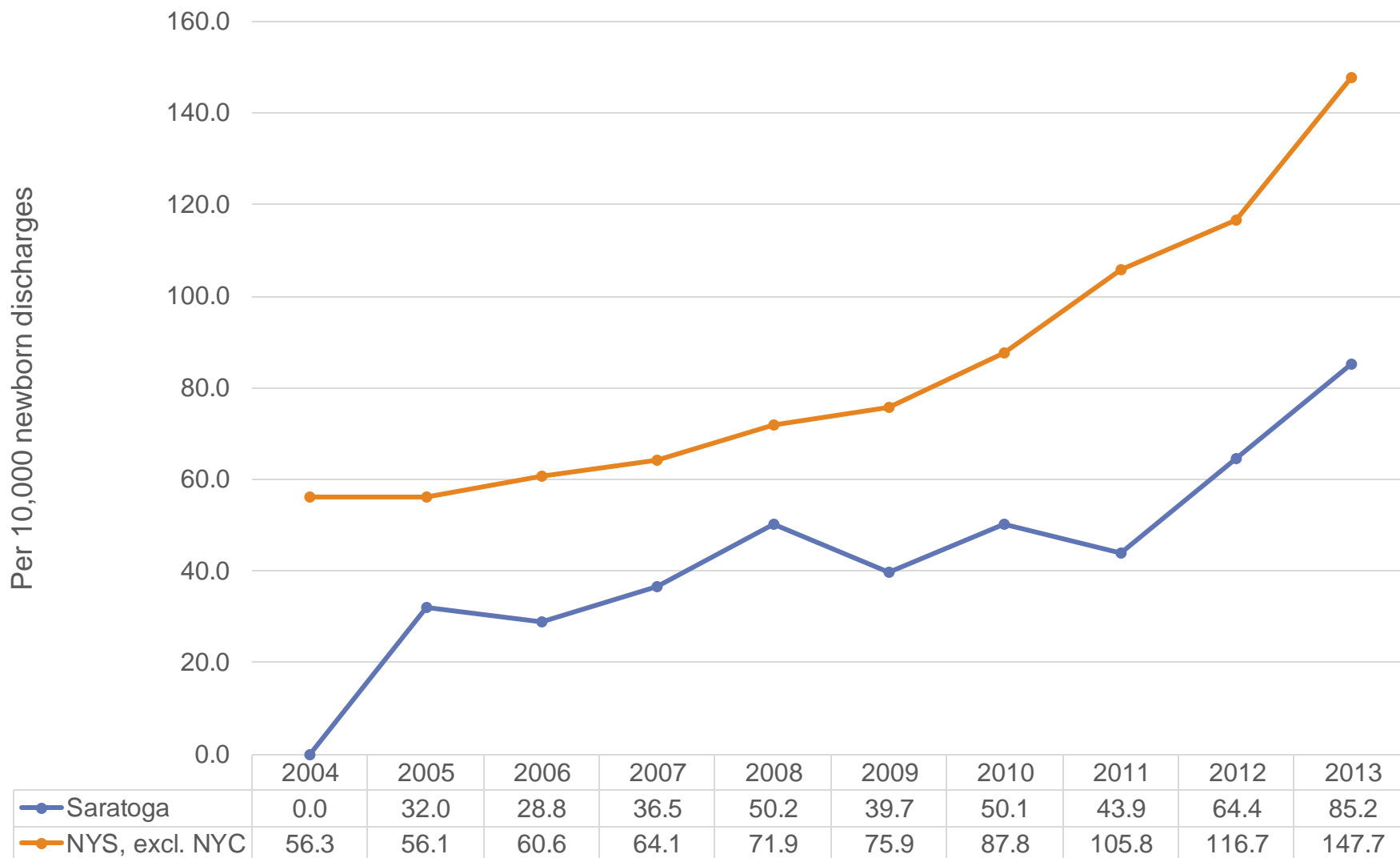
Age-adjusted Drug-Related Hospitalization Rate per 10,000, Saratoga and NYS excl. NYC, 2004-2013



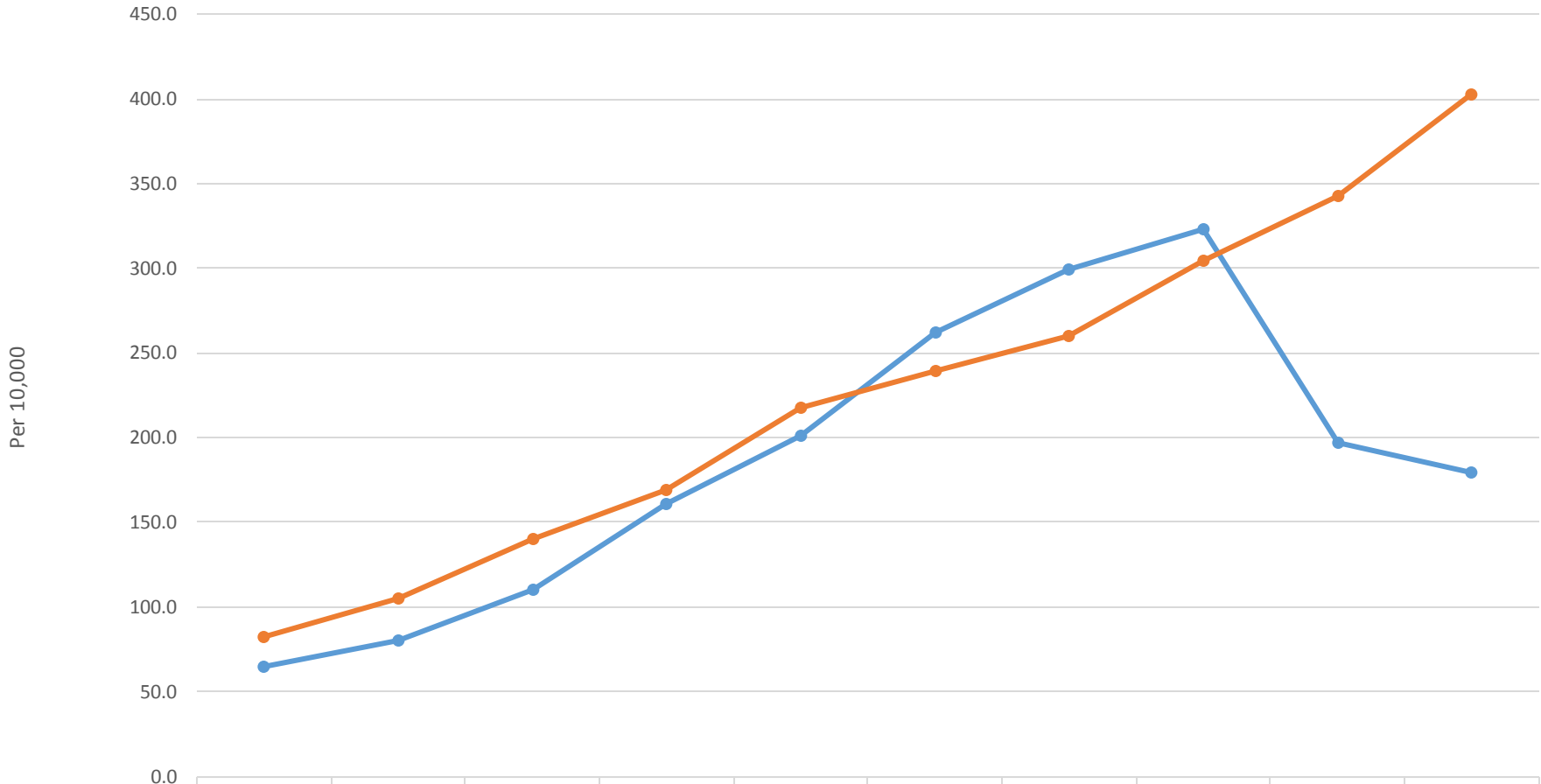
| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|----------------|------|------|------|------|------|------|------|------|------|------|
| Saratoga | 10.8 | 9.4 | 9.2 | 10.9 | 11.8 | 14.0 | 17.4 | 12.6 | 11.5 | 14.3 |
| NYS, excl. NYC | 20.3 | 20.5 | 21.2 | 20.8 | 21.3 | 22.5 | 21.7 | 21.3 | 21.6 | 20.3 |

—●— Saratoga —●— NYS, excl. NYC

Newborn Drug-Related Discharge Rate per 10,000 Newborn Discharges, Saratoga and NYS excl. NYC, 2004-2013

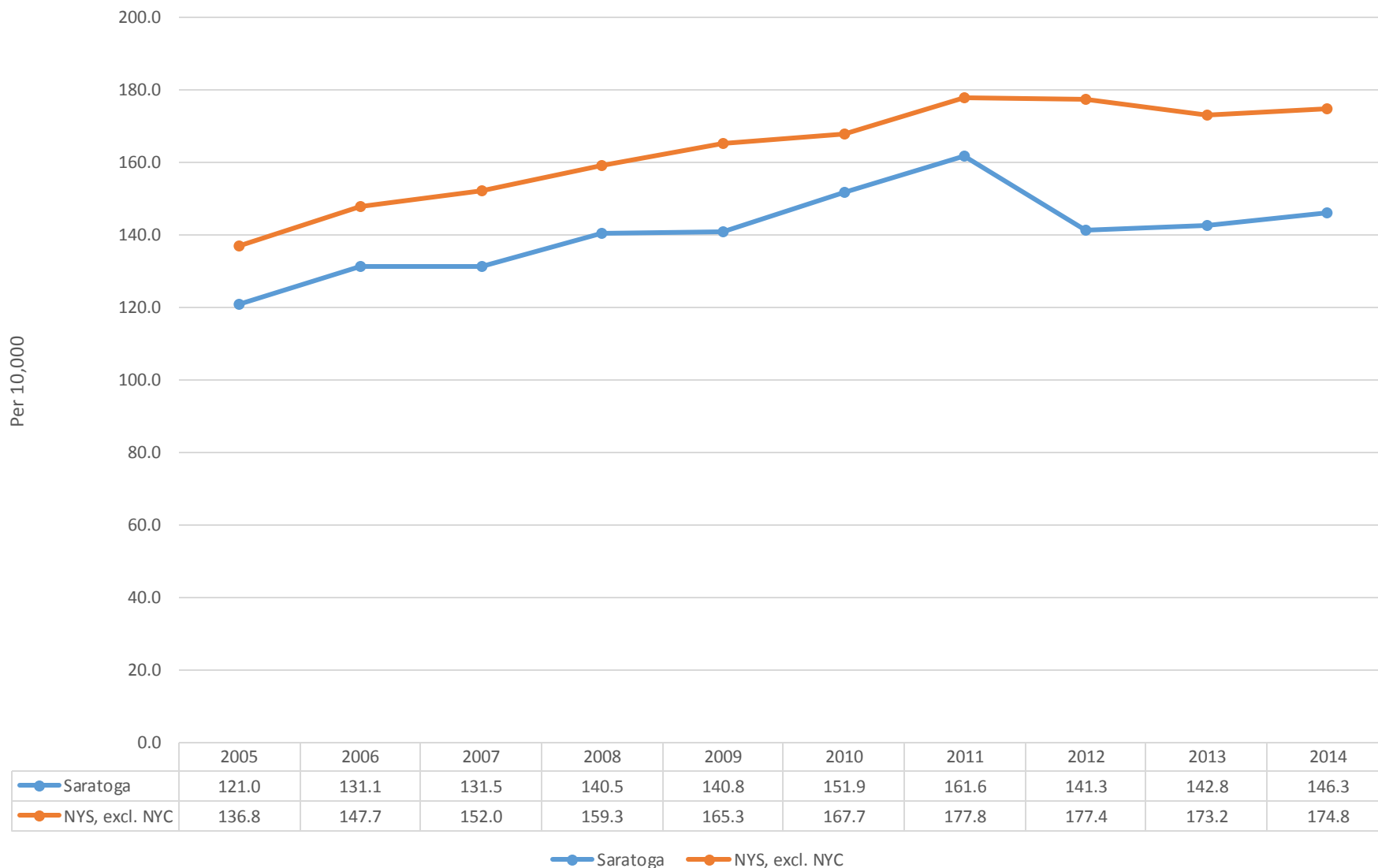


Age-adjusted Substance Abuse (any diagnosis) ED Visit Rate per 10,000, Saratoga, and NYS excl. NYC, 2005-2014

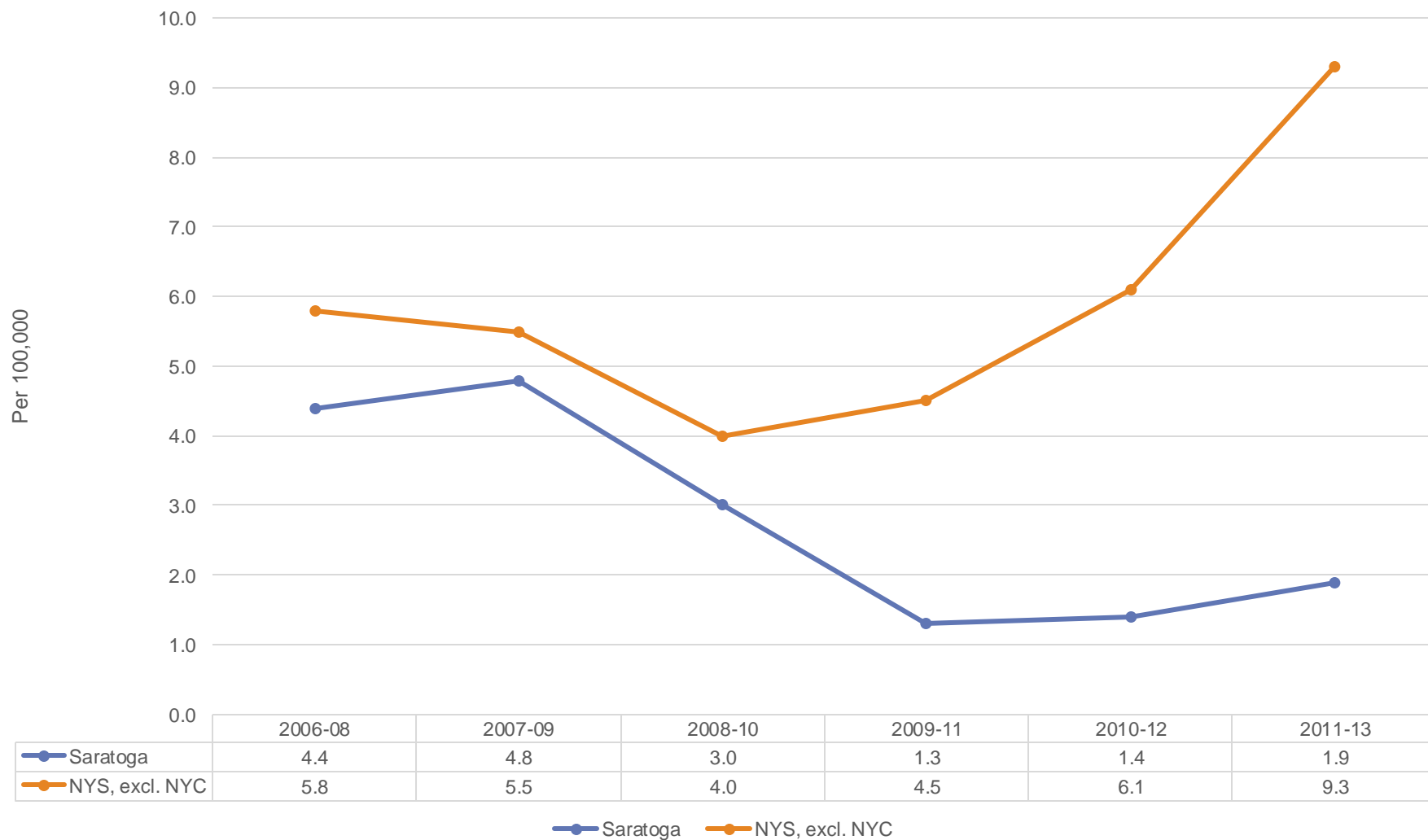


● Saratoga ● NYS, excl. NYC

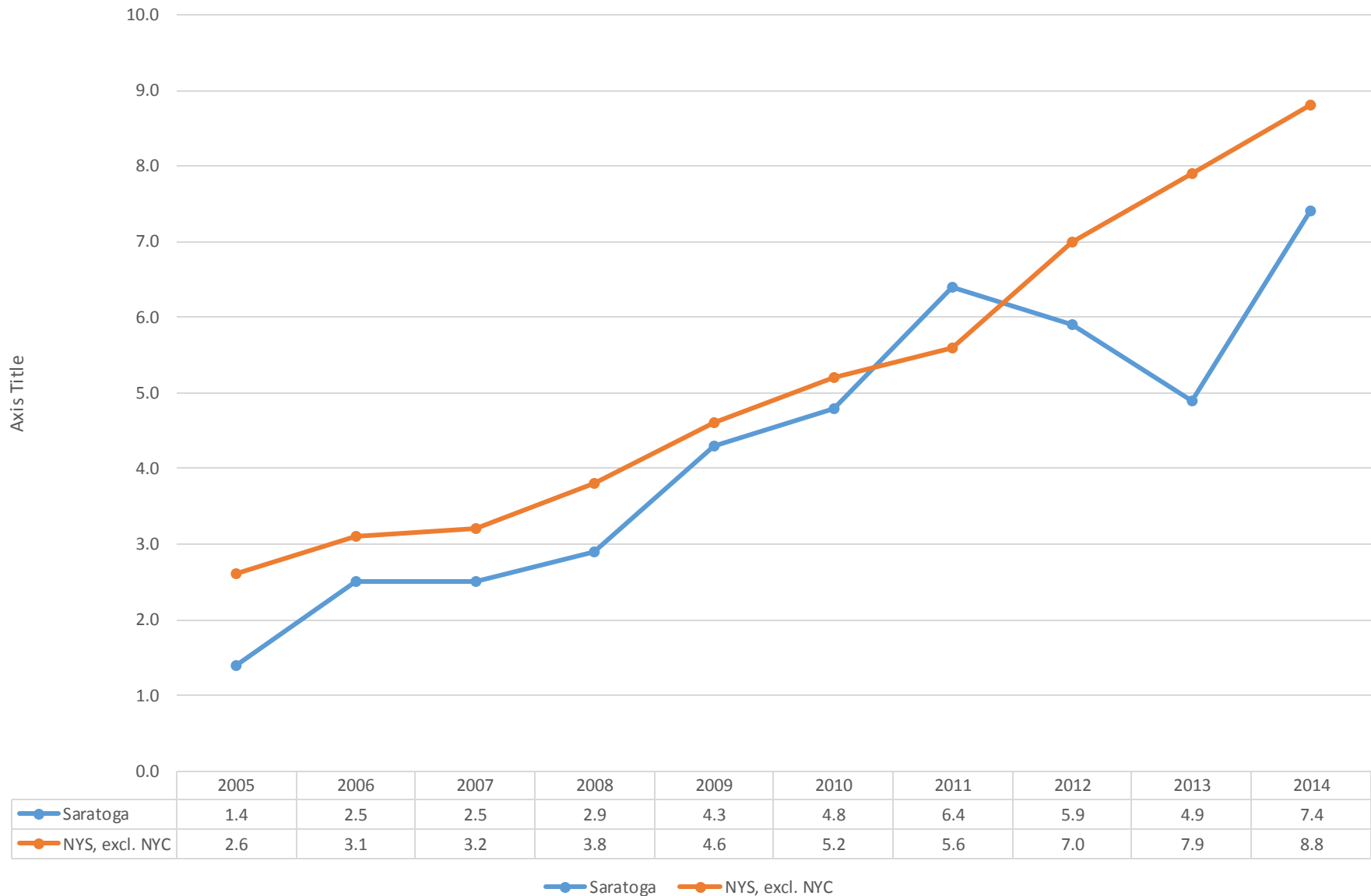
Age-adjusted Substance Abuse (any diagnosis) Hospitalization Rate per 10,000, Saratoga , and NYS excl. NYC, 2005-2014



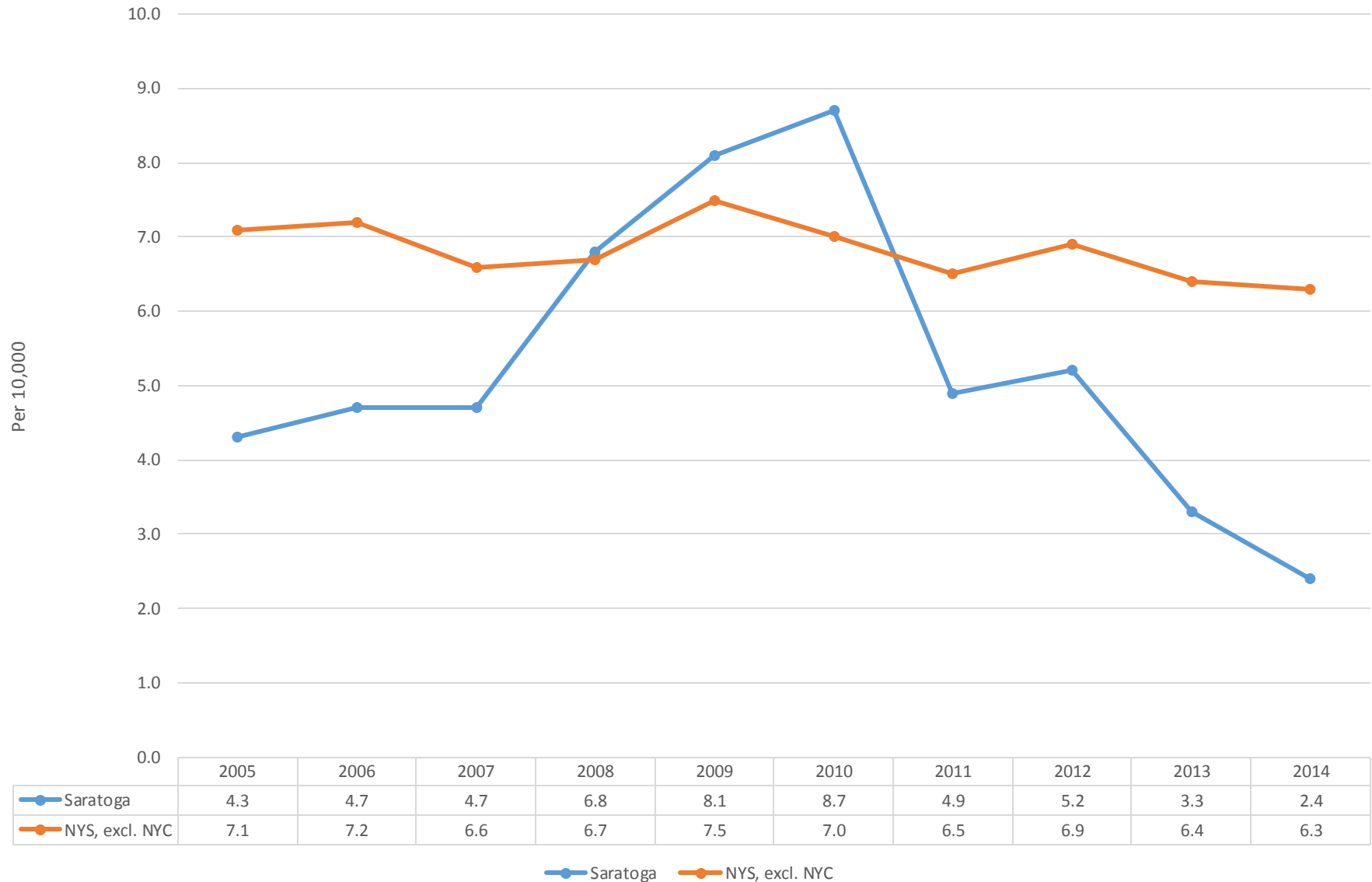
Age-adjusted Substance Abuse Mortality Rate per 100,000, Saratoga and NYS excl. NYC, 2006-08 to 2011-13



Opioid ED Visit Rate per 10,000, Saratoga, and NYS excl. NYC, 2005-2014



Opioid Hospitalization Rate per 10,000, Saratoga, and NYS excl NYC, 2005-2014



EQUITY

Age-adjusted Substance Abuse Mortality Rates per 100,000 by Gender, 2009-2013

| <u>Mortality</u> | Saratoga | Capital Region | Upstate |
|------------------|----------|----------------|---------|
| Male | 2.0 | 4.3 | 9.2 |
| Female | 0.9 | 1.8 | 3.8 |

Age-adjusted Substance Abuse (any diagnosis) Rates per 10,000 by Gender, 2011-2013

| <u>Hospitalizations</u> | Saratoga | Capital Region |
|-------------------------|----------|----------------|
| Male | 165.7 | 208.5 |
| Female | 132.2 | 158.8 |

| <u>ED Visits</u> | Saratoga | Capital Region |
|------------------|----------|----------------|
| Male | 289.8 | 372.2 |
| Female | 256.0 | 347.7 |

Age-adjusted Opiate Rates per 10,000 by Gender, 2011-2013

| <u>Hospitalizations</u> | Saratoga | Capital Region |
|-------------------------|----------|----------------|
| Male | 5.6 | 7.2 |
| Female | 3.2 | 4.8 |

| <u>ED Visits</u> | Saratoga | Capital Region |
|------------------|----------|----------------|
| Male | 7.2 | 8.9 |
| Female | 4.1 | 5.3 |

Adjusted Drug-related Hospitalization Rate per 10,000 by Race/Ethnicity, 2011-2013

| | Saratoga | Upstate |
|--------------------|----------|---------|
| White non-Hispanic | 10.0 | 20.8 |
| Black non-Hispanic | 9.6 | 27.6 |
| Hispanic | 13.7 | 13.7 |

Age-adjusted Opiate Rates per 10,000 by Race/Ethnicity, 2011-2013

| <u>Hospitalizations</u> | Saratoga | Capital Region |
|-------------------------|----------|----------------|
| White non-Hispanic | 4.6 | 6.1 |
| Black non-Hispanic | 2.3* | 5.3 |
| Hispanic | 5.2* | 2.2 |
| Other | 5.3 | 12.6 |

| <u>ED Visits</u> | Saratoga | Capital Region |
|--------------------|----------|----------------|
| White non-Hispanic | 6.0 | 7.5 |
| Black non-Hispanic | 2.9* | 5.7 |
| Hispanic | 1.4* | 3.2 |
| Other | 5.9 | 12.6 |

Top Neighborhood Rates

Substance Abuse (any diagnosis)

ED Visits*

- Saratoga County (272.9)
 - North West- 453.2
 - Saratoga Springs- 423.5
 - Ballston Spa- 418.2
- Upstate- 302.4

Hospitalizations*

- Saratoga County (148.6)
 - South Glens Falls- 220.9
 - North West- 209.2
 - Waterford/Mechanicsville- 193.5
- Upstate- 176.1

*per 10,000 population

Top Neighborhood Rates

Substance Abuse Mortality per 100,000 (2009-2013)

- Saratoga County (1.5)
 - Saratoga Springs- 2.4
 - Clifton Park West- 2.4
 - Waterford/Mechanicville- 1.8
- Upstate- 6.5

*per 10,000 population

Top Neighborhood Rates

Opioid Events (2009-2013)

ED Visits*

- Saratoga County (5.3)
 - Ballston Spa- 9.9
 - South Glens Falls- 7.5
 - Waterford/Mechanicville- 7.0
- Upstate- 6.1

Hospitalizations*

- Saratoga County (6.0)
 - Waterford/Mechanicsville- 8.9
 - North West- 7.5
 - South Glens Falls- 7.3
- Upstate- 6.9

*per 10,000 population

Substance Abuse Summary

Saratoga County was estimated to have:

- 5,700 individuals 12+ years of age with “Drug Dependence and Abuse”;
- 3,800 individuals 12+ years of age “Needing/Not Receiving Drug Treatment”.

Substance Abuse Summary

Saratoga annually has:

- 4,389 Substance Abuse (any diagnosis) ED visits;
- 3,513 Substance Abuse (any diagnosis) hospitalizations;
- 296 Drug-related hospitalizations;
- 18 Newborn drug-related hospitalizations;
- 3 Substance abuse deaths.

Substance Abuse Summary

- Saratoga has an estimated 3% of it's population having drug dependence and abuse, with 2% needing but not receiving treatment;
- Saratoga has lower or significantly lower substance abuse indicator rates, compared to ROS;
- Over the past decade, Saratoga's drug-related hospitalization rates increased through 2010, decreased through 2012, then increased in 2013;
- Newborn drug-related discharges showed an increasing trend through the decade;
- Substance Abuse (any diagnosis) ED visit rates increased through 2012, with a major drop in 2013;
- Substance Abuse (any diagnosis) hospitalization rates increased through 2011, with a decrease through 2013;

Substance Abuse Summary

- **Males** had **2.2** times the substance abuse mortality rates, **1.25** times higher substance abuse hospitalization rates compared to females, but only 1.1 times higher ED visit rates;
- Black non-Hispanics had similar drug-related hospitalization rates compared to their white non-Hispanic Saratoga residents;
- High risk neighborhoods had **1.3 to 1.5 times** the substance abuse ED visit rates, **1.1 to 1.3 times** hospitalization rates, and **1.1-1.6** times the opioid ED and hospitalization rates than ROS, mortality rates were all lower than ROS;
- **Over 90% increase** in clients receiving Heroin Dependency Treatment at Capital Region OASAS certified treatment programs between 2011 to 2014.

ALCOHOL ABUSE IN SARATOGA

The Effect of Alcohol Abuse on the Population-NSDUH, Population 12+ Years of Age, 2013

| | Saratoga | Capital Region |
|---|----------|----------------|
| Alcohol Dependence and Abuse | 13,300 | 58,900 |
| Needing/Not Receiving Alcohol Treatment | 13,300 | 58,900 |

The Effect of Alcohol Abuse on the Population, 2013

| | Saratoga | Capital Region |
|--|----------|----------------|
| Number of adult who binge drank during the past month (2013-14) | 27,750 | 121,300 |
| Number of alcohol related motor vehicle injuries and deaths per year | 102 | 410 |
| Number of cirrhosis hospitalization per year | 45 | 241 |
| Number of cirrhosis deaths per year | 31 | 115 |

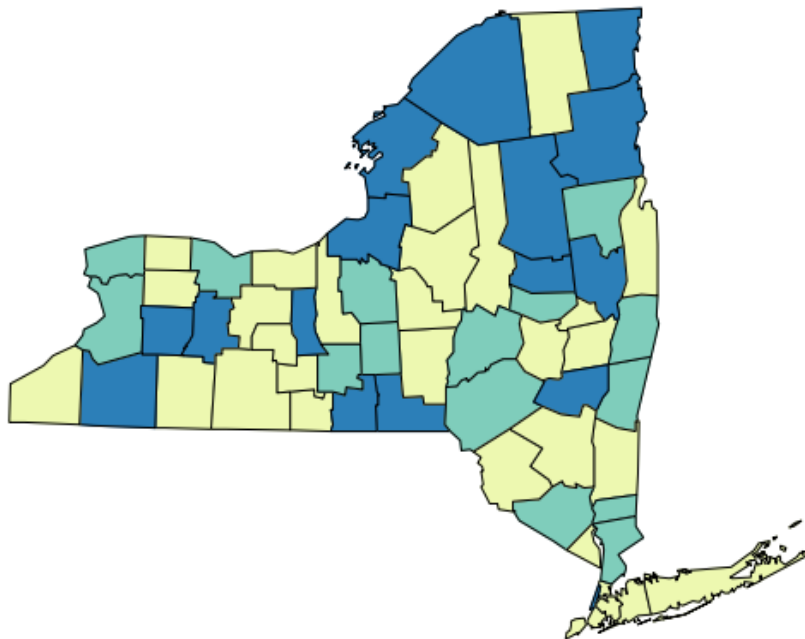
The Effect of Alcohol Abuse on the Population-NSDUH, Estimated Prevalence, Population 12+ Years of Age, 2013

| | Saratoga | Capital Region | New York State |
|---|----------|----------------|----------------|
| Alcohol Dependence and Abuse | 7% | 7% | 7% |
| Needing/Not Receiving Alcohol Treatment | 7% | 7% | 6% |

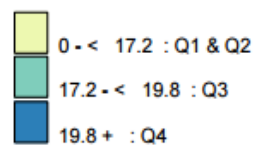
Substance Abuse Indicators and Significance Compared to New York State (excl. NYC)

| | Saratoga | | Capital Region | | Upstate |
|---|----------|-------------|----------------|---------|---------|
| Age-adjusted percentage of adult binge drinking during the past month | 19.8 | Higher | 18.3 | Higher | 17.4 |
| Alcohol related motor vehicle injuries and deaths/100,000 | 51.1 | Sig. higher | 44.1 | Similar | 44.3 |
| Adjusted cirrhosis hospitalization rate/10,000 | 1.8 | Sig. lower | 2.2 | Same | 2.2 |
| Adjusted cirrhosis mortality rate/100,000 | 8.6 | Sig. higher | 8.8 | Higher | 7.2 |

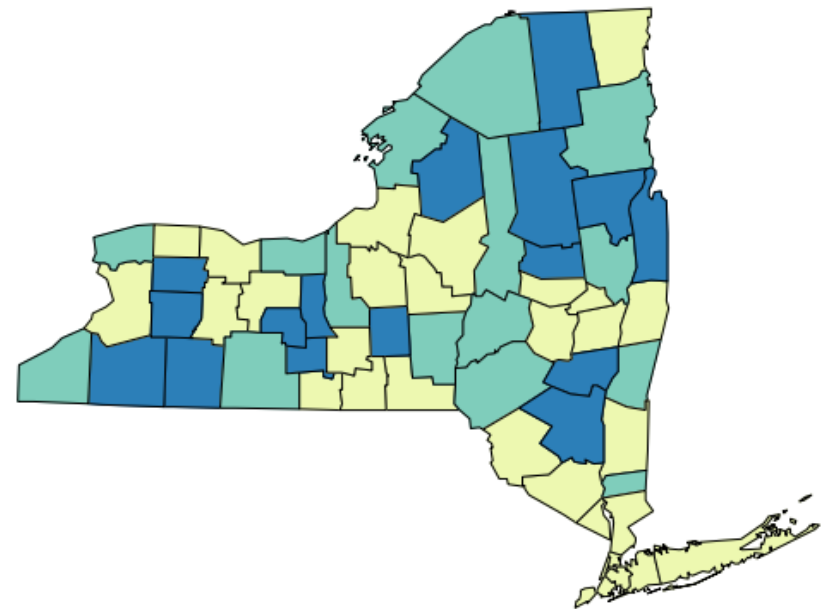
% of Adults who Binge Drink, 2013-14



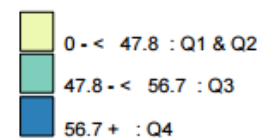
Age-adjusted percentage of adults
Counties Are Shaded Based On Quartile Distribution



Alcohol-related Motor Vehicle Injuries and Deaths per 100,000, 2011-2013

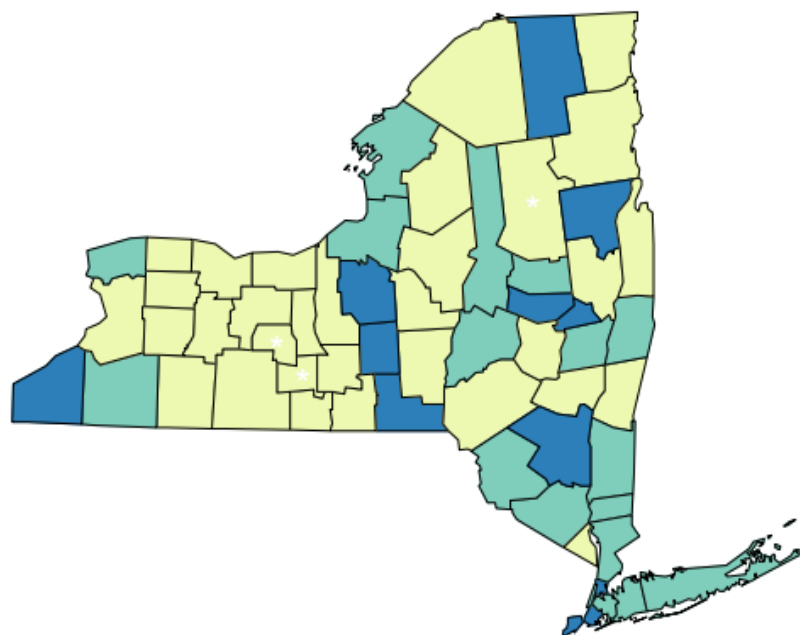


Rate
Counties Are Shaded Based On Quartile Distribution

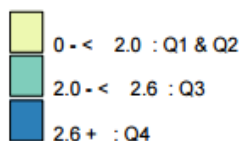


Source: 2011-2013 NYS Department of Motor Vehicles Data as of June, 2015

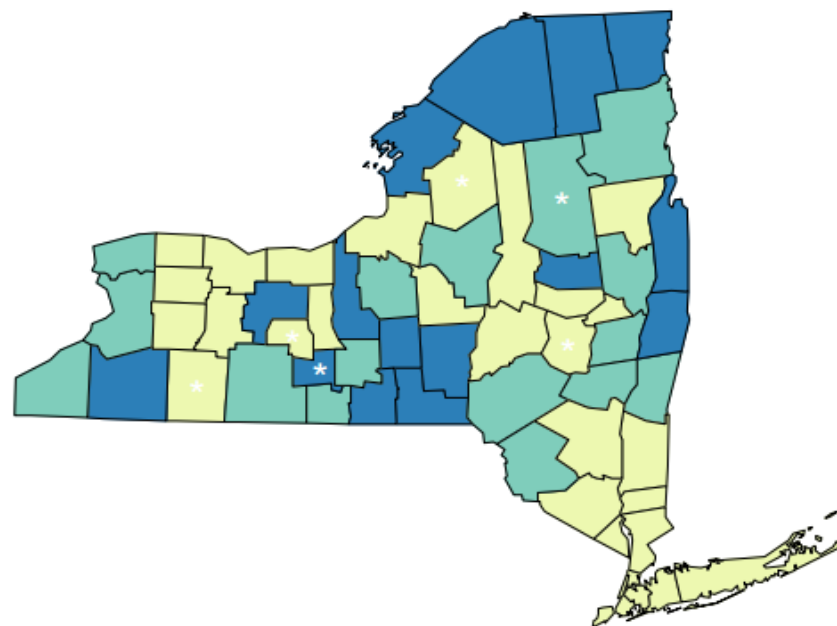
Age-adjusted Cirrhosis Hospitalization Rate per 10,000, 2011-2013



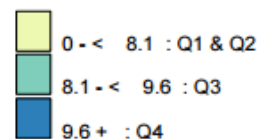
Hospital Discharge Rate
Counties Are Shaded Based On Quartile Distribution
(* Fewer than 10 events in the numerator, therefore the rate is unstable)



Age-adjusted Cirrhosis Mortality Rate per 100,000, 2011-2013



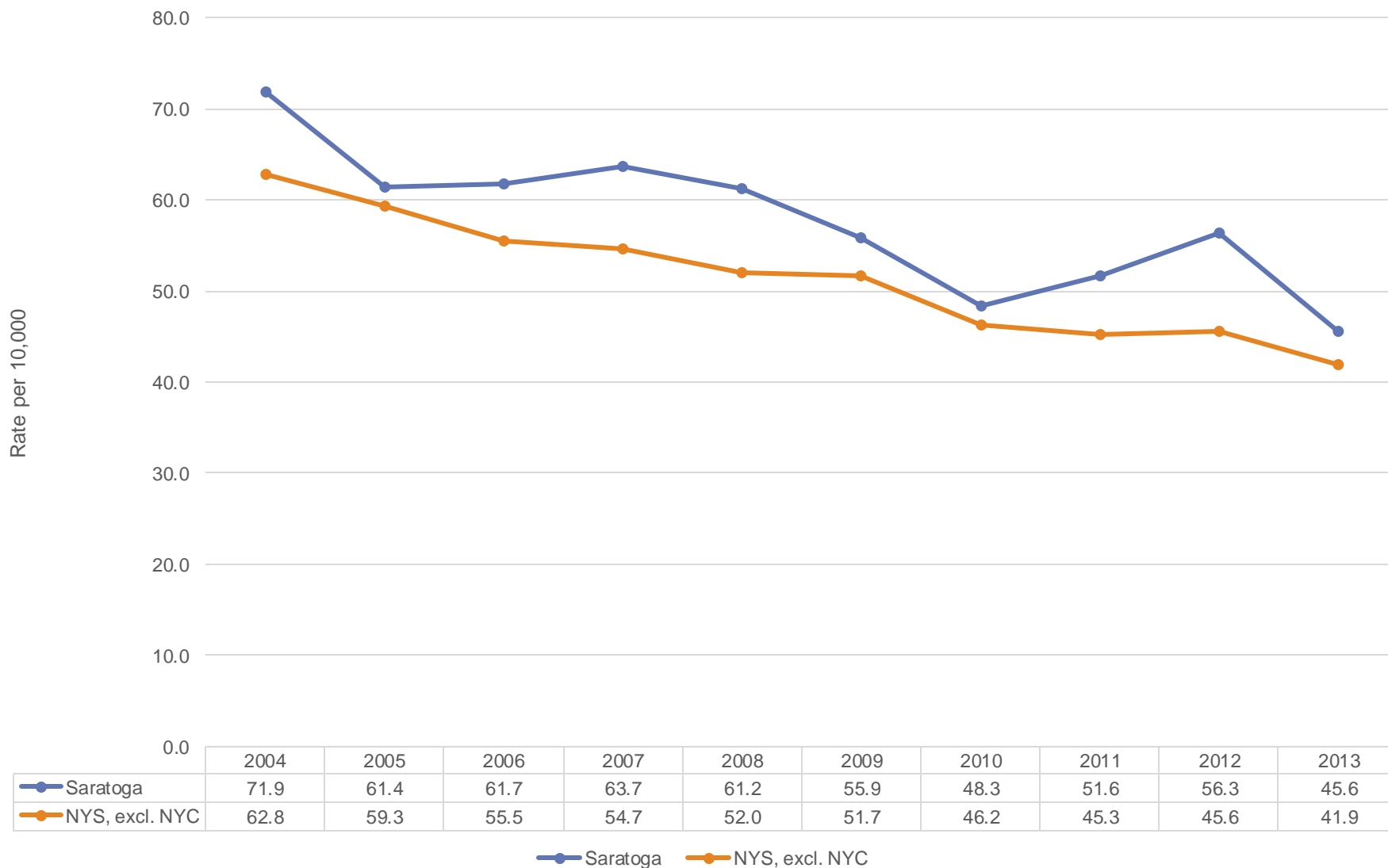
Death Rate
Counties Are Shaded Based On Quartile Distribution
(* Fewer than 10 events in the numerator, therefore the rate is unstable)



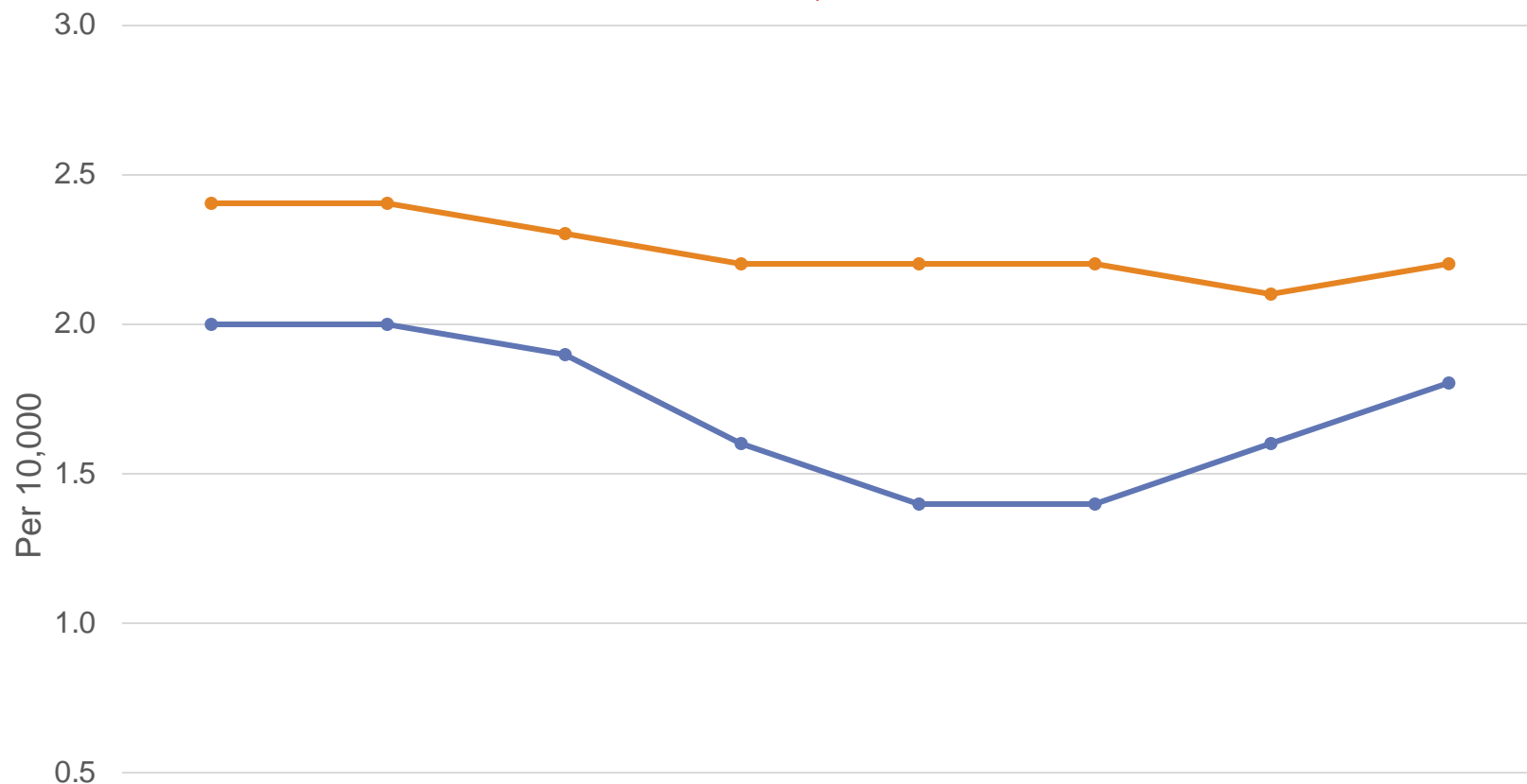
Adjusted Percentage of Adults who were Binge Drinkers for New York State (excl. NYC), Saratoga and Capital Region; 2003, 2008-2009, 2013-14

| | 2003 | 2008-09 | 2013-14 |
|----------------|------|---------|---------|
| Saratoga | 16.3 | 20.1 | 19.8 |
| Capital Region | NA | NA | 18.3 |
| Upstate | 15.2 | 19.8 | 17.4 |

Alcohol-related Motor Vehicle Injury and Death Rate Rate per 100,000, NYS, excl. NYC and Saratoga County , 2004-2013

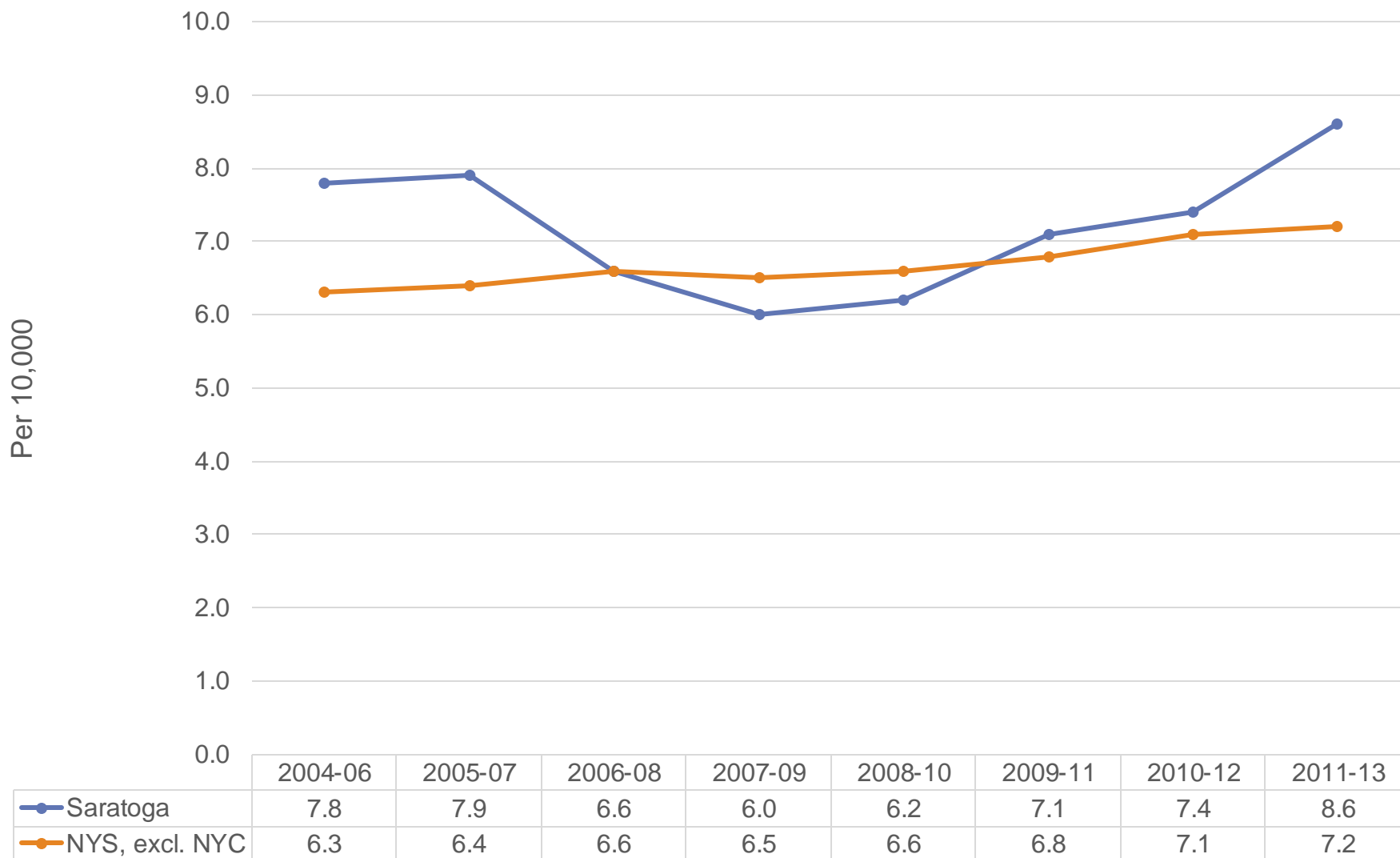


Age-adjusted Cirrhosis Hospitalization Rate per 10,000, Saratoga and NYS excl. NYC, 2004-06 to 2011-13



| | 2004-06 | 2005-07 | 2006-08 | 2007-09 | 2008-10 | 2009-11 | 2010-12 | 2011-13 |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| ● Saratoga | 2.0 | 2.0 | 1.9 | 1.6 | 1.4 | 1.4 | 1.6 | 1.8 |
| ● NYS, excl. NYC | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 |

Age-adjusted Cirrhosis Mortality Rate per 10,000 Saratoga and NYS excl. NYC, 2004-06 to 2011-13



EQUITY

% Adults Binge Drinking in Past Month, 2013-14

| <u>% Binge Drink</u> | Saratoga | Capital Region | Upstate |
|----------------------|----------|----------------|---------|
| Male | 23.2 | 21.9 | 22.8 |
| Female | 14.6 | 12.9 | 11.4 |

Alcohol Abuse Summary

Saratoga annually has:

- 27,750 binge drinkers;
- 13,300 individuals 12+ years estimated to have alcohol dependence or abuse;
- 13,300 individuals 12+years estimated needing/not receiving alcohol treatment;
- 102 alcohol-related motor vehicle injuries and deaths;
- 45 cirrhosis hospitalizations;
- 31 deaths due to cirrhosis.

Alcohol Abuse Summary

- Saratoga has an estimated 7% of it's population having alcohol dependence and abuse, with 7% needing but not receiving alcohol treatment;
- Saratoga had **higher** adult binge drinking rates compared to ROS and fell into the **4th risk quartile**;
- Saratoga had **significantly higher** alcohol-related MV injury and death, and cirrhosis mortality rates (both in **3rd risk quartile**), but significantly lower cirrhosis hospitalization rates than ROS;
- **Males** were **1.6 times** more likely to binge drink than females;
- For the past decade, MV Injury and Death trends have been decreasing;
- Cirrhosis hospitalization and mortality trends were decreasing until 2008-10, then increasing through 2011-13.