

**New York State Expanded
Behavioral Risk Factor
Surveillance System**
July 2008 - June 2009

Prevention Agenda Report
Niagara County

New York State Department of Health

Jan 2010

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Prepared for

New York State Department of Health

Prepared by

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Introduction

This report presents data on Niagara County collected from the Expanded Behavioral Risk Factor Surveillance System (Expanded BRFSS). Results are compared with New York State and with New York State exclusive of New York City for 17 selected health indicators. The indicators focus on risk behaviors, preventive health practices, health care access and selected health outcomes for Niagara County residents.

The 17 indicators should be helpful to counties as they work to reach the New York State Prevention Agenda 2013 Objectives. The Prevention Agenda identifies ten Priority Areas for improving the health of all New Yorkers and asks communities to work together to address these areas. The Priority Areas included in this report are: Access to Quality Health Care, Tobacco Use, Unintentional Injury, Physical Activity and Nutrition, Chronic Disease, Infectious Disease and Mental Health and Substance Abuse. In addition, Cancer Screening indicators were added as these indicators relate to a number of Prevention Agenda Priority Areas. Some Priority Areas have more than one indicator that can be monitored using Expanded BRFSS data. For more information on the Prevention Agenda, please go to http://www.nyhealth.gov/prevention/prevention_agenda.

The Expanded BRFSS is a random digit dialed telephone survey of adults (18 years of age and older) that is representative of the non-institutionalized civilian population with landline telephones living in New York State. Data collection occurred in 58 geographic areas of New York State, including each of the 57 counties outside of New York City and New York City (5 counties) as a single area. A standard questionnaire was utilized in all areas. Data

collection for the 2009 Expanded BRFSS took place during the period of July 2008 through June 2009. The goal was to complete about 650 interviews in each area. The final number of interviews varies because of the sampling design of the survey and differential response rates. More detailed information on the sampling design is available in the technical brief. A summary of all 69 indicators broken down by gender, age, race and ethnicity, education, and income is available at <http://www.health.state.ny.us/nysdoh/brfss/expanded/index.htm>.

The New York State Department of Health contracted with RTI International, which is responsible for the data collection, sampling, weighting and creation of the statistical reports. RTI International subcontracted with Clearwater Research Inc. for data collection and additional expertise in sample design and data quality control.

All estimates for this report are age-adjusted to the Year 2000 Standard US Population. Confidence intervals at the 95% level are represented by the error bars appearing on each figure. Counties can compare their data with results from New York State and with New York State exclusive of New York City. Confidence intervals associated with each health indicator give an estimated range of values which is likely to include the actual prevalence of the indicator. Confidence intervals are similar to margins of error. When the confidence intervals of two estimates of the same indicator from different areas do not overlap, they may be said to be statistically significantly different, i.e., these differences are unlikely related to chance and are considered true differences. If there is any value that is included in both confidence intervals, the two estimates are not statistically significantly different.

Introduction

This report includes the following components:

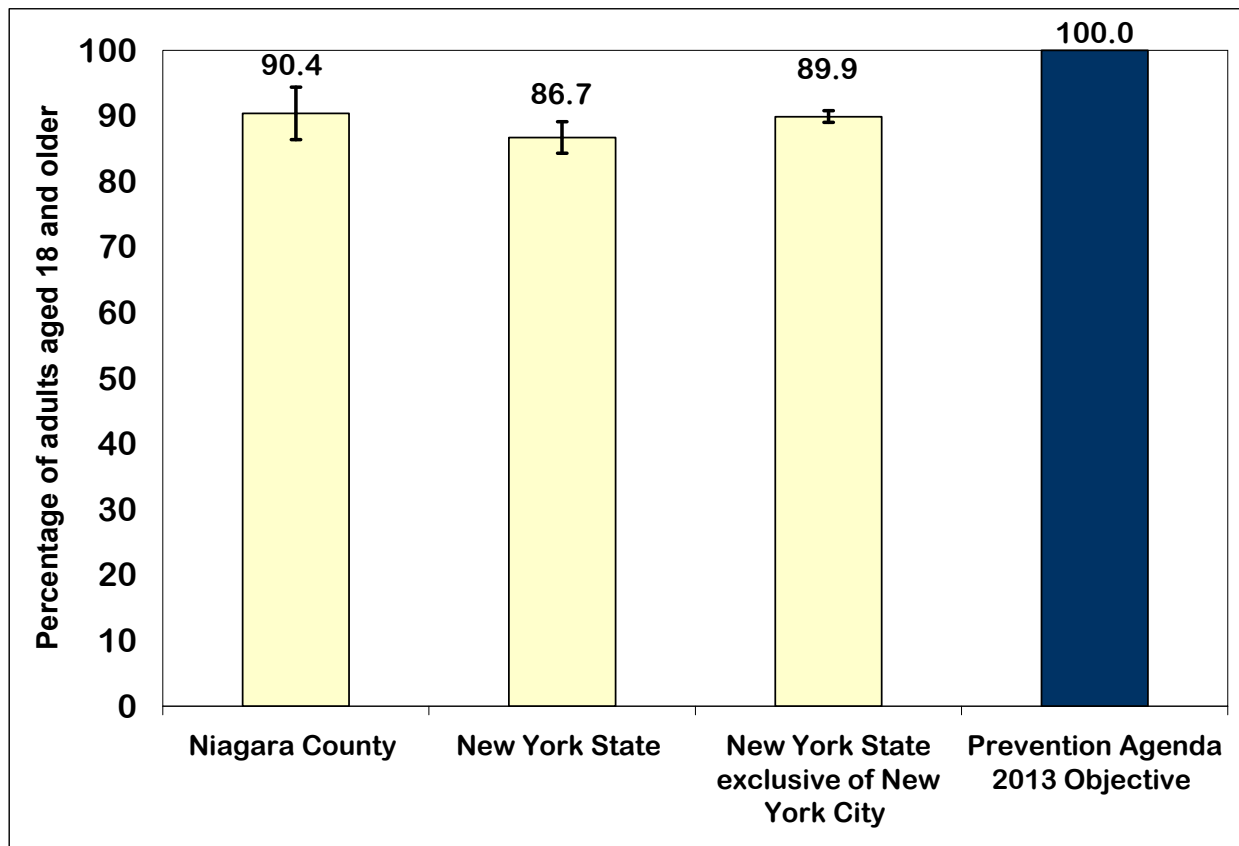
- Descriptions of each Priority Area,
- A narrative describing the results,
- Graphs for 17 Prevention Agenda selected indicators for Niagara County, and
- A summary table that includes Niagara County, New York State, and New York State exclusive of New York City data for each indicator listed by Priority Area.

Access to quality health care

Access to quality health care is important to increase the quality and years of healthy life for all New Yorkers. Having health insurance increases access to the health care system, but it is not sufficient to ensure appropriate use of services or care that is of high quality. Access to and delivery of preventive health services and primary care are also necessary to improve overall health.

In Niagara County, 90.4% of adult residents have health insurance. Among adults residing in New York State and New York State exclusive of New York City, 86.7% and 89.9%, respectively, have health insurance. New York State has set a goal to increase the percentage of adult New Yorkers with health care coverage to 100% by 2013.

Figure 1. Percentage of adults aged 18 and older with health insurance, 2009



Rates are age-adjusted to the Year 2000 US Standard Population.

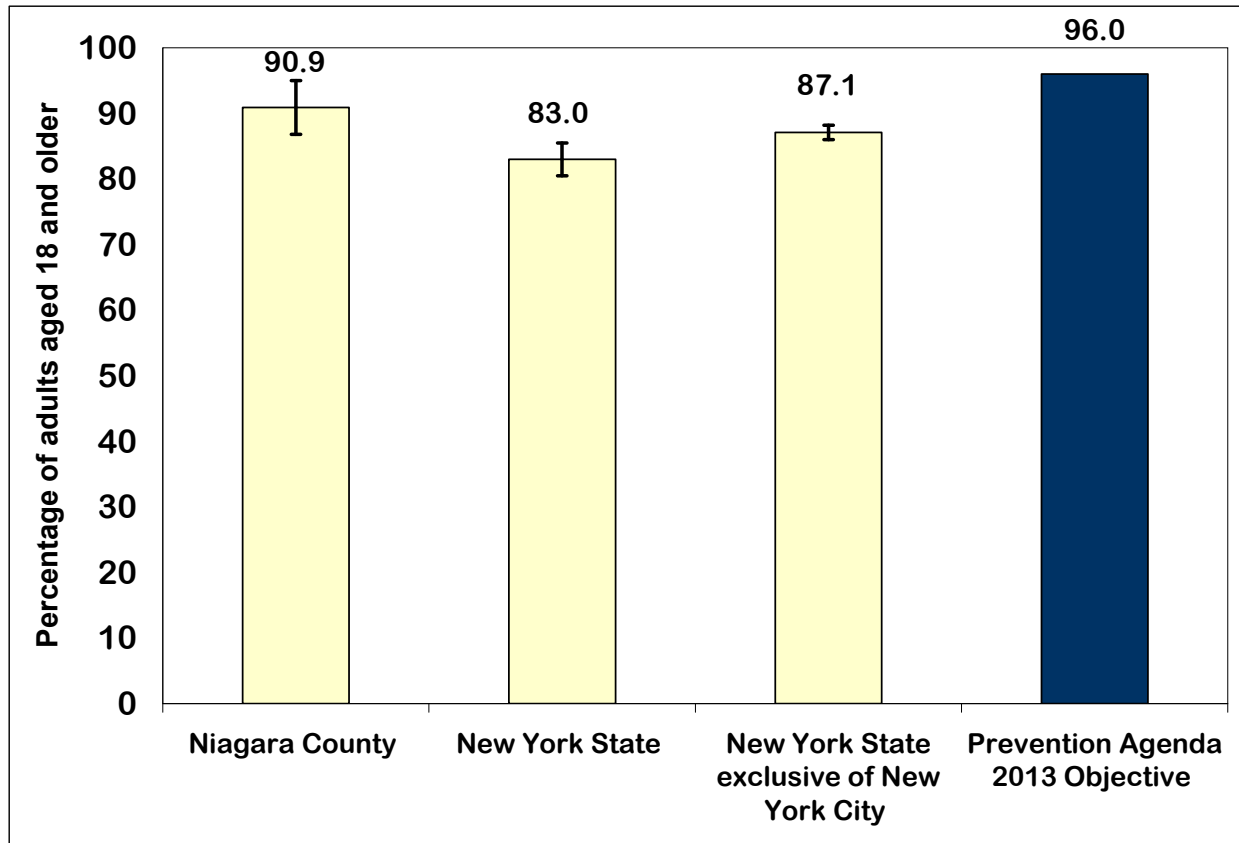
Note: Error bars represent 95% confidence intervals.

Access to quality health care

Having a regular health care provider is a key factor in achieving high quality health care. In Niagara County, 90.9% of adult residents have regular health care providers. Among adults residing in New York State and New York State exclusive of New York City, 83.0% and 87.1%, respectively, have regular health care providers. The percentage of adult residents in Niagara

County who have regular health care providers is statistically significantly greater than the percentage of adult residents who have regular health care providers in New York State. New York State has set a goal to increase the percentage of adult New Yorkers who have regular health care providers to 96% by 2013.

Figure 2. Percentage of adults aged 18 and older with regular health care providers, 2009



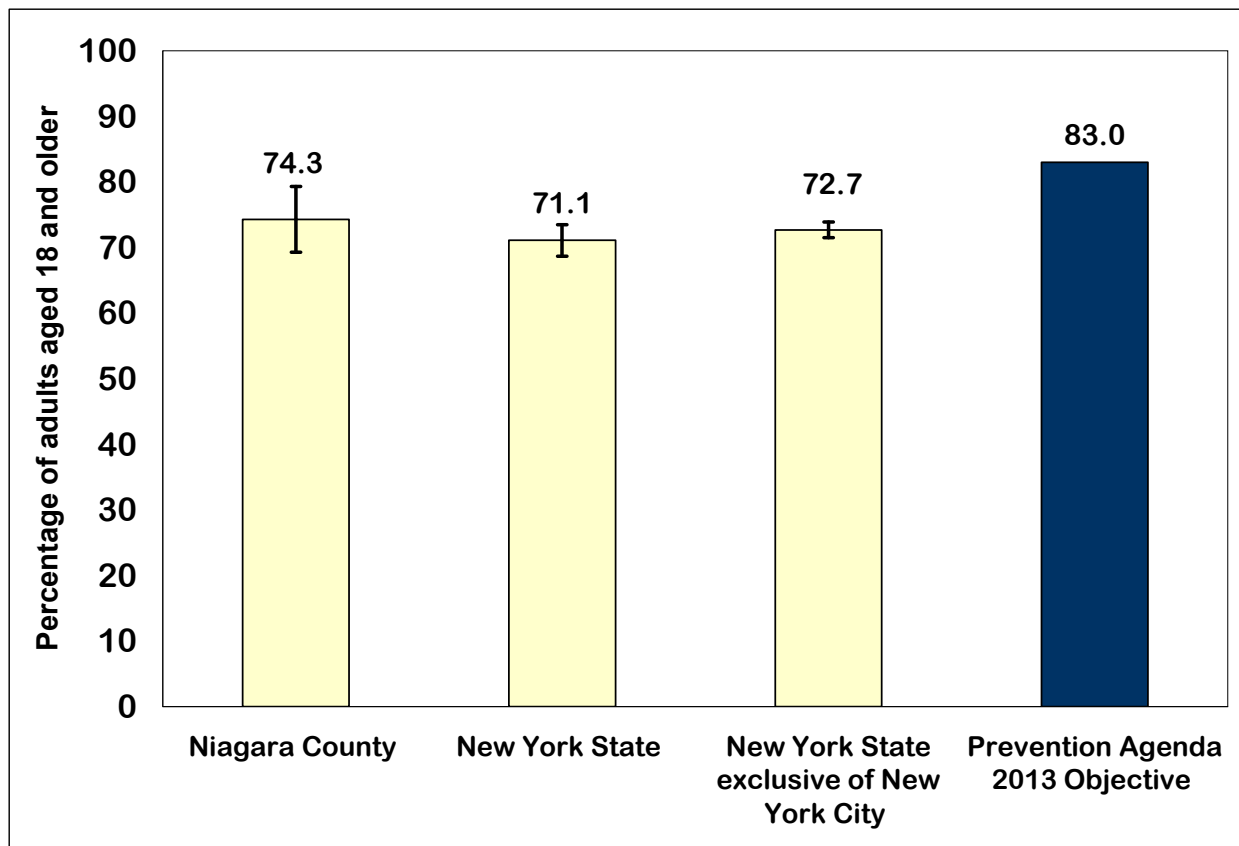
Rates are age-adjusted to the Year 2000 US Standard Population.
 Note: Error bars represent 95% confidence intervals.

Access to quality health care

Oral health is an important aspect of comprehensive health care. Poor oral health has been linked to increased rates of chronic diseases such as heart disease and diabetes. In Niagara County, 74.3% of adult residents have seen dentists in the past year. Among adults

residing in New York State and New York State exclusive of New York City, 71.1% and 72.7%, respectively, have seen dentists in the past year. New York State has set a goal to increase the percentage of adult New Yorkers who have seen dentists in the past year to 83% by 2013.

Figure 3. Percentage of adults aged 18 and older with dental visits in the past year, 2009



Rates are age-adjusted to the Year 2000 US Standard Population.
Note: Error bars represent 95% confidence intervals.

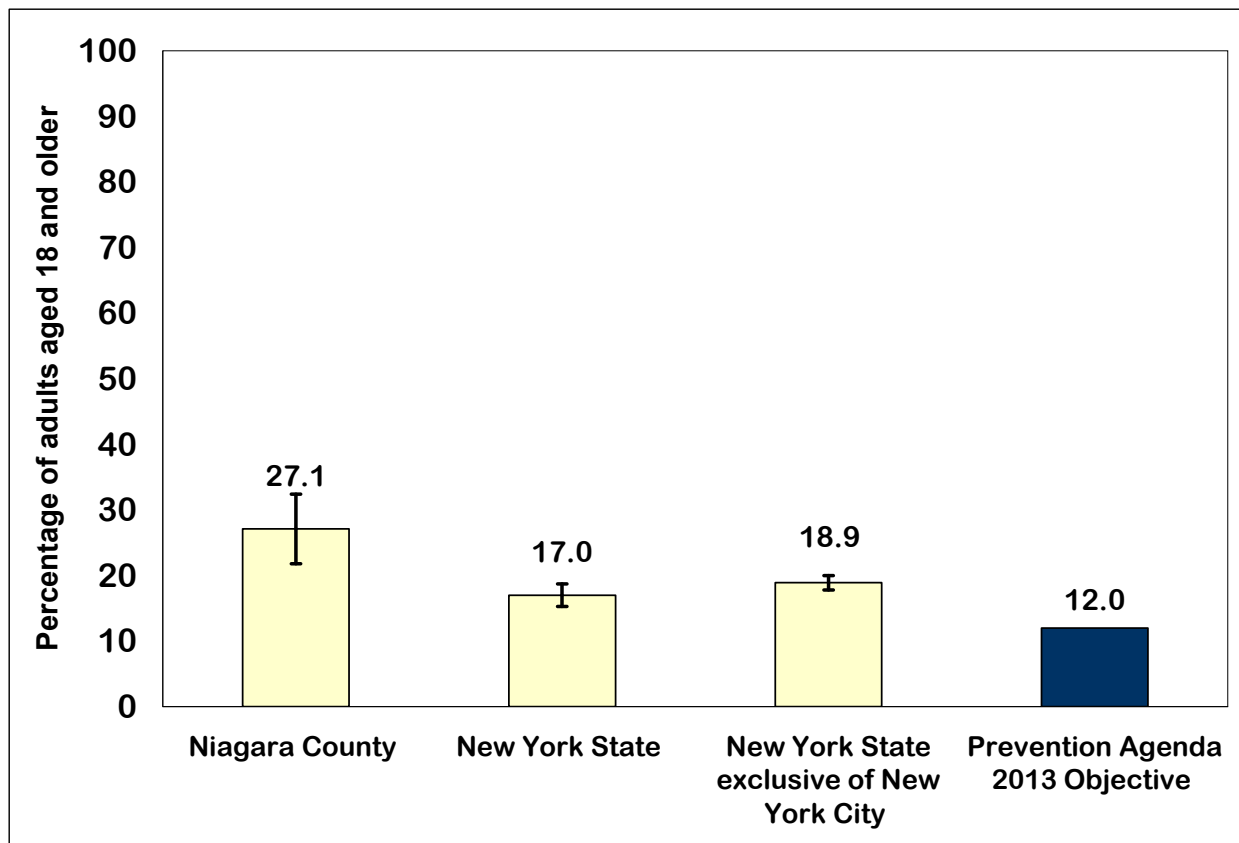
Tobacco use

Tobacco use and dependence is the leading preventable cause of morbidity and mortality in New York State and in the US. Cigarette use alone results in an estimated 25,500 deaths in New York State.

In Niagara County, 27.1% of adult residents are current smokers. Among adults residing in New York State and New York State exclusive of

New York City, 17.0% and 18.9%, respectively, are current smokers. The percentage of adult residents in Niagara County who are current smokers is statistically significantly greater than the percentage of adult residents who are current smokers in New York State and New York State exclusive of New York City. New York State has set a goal to reduce the percent of adults who smoke to no more than 12% by 2013.

Figure 4. Percentage of adults aged 18 and older who are current smokers,* 2009



*Defined as having smoked at least 100 cigarettes in lifetime and currently smoking everyday or some days. Rates are age-adjusted to the Year 2000 US Standard Population.

Note: Error bars represent 95% confidence intervals.

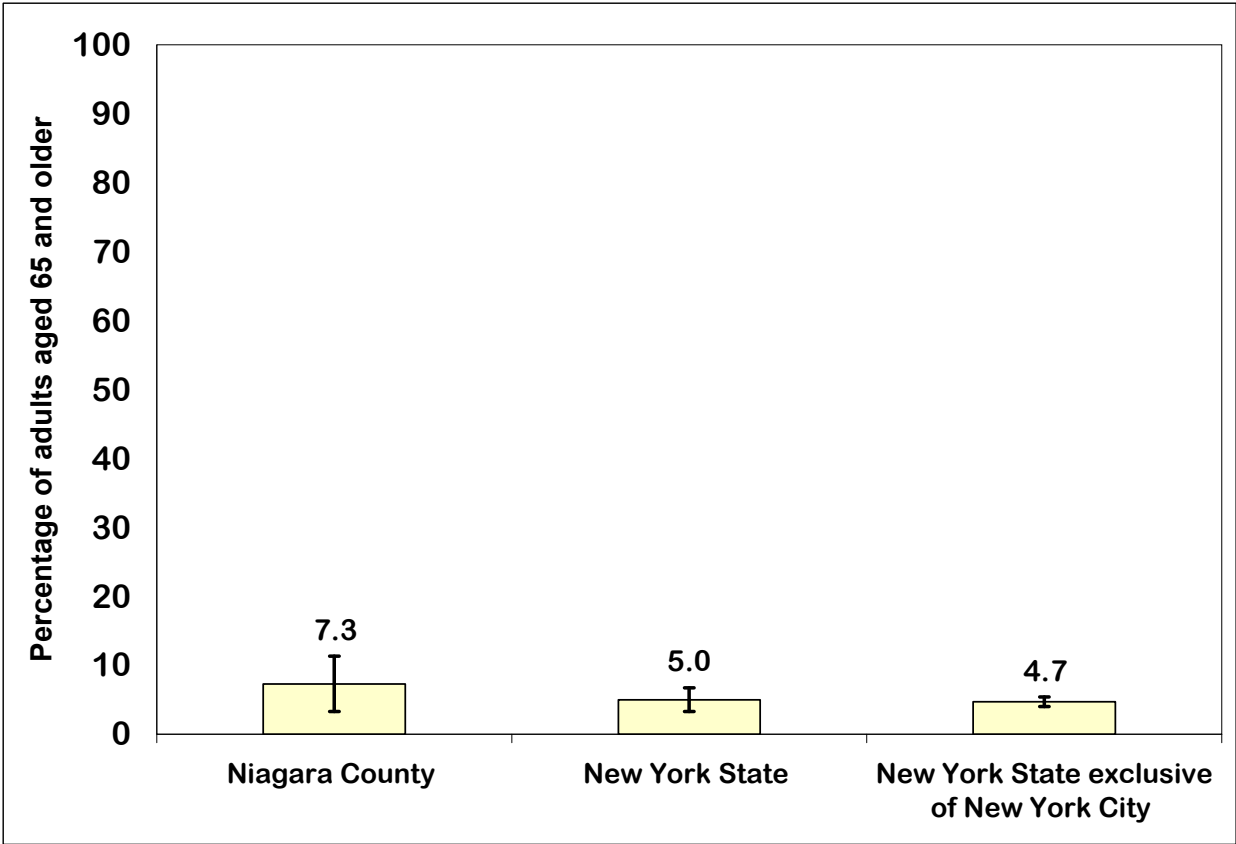
Unintentional injury

Unintentional injuries are a leading cause of death and disability among all age groups in New York State and the top killer of New Yorkers aged 1-44 years. Many more New Yorkers are injured each year and survive, yet often require hospitalization and rehabilitation services. The consequences of non-fatal injuries range from temporary pain and inconvenience, to long-term disability, chronic pain, and diminished quality of life. The economic impact of injuries – which is substantial – includes the costs associated with medical treatment and lost

productivity (e.g., wages and accompanying fringe benefits, the ability to perform normal household responsibilities).

Falls are common in the elderly and can lead to long term disability. In Niagara County, 7.3% of adult residents aged 65 and older had falls within the past three months that resulted in injuries. Among adults aged 65 and older residing in New York State and New York State exclusive of New York City, 5.0% and 4.7%, respectively, had falls within the past three months that resulted in injuries.

Figure 5. Percentage of adults aged 65 and older who had falls that resulted in injuries in the past three months, 2009



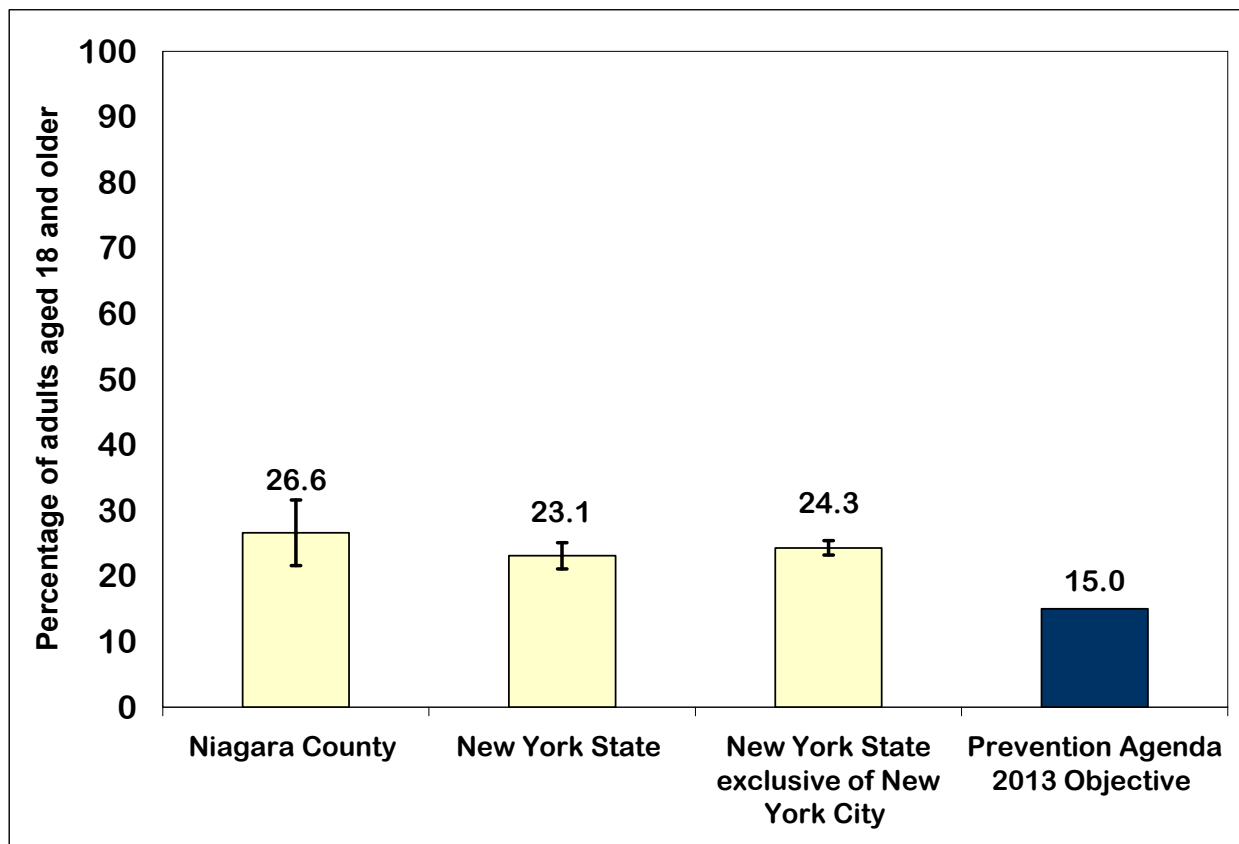
Rates are age-adjusted to the Year 2000 US Standard Population.
Note: Error bars represent 95% confidence intervals.

Physical activity and nutrition

For both adults and children, poor nutrition and physical inactivity can contribute to the development of chronic diseases and other disabilities that increase health care costs and decrease quality of life. Obesity, a major risk factor for many chronic diseases, has reached epidemic proportions both in New York State and across the nation. Obesity costs New York State more than \$6 billion annually in direct medical expenditures for treatment of related diseases, as well as indirect costs such as lost productivity.

Being overweight or obese increases the likelihood of developing chronic diseases such as heart disease or diabetes that may result in premature death. In Niagara County, 26.6% of adult residents are obese. Among adults residing in New York State and New York State exclusive of New York City, 23.1% and 24.3%, respectively, are obese. New York State has set a goal to decrease the percentage of adults who are obese to no more than 15% by the year 2013.

Figure 6. Percentage of adults aged 18 and older who are obese,* 2009



*Obesity is defined as having a body mass index (BMI) of 30.0 or greater. BMI is calculated as weight in kilograms divided by the square of height in meters

Rates are age-adjusted to the Year 2000 US Standard Population.

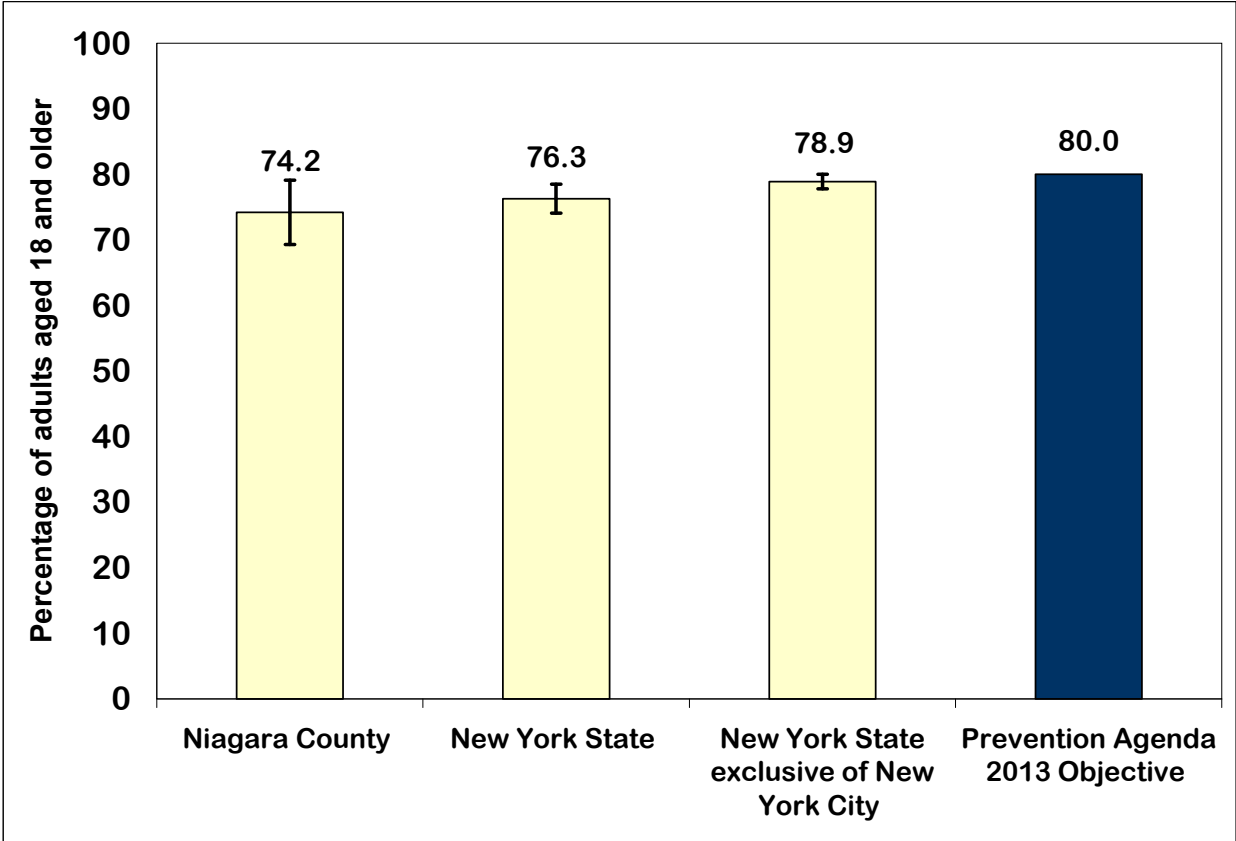
Note: Error bars represent 95% confidence intervals.

Physical activity and nutrition

Regular physical activity throughout life is important for maintaining health and preventing premature death. In Niagara County, 74.2% of adult residents participate in some type of physical activity during their leisure-time non-working hours. Among adults residing in New York State and New York State exclusive of New York City, 76.3% and 78.9%, respectively,

participate in some type of physical activity during their leisure-time non-working hours. New York State has set a goal to increase the percentage of adult New Yorkers who engage in some type of leisure-time physical activity to at least 80% by 2013.

Figure 7. Percentage of adults aged 18 and older who had some type of leisure-time physical activity, 2009



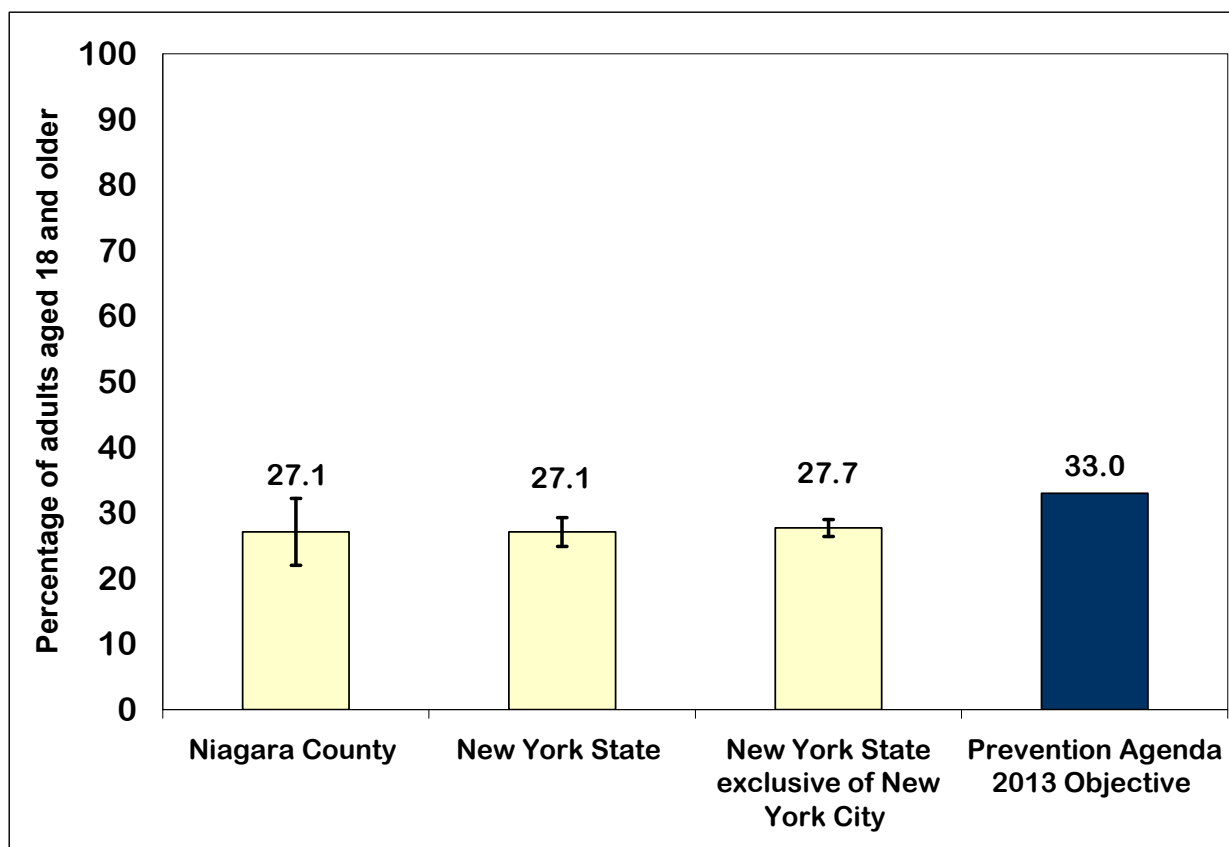
Rates are age-adjusted to the Year 2000 US Standard Population.
Note: Error bars represent 95% confidence intervals.

Physical activity and nutrition

Diets with higher intakes of vegetables, fruits and grains are associated with a variety of health benefits, including decreased risk for some types of cancers. In Niagara County, 27.1% of adult residents consume 5 or more servings of fruits and vegetables per day. Among adults residing in New York State and New York State

exclusive of New York City, 27.1% and 27.7%, respectively, consume 5 or more fruits and vegetables per day. New York State has set a goal to increase the percentage of adults who consume at least 5 or more fruits and vegetables per day to 33% by 2013.

Figure 8. Percentage of adults aged 18 and older who consume 5 or more fruits and vegetables per day, 2009



Rates are age-adjusted to the Year 2000 US Standard Population.

Note: Error bars represent 95% confidence intervals.

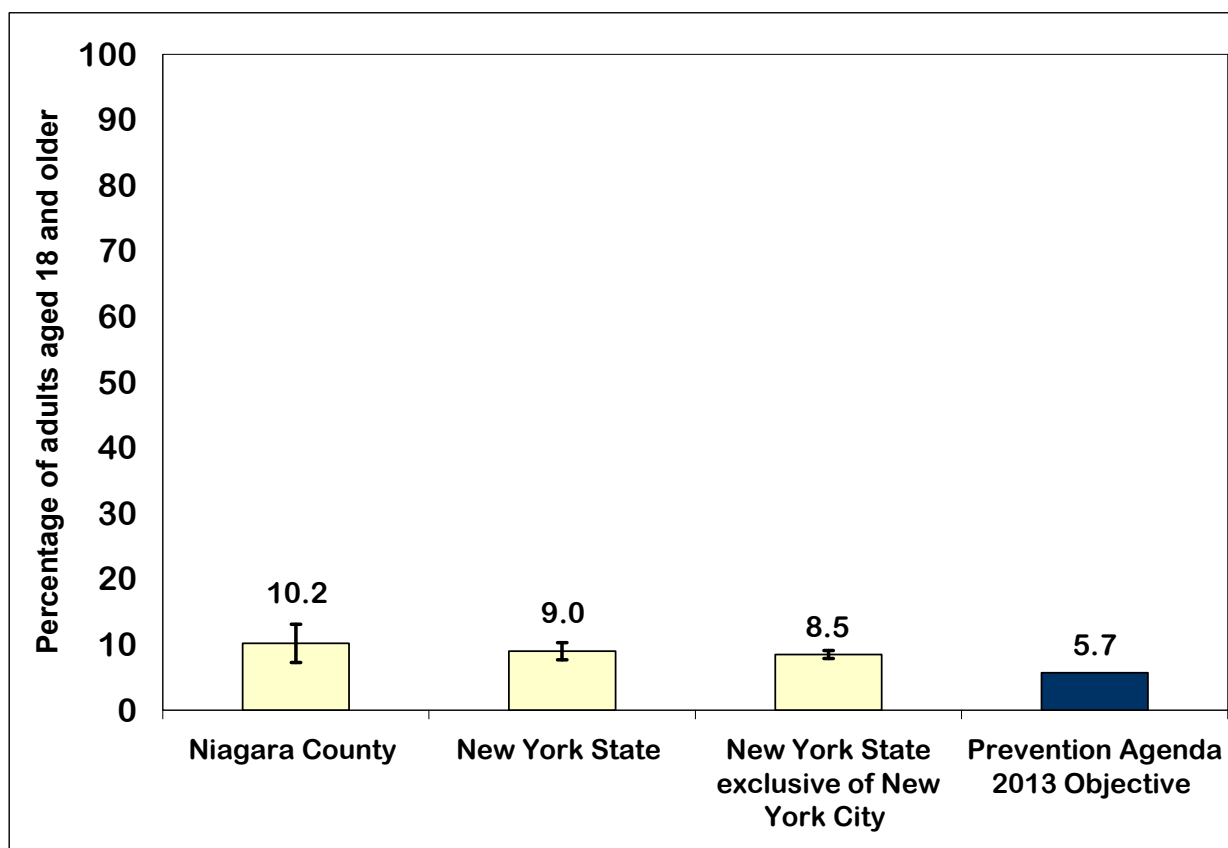
Chronic disease

Chronic diseases such as asthma, cancer, diabetes, heart disease and stroke account for seven of every ten deaths in the US. Chronic diseases are also among the most preventable. Multiple risk factors, including tobacco use, poor diet, and physical inactivity, have been linked to the causes of chronic diseases.

Uncontrolled diabetes can lead to serious chronic complications in the eyes (retinopathy),

kidneys (nephropathy), peripheral nerve system (neuropathy), and arteries (atherosclerosis). In Niagara County, 10.2% of adult residents have diabetes. Among adults residing in New York State and New York State exclusive of New York City, 9.0% and 8.5%, respectively have diabetes. New York State has set a goal to reduce the percentage of adults with diabetes to no more than 5.7% by 2013.

Figure 9. Percentage of adults aged 18 and older who have diabetes,* 2009



*Defined as having ever been told by a doctor that you have diabetes excluding pre-diabetes and women with diabetes only when pregnant

Rates are age-adjusted to the Year 2000 US Standard Population.

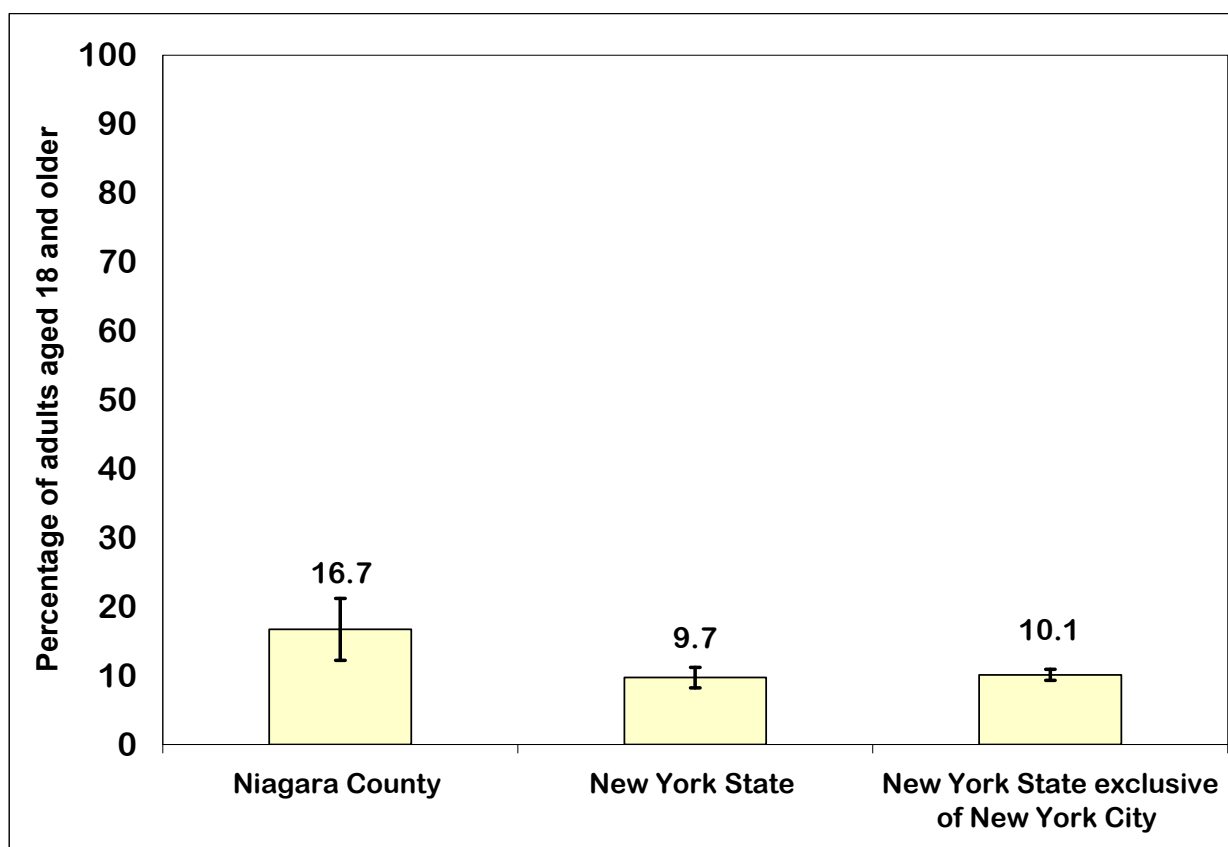
Note: Error bars represent 95% confidence intervals.

Chronic disease

Asthma is a serious problem in New York State. There were more than 165,000 emergency department visits and more than 39,000 hospitalizations per year due to asthma during the period of 2005 to 2007. In Niagara County, 16.7% of adult residents have asthma. Among adults residing in New York State and New

York State exclusive of New York City, 9.7% and 10.1%, respectively, have asthma. The percentage of adult residents in Niagara County who have asthma is statistically significantly greater than the percentage of adult residents who have asthma in New York State and New York State exclusive of New York City.

Figure 10. Percentage of adults aged 18 and older who have current asthma,* 2009



*Defined as having ever been told by a health professional that they had asthma and still have asthma. Rates are age-adjusted to the Year 2000 US Standard Population.

Note: Error bars represent 95% confidence intervals.

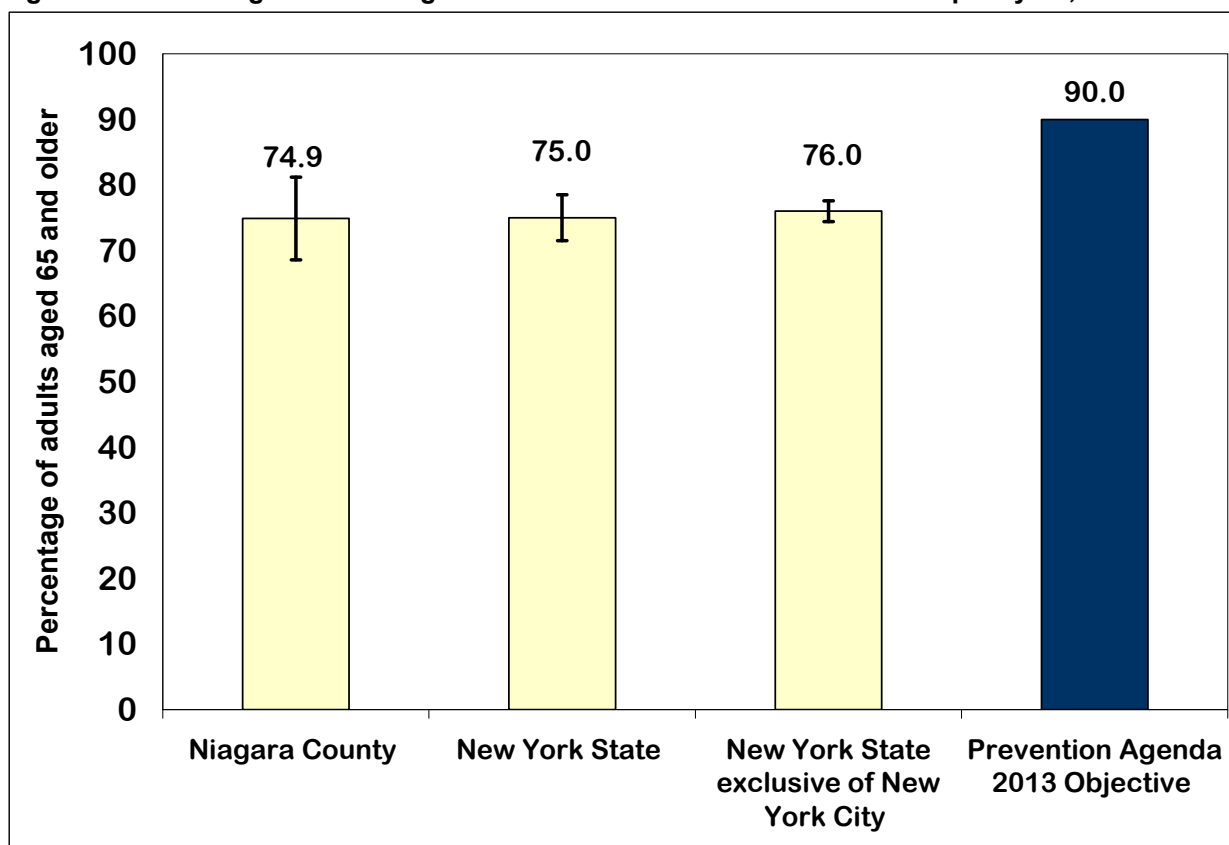
Infectious disease

Infectious diseases such as pneumonia, influenza and HIV infection are a major cause of illness and death in New York State. The effective control of infectious diseases requires public health infrastructures that can rapidly recognize and respond to disease threats and prevent emerging problems.

Vaccination is an effective strategy to reduce illness and deaths due to pneumococcal disease and influenza. The elderly are at higher risk for

complications and deaths due to these illnesses. In Niagara County, 74.9% of adult residents aged 65 and older had flu shots in the past year. Among adults 65 and older residing in New York State and New York State exclusive of New York City, 75.0% and 76.0%, respectively, had flu shots in the past year. New York State has set a goal to increase the percentage of adults aged 65 and older who had flu shots in the past year to at least 90% by 2013.

Figure 11. Percentage of adults aged 65 and older who had flu shots in the past year, 2009



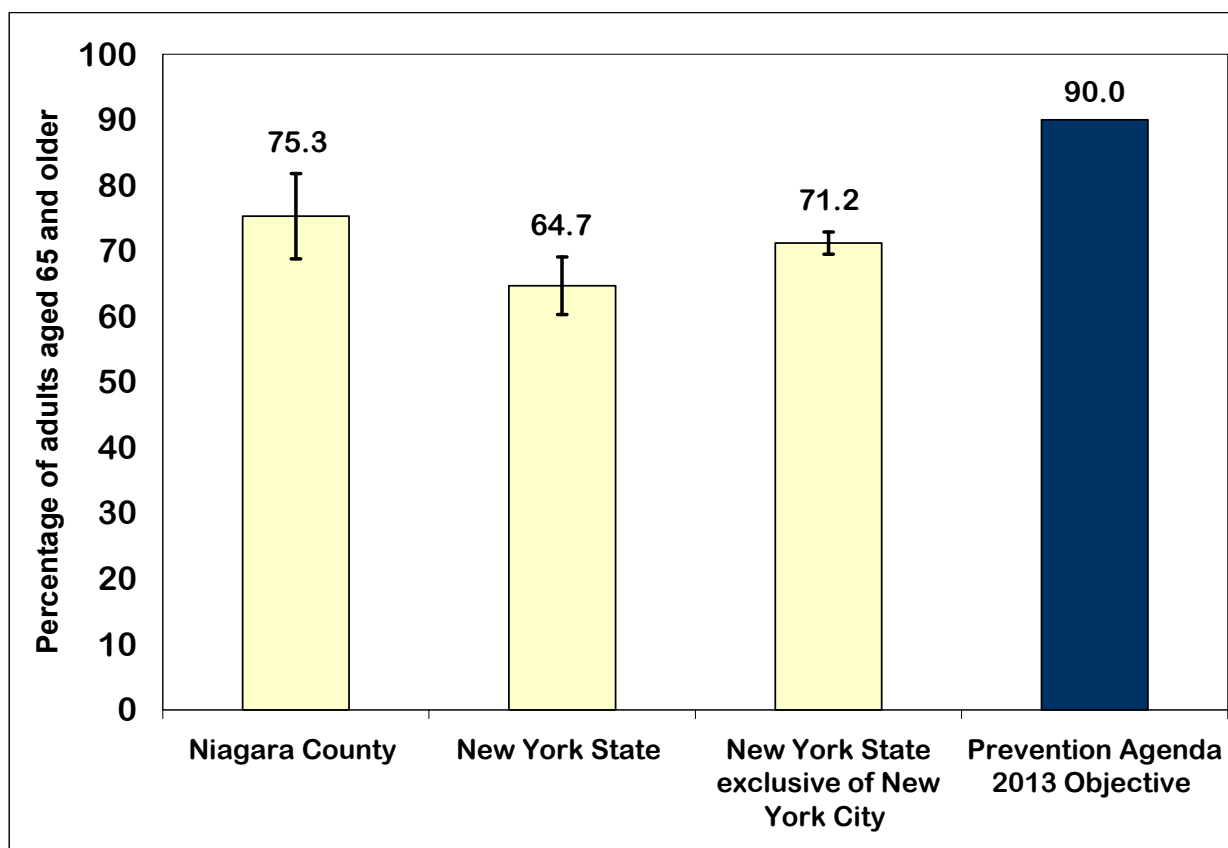
Rates are age-adjusted to the Year 2000 US Standard Population.
Note: Error bars represent 95% confidence intervals.

Infectious disease

Pneumonia vaccination rates among the elderly are lower than those for flu immunization in New York State. In Niagara County, 75.3% of adult residents aged 65 and older ever had pneumonia vaccinations. Among adults age 65 and older residing in New York State and New

York State exclusive of New York City, 64.7% and 71.2%, respectively, have ever had pneumonia vaccinations. New York State has set a goal to increase the percentage of adults aged 65 and older who ever had pneumonia vaccinations to at least 90% by 2013.

Figure 12. Percentage of adults aged 65 and older who ever had pneumonia vaccinations, 2009



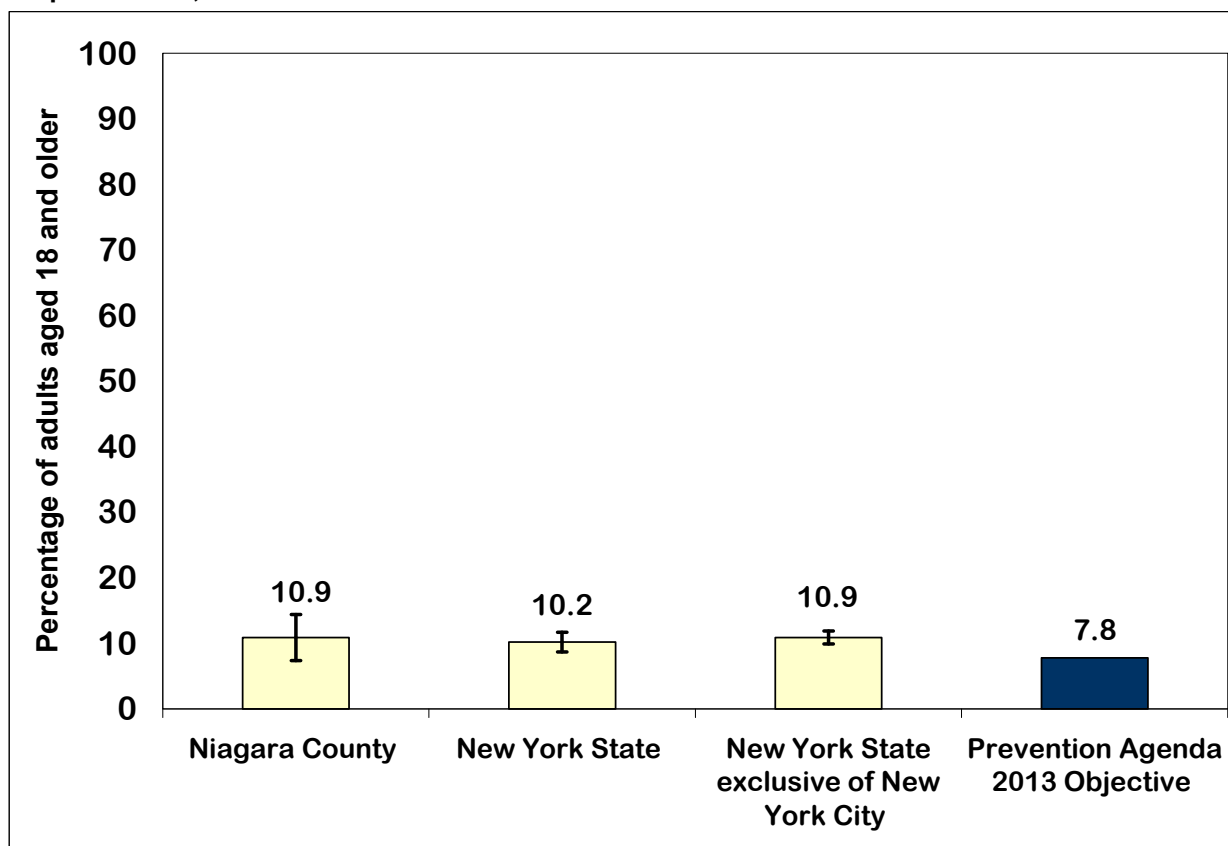
Rates are age-adjusted to the Year 2000 US Standard Population.
Note: Error bars represent 95% confidence intervals.

Mental health and substance abuse

Mental disorders contribute to poor health and disability. They occur across the lifespan, affecting persons of all racial and ethnic groups, both sexes, and all educational and socioeconomic groups. Substance abuse and its related problems are among society's most pervasive health and social concerns. A report of the US Surgeon General estimated that at least one in five Americans experiences mental illness in a given year. Nearly one in three adults who have mental disorders in their lifetimes also experiences co-occurring substance abuse disorders (US Department of Health and Human Services, Healthy People 2010, Conference Edition, January 2000).

Untreated mental illnesses have associated human and economic costs such as diminished productivity, work-place absenteeism, and in severe cases, an increased rate of suicide. In Niagara County, 10.9% of adult residents experience poor mental health for 14 or more days in a month. Among adults residing in New York State and New York State exclusive of New York City, 10.2% and 10.9%, respectively, experience poor mental health for 14 or more days in a month. New York State has set a goal to reduce the percentage of adult New Yorkers reporting 14 or more days with poor mental health in the last month to no more than 7.8% by 2013.

Figure 13. Percentage of adults aged 18 and older with poor mental health for 14 or more days in the past month, 2009



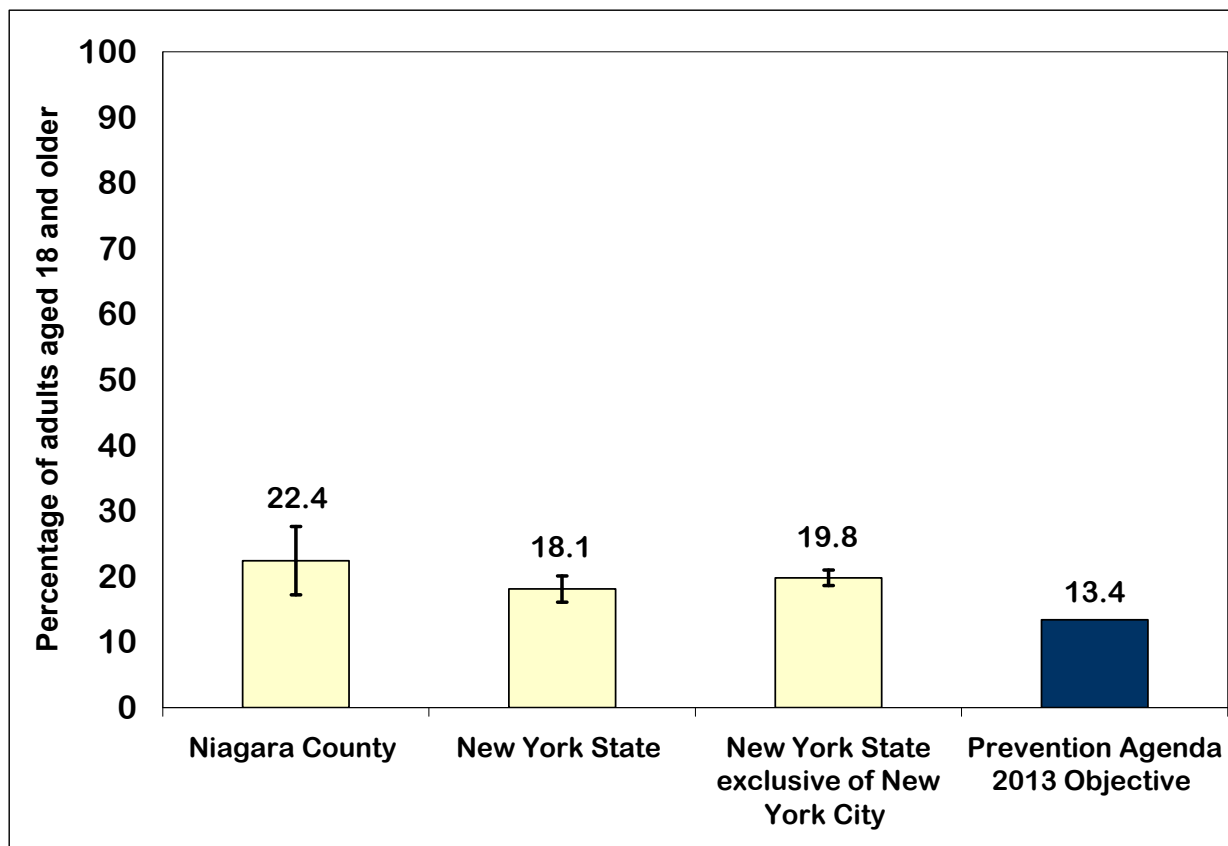
Rates are age-adjusted to the Year 2000 US Standard Population.
Note: Error bars represent 95% confidence intervals.

Mental health and substance abuse

Binge drinking (5 or more drinks on one occasion for men, 4 or more drinks on one occasion for women) is associated with many health problems including unintentional injury, alcohol poisoning, poorly controlled diabetes and cardiovascular diseases. In Niagara County, 22.4% of adult residents engage in binge

drinking. Among adults residing in New York State and New York State exclusive of New York City, 18.1% and 19.8%, respectively, engage in binge drinking. New York State has set a goal to reduce the percentage of adult New Yorkers reporting binge drinking during the past month to no more than 13.4% by 2013.

Figure 14. Percentage of adults aged 18 and older who reported binge drinking,* in the past month 2009



*Defined as men having 5 or more drinks or women having 4 or more drinks on 1 or more occasion within the past month

Rates are age-adjusted to the Year 2000 US Standard Population.

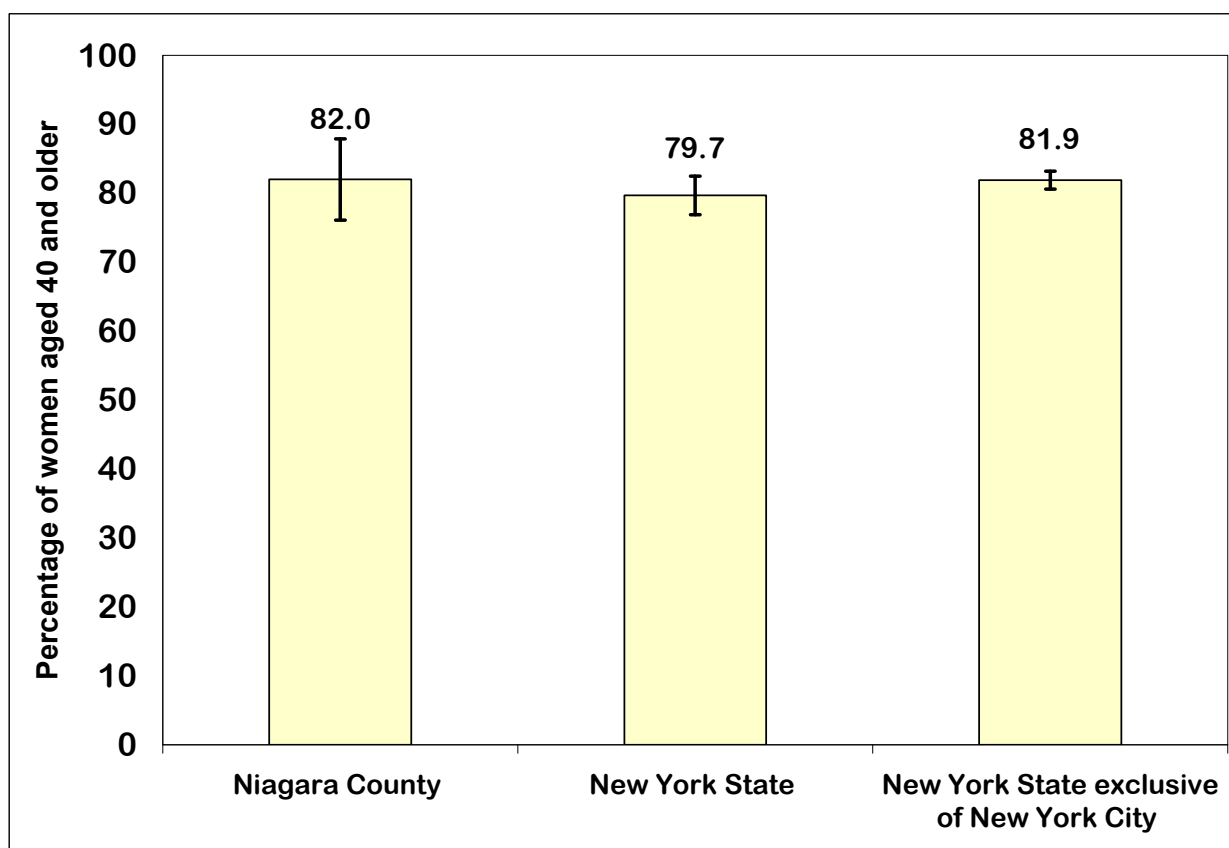
Note: Error bars represent 95% confidence intervals.

Cancer screening

For several types of cancer, detection at early stages greatly increases the likelihood that treatment will be successful. According to the National Cancer Institute, there is evidence demonstrating the efficacy of screening exams for the early detection of breast, cervical and colorectal cancer.

In Niagara County, 82.0% of female residents aged 40 years and older had mammograms in the past two years. Among females aged 40 years and older residing in New York State and New York State exclusive of New York City, 79.7% and 81.9%, respectively, had mammograms in the past two years.

Figure 15. Percentage of women aged 40 and older who had mammograms in the past two years, 2009



Rates are age-adjusted to the Year 2000 US Standard Population.

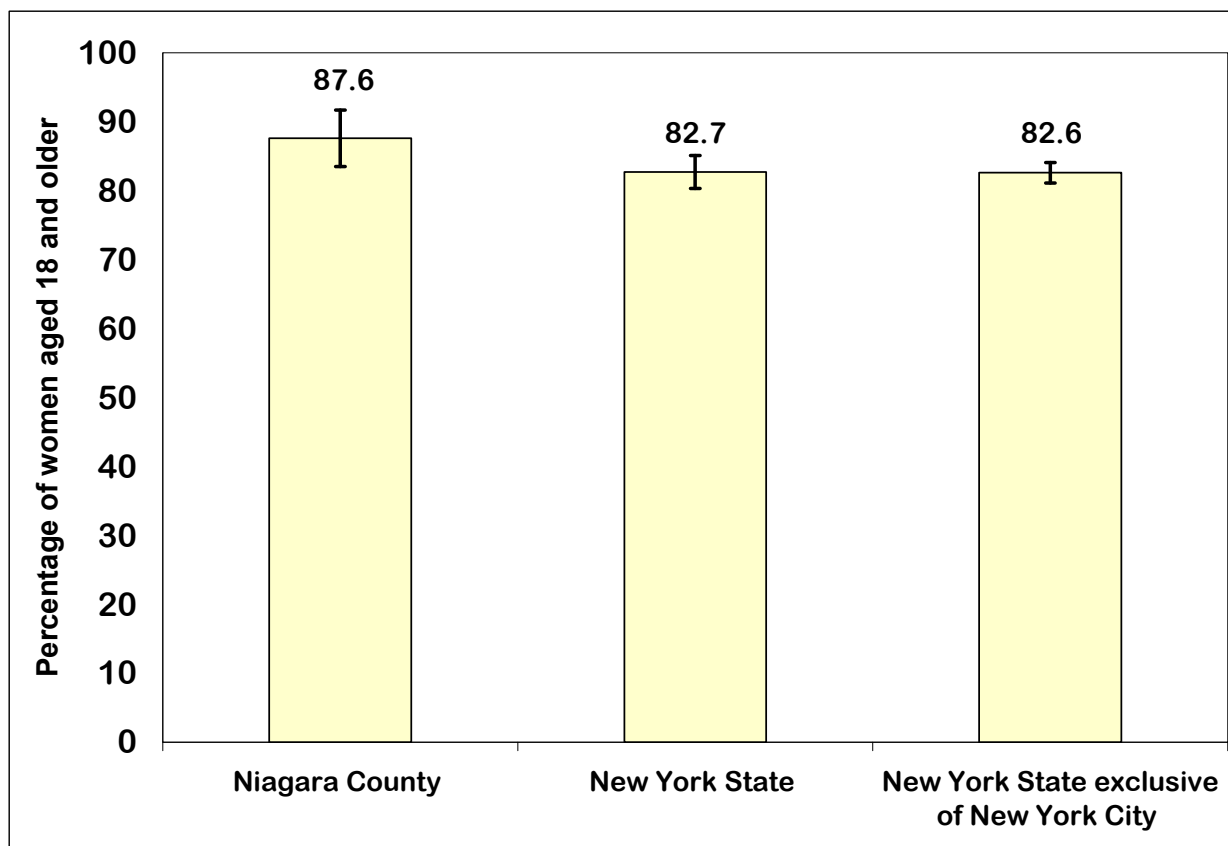
Note: Error bars represent 95% confidence intervals.

Cancer screening

Since the introduction of the Pap test, deaths caused by cervical cancer have been greatly reduced. In Niagara County, 87.6% of adult female residents had Pap tests within the past three years. Among adult females residing in

New York State and New York State exclusive of New York City, 82.7% and 82.6%, respectively, had Pap tests within the past three years.

Figure 16. Percentage of women aged 18 and older who had pap tests in the past three years, 2009



Rates are age-adjusted to the Year 2000 US Standard Population.

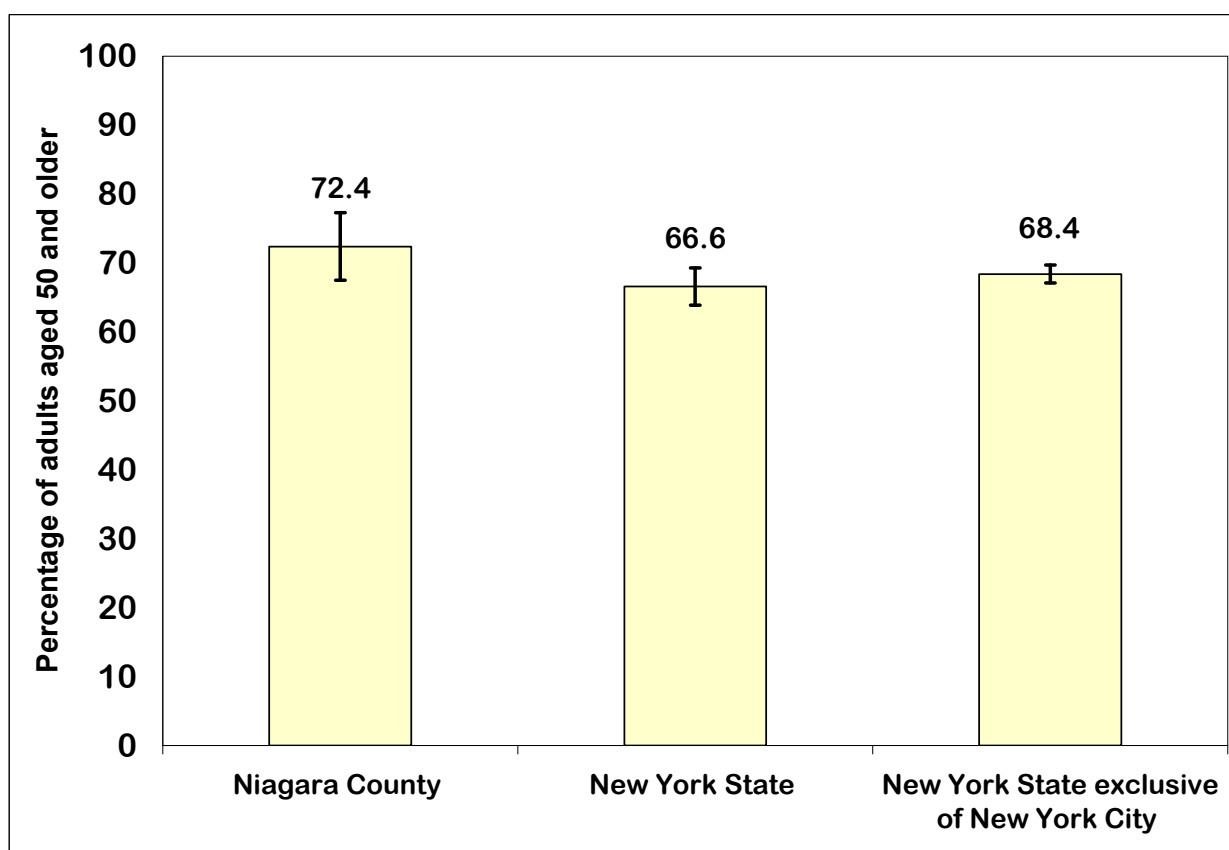
Note: Error bars represent 95% confidence intervals.

Cancer screening

Colon cancer sometimes has no symptoms until later stages. Therefore, it is important for people to have recommended screening tests for early detection of cancer. In Niagara County, 72.4% of adult residents aged 50 years and older ever

had sigmoidoscopies or colonoscopies. Among adults aged 50 years and older residing in New York State and New York State exclusive of New York City, 66.6% and 68.4%, respectively, ever had sigmoidoscopies or colonoscopies.

Figure 17. Percentage of adults aged 50 and older who ever had sigmoidoscopies or colonoscopies, 2009



Rates are age-adjusted to the Year 2000 US Standard Population.

Note: Error bars represent 95% confidence intervals.

Summary table: Niagara County

Indicator (2009)	Prevention Agenda 2013 Objective	Niagara County (95% CI)	New York State (95% CI)	New York State exclusive of New York City (95% CI)	Significant Difference
ACCESS TO CARE					
% of adults with health insurance	100	90.4 (86.3,94.4)	86.7 (84.4,89.1)	89.9 (89.0,90.8)	-
% of adults with regular health care providers	96	90.9 (86.8,95.1)	83.0 (80.4,85.5)	87.1 (85.9,88.2)	a
% of adults with dental visits in past year	83	74.3 (69.2,79.3)	71.1 (68.6,73.5)	72.7 (71.5,74.0)	-
TOBACCO USE					
% of adults who are current smokers ¹	12	27.1 (21.8,32.4)	17.0 (15.3,18.8)	18.9 (17.8,20.0)	a, b
UNINTENTIONAL INJURIES					
% of adults aged 65 and older who had falls that resulted in unintentional injuries in the past three months	NA	7.3 (3.3,11.2)	5.0 (3.3,6.7)	4.7 (4.0,5.4)	-
PHYSICAL ACTIVITY AND NUTRITION					
% of adults who are obese ²	15	26.6 (21.7,31.6)	23.1 (21.0,25.1)	24.3 (23.2,25.4)	-
% of adults who consume 5 or more fruits and vegetables per day	33	27.1 (22.0,32.1)	27.1 (24.9,29.2)	27.7 (26.4,29.0)	-
% of adults who had some type of leisure-time physical activity	80	74.2 (69.4,79.1)	76.3 (74.1,78.5)	78.9 (77.8,80.0)	-
CHRONIC DISEASE					
% of adults who have diabetes ³	5.7	10.2 (7.3,13.1)	9.0 (7.8,10.3)	8.5 (8.0,9.1)	-
% of adults who have current asthma ⁴	NA	16.7 (12.2,21.2)	9.7 (8.2,11.2)	10.1 (9.3,10.9)	a, b
INFECTIOUS DISEASE					
% of adults age 65 and older who had flu shots in the past year	90	74.9 (68.6,81.3)	75.0 (71.5,78.5)	76.0 (74.4,77.5)	-
% of adults age 65 and older who ever had pneumonia vaccinations	90	75.3 (68.8,81.8)	64.7 (60.4,69.1)	71.2 (69.5,73.0)	-

Indicator (2009)	Prevention Agenda 2013 Objective	Niagara County (95% CI)	New York State (95% CI)	New York State exclusive of New York City (95% CI)	Significant Difference
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MENTAL HEALTH AND SUBSTANCE ABUSE

% adults with poor mental health for 14 or more days in the past month	7.8	10.9 (7.4,14.4)	10.2 (8.7,11.7)	10.9 (10.0,11.9)	-
% of adults who binge drank in the past month ⁵	13.4	22.4 (17.2,27.6)	18.1 (16.1,20.2)	19.8 (18.6,21.0)	-

CANCER SCREENING

% women aged 40 and older who had mammograms in the past two years	NA	82.0 (76.1,87.9)	79.7 (76.9,82.5)	81.9 (80.7,83.2)	-
% of women who had pap tests in the past three years	NA	87.6 (83.5,91.7)	82.7 (80.2,85.1)	82.6 (81.1,84.2)	-
% of adults aged 50 and older who ever had sigmoidoscopies or colonoscopies	NA	72.4 (67.5,77.3)	66.6 (63.9,69.3)	68.4 (67.1,69.7)	-

^a Significantly different from New York State

^b Significantly different from New York State exclusive of New York City

¹ Defined as having smoked at least 100 cigarettes in lifetime and currently smoking everyday or some days

² Obesity is defined as having a body mass index (BMI) of 30.0 or greater. BMI is calculated as weight in kilograms divided by the square of height in meters

³ Defined as having ever been told by a doctor that you have diabetes excluding pre-diabetes and women with diabetes only when pregnant

⁴ Defined as having ever been told by a health professional that they had asthma and still have asthma

⁵ Defined as men having 5 or more drinks or women having 4 or more drinks on 1 or more occasion within the past month

Note: All estimates are age-adjusted to the year 2000 standard US population.