



**University at Buffalo**  
*The State University of New York*  
School of Public Health and Health Professions

# POPULATION HEALTH OBSERVATORY



*“Dedicated to improving health through population based research.”*

---

## ERIE COUNTY COMMUNITY HEALTH ASSESSMENT 2004 CANCER RELATED RESULTS

---

August 2004

Funded By:  
Erie County Health Department

# Acknowledgement

## Primary Study Investigator

Saverio Stranges, MD, PhD  
Department of Social and Preventive Medicine

## Contributors

### Department of Biostatistics

Wei Tan, MA  
Austin Miller, MA  
Randy Carter, PhD  
Terry Mashtare, MA

### School of Public Health and Health Professions

Maurizio Trevisan, MD

### Erie County Health Department

Anthony Billittier IV, MD,  
Commissioner, Erie County  
Health Department

# All Cancer Death Rates

## 140-208 (ICD 9); C00-C97 (ICD 10)

### Summary

The overall age-adjusted death rates of cancer, the second leading cause of death in the United States, have been slightly declined in the period 1979-2000 in Erie County in both sexes and racial groups, at a greater extent among males than females.

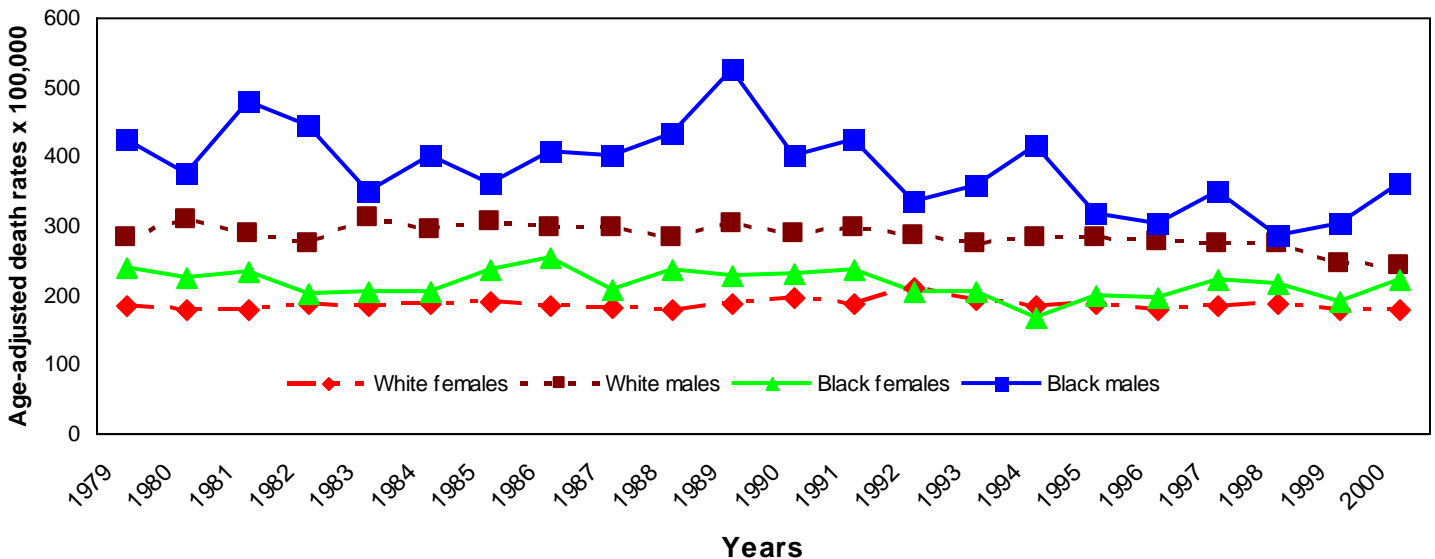
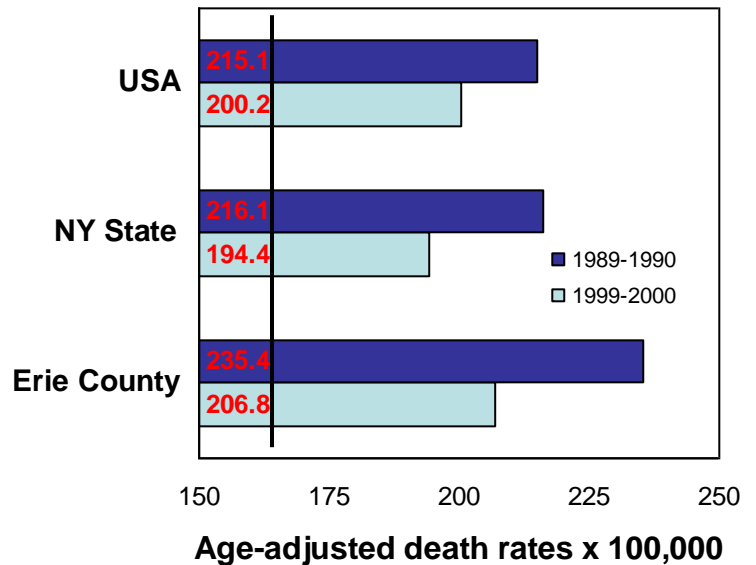
In the periods 1989-1990 and 1999-2000, the overall rates of Erie County have been consistently higher than both national and New York State figures. However, county, state and national rates appear far from the target of Healthy People 2010.

### Objectives

#### HP 2010

Reduce the overall cancer death rate to no more than 159.9 per 100,000 population (age-adjusted to the year 2000 standard population)

#### HP2010 Goal



# Lung Cancer Death Rates

## 162 (ICD 9); C33-C34 (ICD 10)

### Summary

The age-adjusted death rates of lung cancer, the most common cause of cancer death in both sexes in the United States, have been characterized by an increasing trend among females and a slight decline among males in the period 1979-2000 in Erie County.

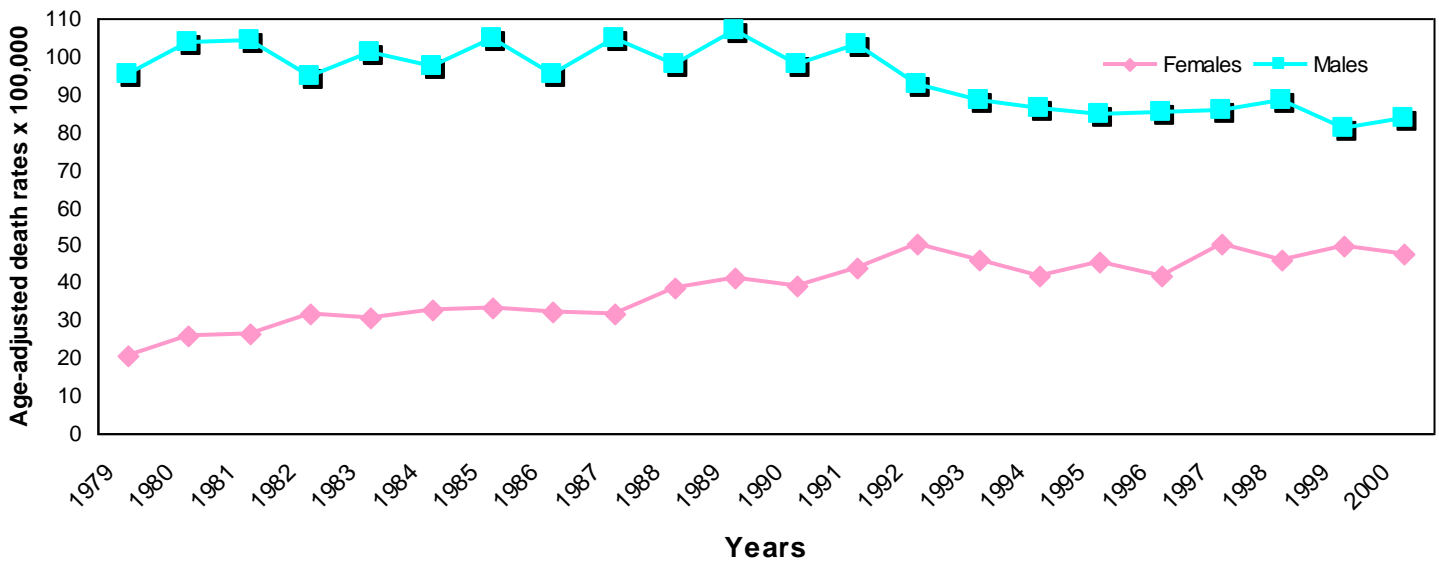
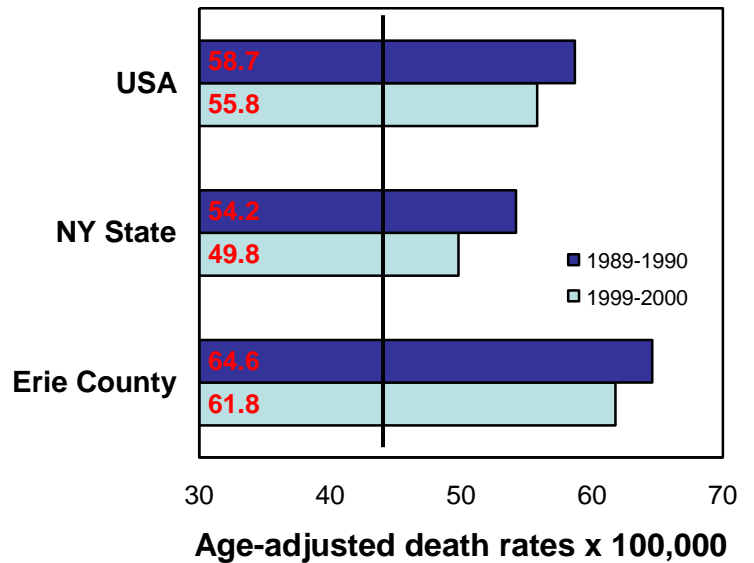
When comparing the overall rates of Erie County with both national and New York State data in the periods 1989-1990 and 1999-2000, they are consistently higher in Erie County. All the levels exceed the target of Healthy People 2010, at a greater extent for Erie County.

### Objectives

#### HP 2010

Reduce lung cancer death rate to no more than 44.9 per 100,000 population (age-adjusted to the year 2000 standard population)

*HP2010 Goal*



# Breast Cancer Death Rates

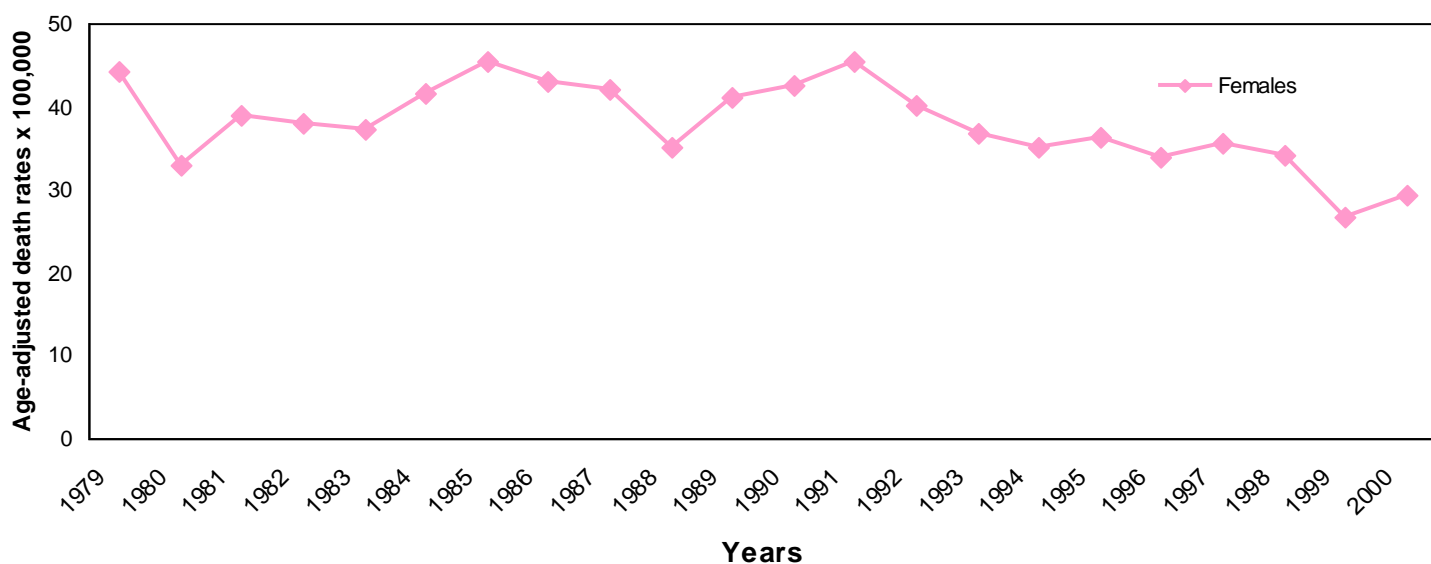
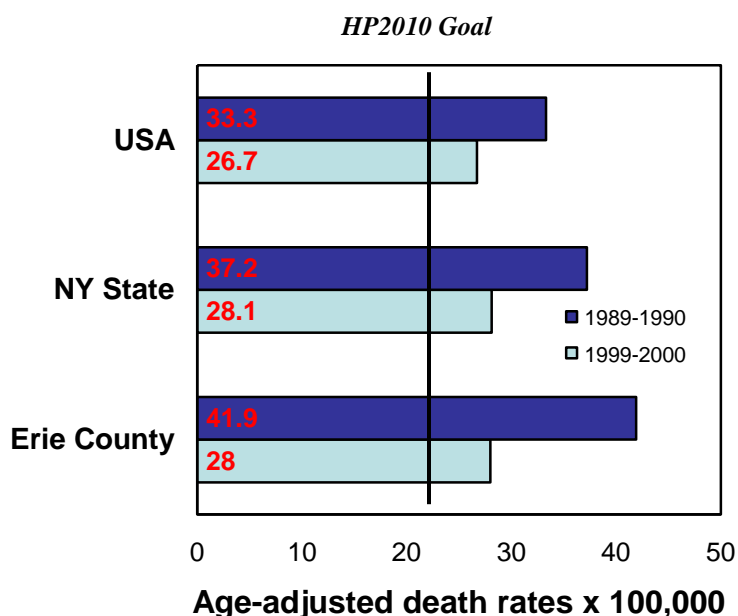
## 174 (ICD 9); C50 (ICD 10)

### Summary

Death rates for breast cancer, the most common cancer among women in the United States, have been characterized by a consistent decline in Erie County in the period 1979-2000.

In comparison with both national and NY State figures, Erie County has been characterized by the highest rates in the period 1989-1990 while there are no substantial differences among the three levels considered in the period 1999-2000. County, state and national rates slightly exceed the target of Healthy People 2010.

**Objectives**  
**HP 2010**  
 Reduce breast cancer death rate to no more than 22.3 per 100,000 females (age-adjusted to the year 2000 standard population)



# Cervical Cancer Death Rates

## 180 (ICD 9); C53 (ICD 10)

### Summary

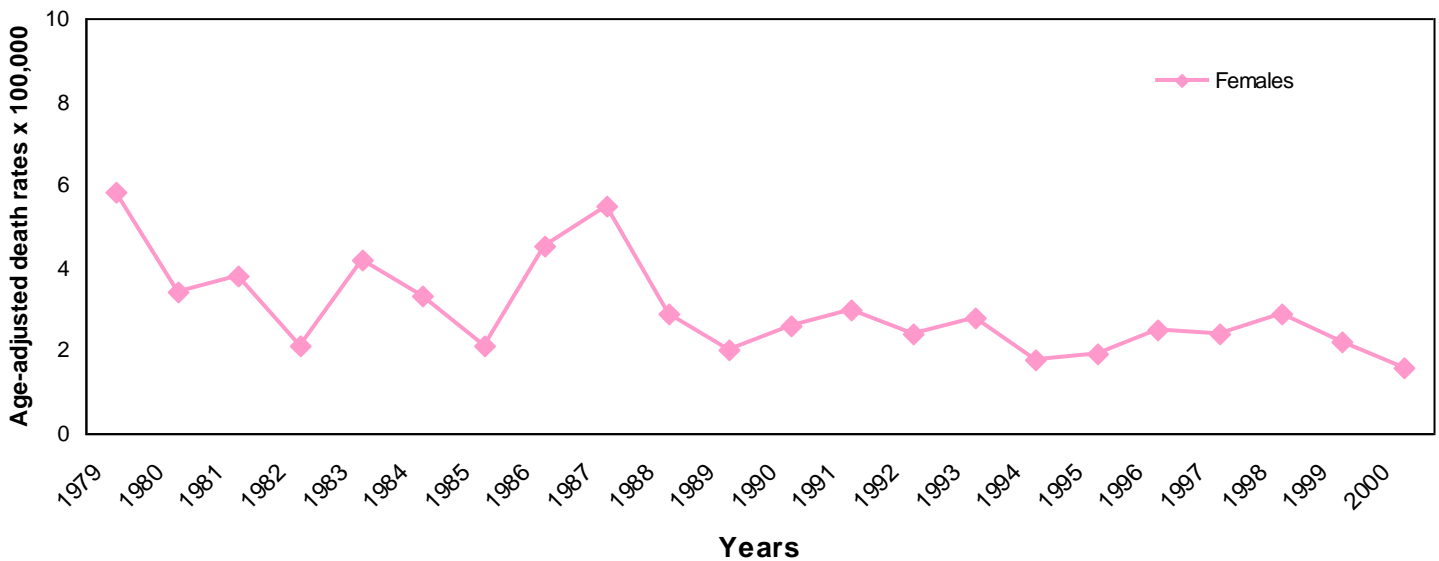
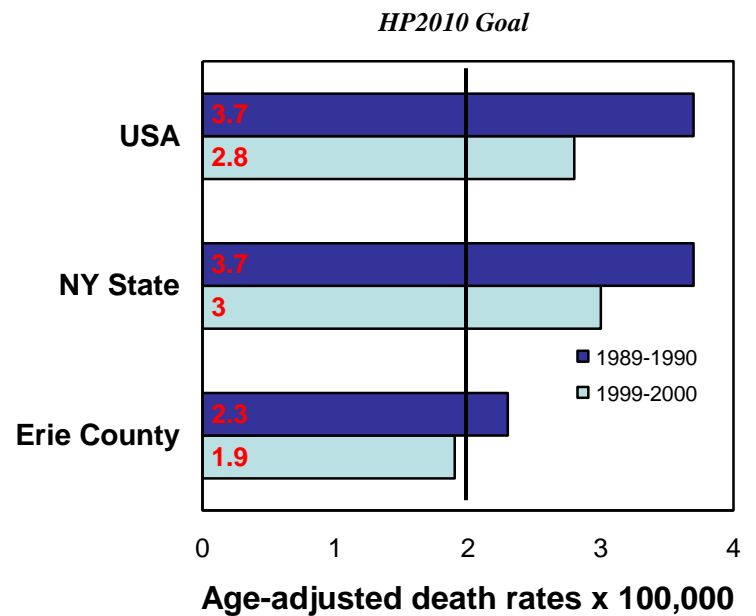
The death rates of cervical cancer have decreased in Erie County in the last two decades.

In the periods 1989-1990 and 1999-2000 death rates in Erie County have been lower than either national or state levels, and in the last period they fall below the Healthy People 2010 objective.

### Objectives

#### HP 2010

Reduce cervical cancer death rate to no more than 2 per 100,000 females (age-adjusted to the year 2000 standard population)



# Prostate Cancer Death Rates

## 185 (ICD 9); C61 (ICD 10)

### Summary

Prostate cancer is the most commonly diagnosed form of cancer in males and the second leading cause of cancer death among males in the United States. Death rates of prostate cancer in Erie County have shown little change in the period 1979-2000.

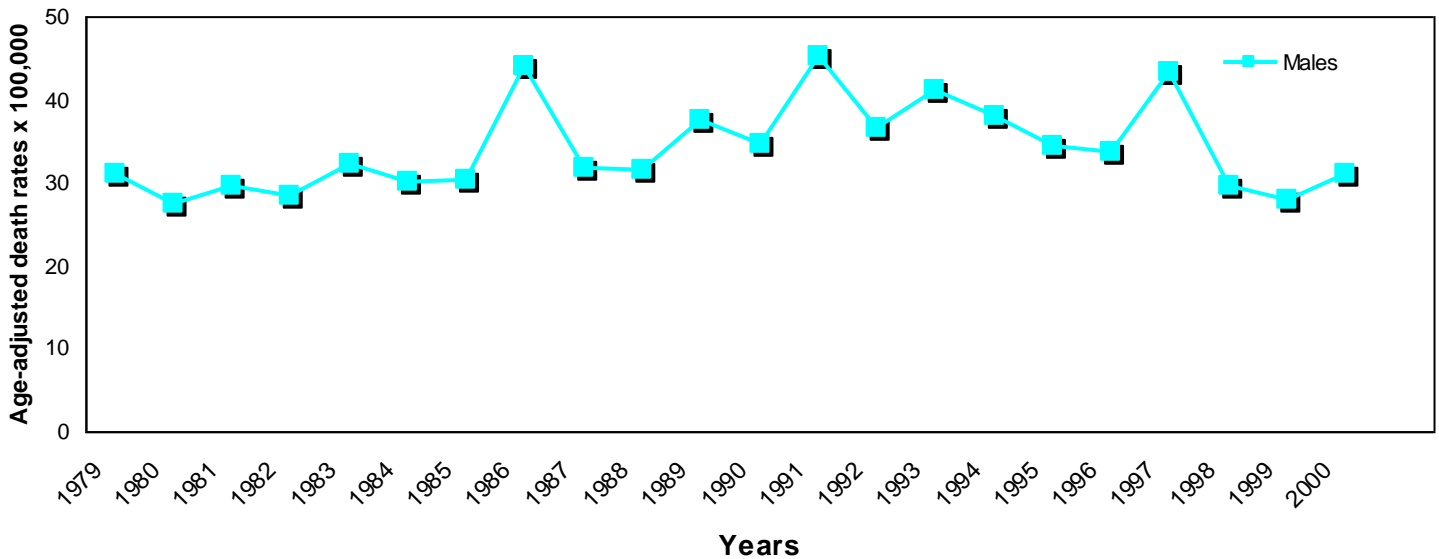
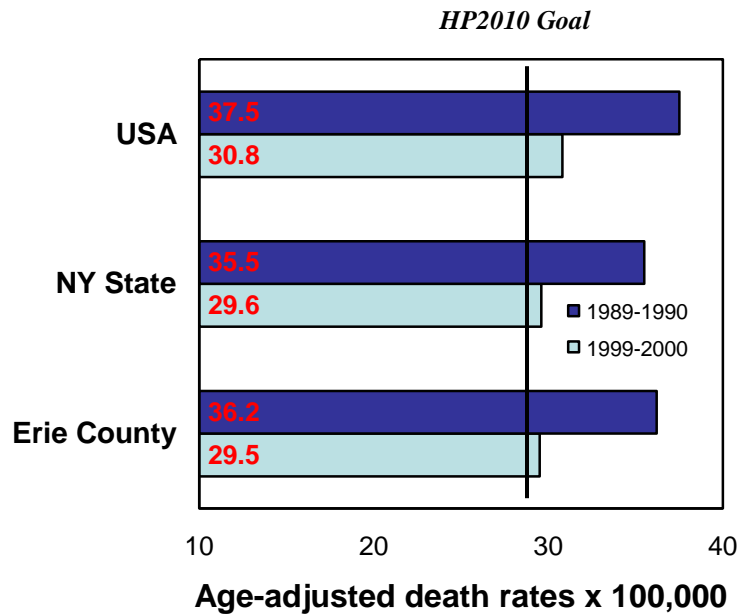
The rates in Erie County have been very similar to the ones of NY State and slightly lower than the national figures in the periods 1989-1990 and 1999-2000.

County, state and national rates are slightly over the target of Healthy People 2010.

### Objectives

#### HP 2010

Reduce prostate cancer death rate to no more than 28.8 per 100,000 males (age-adjusted to the year 2000 standard population)



# Oral Cancer Death Rates (ages 45-74) 140-149 (ICD 9); C00-C14 (ICD 10)

## Summary

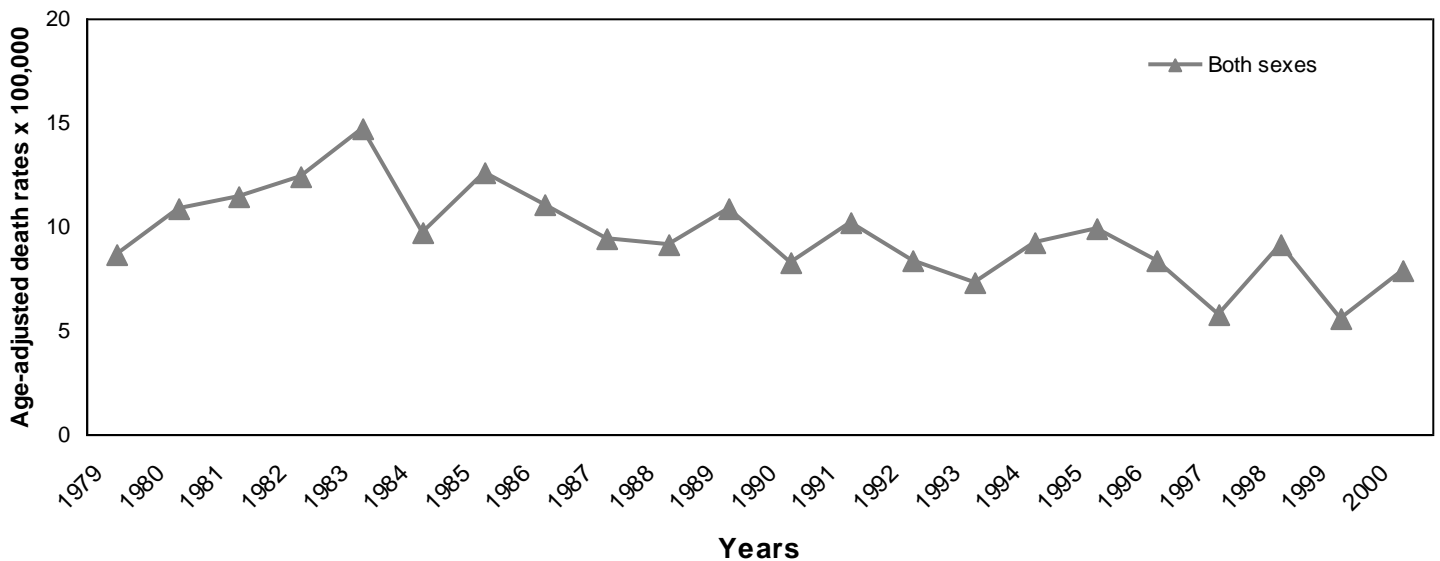
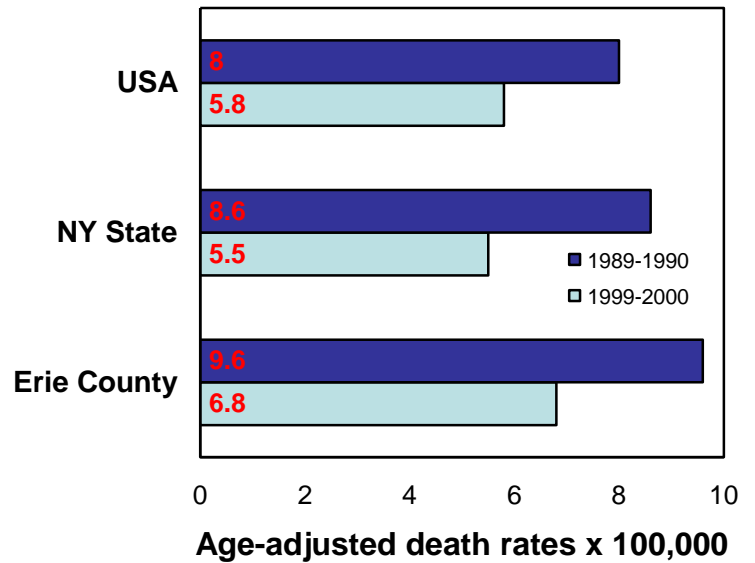
Death rates for oral cancer have been characterized by a slight decline in Erie County in the last two decades, even though the total number of deaths is quite small and changes are of difficult interpretation.

Erie County has shown consistently higher rates than national and state levels in the periods 1989-1990 and 1999-2000.

### Objectives

#### HP 2010

There is no HP 2010 goal for oral cancer death rates





# Lung Cancer Incidence Rates\*

## 162 (ICD 9); C33-C34 (ICD 10)

### Summary

Lung cancer rates for males are consistently higher than for females. Males in Erie County have the highest incidence rates compared to the US and NY State. Within Erie County Black males have the highest incidence rates, followed by White males, White females and Black females. The gap between males and females is much larger for Blacks than for Whites.

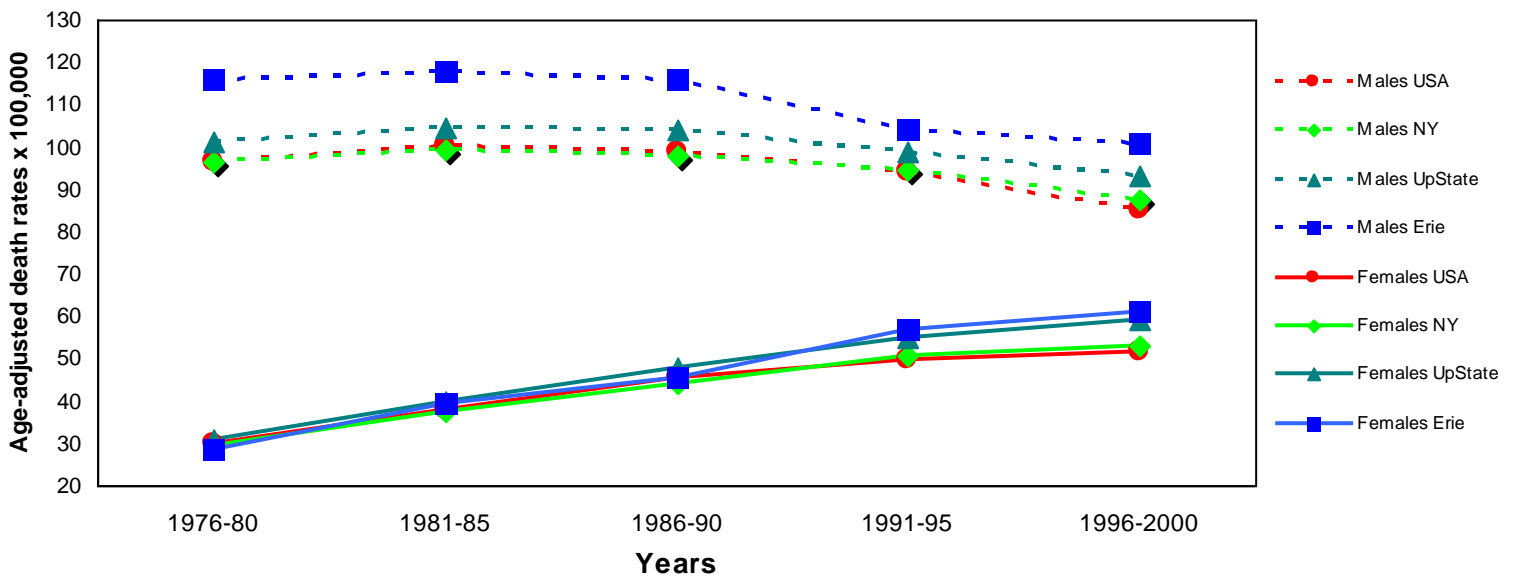
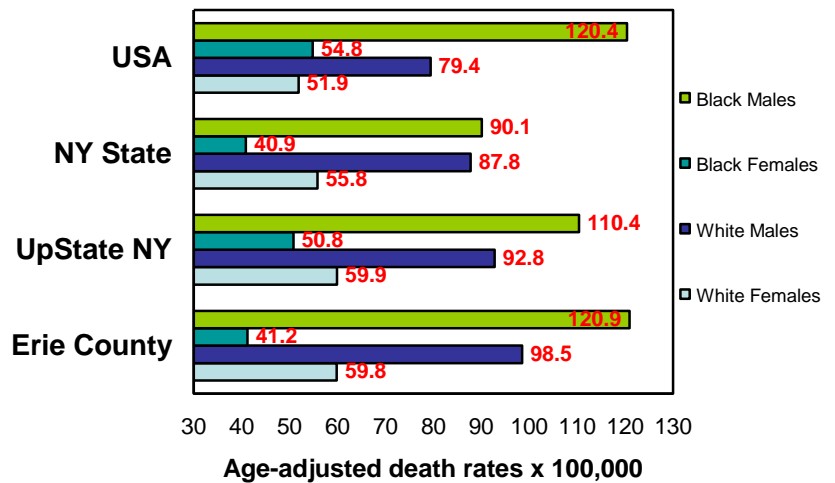
Lung cancer incidence rates have leveled off or declined slightly for males in Erie County. However, rates for females have been increasing steadily since 1976-80. The trends for Erie County were very similar to those for NY State, Upstate NY and the nation as a whole.

### Objectives

#### HP 2010

There is no HP 2010 target for this measure

### Incidence rates by sex and race, 1996-2000



\*Note: Incidence rates are age-adjusted to the 2000 US standard population by 5-year age groups; USA data are from Surveillance, Epidemiology and End Results program (SEER), 12 areas for 1996-2000 and 9 areas for trends.

# Breast Cancer Incidence Rates

## 174 (ICD 9); C50 (ICD 10)

### Summary

White females have a consistently higher rate than Black females regardless of region. There is a greater gap in incidence rates between Black and White females in all regions of NY than in the US as a whole. Rates in Erie County are comparable to those for NY and the US for White Females while the rates for Black females are lower than seen nationally.

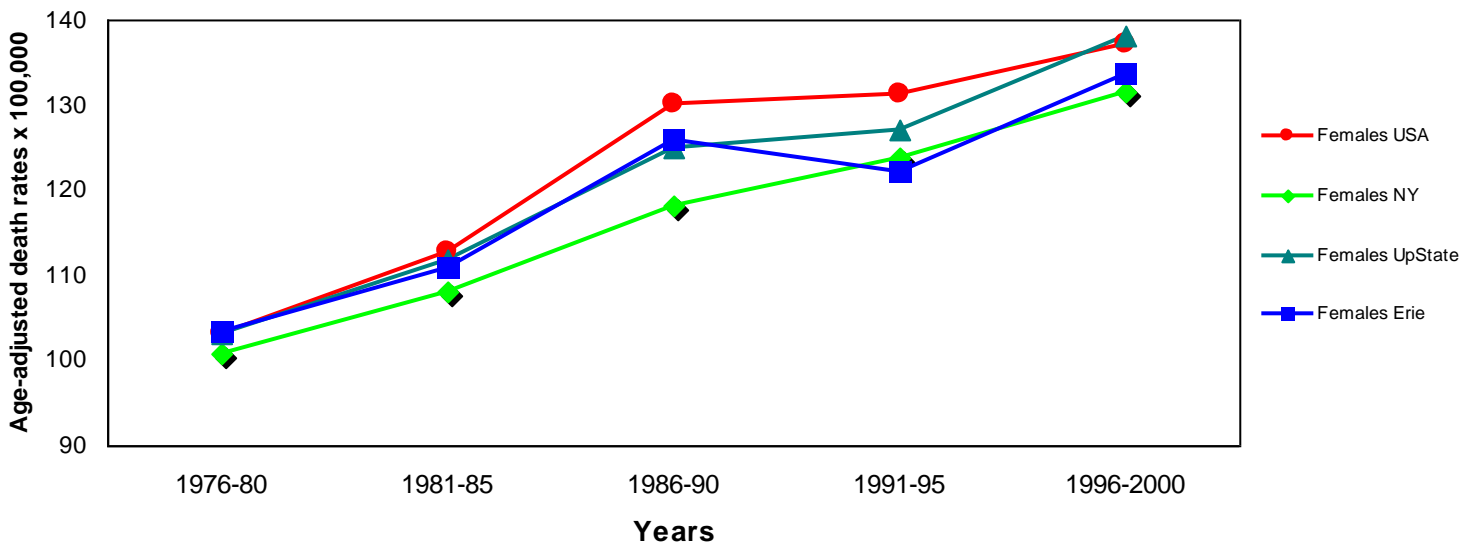
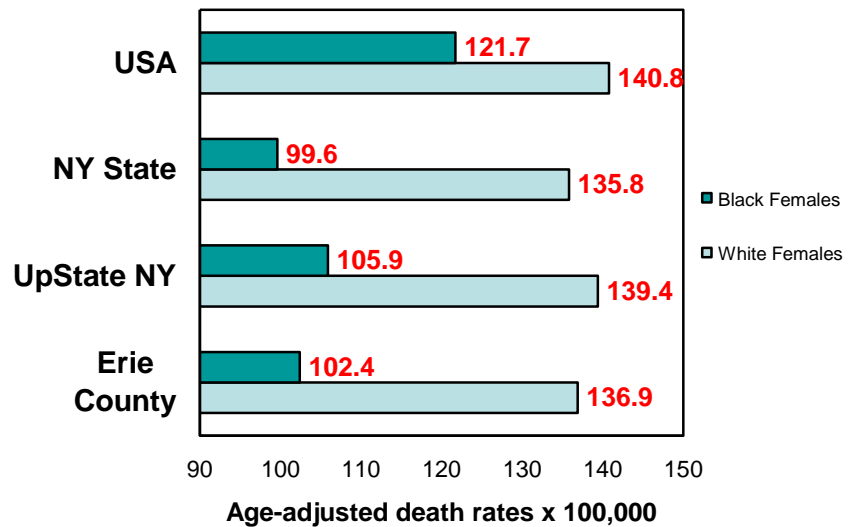
Overall incidence rates have been increasing steadily since the earliest period of 1976-80. The rates for Erie County are only slightly lower than those for Upstate NY and the US.

### Objectives

#### HP 2010

There is no HP 2010 target for this measure

### Incidence rates by sex and race, 1996-2000



\*Note: Incidence rates are age-adjusted to the 2000 US standard population by 5-year age groups; USA data are from Surveillance, Epidemiology and End Results program (SEER), 12 areas for 1996-2000 and 9 areas for trends.

# Cervical Cancer Incidence Rates

## 180 (ICD 9); C53 (ICD 10)

### Summary

Regardless of race women in Erie County have the lowest rates of cervical cancer compared to NY and the US. However, regardless of region Black women have rates higher than those found in White women.

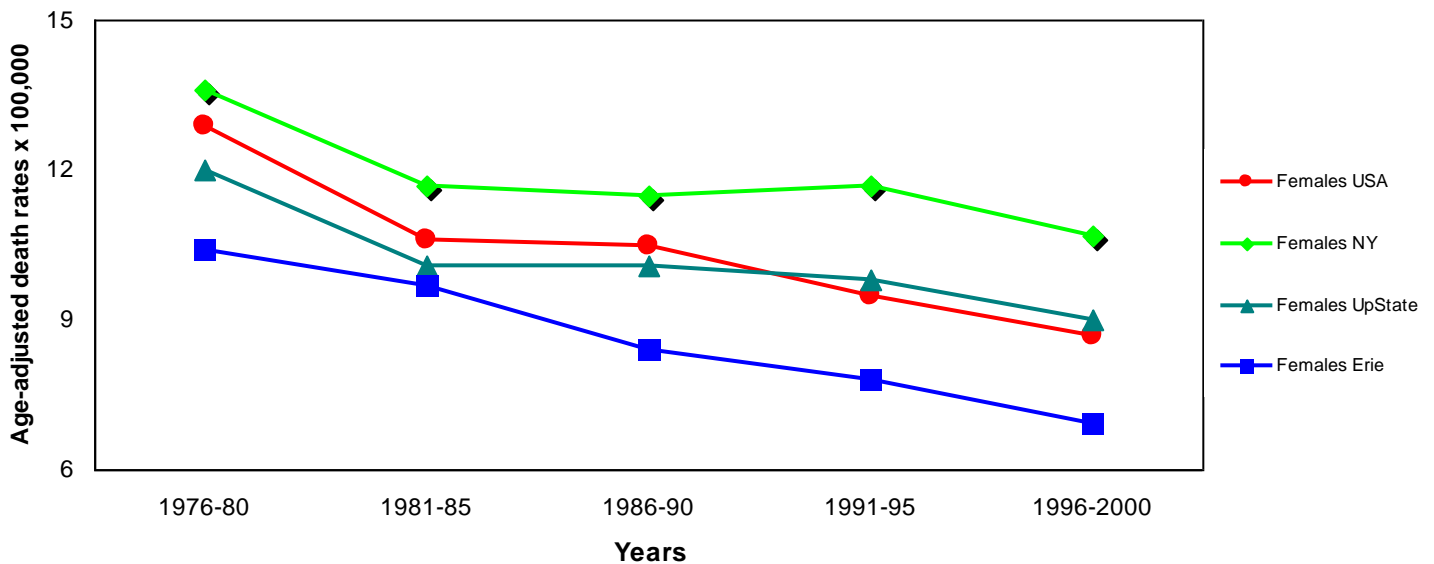
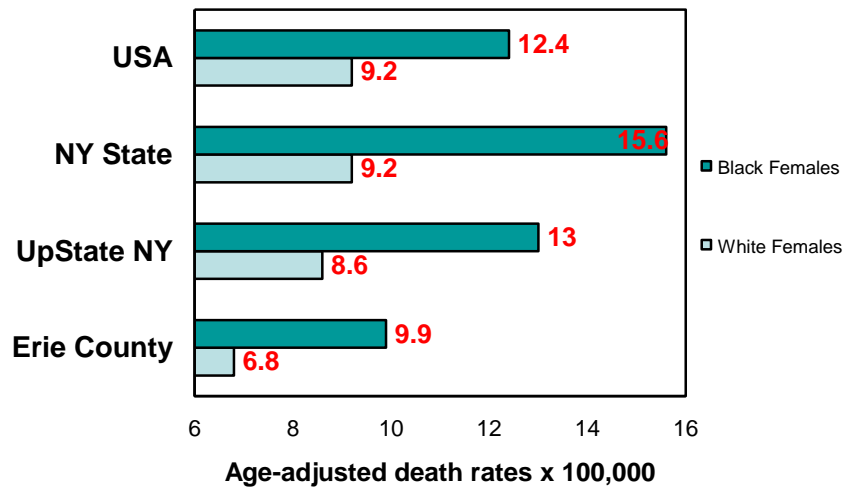
Incidence rates have declined steadily in Erie County since 1976-80. Throughout the entire period the rates in Erie County were consistently lower than those found in NY State, Upstate NY and the US. Overall, the patterns in Erie County were very similar to the other regions.

### Objectives

#### HP 2010

There is no HP 2010 target for this measure

Incidence rates by sex and race, 1996-2000



\*Note: Incidence rates are age-adjusted to the 2000 US standard population by 5-year age groups; USA data are from Surveillance, Epidemiology and End Results program (SEER), 12 areas for 1996-2000 and 9 areas for trends.

# Colorectal Cancer Incidence Rates

## 153-154 (ICD 9); C18-C21 (ICD 10)

### Summary

Males have higher rates than females. The patterns of disease in Erie County and NY were somewhat different than those found in the US. Among males in Erie County, Whites had incidence rates which were equal to or slightly greater than those for Black males while nationally Black males have the highest rates. Black females from Erie County have incidence rates which are higher than those found in White females. The rates for Black females from Erie County are higher than those found in Upstate NY and NY State while they are comparable to the rates for the US.

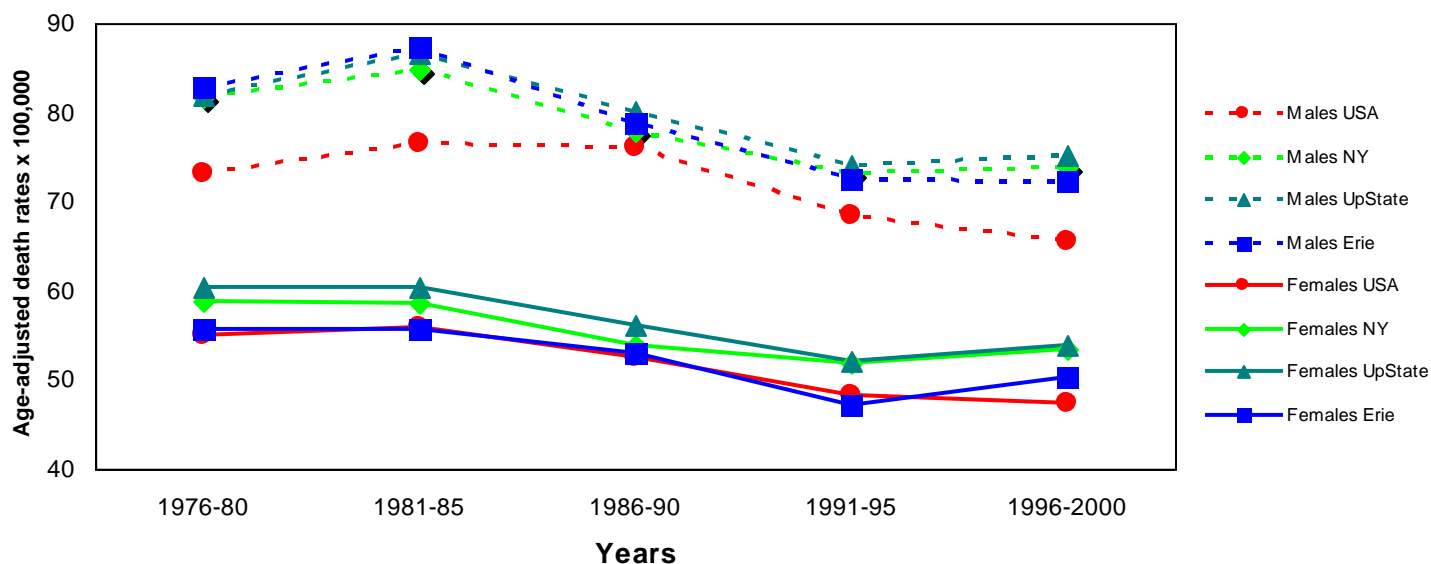
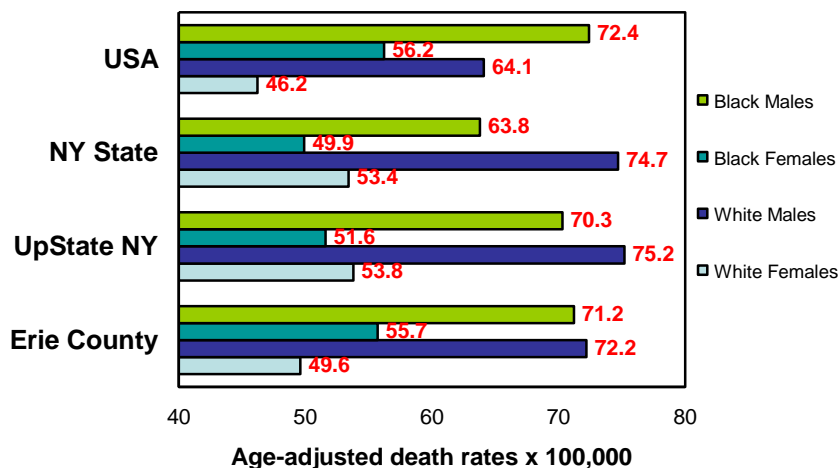
Incidence rates have been declining steadily since 1981-85. The decline was steeper for males than for females.

### Objectives

#### HP 2010

There is no HP 2010 target for this measure

### Incidence rates by sex and race, 1996-2000



\*Note: Incidence rates are age-adjusted to the 2000 US standard population by 5-year age groups; USA data are from Surveillance, Epidemiology and End Results program (SEER), 12 areas for 1996-2000 and 9 areas for trends.

# Oral Cancer Incidence Rates

## 140-149 (ICD 9); C00-C14 (ICD 10)

### Summary

Males tend to have much higher rates than females. Black males consistently have the highest rates; the rates for Erie County are the highest among the regions being compared. In addition, the rates for Black females in Erie County were much higher than found in any of the other regions. White males in Erie County had rates which were about forty percent lower than the rates for Black males.

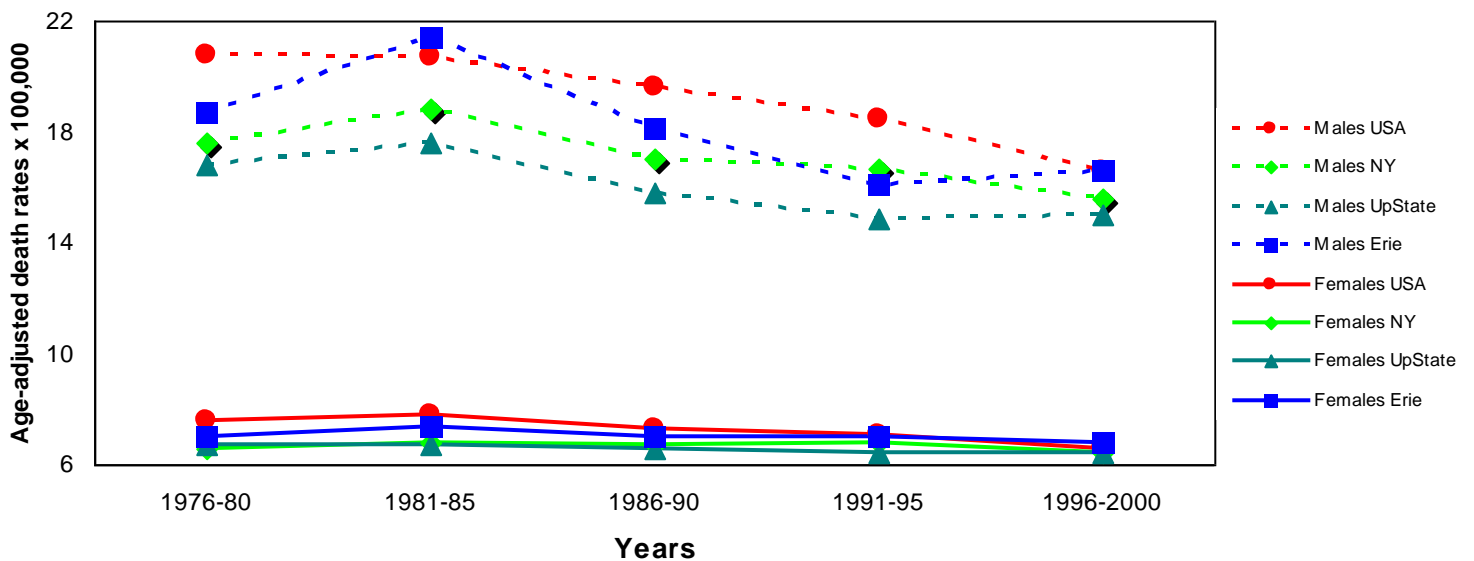
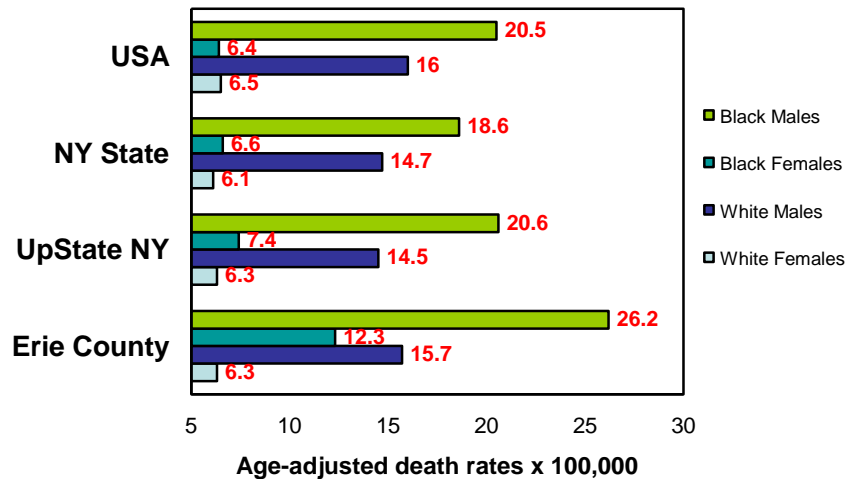
Incidence rates have been declining steadily since 1981-85. There was no substantial change in the rates over time for females.

### Objectives

#### HP 2010

There is no HP 2010 target for this measure

Incidence rates by sex and race, 1996-2000



\*Note: Incidence rates are age-adjusted to the 2000 US standard population by 5-year age groups; USA data are from Surveillance, Epidemiology and End Results program (SEER), 12 areas for 1996-2000 and 9 areas for trends.

# Prostate Cancer Incidence Rates\*

## 185 (ICD 9); C61 (ICD 10)

### Summary

Black males had the highest incidence rates regardless of region. The rates for Black males in Erie County were almost two times higher than the rates for White males.

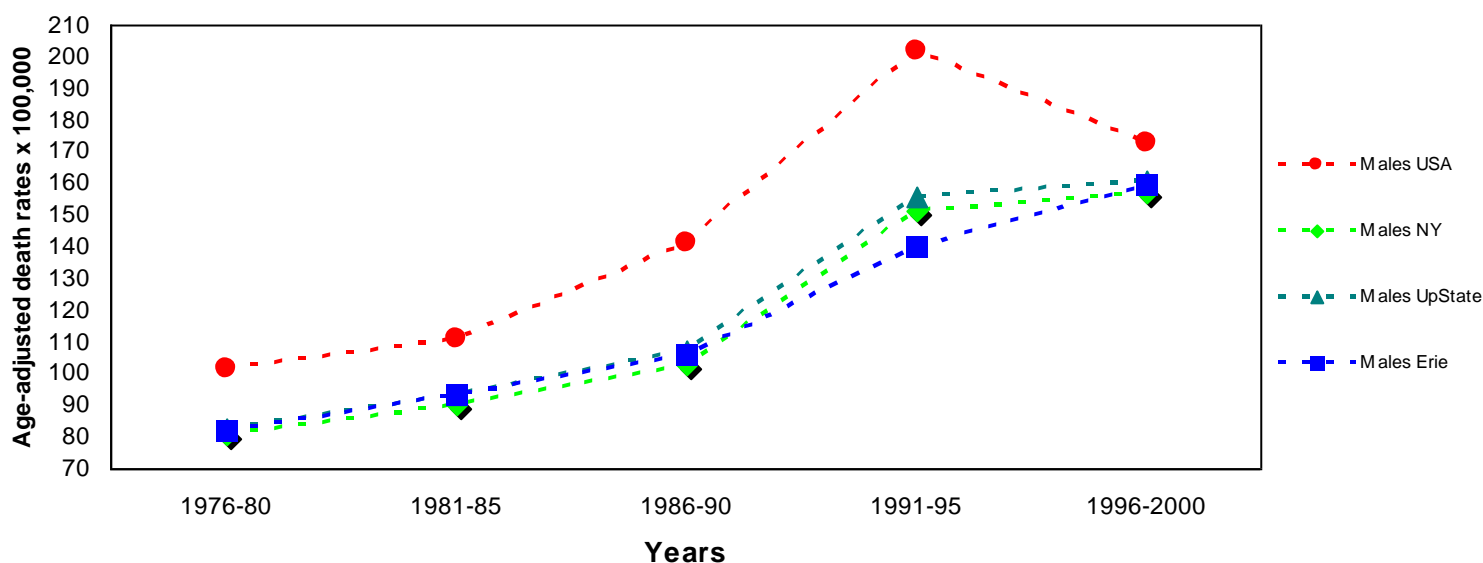
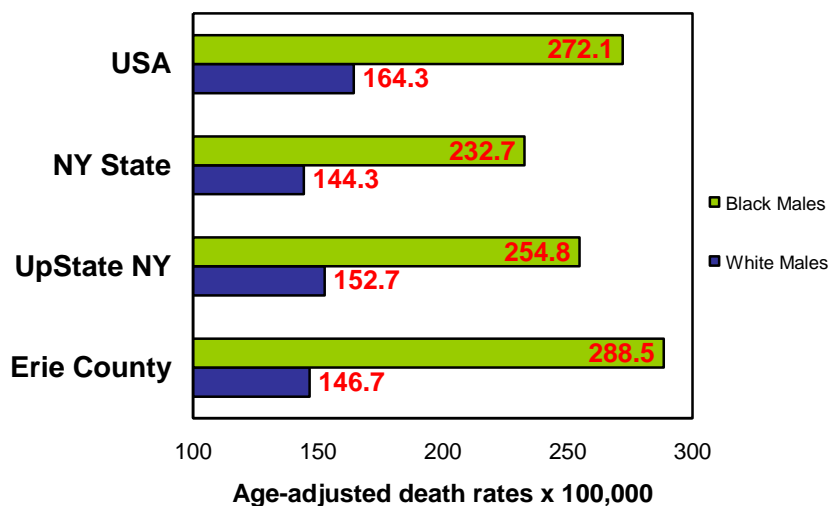
The rates for the US were consistently higher than those for Erie County and NY State for the entire time period, but the gap narrowed considerably in the last few years. Increasing rates of disease since 1986-90 may be due to the increased use of the PSA test in routine screening for prostate cancer.

### Objectives

#### HP 2010

There is no HP 2010 target for this measure

### Incidence rates by sex and race, 1996-2000



\*Note: Incidence rates are age-adjusted to the 2000 US standard population by 5-year age groups; USA data are from Surveillance, Epidemiology and End Results program (SEER), 12 areas for 1996-2000 and 9 areas for trends.

# Percent of Invasive Lung Cancers Diagnosed at an Early Stage\* 162 (ICD 9); C33-C34 (ICD 10)

## Summary

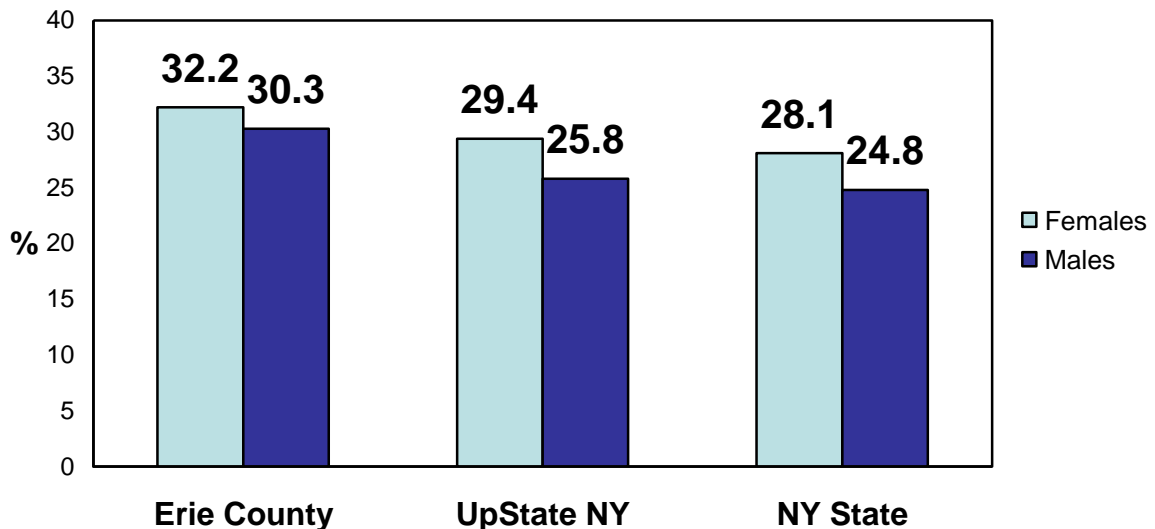
Lung cancer is more often diagnosed at an early stage in Erie County than in Upstate NY and NY State. The percentage is slightly but consistently higher for females than for males in all three regions. The higher percentage in Erie County may be due to the effect of the presence of the Roswell Park Cancer Institute and their cancer prevention activities.

## Objectives

### HP 2010

There is no HP 2010 target for this measure

1996-2000



\*Note: Data from the New York State Public Health Website ([www.health.state.ny.us](http://www.health.state.ny.us))

# Percent of Invasive Breast Cancers Diagnosed at an Early Stage\* 174 (ICD 9); C50 (ICD 10)

## Summary

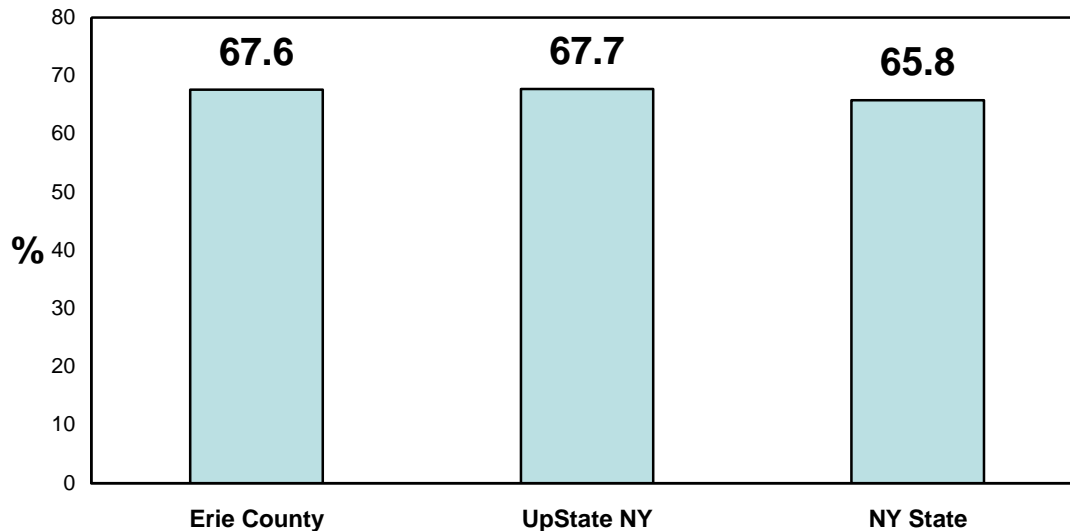
About 70 percent of all breast cancer cases are diagnosed at an early stage. The rates were similar for all three regions. The early diagnosis rate was almost twice as high as the percentage for lung cancer.

## Objectives

### HP 2010

There is no HP 2010 target for this measure

## 1996-2000



\*Note: Data from the New York State Public Health Website ([www.health.state.ny.us](http://www.health.state.ny.us))



# Percent of Invasive Cervical Cancers Diagnosed at an Early Stage\* 180 (ICD 9); C53 (ICD 10)

## Summary

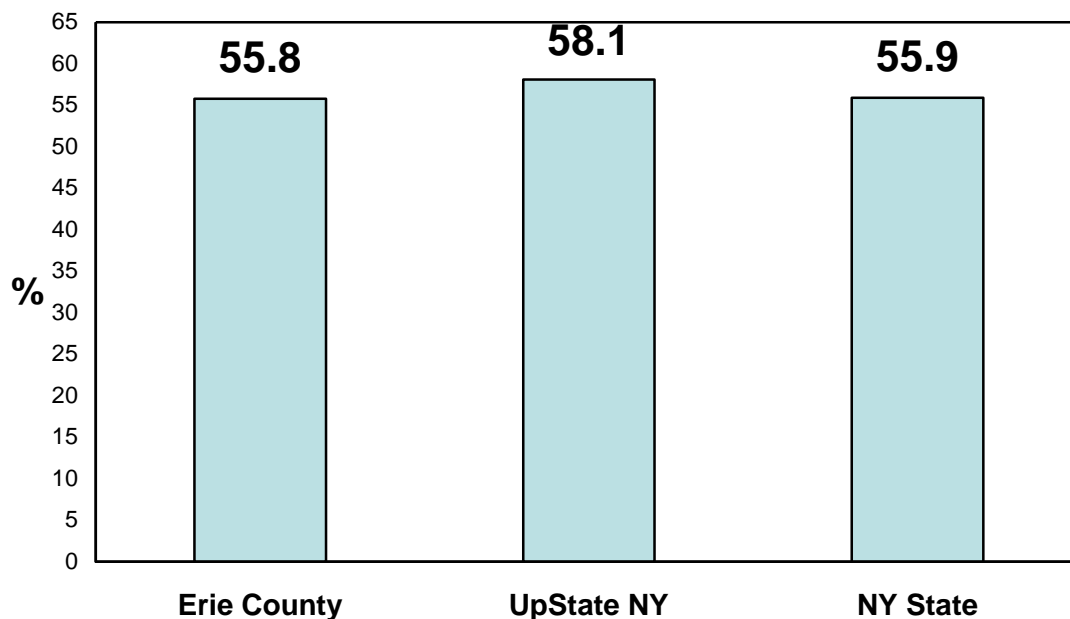
About 55 percent of all cervical cancers are diagnosed at an early stage. The rates were similar for all three regions.

## Objectives

### HP 2010

There is no HP 2010 target for this measure

## 1996-2000



\*Note: Data from the New York State Public Health Website ([www.health.state.ny.us](http://www.health.state.ny.us))

# Percent of Invasive Colorectal Cancers Diagnosed at an Early Stage\* 153-154 (ICD 9); C18-C21 (ICD 10)

## Summary

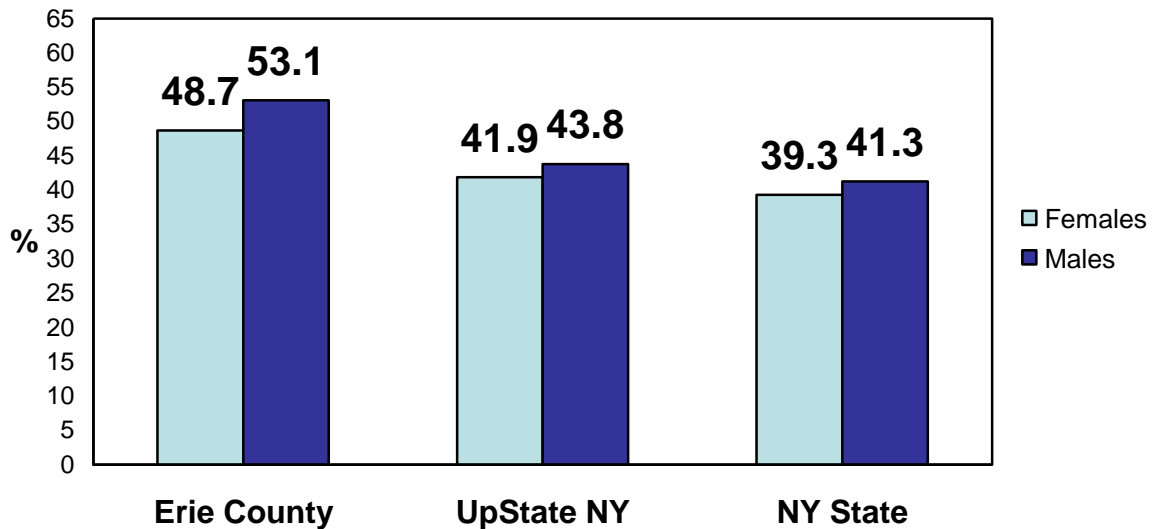
### Objectives

#### HP 2010

There is no HP 2010 target for this measure

About 50-55 percent of all colorectal cancers in Erie County are diagnosed at an early stage. The percentage for males was higher than for females. The early diagnosis rates in Erie County were higher than in Upstate NY and NY State. This may be due to the effect of the presence of the Roswell Park Cancer Institute in Erie County and their cancer prevention activities.

## 1996-2000



\*Note: Data from the New York State Public Health Website ([www.health.state.ny.us](http://www.health.state.ny.us))

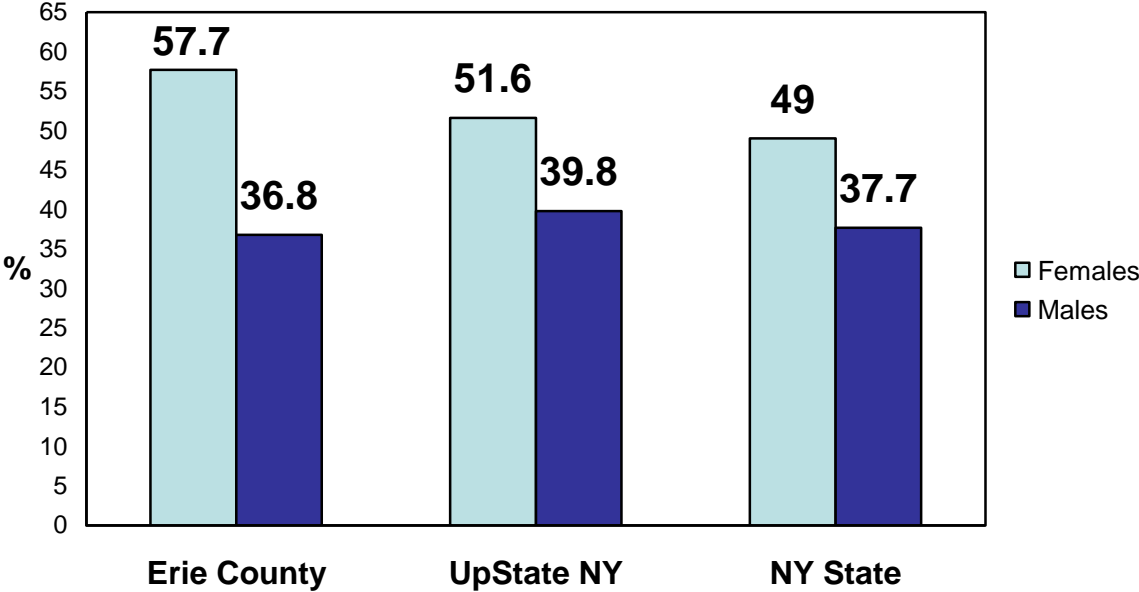
# Percent of Invasive Oral Cancers Diagnosed at an Early Stage\* 140-149 (ICD 9); C00-C14 (ICD 10)

## Summary

**Objectives**  
**HP 2010**  
There is no HP 2010 target for this measure

The percentage of oral cancers diagnosed at an early age varies considerably by sex. Females have the highest percentage in all three regions and females from Erie County have the highest percentage overall – slightly below 60%. The percentage for males is consistently lower at about 35%.

## 1996-2000



\*Note: Data from the New York State Public Health Website ([www.health.state.ny.us](http://www.health.state.ny.us))

# Percent of Invasive Prostate Cancers Diagnosed at an Early Stage\*

185 (ICD 9); C61 (ICD 10)

## Summary

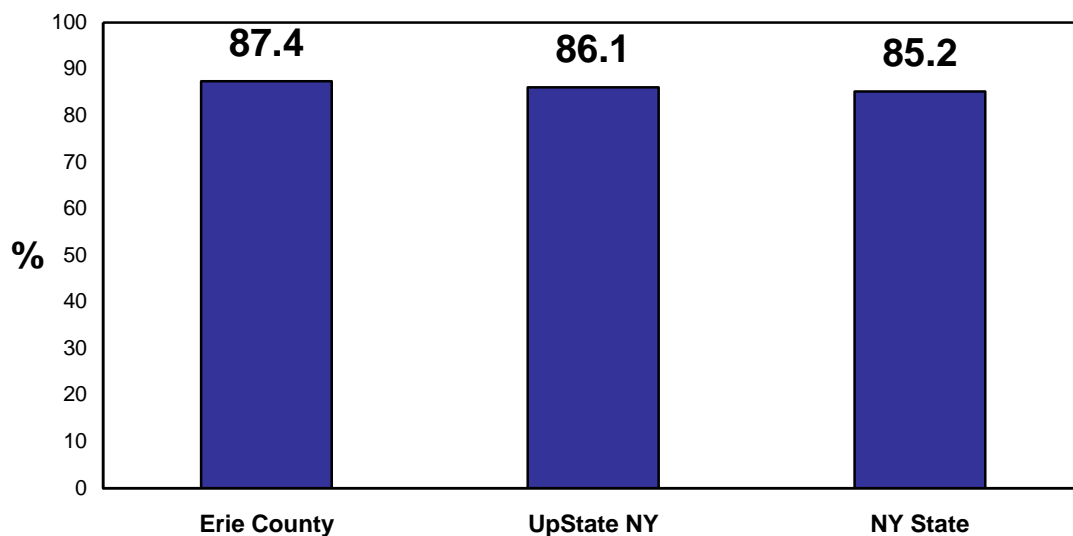
### Objectives

#### HP 2010

There is no HP 2010 target for this measure

The percentage of prostate cancers diagnosed at an early stage is higher than any of the other cancers examined in this report – almost 90%! The high percentage is almost surely due to the increased use of the PSA test in routine screening for prostate cancer.

## 1996-2000

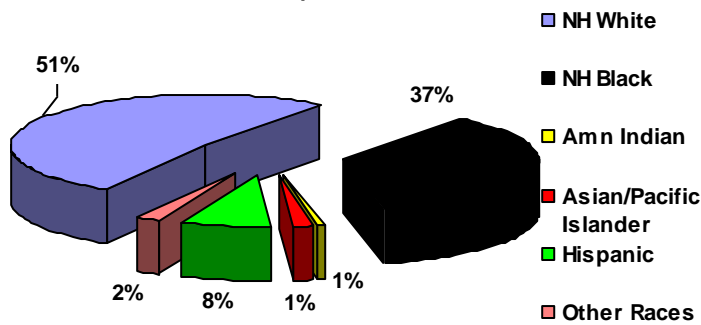


\*Note: Data from the New York State Public Health Website ([www.health.state.ny.us](http://www.health.state.ny.us))

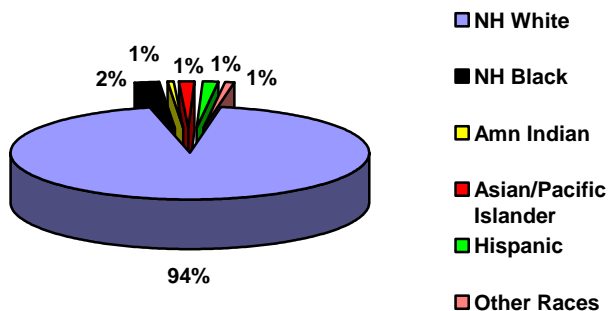
## Racial Composition, Buffalo, Non-Buffalo Erie, Erie County, 2000 Census

	Non Hispanic White	Non Hispanic Black	American Indian/Alas. Native	Asian/Pacific Islander	Hispanic	Other* Races	Total
Buffalo	151,450	107,066	2,010	4,116	22,076	5,930	292,648
Non-Buffalo Erie	616,026	14,223	3,344	9,799	8,978	5,247	657,617
Erie County	767,476	121,289	5,354	13,915	31,054	11,177	950,265

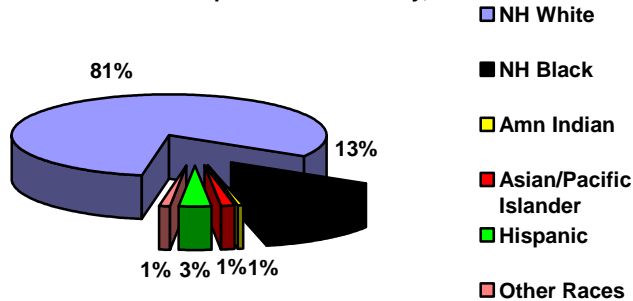
**Racial Composition Buffalo, 2000**



**Racial Composition Non-Buffalo Erie, 2000**



**Racial Composition Erie County, 2000**



According to the 2000 census, the racial composition of Buffalo City is substantially different from those of both Non-Buffalo Erie and overall Erie County. The city of Buffalo is characterized by a much higher percentage of Non Hispanic Blacks and Hispanics and a lower percentage of Non Hispanic Whites compared to the other two areas. For the remaining racial groups, there are no significant differences in their proportion across the three considered areas. In Erie County excluding the city of Buffalo, the population is composed principally of Non Hispanic Whites (94%) with very low percentages for other racial groups.

\*Other Races include unknown or missing data and the racial category for Two or More Races, which was not reported until the year 2000, source: [www.census.gov](http://www.census.gov).