

Community Health Assessment 2013–2017

Tompkins County Health Department

1. Description of the community being assessed.
 - a. Demographics of the population served.
 - b. Health status of the population and distribution of health issues.
2. Identification of the main health challenges facing the community.
3. Summary of the assets and resources available to address health issues.
4. Documentation on the process and methods used to conduct the assessment

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The demographics of the population served

TOMPKINS COUNTY, New York covers 476 square miles at the southern end of Cayuga Lake, the longest of New York’s Finger Lakes. Centered in the county and at the lake’s tip is Ithaca, the county seat and only city. Ithaca is 60 miles southwest of Syracuse and 25 miles west of Cortland. It forms a hub for five state highways though the closest Interstate connection is forty minutes away in Cortland.

The U.S. Census Bureau’s 2007–2011 American Community Survey 5-year population estimates are used in this section of the report, because these are the only data sets that include data for — and are therefore comparable with — all geographic subdivisions in Tompkins County.

Data is often better understood when relevant comparisons are presented, therefore it was determined that it would be most instructive to compare Tompkins County, which is rated in the top five among New York counties for *Health Outcomes* by the University of Wisconsin County Health Rankings, with other top-5 counties. These are (in ranking order): Livingston, Rockland, Tompkins, Putnam, and Saratoga.¹

Population

Tompkins County’s 2010 U.S. Census population is 101,564, a 5.0% increase over the 2000 Census count of 96,501. At 30,014, the City of Ithaca is the population center with 29.6% of the county total.²

Tompkins County includes 9 towns and 6 villages. The 2010 U.S. Census shows three Towns — Caroline, Danby, and Enfield — with a population under 3,600. Groton, Newfield, and Ulysses are under 6,000 residents. Together, these six towns comprise about 26% of the county population. The three largest towns, Dryden, Ithaca, and Lansing, contain about 45% of the county population (Table 1, page 5).

Profile

Tompkins County is home to three institutions of higher education: Cornell University (21,131 students³), Ithaca College (6,760 students⁴) and Tompkins Cortland Community College (TC3, 3,478 students⁵). Cornell’s main campus is on East Hill in the City of Ithaca, and many of its facilities are in the Towns of Ithaca and Dryden. Ithaca College is on South Hill, within the Town of Ithaca. TC3 is in the Town of Dryden.

Much of the county’s demographic profile reflects the weight of the college sector. The median age of Tompkins County residents is 29.5 years⁶ — the lowest in the state — with 17% of residents age 20–24 years. Just over 1-in-10 Tompkins County residents is age 65 or older (10.7%). In Rockland County the median age is 36.8 years, and 13.3% of residents are age 65-plus (see Table 2).

In their September 2012 report, Assessment of the Needs of Residents 60 Years of Age and Older,⁷ the Tompkins County Office for the Aging (COFA) points out the impact that aging baby boomers are beginning to have on the county's demographic profile. The report cites a 34% increase in people age 60 and over from 2000 to 2010, with a very near doubling — up 89% — of the population age 60 to 64. The authors are blunt about this trend, stating, “As this large generation continues to age, they will place demands on government, service systems, and the community-at-large in a multitude of ways.”

Tompkins County's population is well educated: 93% of residents age 25-plus are high school graduates, 49.8% have a Bachelor degree, and 29.0% a graduate or professional degree.⁸ Post-secondary rates in Rockland County are roughly 10 percentage points lower, with 40.8% having earned a Bachelor degree and 18% with a graduate or professional degree. Livingston County rates are 23.3% and 10.2%, respectively (see Table 3).

Close to half (47%) of the employed workforce in Tompkins County works in education, healthcare and social services. For Ithaca city, the rate is over half (54%). The proportion of Tompkins County workers who are employed in manufacturing has dipped slightly from 7.0% in 2000 to 6.5% by the current 5-year estimate.⁹

Unemployment in Tompkins County is often the lowest in the state. The ACS 5-year estimate (2007-2011) shows a 5.6% county unemployment rate and 5.9% in the city.

The U.S. Census Bureau demonstrates population transience using data on “Residence one year ago” for those age one year-plus, and Tompkins is high in all categories measured: 25% live in a different house, 12.8% were in a different county the previous year, 6.6% in a different state and 2.5% were living abroad.¹⁰ These numbers are easily attributable to the academic population. The impact of such transience is a lack of population consistency when providing and promoting awareness of public services.

Place of birth shows a similar pattern. Thirty percent of Tompkins' population was born in a U.S. state other than New York, and 12.7% were born outside the U.S. entirely.¹¹ Tompkins County's population is 83% white, 4% Black or African American, 9.2% Asian, and 2.5% two or more races. The population of Ithaca city is 16.2% Asian, nearly one-in-six.¹² Sixteen percent speak a language other than English at home. See Table 1 and Table 2.

Households

Very close to half (48.2%) of Tompkins County households are non-family households. In Ithaca city, the rate is close to three-quarters (73.4%) non-family households.¹³ Consistent with rates of non-family households and transience, a high proportion — 44.7% — of Tompkins County housing is renter-occupied. In Ithaca, the rate is 74%, nearly three out of four. In Rockland County, only 29% of housing is renter-occupied (see Table 4).

The high rate of non-family households and renter-occupied housing is another probable reflection of Tompkins County's student population. Similarly, median household income is likely student driven; for non-family households it is \$29,362, and for family households it

is \$72,426.¹⁴ While the comparison counties also show a wide gap between non-family and family households, the median non-family household income for Tompkins County represents nearly half all households. Non-families make up a fewer than one-quarter of all households in both Putnam and Rockland Counties (24.0% and 23.6%, respectively) and just over a third in Livingston and Saratoga (34.1% and 33.8%, respectively).

Poverty

Poverty data for families is more likely to demonstrate the needs of less transient residents than will data that includes non-family households. This is especially relevant in a “college town,” where a large population of students working part time can skew the poverty rate downward. In fact, a 2013 study documents a steep drop in Tompkins County’s overall poverty rate when students are factored out: 21% for all people in Tompkins County, and 11.5% when students not living with relatives are excluded. For Ithaca city, the poverty rate changes from 48.3% for all people to 23.3% for all people excluding students not living with relatives.¹⁵

The poverty rate for all families in Tompkins County is 7.7%, and in Ithaca city it is 11.9%. Of greater concern are families with children. In Tompkins County, about 1-in-6 (16.0%) families with children under age 5 have incomes below the poverty level. For Tompkins County families with children under age 18, the poverty rate drops to about 1-in-8, or 13.1%. In Ithaca city the family poverty rates are 18.8% and 16.8%, respectively. Data for the percent of people in poverty are shown in Table 4.

In the cases of single-mother family households with related children under age 18, the poverty rate is 37.0% for Tompkins County, 48.1% for Ithaca city; single-mother families with children only under age 5 live in poverty at rates of 57.5% for Tompkins County, and 100% for Ithaca city and the Town of Groton.¹⁶

Close to 9-in-10 Tompkins County adults report having a regular health care provider (88.9%), which is consistent among rates for the other counties at the top of the County Rankings.¹⁷ Among Tompkins County adults age 18–64, 86.5% have health insurance.¹⁸

Demographic TABLES

Table 1: 2010 U.S. Census Population.

Area	Population	White	Black or African American	Asian	Hispanic or Latino
Tompkins County	101,564	83%	4%	9%	4%
Caroline Town	3,282	94%	2%	1%	2%
Danby Town	3,329	92%	3%	1%	3%
Dryden Town	14,435	91%	3%	2%	3%
Enfield Town	3,512	93%	2%	0%	2%
Groton Town	5,950	96%	1%	1%	2%
Ithaca City	30,014	71%	7%	16%	7%
Ithaca Town	19,930	80%	4%	11%	4%
Lansing Town	11,033	82%	4%	10%	3%
Newfield Town	5,179	94%	2%	1%	1%
Ulysses Town	4,900	95%	1%	1%	2%

Source: 2010 Census: Public Law 94-171 Data. Accessed at <http://www.esd.ny.gov/NYSDataCenter/Census2010.html>

Table 2– Demographic Profiles

County	Population 2010 U.S. Census (a)	Population Density per square mile (a)	White (b)	Median Age (b)	Age 65+ (b)	Born outside of NYS	Non-family households (c)
Livingston	65,393	103	94.1%	39.4	13.6%	14.5%	34.1%
Rockland	311,687	1,816	73.5%	36.8	13.3%	34.3%	23.6%
Tompkins	101,564	214	82.8%	29.5	10.7%	43.0%	48.2%
Putnam	99,710	434	89.6%	41.2	12.0%	23.9%	24.0%
Saratoga	219,607	191	94.6%	40.5	13.5%	21.5%	33.8%
<i>Upstate Median</i>	<i>80,317</i>	<i>112</i>					

(a) NYS Vital Statistics 2011. Accessed at http://www.health.ny.gov/statistics/vital_statistics/2011/table02.htm

(b) 2007-2011 American Community Survey 5-Year Estimates. DP05

(c) Pct non-family households. 2007-2011 ACS 5-Year Estimates. DP02

Table 3– Education, employment

County	Bachelor degree or higher (a)	Graduate or professional degree (a)	Unemployment (b)	Manufacturing jobs (c)
Livingston	23.3%	10.2%	7.8%	14.3%
Rockland	40.8%	18.0%	6.5%	6.9%
Tompkins	49.8%	29.0%	5.8%	6.5%
Putnam	38.1%	16.8%	6.6%	4.7%
Saratoga	35.4%	15.1%	6.6%	8.7%

(a) Pct of population age 25 yrs and over. 2007-2011 American Community Survey (ACS) 5-Year Estimates. DP02

(b) 2011 United States Department of Labor Data as of July, 2012. Accessed at

<http://www.health.ny.gov/statistics/chac/general/g97.htm>

(c) Pct civilian employed population age 16 yrs and over in manufacturing. 2007-2011 ACS 5-Year Estimates. DP03

Table 4– Income & Poverty

County	Median family income, \$ (a)	People in families in poverty (b)	People under age 18 yrs in poverty (b)	Pct all households with SNAP benefits (c)	Pct all housing units that are Renter-occupied (d)
Livingston	65,748	7.1%	13.5%	9.3%	24.9%
Rockland	98,533	10.3%	18.4%	7.1%	29.4%
Tompkins	72,426	8.9%	16.2%	9.0%	44.7%
Putnam	105,391	3.0%	5.5%	2.7%	16.6%
Saratoga	83,823	3.9%	6.9%	5.1%	26.3%

(a) 2007-2011 ACS 5-Year Estimates. DP03

(b) Pct of families & people whose income in the past 12 months is below the poverty level. 2007-2011 ACS 5-Year Estimates. DP03

(c) Pct of total households with Food Stamp/ SNAP benefits in the past 12 months. 2007-2011 ACS 5-Year Est. DP03

(d) 2007-2011 ACS 5-Year Estimates. DP04: Selected Housing Characteristics

Health status of the population and distribution of health issues

TOMPKINS COUNTY is in the top five among New York counties for both *Health Outcomes* — measures of mortality and morbidity — and *Health Factors* — health behaviors, clinical care, social and economic factors, and physical environment — in the 2013 University of Wisconsin County Health Rankings (County Rankings)¹⁹. Throughout this assessment, health indicators will be compared with the other top five *Outcomes* counties — Livingston, Rockland, Putnam, and Saratoga — in order to assert a more rigorous standard. Populations for these five counties vary widely from Rockland at 311,687 to Livingston at 65,393; Tompkins County’s 2012 population was 101,564.²⁰ Specific health indicators also show wide variation, despite in aggregate these populations are clustered at the top of the *Outcomes* ranking. Ultimately, close analysis reveals important health concerns and priorities in all of these “healthiest” counties, including Tompkins.

In the previous section on demographics it was noted that Tompkins has the lowest median age among all counties, thanks to its high student population. While this young, well educated citizenry undoubtedly contributes to the county’s overall good health, the demographic overview also cited a high proportion of non-family households — likely student residences — as well as significant levels of poverty among single mother families, especially those with young children. Single parent households, particularly single mother households is an important indicator of economic well being of children that contributes to the health of families.

Households

The County Rankings report that over one quarter (27%) of Tompkins County children live in a single parent household. And according to the U.S. Census, well over a third (37%) of single parent households with female householder and children under age 18 have incomes below the poverty level.²¹ In Ithaca city, the number is closer to one-half (48%). In cases where all children in these single-mother households are under age five, U.S. Census data paints a more dire situation, with poverty rates of 58% for Tompkins County, and 100% for both Ithaca city and the Town of Groton.

Free and reduced lunch utilization is an often-used indicator of poverty. New York State Department of Education data for Tompkins County’s 6 districts and one charter school are summarized across three school years in Table 5, page 11. Across all districts, about one-third of students grades K–12 are eligible for free or reduced price lunch, a number that has remained relatively steady over the period from Fall 2009 to Spring 2012. Individual districts with higher poverty rates show greater need. For example in the Newfield District over half of students are eligible.

Participation in the Supplemental Nutrition Assistance Program (SNAP) and medical assistance (Medicaid) programs are also key poverty indicators. The Tompkins County Department of Social Services prepares monthly caseloads reports for these programs that include data over a 4-year period.²² The selection of data in Table 6 shows a caseload

increase from 2009 to 2013 of 34% for SNAP, 19% for Medicaid, and 33% for Family Health Plus, the state health plan for children. Children who remain economically disadvantaged into their school years are more likely to perform below standards in math and English language arts.²³

Obesity

Many pregnant women and mothers with young children who live in a low income household get food and nutritional support from local WIC²⁴ programs. WIC is available based on income guidelines regardless of whether it is single or two-parent household. In Tompkins County, nearly half (46%) of all births are to women who are enrolled in the WIC program.²⁵ For many of these women, their lives are burdened not only by low income, but also by health risks. Among Tompkins County WIC pregnancies, a quarter of women (26.4%) were classified obese (BMI>29) pre-pregnancy, and close to another quarter (22.3%) were pre-pregnancy overweight (BMI 25–29).²⁶ Among Tompkins County children age 2–4 years who are enrolled in WIC, about one-in-eight (12.8%) are obese.²⁷ Data and comparisons are presented in Table 7.

The risk of obesity among children in Tompkins County is not necessarily limited to low income households. Among all children and adolescents, 17.3% are obese,²⁸ with a rate of 11.7% among elementary students alone.²⁹ Considering all students in elementary, middle and high school, over a quarter (26.3%) are overweight or obese. Reviewing middle and high school students, the prevalence of overweight or obese climbs to nearly one third (32.7%). For comparative rates of other Top-5 counties, see Table 9. Data are from the student weight category reporting system.

Breastfeeding has become recognized as an important measure in obesity prevention, and in Tompkins County three-quarters (75.2%) of infants are exclusively breastfed at the delivery hospital. Once infant and mother leave the hospital, breastfeeding is only tracked reliably for mothers enrolled in WIC. With this group, fewer than 2-in-5 (38.1%) mothers continue to breastfeed for a full 6 months (Table 8).

Tompkins County adults are not immune from the state and national trends toward overweight and obesity. The Behavioral Risk Factor Surveillance System (BRFSS) collects self-reported data about adults at the county and statewide level. The most recent county-level survey was conducted in 2008 and 2009, and released in December 2009. According to the BRFSS, adult obesity in Tompkins County is at an age-adjusted rate of 20% — one-in-five (± 4.5). For those with only a high school education or less, the rate nears one third (30.0%, ± 9.6). When the risk factor is widened to tally those adults who self-report they are either overweight or obese, the age-adjusted prevalence rises to more than half (55.1%, ± 5.9). Tompkins men are more likely than women to be overweight or obese (60.4% and 49.8%, respectively).

Tompkins County adults report a relatively high level of physical activity, with only one-in-seven (14.7%) reporting that they engage in *no* leisure-time physical activity. On the nutritious foods end of healthy habits, fully one-third (33.1%) of Tompkins adults report

eating five or more servings of fruit and vegetables per day. Table 10 compares rates for physical activity and fruit and vegetable consumption across the Top-5 counties.

Chronic Disease

Among the more traditional chronic disease indicators that are rated based on self-report diagnosis, hospital discharge, or vital records reporting — for example heart and circulatory, cancers, diabetes, and asthma — cancers and asthma stand out in Tompkins County. Although Tompkins County’s overall cancer incidence and mortality rates are below the state median, it is none-the-less the leading cause of death and premature death in Tompkins at 154 cancer deaths and 256 premature deaths per 100,000. The age-adjusted death rate for female breast cancer in Tompkins County is 24.4 per 100,000, above the state and Upstate medians. Colorectal cancer mortality, ovarian cancer incidence, prostate cancer mortality and prostate cancer incidence rates for Tompkins County are also all higher than the Upstate median (see Table 11).

Heart disease is second highest cause of death in Tompkins County, with 138 deaths per 100,000, followed by chronic lower respiratory diseases at 35 per 100,000.

Hospital discharge and Emergency Department (ED) admission data demonstrate disease prevalence on an acute level. The BRFSS tracks chronic disease diagnosis as reported by individuals rather than by a health care provider or agency, and therefore provides a view of prevalence which may include cases of managed disease that has not required hospitalization.

Asthma hospitalizations in Tompkins County run below the Upstate median for both discharges and ED. However, BRFSS data for both “ever diagnosed with asthma” and “current asthma” pins Tompkins County above the median value for Upstate and the highest rate among the Top-5 *Health Outcome* counties (see Table 12). Within Tompkins County, the Newfield ZIP code (14867) represents the most persistent origin of emergency department visits due to asthma, with high rates relative to the rest of the county for all age groups (see Figure 4, page 24).

Overweight and obesity can lead to conditions of pre-diabetes or Type 2 diabetes. Statewide, Tompkins County reports the second-lowest incidence of hospitalization in cases both where diabetes is the primary diagnosis and where there is any diagnosis of diabetes. The percent of residents who ever were given a diagnosis of diabetes is tallied by the BRFSS, and while Tompkins County’s rate is still low (7.4%), the difference between Tompkins and the Upstate median in percent ever diagnosed (7.4% and 8.9%, respectively) is not as great as is seen with hospitalization rates (see Table 13).

Health Indicator Differences by Ethnicity, 2008–2010

Ethnic and racial diversity is not high in Tompkins County — the population is 82% Non-Hispanic White — and yet some indicators present a broad difference in health outcomes and health factors in particular for the Black population.³⁰ Residents identifying as

Asian/ Pacific Islander form the largest minority in Tompkins County, making up 8.9% of the population. Non-Hispanic Blacks are 4.5% of the population, and Hispanics 4.2%.

Because the populations are small, much of the data for minority populations is classified as *unstable* due to fewer than 20 events. However, some important information can be gleaned from what is available, in particular with respect to the Black population. Following are a few differences for Blacks compared with Whites:

- 25% higher age-adjusted mortality rate,
- 63% higher percent premature deaths (<age 75)
- 48% more years of potential life lost
- 29% lower rate of adequate prenatal care
- 178% higher asthma hospitalization rate
- 47% higher diseases of the heart hospitalization rate
- 59% higher congestive heart failure hospitalizations
- 96% higher diabetes hospitalizations
- 240% higher drug-related hospitalizations

See Table 14, page 14 for specific data.

Mental Health & Substance Abuse

The NYSDOH has identified particular indicators as references for each Prevention Agenda priority area.³¹ The priority area “Promote mental health and prevention substance abuse” references 3 indicators for which comparative data is available: adults with poor mental health days, binge drinking, and suicide deaths. These data are shown in Table 15, along with statistics for heavy drinking, violent crime, drug related hospitalizations, and alcohol related motor vehicle injuries. Ten-year trends for the latter two indicators are shown in Figure 15 and Figure 16, page 30.

Tompkins County’s most striking mental health indicator is its suicide rate, the highest among the top 5 counties in the County Rankings, and above the state median (third quartile for upstate counties, fourth statewide). The drug-related hospitalization rate in Tompkins County maintained a steady rise from 2002–2011, with the age-adjusted 3-year average for 2009–2011 67% higher than the 3-year average for 2002–2004 (see Figure 15, page 30).

Core youth risk and protective factors are tracked bi-annually by Tompkins County Youth Services (TCYS), which conducts a comprehensive Communities that Care[®] survey of students grades 6 to 12 from most county school districts. At least 4,400 students have completed the survey in each cycle.³²

Thirty-day drug and alcohol use data is shown over 6 years (3 survey cycles) in Table 16. While alcohol use has generally declined for both 10th and 12th grade students, from 2010 to 2012 there have been increases in cigarette and marijuana use by both 10th and 12th graders, and an increase in non-medical prescription drug use for 12th graders. The steepest increase over 6 years was for cigarette use among high school seniors, which spiked 75% from 2008 to 2012.

Middle- and high school student mental health questions are also part of the TCYS survey, and shown for 2012 in Table 17. In the survey, one quarter (26%) of middle school students and nearly one-third (30%) of high school students reported feeling sad or depressed most days.

Health Status TABLES

Table 5– Free or Reduced Price Lunch Eligibility, Tompkins County schools

County	2009-10	2010-11	2011-12
Tompkins Co. (a)	35.2%	32.6%	34.6%
Ithaca City (b)	32.1%	30.7%	36.3%
Newfield (c)	51.0%	51.5%	53.8%
Groton (d)	45.0%	41.5%	39.7%

Source: 2011-12 NYS Education Department, NYS Report Card. March 2013.

(a) Six School Districts, plus New Roots Charter School; 3-yr avg. total enrollment 11,156

(b) Ithaca City School District. (c) Newfield School District. (d) Groton School District

Table 6– SNAP and Medicaid single month caseloads, Tompkins County

	2009	2010	2011	2012	2013	4-Yr Change
Total SNAP	3,815	4,421	4,713	4,941	5,118	+34.2%
Total Medicaid	5,821	6,202	6,433	6,796	6,909	+18.7%
Family Health Plus	486	548	611	627	646	+32.9%

Source: Tompkins County Department of Social Services Monthly Caseload Statistics Report for August 2013.

Table 7– Obesity, WIC households. [For 10-yr trend see Figure 7 and Figure 8, page 26]

County	Pct of births that are to women in WIC (a,b)	Women in WIC who are pre-pregnant obese (b)	Children in WIC age 2–4 who are obese (c)
Livingston	47.9%	29.1%	14.3%
Rockland	48.3%	16.8%	10.9%
Tompkins	46.2%	26.4%	12.8%
Putnam	25.7%	20.6%	20.8%
Saratoga	17.3%	32.3%	15.3%

(a) Source:2008-2010 Vital Statistics Data as of February, 2012

(b) Source:2008-2010 NYS Pregnancy Nutrition Surveillance System - WIC Program Data as of July, 2012

(c) Source:2008-2010 NYS Pediatric Nutrition Surveillance System Data as of July, 2012

Table 8– Breastfeeding. [For multi-yr trend see Figure 9]

County	Pct Infants fed exclusively breast milk in delivery hospital (a)	Pct WIC mothers breastfeeding at least 6 months (b)
Livingston	65.6%	28%
Rockland	38.4%	66.9%
Tompkins	75.2%	38.1%
Putnam	62.6%	46.2%
Saratoga	65.8%	19.6%
<i>NYS Median</i>	<i>60.6%</i>	<i>19.8%</i>

(a) 2008-2010 Vital Statistics Data as of February, 2012

(b) 2008-2010 NYS Pediatric Nutrition Surveillance System Data as of July, 2012

Table 9– Obesity, Youth.

County	Pct children & adolescents who are obese	Pct obese Elementary students (a)	Pct over-weight or obese, All students (b)	Pct obese Middle & high school students (a)
Livingston	18.9%	14.7%	25.1%	14.8%
Rockland	16.9%	16.3%	35.3%	29.0%
Tompkins	17.3%	11.7%	26.3%	19.8%
Putnam	17.2%	9.7%	22.6%	13.7%
Saratoga	14.2%	10.8%	29.2%	21.6%
<i>NYS Median</i>	<i>19.1%</i>	<i>14.9%</i>	<i>31.3%</i>	<i>20.0%</i>

(a) Obese: 95th percentile or higher (b) Overweight: 85th percentile or higher

Sources: 2010-12 Student Weight Status Category Reporting System. 2008-2010 Student Weight Status Category Reporting System Data as of July, 2012.

Table 10– Obesity, physical activity, nutrition; Adults.

County	Obesity among adults	Overweight or obesity among adults	NO leisure-time physical activity	Consume 5+ servings of fruit & veg. daily
Livingston	22.7%	61.9%	18.8%	25%
Rockland	15.0%	59.8%	27.6%	26.4%
Tompkins	20.0%	55.1%	14.7%	33.1%
Putnam	25.2%	58.3%	19.5%	30.6%
Saratoga	28.9%	61.0%	15.4%	28.1%
<i>NYS Median</i>	<i>27.6%</i>	<i>62.9%</i>	<i>21.6%</i>	<i>26.4%</i>

BRFSS 2009, adults age 18+, age adjusted. 95% Confidence Intervals not shown

Table 11– Cancer (age-adjusted rates per 100,000) [For 10-yr trends see Figure 10 thru Figure 14]

County	Cancer death rate (a)	Premature death rate (before age 75) by cancer (a)	Female breast cancer mortality rate (b)	Colorectal cancer mortality rate (b)	Prostate cancer mortality rate (b)	Ovarian cancer incidence rate (b)	Prostate cancer incidence rate (b)
Livingston	183	405	25.4	14.5	22.1	19.6	166.3
Rockland	135	243	19.7	11.8	13.9	13.7	196.8
Tompkins	154	256	24.4	17.5	23.2	14.7	208.7
Putnam	147	340	26.4	13.5	19.7	12.7	153.8
Saratoga	170	293	26.6	14.7	17.7	14.2	156.7
<i>Upstate Median</i>			21.3	15.9	21.5	13.2	162.0

(a) Source: Vital Statistics Data as of March, 2013. Age-adjusted rate per 100,000. NYSDOH Bureau of Biometrics and Health Statistics

(b) Source: 2007–2009 NYS Cancer Registry Data as of July, 2012.

Table 12– Asthma Indicators [For 10-yr trends see Figure 2 thru Figure 4]

County	Asthma Hospital Discharges, age-adjusted (a)	Asthma Hospitalization Rate, age 0–4 yrs (b)	Asthma Hospitalization Rate, age 5–14 yrs (b)	Asthma Hospitalization Rate, age 0–17 yrs (b)	Ever diagnosed with Asthma, adults (d)	Currently have asthma, adults (d)	Adults living in homes in which smoking is prohibited (d)
Livingston	8.0	23.4	7.9	10.7	20.0%	16.3%	78.1%
Rockland	12.6	28.6	7.6	12.6	10.1%	7.1%	86.3%
Tompkins	5.9	35.2	8.4	14.1	22.4%	14.9%	86.4%
Putnam	9.7	28.9	4.9	9.4	14.9%	9.0%	85.7%
Saratoga	7.6	22.8	6.2	9.9	15.9%	11.0%	82.0%
<i>Upstate Median</i>	10.3	28.1	7.9	11.5	15.9%	11.0%	75.7%

(a) 2009–2011 SPARCS Data as of February, 2013. Age-adjusted to 2000 U.S. population. Rate per 10,000.

(b) 2009–2011 SPARCS Data as of February, 2013. Rate per 10,000.

(d) NYS BRFS 2008–09, age-adjusted. 95% Confidence Intervals not shown.

Table 13– Diabetes [For 10-yr trends, see Figure 5 and Figure 6]

County	Hospitalization rate with diabetes as Primary diagnosis (a)	Hospitalization rate with any diagnosis of diabetes (a)	Adults who ever received a diagnosis of Diabetes (b)
Livingston	9.6	198.2	9.9%
Rockland	12.4	179.6	8.0%
Tompkins	5.5	124.1	7.4%
Putnam	9.2	155.8	6.4%
Saratoga	9.3	157.2	8.4%
<i>Upstate Median</i>	13.5	201.5	8.9%

(a) 2008–2010 SPARCS Data as of May, 2011 (age-adjusted rate per 10,000).

(b) NYS BRFS 2008–09, age-adjusted. 95% Confidence Intervals not shown.

Table 14– Disparities by Race/Ethnicity, Tompkins County

	White Population	Black Population	Difference
Mortality Rate per 100,000*	670.6	835.4	+25%
Pct Premature deaths (< age 75)	33.3%	54.2%	+63%
Lost years of potential life per 100,000*	4,318	6,410	+48%
Pct births with adequate prenatal care**	75%	52.9%	-29%
Asthma hospitalizations per 10,000*	6.3	17.5	+178%
Diseases of the heart hospitalizations per 10,000*	82	120.3	+47%
Congestive heart failure hospitalizations per 10,000, age 18+ years	20.5	32.5	+59%
Diabetes hospitalizations per 10,000 (any Dx ICD9 250)*	122.5	240.0	+96%
Drug-related hospitalizations per 10,000*	13.4	45.6	+240%

*Age-adjusted rate **Kotelchuck Index

Source: NYSDOH County Health Indicators by Race/Ethnicity for Tompkins County. See <http://www.health.ny.gov/statistics/community/minority/about.htm> for specific sources & explanations.

Table 15– Mental Health Indicators

County	Adults with poor mental health 14+ days last month (a)	Binge drinking within the last month, adults (a,b)	Heavy drinking within the past month, adults (a)	Suicide death rate (c)	Violent crime rate (d)	Drug-related hospitalization rate (e)	Alcohol related motor vehicle injuries & deaths (f)
Livingston	8.5%	19.7%	6.3%	5.2	100	13.4	62.2
Rockland	8.1%	13.1%	2.1%	5.2	161	23.3	35.5
Tompkins	8.3%	16.5%	7.7%	11.2	150	13.6	51.6
Putnam	9.5%	19.8%	8.1%	6.4	79	23.4	55.3
Saratoga	10.2%	20.1%	5.5%	8.5	72	14.3	55.1
Upstate Median	10.2%	19.8%	6.9%	9.9	NA	19.0	54.6

(a) NYS BRFSS 2008–09, adults age 18+, age-adjusted. 95% Confidence Intervals not shown.

(b) Defined as adult men averaging more than 2 alcoholic drinks per day and adult women averaging more than 1 alcoholic drink per day within the past month

(c) 2008-2010 Vital Statistics Data as of February, 2012. (Age-adjusted rate per 100,000).

(d) University of Wisconsin County Health Rankings for 2013

(e) 2008-2010 SPARCS Data as of May, 2011 (age-adjusted rate per 10,000)

(f) 2008-2010 NYS Department of Motor Vehicles Data as of July, 2012 (crude rate per 100,000)

Table 16– 30-day use of drugs,* Tompkins County youth

Alcohol	2008	2010	2012	Change 2008–2012	Lifetime use *** (2012 survey)
10th Grade	32.6%	29.4%	26.1%	–19.9%	58.4%
12th Grade	42.5%	44.6%	41.0%	–3.5%	77.0%
Cigarettes					
10th Grade	8.6%	7.4%	7.7%	–10.5%	19.6%
12th Grade	7.5%	10.5%	13.1%	+74.7%	32.6%
Prescription Drugs**					
10th Grade	6.0%	6.6%	4.2%	–30.0%	10.6%
12th Grade	7.4%	8.3%	9.9%	+33.8%	21.2%
Marijuana					
10th Grade	16.4%	17.4%	20.0%	+22.0%	32.1%
12th Grade	20.5%	25.7%	30.8%	+50.2%	47.0%

Source: Tompkins County Department of Youth Services. Bi-annual Communities that Care® Youth Survey 2012, all Tompkins County districts. Available at <http://www.healthyouth.org/publications.php>.

*Used at least once in the last 30 days **Non-medical use ***Ever used/tried in lifetime

Table 17– Student mental health indicators, Tompkins County, 2012.

County	Middle School Students	High School Students
Sometimes I think life isn't worth it	18%	24%
At times I think I'm no good at all	28%	33%
I think I'm a failure	14%	17%
In the past year, I felt sad or depressed most days	26%	30%

Source: Tompkins County Department of Youth Services. Bi-annual Communities that Care® Youth Survey 2012, all Tompkins County districts.

Summary of Assets and Resources

Healthcare Delivery in Tompkins County

Tompkins County Health Department (TCHD) is a full service health department comprised of the Divisions of Environmental Health, Community Health and Children with Special Health Care Needs. Its mission: To strive to achieve a healthy community by protecting, and promoting public health through education, training, advocacy, and the provision of services.

TCHD provides pre- and post-natal care through the Medicaid Obstetrical and Maternal Services (MOMS) program and through pre- and post- natal home visits for at risk families. The Supplemental Nutrition Program for Women Infants and Children (WIC) is a federally funded program provided by TCHD. WIC improves the health status of eligible women, infants and children (up to five years) through the provision of checks to purchase nutritious foods, nutrition and health education, breastfeeding promotion and support and referrals to local health and human service agencies.

The Children with Special Health Care Needs Division serves children who have or are at risk for chronic, physical, and developmental, behavioral or emotional conditions and who require a broader scope of health and related services to reach their fullest potential.

The Department provides childhood immunizations to children without health insurance, flu immunizations to targeted populations and the general public. Rabies post – exposure immunizations are also provided to the community. Communicable disease surveillance and case management, tuberculosis, contact investigation and treatment and anonymous HIV counseling and testing are essential programs. The Environmental Health Division along with its other educational and regulatory programs provides the Healthy Neighborhoods Program (HNP) to targeted areas. The HNP goals include preventing indoor air pollution, residential fire deaths, lead poisoning and asthma hospitalizations.

The Health Promotion Program (HPP) focuses on evidence based programs to reduce the risk of chronic disease among Tompkins County residents. This includes the Tobacco Control Program (TCHD is the lead agency). The goals of the program are to denormalize tobacco use and reduce youth initiation through policy and programs. HPP provides the evidence based Diabetes Prevention Program and collaborates with the Human Services Coalition to provide other chronic disease management programs. It also participates in the worksite wellness initiative of the Creating Healthy Places project.

Cayuga Medical Center (CMC) is a 204 bed health care facility affiliated with Roswell Park Cancer Institute, Rochester General Hospital's Heart Institute, Weill Medical College, and Mayo Laboratories. It is the County's only hospital. CMC's 2011 Hospital Community Service Plan indicated that the hospital's primary service area comprises all of Tompkins and Interlaken in Seneca County. Portions of the six surrounding counties make up the secondary service area. Seventy-nine percent of inpatient discharges are Tompkins County

residents and 17% of the residents are from contiguous counties. (SPARCS 2010 Annual Report)

Approximately 225 physicians (3:1 specialists to primary care) serve Tompkins County. Several specialties locally identified to be in short supply include family practice, pulmonology, obstetrics/ gynecology, dermatologists, neurology, vascular surgery, neurosurgery. The NYS Regents Shortage Areas identifies pathology and physical and rehabilitative medicine in addition to the local needs assessment. CMC is listed as a hospital eligible for primary care and non-primary care shortage area designation. Tompkins County's Medicaid-eligible population is designated as a HPSA for primary and dental care.

Ithaca Free Clinic (IFC), a program of the Ithaca Health Alliance is a non-profit organization. It offers free conventional and holistic healthcare for people without insurance. It is staffed by volunteer physicians, herbalists, acupuncturists, nurses and other professionals. As a point in time assessment, the IFC reports that in August 2013, it “provided health care for over 150 people with more than 200 visits, saving patients (and the community) more than \$14,000 that they couldn't afford otherwise.”

Colleges - Cornell University (Gannett Health Services) and Ithaca College (Hammond Health Center) provide primary care and counseling services for their student populations; Nurse Practitioners provide services to Tompkins-Cortland Community College students.

Other Providers - *Hospicare and Palliative Care Services* provides services in their six – bed residence, at the hospital or in patient homes. *Visiting Nurses Association* is the County's only Certified Home Health Agency. There are six active licensed home health agencies. *Franziska Racker Center*, serves children and adults with a broad range of special health and mental health needs. *Planned Parenthood of the Southern Finger Lakes* provides family health planning services, sexually transmitted infection screening and treatment and gynecological care. *The Cancer Resource Center of the Finger Lakes* provides support for people living with or affected by cancer.

Behavioral Health Services - are provided by the Mental Health Clinic of Tompkins County, Family & Children's Services, Lakeview Mental Health Services, Cayuga Addiction Recovery Services, the Alcohol and Drug Council, Mental Health Association, and private therapists. Collaborative Solutions Network and Mental Health Connect at the Racker Center guide parents, educators, providers, and youth in identifying appropriate psychosocial services.

Tompkins Health Network (THN) The mission of the Tompkins Health Network (THN) is to improve the health of Tompkins County residents by increasing access to quality health care services, promoting the efficiency of health services, and creating an environment to support healthy lifestyles. To accomplish this, the THN is proactive and collaboratively plans and implements activities and projects involving local health care providers, payers, community leaders and consumers. The THN operates as a program of the Health Planning Council (HPC) and under the umbrella of the non-profit Human Services Coalition of Tompkins County.

Community Agencies, Resources, Initiatives

Ithaca and Tompkins County is a resourceful and well educated community that is characterized by its commitment to seeking solutions to social needs and injustices. It also seeks to enhance and build on existing resources in the environment and in the community infrastructure. Local government and agencies are committed to diversity and inclusion in the work force and in program implementation. The cultural and artistic landscape offers a wide range of opportunities for participation and enjoyment in music, theater, art, dance, and intellectual programming. Seasonal community festivals and celebrations promote local agencies, artists, local food, agriculture, and music. The County is rich in geographical diversity as well, known for its gorges, numerous hiking trails including the Cayuga Waterfront Trail. There are numerous hiking and outdoor groups available to local residents. Cayuga Lake and the water activities it supports are big attractions. The Tompkins County Chamber of Commerce reports that 500,000 people visit the area annually.

Tompkins County has a wide range of activities and programming in the City of Ithaca, towns and villages, schools, and community centers that focus on promoting healthy individuals across the age spectrum and healthy communities. The perennial challenge has been for the community and interested organizations that want to refer clients to community resources, to be knowledgeable of program availability.

Included below are organizations that specifically focus on chronic disease and obesity prevention, healthy eating, and physical activity, and have a wide reach within the County.

Cornell Cooperative Extension of Tompkins County offers a wide range of programming that includes agricultural programming, consumer issues, nutrition, healthy families, and environmental issues. Those that address nutrition and obesity prevention follow.

- *Cooking Matters*[™] is an interactive guided supermarket tour offered monthly by CCE and WIC staff for WIC participants at Community Pride, a locally owned community supermarket.
- Breastfeeding classes — six week classes provided by CCE lactation consultants on an ongoing basis. Classes are free for women eligible for WIC, Medicaid, or Food Stamps.
- Cooking and Nutrition classes for families, youth, and seniors are free for income eligible participants and are offered at community sites and in individual homes.
- Promotion of local foods including Farmers' Markets in the City of Ithaca, outlying locations, and Community Supported Agriculture (CSA) shares as a means to support the local economy.

Cayuga Center for Healthy Living is a program of the Cayuga Medical Center.

- *KidFit* a program for obese and overweight children between the ages of 8 and 14 focusing on healthy eating and supervised exercise.
- Diabetes Education Program — An American Diabetes Association program covering nutrition, medication management, exercise and other concerns.

- Healthy Living 101 — a six-week program covering nutrition, exercise and stress management.
- Medically supervised exercise program.
- Smoking cessation.

Creating Healthy Places (CHP)

- The Human Services Coalition is the lead agency. This five-year grant focuses on access to healthy food and creating opportunities for physical activity. The Town of Dryden and the Northeast Neighborhood in the City of Ithaca have been the focus areas. The worksite component of this grant encourages worksites to adopt policies that would sustain individual healthy behaviors. The Friends of Stewart Park, a public/private partnership, was initiated with the help of CHP staff and funding. This partnership seeks to encourage increased use of the park through restoration of historic buildings and a new all accessible playground.

Process and methods used to conduct the assessment

Tompkins County Health Planning Council and Tompkins Health Network

Tompkins County Health Department engaged the Advisory Board of the Health Planning Council (HPC) whose members are also members of the Tompkins Health Network (THN), Tompkins County's rural health network, early in the process of the CHA development. HPC and THN are programs of the Tompkins County Human Services Coalition. The Public Health Director and the Director of the Health Promotion Program are board members. The Health Department has a long standing relationship with the HPC. The organizations have collaborated on many community health related projects including the 2010–2013 Prevention Agenda and Community Health Assessment.

Members of the Board include representatives from the Long Term Care/Adult Protective Services at the Department of Social Services, Lifelong (a senior citizens' center), Ithaca Free Clinic, Department of Emergency Response, County Office for the Aging, Kendal Continuing Care and Retirement Care Community, Excellus Health Plan, Inc., Community Health Foundation of Western and Central New York, Ithaca College Gerontology Institute, Hospicare and Palliative Care Services of Tompkins County, Community Health and Home Care, Cayuga Medical Center, Finger Lakes Independent Center, Ithaca City School District, and Tompkins County Health and Mental Health Departments. Monthly board meetings are open to the public and community members and agency and healthcare professionals regularly attend the speaker presentations that are part of the program.

Discussion in anticipation of the 2013–2017 CHA and CHIP began at HPC board meetings in 2012, including a review of accomplishments related to the 2010–2013 Prevention Agenda. At the March 2013 board meeting, TCHD led a discussion of HPC board members to identify community health priorities. Board members were asked to prioritize areas based on their professional knowledge and experience in the community. Mental Health and Substance Abuse emerged as an important and multifaceted concern. The issues affect people across the lifespan, impact the management of chronic diseases, affect emergency management services and emergency department visits. Appropriate services and placement of people with mental health issues are problems that are community responsibilities. Other concerns fell into socioeconomic areas and various other social determinants of health.

Community Survey

TCHD released an online survey in May 2013 to solicit input from various community sectors and the public at large to identify the health challenges in the County. The five-question survey asked respondents to prioritize the five New York State Prevention Priorities for Tompkins County. Responses to open ended questions explained reasons for their first two priority choices. Targeted requests to take the survey were made to County

departments, community organizations, Health Planning Council board, educators, health care professionals, Immunization Coalition, Friends of Stewart Park, Cornell Wellness, Chamber of Commerce members, local legislators and the Board of Health. A media release resulted in coverage by the *Ithaca Journal*, *Tompkins Weekly* and an interview with the Public Health Director on WHCU radio newscast. A notice was sent out twice to the Human Services Coalition listserv (2,500 subscribers).

There were 266 responses to the survey; the greatest response at 35% was from those who identified as a community member. Other sectors were healthcare, business, education, non-profit organizations, government and “other.” The results for four of the priorities were equivocal. The prevention of HIV, STD, vaccine preventable diseases and health care infections was not chosen as a focus for community effort.

A review of the open ended responses indicated that concerns tended to focus on prevention of chronic disease and its impact on the largest number of people and cost of chronic diseases. Promoting healthy women, children, and infants revolved around the importance of healthy start and the fact that children were the future. Specific focus areas in this category were similar to prevention of chronic disease — nutrition and healthy lifestyles. Mental Health and Substance Abuse issues — the standout in the five priority areas — centered on inadequate services, funding and access and implications that mental health and substance abuse have on the other Prevention Priorities. A presentation on the results of the community survey was made to the Health Planning Council at its monthly board meeting on June 10, 2013. This presentation also served as a progress report and update on the Community Health Assessment.

Based on survey results and the HPC March 11 discussion and interest, Promoting Mental Health and Preventing Substance Abuse stood out as a community priority.

Tompkins County Legislature and Tompkins County Board of Health

On August 27, TCHD convened Tompkins County Legislators and members of the Board of Health to identify the areas that, in their opinion should be the focus of Tompkins County to improve the health of the community. Twenty four focus areas were drawn from the three remaining Prevention Priorities: Prevention of Chronic Disease, Healthy and Safe Environments, and Healthy Women and Children. The prevention of obesity in children and adults as well as improving the design and maintenance of the built environment were strong favorites among the group.

Conclusion

Recommendations

Analysis of health indicators, local data, and community and stakeholder input resulted in two health priority recommendations. Mental Health and Substance Abuse emerged as an important and multifaceted concern among many individuals and groups. Opportunities to engage in healthy lifestyle activities for adults and children particularly young families, to prevent chronic disease and reduce the prevalence of obesity were highlighted as important for community engagement. As a result, Tompkins County Health Department recommended Promoting Mental Health and Preventing Substance Abuse and Preventing Chronic Disease as Tompkins County’s two health priorities.

In Summary

The Tompkins County Community Health Assessment will be continually updated as new information is released, as new health issues emerge and as the community identifies and evaluates its priorities. The information contained here includes data and information on community resources and gaps related mainly to the priorities identified through analysis and community input. For more information on other health indicators for Tompkins County, go to:

http://www.health.ny.gov/prevention/prevention_agenda/2013-2017/indicators/2013/tompkins.htm

The Tompkins County 2013–2017 Community Health Assessment (CHA) and Community Health Improvement Plan (CHIP) will be distributed to the Tompkins County Legislature, the Tompkins County Board of Health and the Tompkins County Health Planning Council which served as the project’s steering committee.

The CHA and CHIP will be posted on the Tompkins County Health Department’s website and community partner organizations will be invited to post the documents or links to their websites. A press release will be issued to the local media and to the Human Services Coalition listserv.

TREND CHARTS

Figure 1— % Children in poverty, 2001–2010

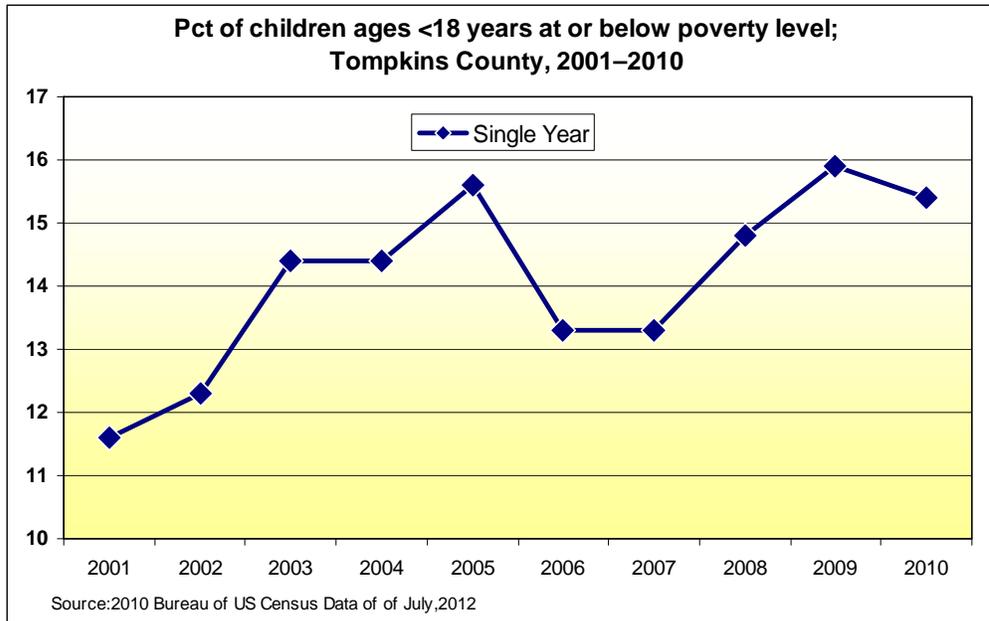


Figure 2— Asthma hospital discharge rate, 3-yr averages over 10 years

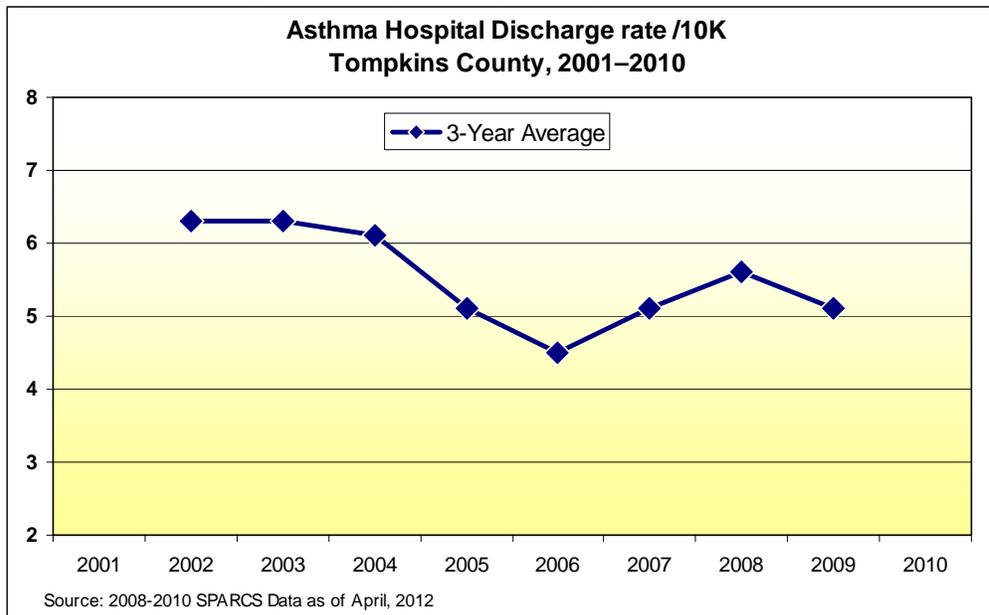


Figure 3— Asthma emergency department visit rate, 3-yr averages over 10 years

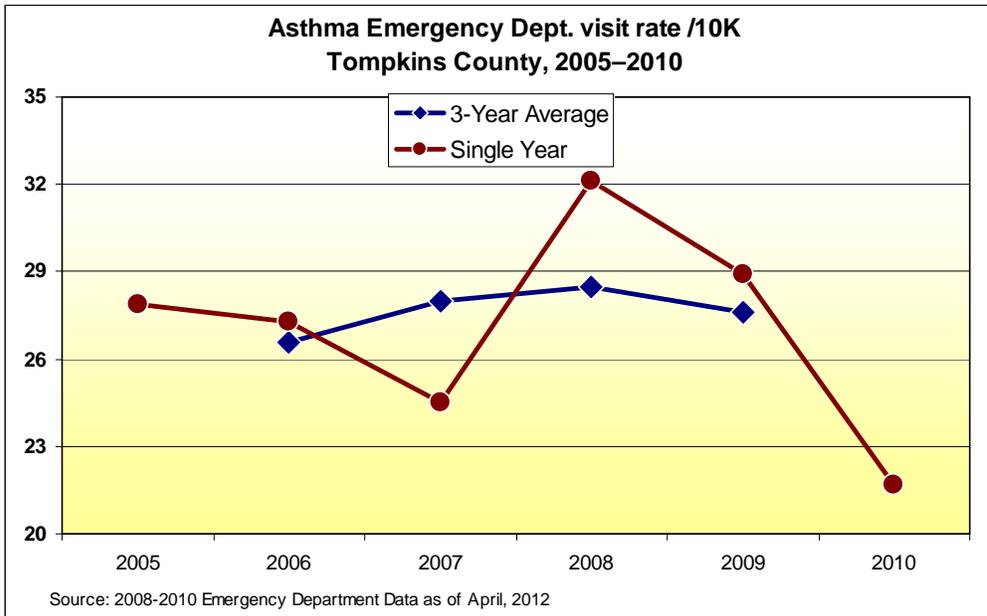


Figure 4— Asthma Emergency Department Visits by ZIP Code (Rate/10K)

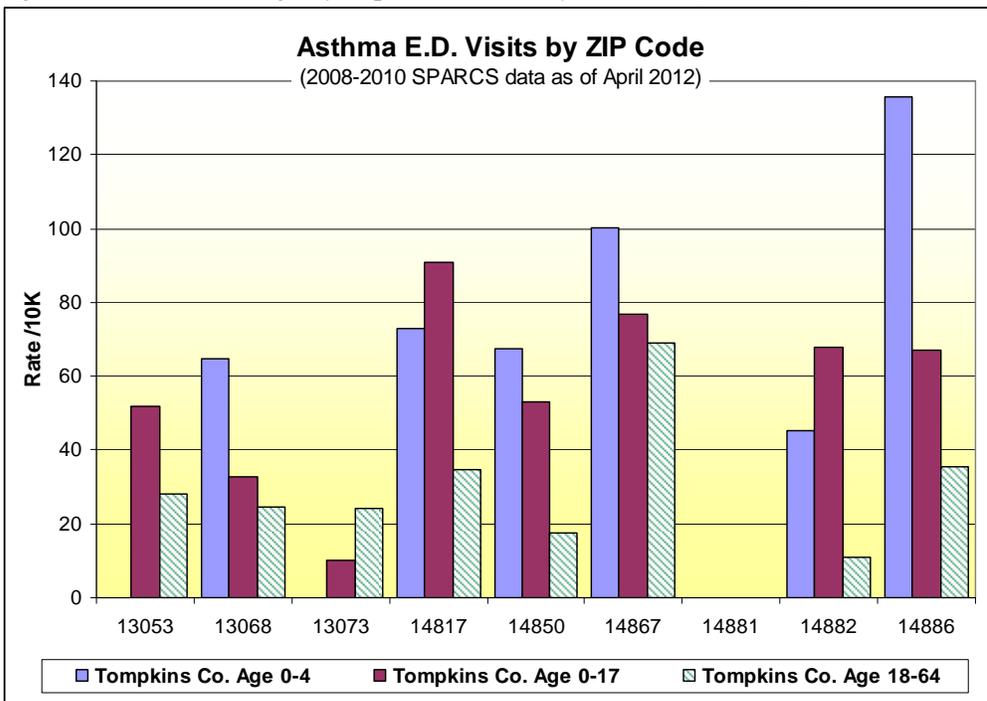


Figure 5— Diabetes hospitalization rate as primary diagnosis, age-adjusted 3-yr averages over 10 years

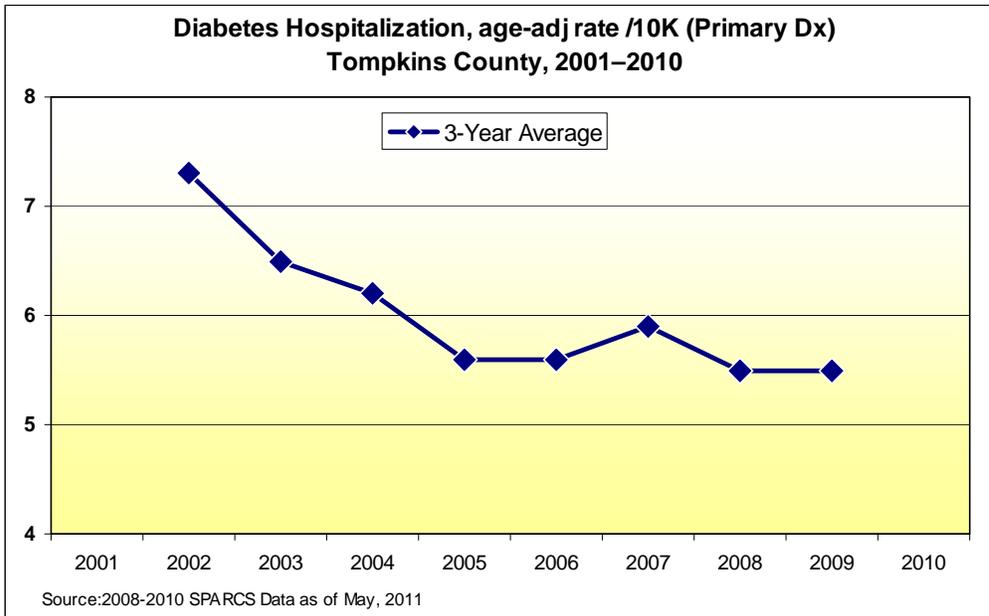


Figure 6— Diabetes hospitalization rate for any diagnosis, age-adjusted 3-yr averages over 10 years

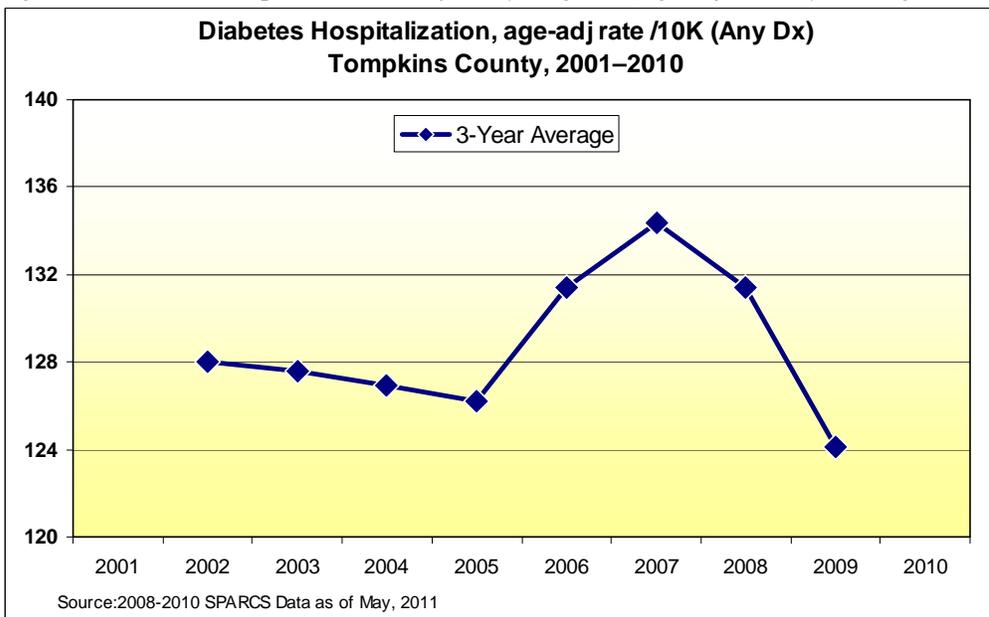


Figure 7—% Women in WIC who were pre-pregnancy obese, single year and 3-year averages 2006–10

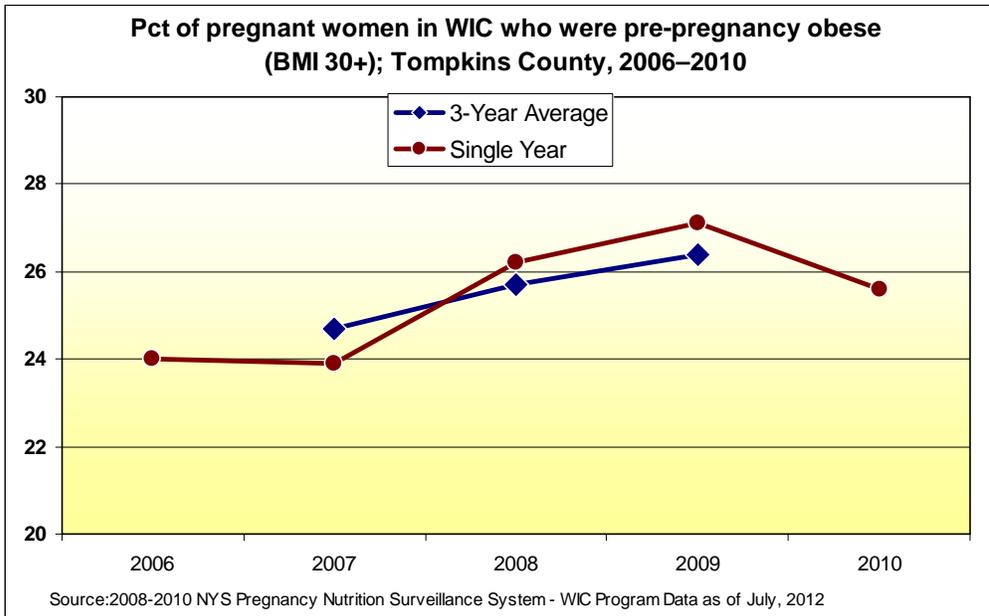


Figure 8—% Children in WIC ages 2–4 who are obese, 3-yr averages over 10 years

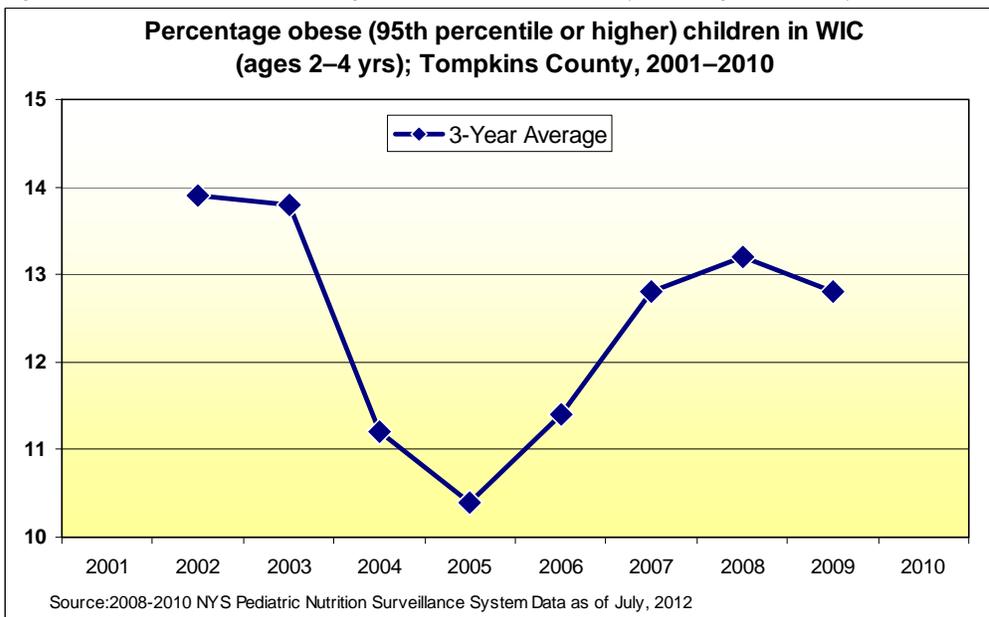


Figure 9— % Mothers in WIC who breastfed at least 6 months, 3-yr averages over 10 years

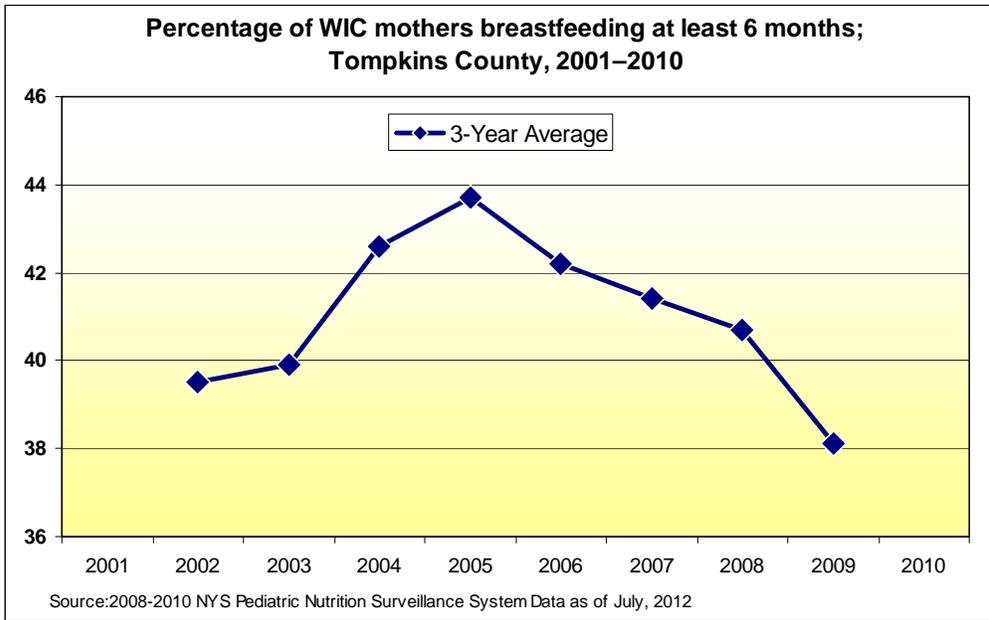


Figure 10— Colon & Rectum Cancer Mortality rates, age-adjusted 3-yr averages over 10 years

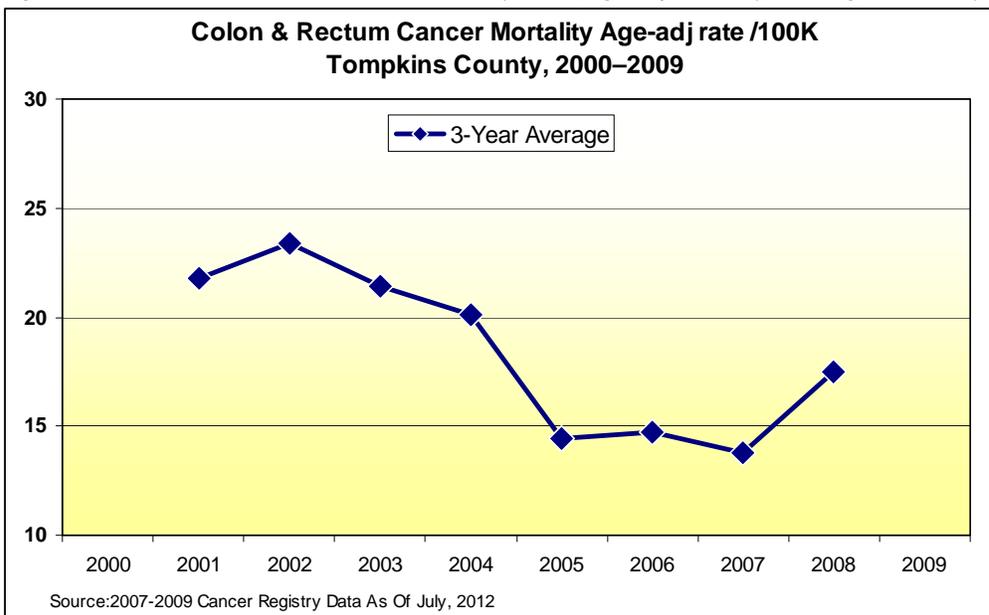


Figure 11— Female Breast Cancer Mortality rates, age-adjusted 3-yr averages over 10 years

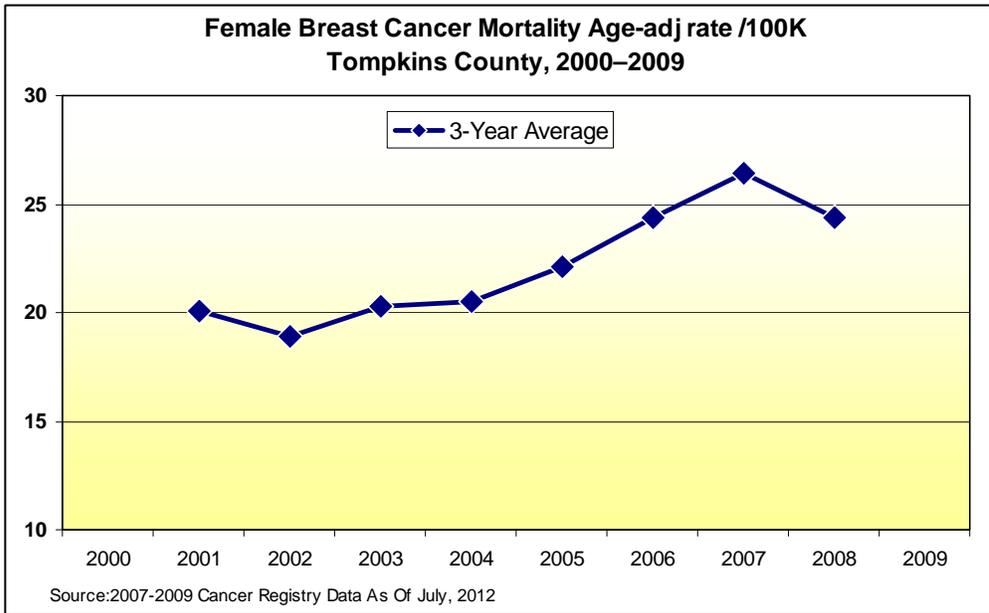


Figure 12— Ovarian Cancer Incidence rates, age-adjusted 3-yr averages over 10 years

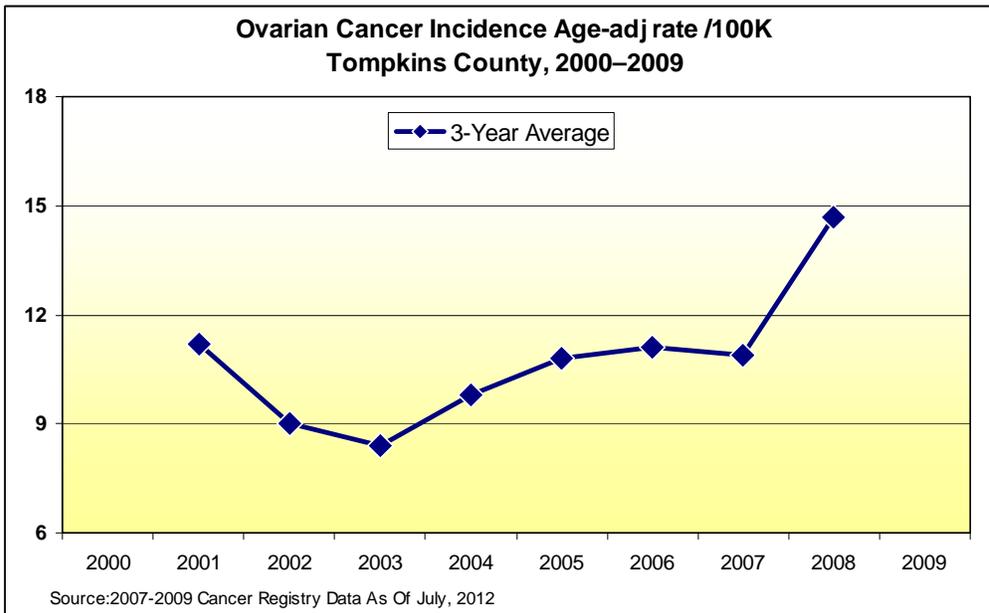


Figure 13— Prostate Cancer Incidence rates, age-adjusted 3-yr averages over 10 years

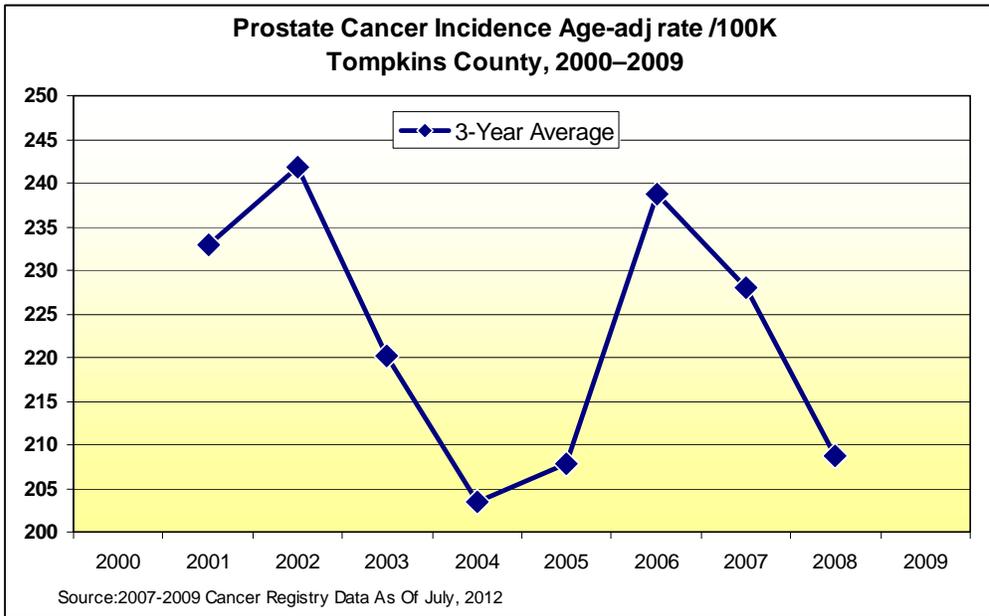


Figure 14— Prostate Cancer Mortality rates, age-adjusted 3-yr averages over 10 years

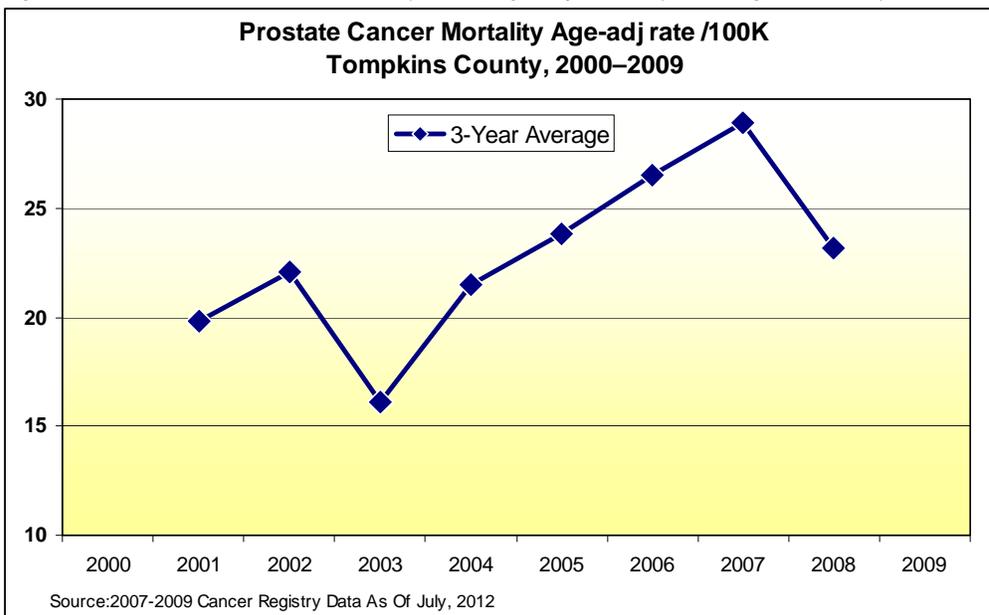


Figure 15— Drug-related hospitalization rates, age-adjusted 3-yr averages over 10 years

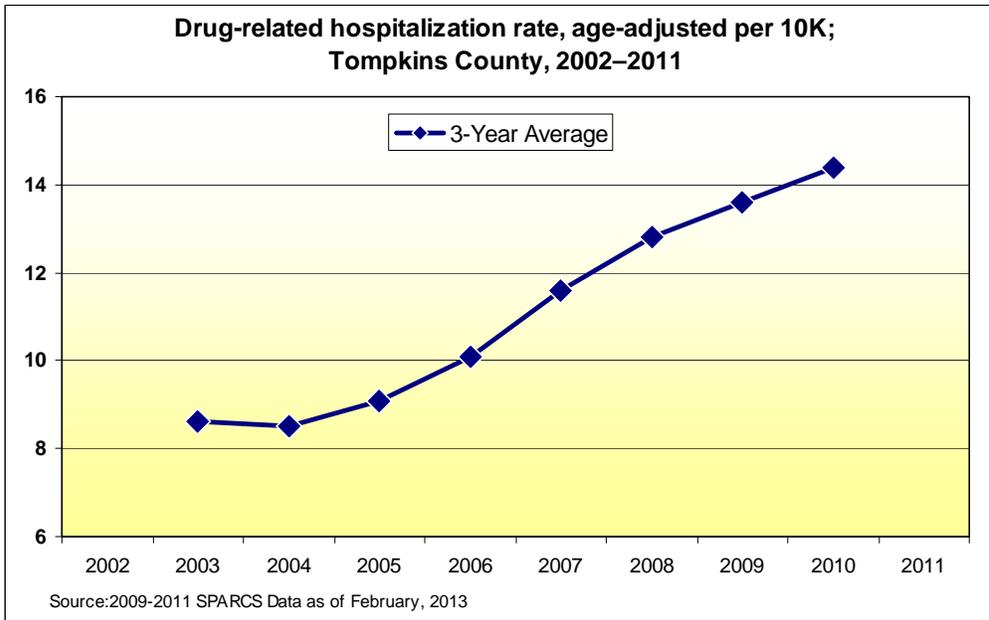
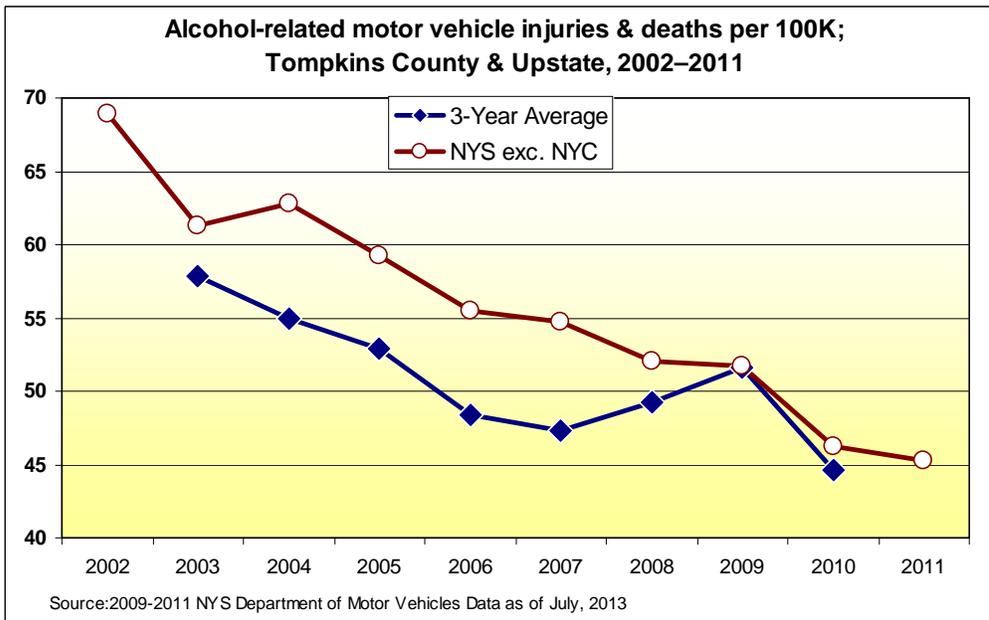


Figure 16— Alcohol-related MV injuries & deaths /100K, 3-yr average & single year Upstate over 10 years



Endnotes

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- ¹ University of Wisconsin Prevention Health Institute, County Health Rankings and Roadmaps. 2013 Rankings for New York. www.countyhealthrankings.org/new-york. Accessed Aug. 2013.
 - ² 2010 U.S. Census population, accessed at http://www.health.ny.gov/statistics/vital_statistics/2011/.
 - ³ Total 2011, Ithaca campus. <http://www.cornell.edu/about/facts/stats.cfm>. Accessed 9/11/2013
 - ⁴ Total 2011. <http://www.ithaca.edu/ir/docs/stenrl/totalenrl.pdf>. Accessed 9/11/2013
 - ⁵ Concurrent Enrollment, 2011–12 academic year. http://www.tc3.edu/docs/bot/BOTCompletePacket2013_02_21.pdf. Accessed 9/11/2013
 - ⁶ U.S. Census, DP05: 2007–2011 American Community Survey 5-year estimates.
 - ⁷ Tompkins County Office For the Aging, go to <http://www.tompkinscountyny.gov/cofa/surveys/facts> to access http://www.tompkinscountyny.gov/files/cofa/Surveys_Facts/documents/2012%20Needs%20Assessment%20Executive%20Summary%2011.7.12.pd.pdf
 - ⁸ U.S. Census, DP02: 2007–2011 American Community Survey 5-year estimates.
 - ⁹ U.S. Census, DP03: 2007–2011 American Community Survey 5-year estimates.
 - ¹⁰ DP02: 2007–2011 5-year
 - ¹¹ DP02: 2007–2011 5-year
 - ¹² DP05: 2007–2011 5-year
 - ¹³ DP02: 2007–2011 5-year
 - ¹⁴ DP03: 2007–2011 5-year
 - ¹⁵ Bishaw, A. 2013. Examining the effect of off-campus college students on poverty rates. <http://www.census.gov/hhes/www/poverty/publications/bishaw.pdf>. Accessed July 2013.
 - ¹⁶ DP03
 - ¹⁷ NYS BRFSS 2008–2009. Table 10d: Adults with regular health care provider, Age-Adjusted.
 - ¹⁸ NYS Community Health Indicator Reports, 2010 U.S. Census data. <http://www.health.ny.gov/statistics/chac/general/g102.htm>.
 - ¹⁹ University of Wisconsin Prevention Health Institute, County Health Rankings and Roadmaps. 2013 Rankings for New York. www.countyhealthrankings.org/new-york. Accessed Aug. 2013.
 - ²⁰ NYSDOH populations as of 2012. (Source:2010 National Center for Health Statistics Population Data)
 - ²¹ U.S. Census, DP03: 2007–2011 American Community Survey 5-year estimates.
 - ²² Available in Health & Human Services Committee agenda packets, at <http://tompkinscountyny.igm2.com/Citizens/Default.aspx>
 - ²³ Tompkins County Youth Services Department, 2012. The State of Tompkins County Youth.
 - ²⁴ Supplemental nutrition program for Women, Infants, and Children
 - ²⁵ Source:2008-2010 NYS Pregnancy Nutrition Surveillance System - WIC Program Data as of July, 2012 and 2008-2010 Vital Statistics data as of February 2012
 - ²⁶ Source:2008-2010 NYS Pregnancy Nutrition Surveillance System - WIC Program Data as of July, 2012
 - ²⁷ Source:2008-2010 NYS Pregnancy Nutrition Surveillance System - WIC Program Data as of July, 2012
 - ²⁸ 2010-12 Student Weight Status Category Reporting System Data as of November, 2012
 - ²⁹ 2008-2010 Student Weight Status Category Reporting System Data as of July, 2012
 - ³⁰ Source: NYSDOH County Indicators by Race/Ethnicity. <http://www.health.ny.gov/statistics/community/minority/county/tompkins.htm>. Accessed 10/4/13.
 - ³¹ NYSDOH Indicators for tracking public health priority areas, NYS, 2013–2017. Accessed at http://www.health.ny.gov/prevention/prevention_agenda/2013-2017/indicators/2013/nys.htm
 - ³² <http://www.healthyouth.org/publications.php>