

# Sources for Comparison Cancer Data

NAACCR Hospital Registry Webinar:  
Data Quality and Data Use

5/8/2008

Shannon Vann, CTR



# Cancer in North America (CINA)

- CINA – 4-volume monograph released by NAACCR
- CINA + Online
  - ◆ <http://www.cancer-rates.info/naaccr/> OR
  - ◆ <http://www.naaccr.org>
    - ◆ Quick cancer statistics
    - ◆ Online database for public queries regarding cancer incidence
- CINA Deluxe
  - ◆ Discretionary research data set



http://www.cancer-rates.info/naaccr/

Google

Search web...

NAACCR CINA+ Online

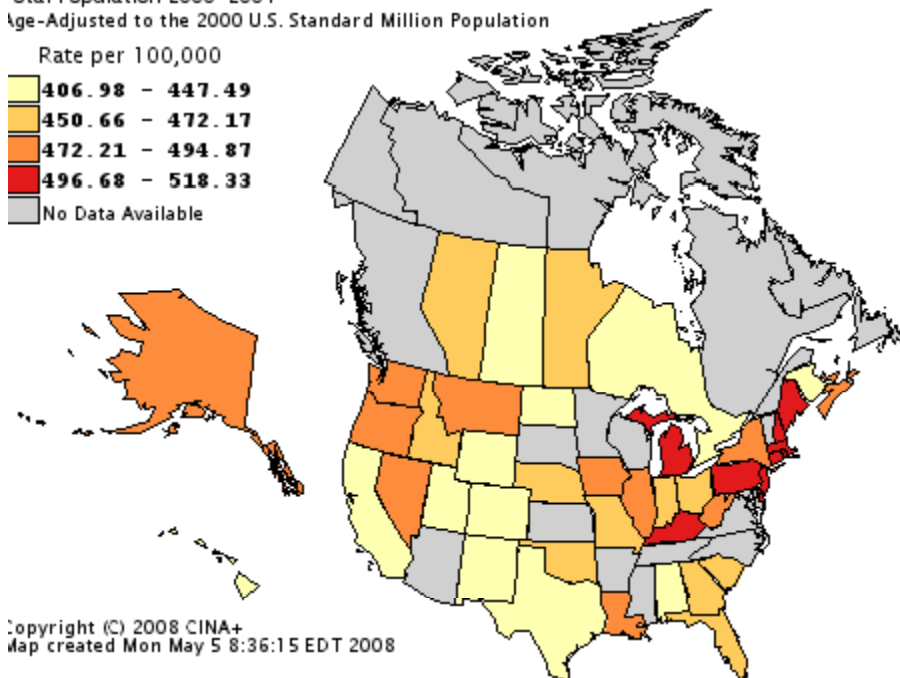
**Age-Adjusted Invasive Cancer Incidence Rates by State/Province in North America  
All Sites, 2000-2004**

Total Population 2000-2004

Age-Adjusted to the 2000 U.S. Standard Million Population

Rate per 100,000

- 406.98 - 447.49
- 450.66 - 472.17
- 472.21 - 494.87
- 496.68 - 518.33
- No Data Available



Copyright (C) 2008 CINA+  
Map created Mon May 5 8:36:15 EDT 2008

Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and include data from state and provincial cancer registries participating in SEER, NPCR, or both, in the US and the Canadian Cancer Registry in Canada.

To view regionwide trend data, click icon at left. To view all region data, click on white space outside of map. To view region specific trend data, click on region on map or on region



**CINA+ Online  
Cancer in North America**



**Specify Criteria for Map Display and Click Redraw.**

Display Geography: North America

Cancer Site: All Sites

Years: Starting 2000 Ending 2004

Sex: All

Race/Ethnicity \*: All

Standard: 2000 U.S. Standard Million Population

Confidence Intervals: Off

Redraw

\* Race/Ethnicity data only available for the United States.

Address bar: <http://www.cancer-rates.info/naaccr/>

Search:

Navigation: Home, Back, Forward, Stop, Refresh, Print, Page, Tools

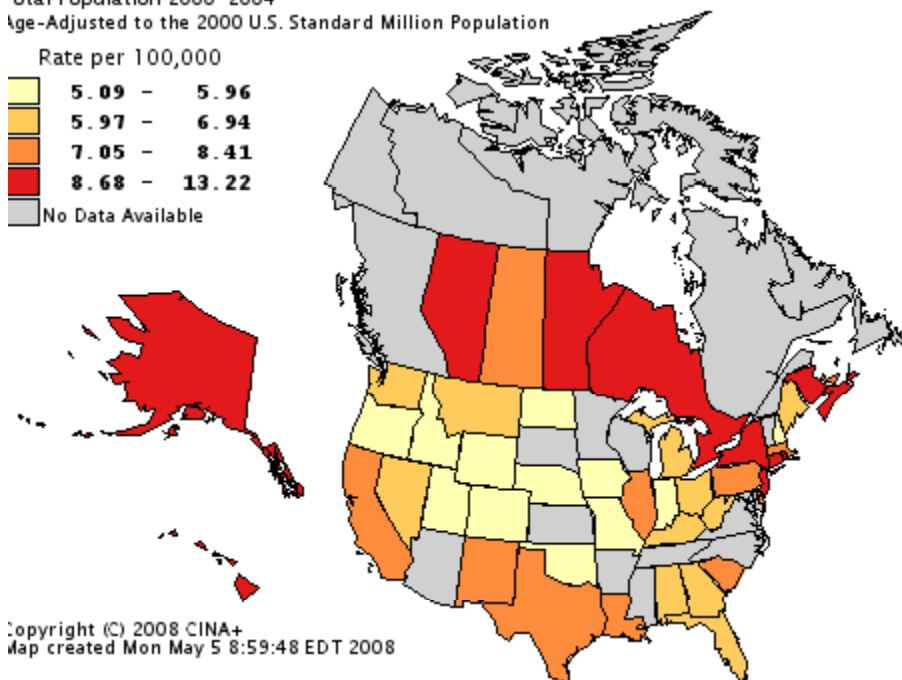
NAACCR CINA+ Online

**Age-Adjusted Invasive Cancer Incidence Rates by State/Province in North America  
Stomach, 2000-2004**

Total Population 2000-2004  
Age-Adjusted to the 2000 U.S. Standard Million Population

Rate per 100,000

	5.09 - 5.96
	5.97 - 6.94
	7.05 - 8.41
	8.68 - 13.22
	No Data Available



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Map created Mon May 5 8:59:48 EDT 2008

Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and include data from state and provincial cancer registries participating in SEER, NPCR, or both, in the US and the Canadian Cancer Registry in Canada.

To view regionwide trend data, click icon at left. To view all region data, click on white space outside of map. To view region specific trend data, click on region on map or on region



**CINA+ Online  
Cancer in North America**



**Specify Criteria for Map Display and Click Redraw.**

Display Geography:

Cancer Site:

Years: Starting  Ending

Sex:

Race/Ethnicity \*:

Standard:

Confidence Intervals:

\* Race/Ethnicity data only available for the United States.

# Cancer Control P.L.A.N.E.T.

- <http://cancercontrolplanet.cancer.gov>
  - ◆ Provides access to data and resources
  - ◆ Allows user to find information by cancer control topic

# Cancer Control P.L.A.N.E.T.

- 5 steps to comprehensive cancer control
  1. Assess program priorities
  2. Identify potential partners
  3. Research reviews of different intervention approaches
  4. Find research-tested intervention programs & products
  5. Plan & evaluate your program

The logo for the National Association of Cancer Control Registries (NAACCR). It features the acronym "NAACCR" in a bold, blue, serif font. A red swoosh underline is positioned beneath the letters "A", "A", and "C".

# Cancer Control P.L.A.N.E.T.

## ■ State Cancer Profiles

- ◆ <http://statecancerprofiles.cancer.gov>

- ◆ Quick profiles

- ◆ Comparison tables

- ◆ Interactive graphs & maps

- ◆ Support data

The logo for the National Association of Cancer Registries (NAACCR). It features the acronym "NAACCR" in a dark blue, serif font. A red swoosh underline is positioned beneath the letters "A", "A", and "C".

http://statecancerprofiles.cancer.gov/

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Maps Favorites PC Health Spaces (0) Allowed Form Fill Tools

State Cancer Profiles Home Page

**NATIONAL CANCER INSTITUTE**

# State Cancer Profiles

Dynamic views of cancer statistics for prioritizing cancer control efforts in the nation, states, and counties

**Help us improve! Contact us with feedback.**

**CDC**


State Cancer Profiles Home

### Quick Profiles

Area


Cancer

### Comparison Tables


 **Rate/Trend Comparisons**  
 set higher priority for cancer control when rates are high or rising  
[learn more...](#)


- [Prioritize cancer sites](#) for a specific state or county
- [Prioritize states or counties](#) for a specific cancer site


 **Death Rates**  
 for states or for counties in a state  
[learn more...](#)


 **Incidence Rates**  
 for states with high quality cancer registries  
[learn more...](#)

### Interactive Graphs and Maps


 **5-Year Rate Changes**  
 in cancer mortality or incidence for all major cancer sites by user selectable criteria  
[learn more...](#)

 **Historical Trends**  
 compare trends in cancer mortality and incidence by user selectable criteria  
[learn more...](#)

 **Comparative Data Display (Micromaps)**  
 explore relationships across geography of mortality, incidence, demographics, or risk factors  
[learn more...](#)

 **Interactive Maps**  
 for states or for counties in a state - mortality and incidence maps  
[learn more...](#)

### Support Data

 **Screening and Risk Factors**  
 prevalence percents by state from behavioral surveys  
[learn more...](#)

 [Cancer Control P.L.A.N.E.T. Home](#)

#### New Releases

[2004 USCS Incidence Data](#)

2004 SEER Incidence Data (also released in the [Cancer Statistics Review](#))

[2004 Mortality Data](#)

[2005 & 2006 Screening and Risk Factors](#)

[Download State Cancer Profiles brochure \(PDF\)](#)

[Revision History \(Updated: 8/16/2007\)](#)

[Release Schedule](#)

#### Help & About

[About this Site](#)

[Quick Reference Guides](#)

[Tutorials](#)



Rate/Trend Comparison by Cancer: Esophagus

**Death Rate/Trend Comparison by Cancer, death years through 2004**  
**New York Counties versus United States**

**Esophagus**  
**All Races, Both Sexes**

**Above US Rate**

**Similar to US Rate**

**Below US Rate**

**Rising Trend**

Priority 1: rising ↑ and above ↑ Chautauqua County Onondaga County Rensselaer County St. Lawrence County Ulster County	Priority 2: rising ↑ and similar = Chemung County Jefferson County Ontario County Saratoga County	Priority 3: rising ↑ and below ↓ [none]
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**Stable Trend**

Priority 4: stable → and above ↑ Niagara County Sullivan County	Priority 6: stable → and similar = New York Albany County Broome County Cayuga County Columbia County Dutchess County Erie County Monroe County Nassau County Oneida County Orange County Putnam County Rockland County	Priority 7: stable → and below ↓ Richmond County
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[Modify](#)

[Data Table](#)

[Export Data](#)

[Interpret](#)

[Printable View](#)

http://statecancerprofiles.cancer.gov/recenttrend/recenttrend.php?0&23&0&9599&001&999&00&2&0&0&2#graph

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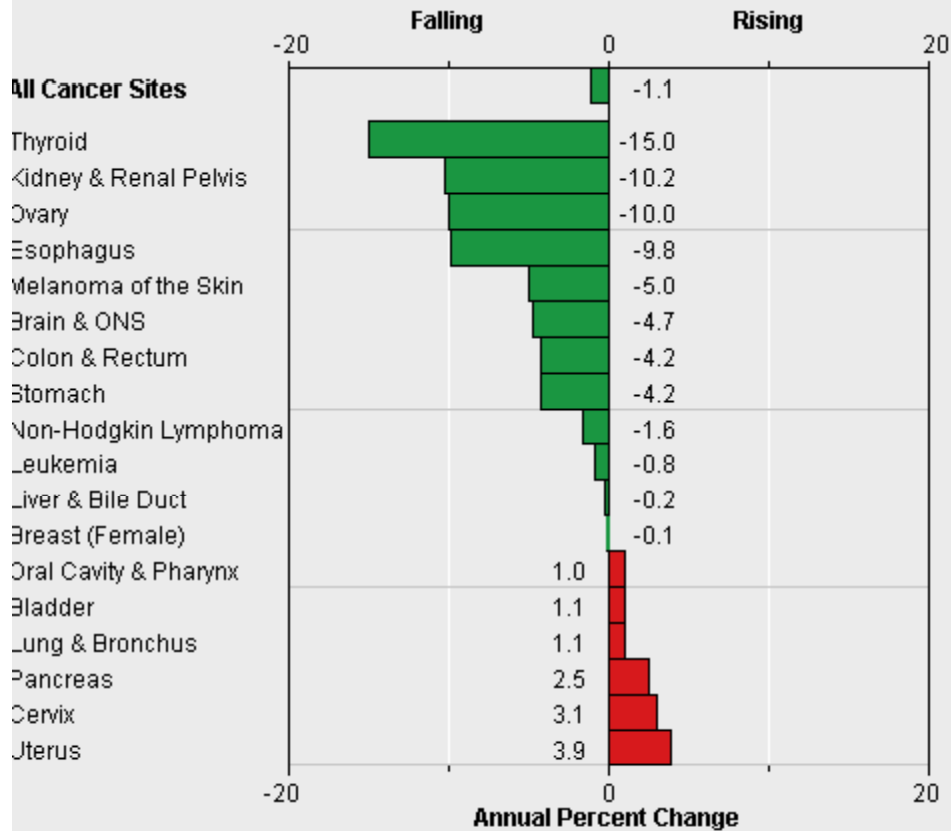
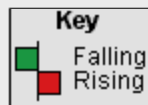
Bookmarks 270 blocked Check AutoLink AutoFill Send to Settings

Maps Favorites PC Health Spaces (2) Allowed Form Fill

5-Year Rate Changes - State Cancer Profiles

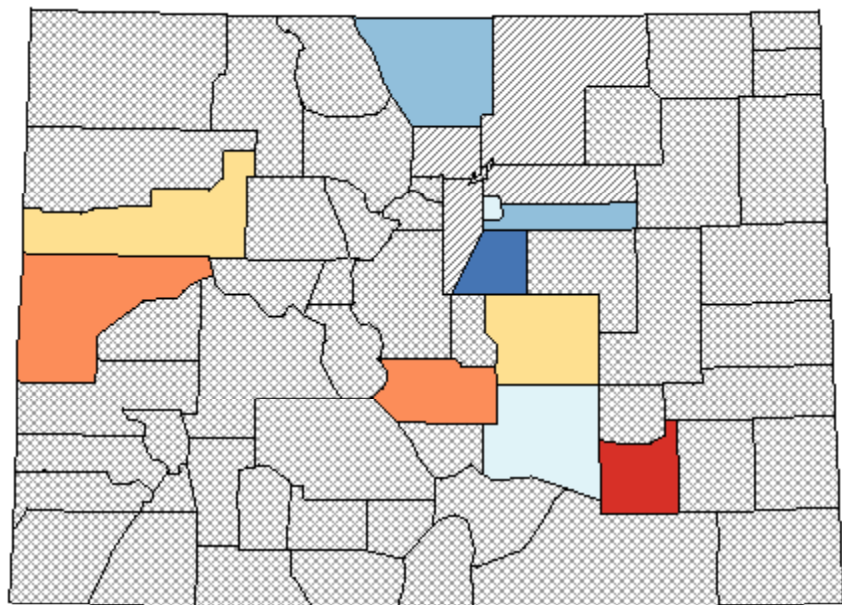
Home RSS Print Page Tools

### 5-Year Rate Changes - Mortality Maine, 2000-2004 All Ages, Females, All Races (incl Hisp)



- [Data Table](#)
- [Export Data](#)
- [Interpret](#)
- [Save Graph](#)
- [Printable View](#)

### Incidence Rates<sup>†</sup> for Colorado, 2001 - 2004 Oral Cavity & Pharynx All Races (includes Hispanic), Both Sexes, All Ages



**Age-Adjusted Annual Incidence Rate (Cases per 100,000)**  
Quantile Interval

- 12.6 to 17.9
- 10.4 to 12.5
- 9.4 to 10.3
- 9.0 to 9.3
- 7.3 to 8.9
- 7.2
- Suppressed \* / \*\*
- Data Not Available ◇

**US (SEER + NPCR)**  
Rate (95% C.I.)  
10.6 (10.5 - 10.7)

**Colorado**  
Rate (95% C.I.)  
9.0 (8.6 - 9.5)

- [Save Map Image](#)
- [Data Table](#)
- [Export Data](#)
- [Interpret](#)
- [Printable View](#)

- Action Notes
- Rollover a county with your mouse to see the rate (and 95% C.I.)
  - Scroll to the top of the web page to change the parameters of the map

# United States Cancer Statistics

- <http://apps.nccd.cdc.gov/uscs/index.aspx>
  - ◆ 1999-2004 cancer incidence & mortality
    - ◆ Report
      - United State Cancer Statistics 2004 Incidence & Mortality
    - ◆ Graphs using U.S. and individual state data
      - Top 10 cancers
      - State vs. national comparisons
      - Selected cancer ranked by state

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# United States Cancer Statistics

- <http://apps.nccd.cdc.gov/uscs/index.aspx>
  - ◆ 1999-2004 cancer incidence & mortality
    - ◆ Tables using U.S. and individual state data
      - U.S. cancer by type
      - Cancers graphed by state & region
      - Childhood cancer
      - Additional cancer data

The logo for the National Association of Cancer Registries (NAACCR) is located in the bottom right corner. It features the acronym "NAACCR" in a bold, dark blue serif font. A red swoosh underline is positioned beneath the letters "A", "A", and "C", extending from the left side of the "A" to the right side of the "C".



http://apps.nccd.cdc.gov/uscs/Table.aspx?Group=3f&Year=2004&Display=n

Google

Search web...

Cancer - United States Cancer Statistics (USCS) Data...

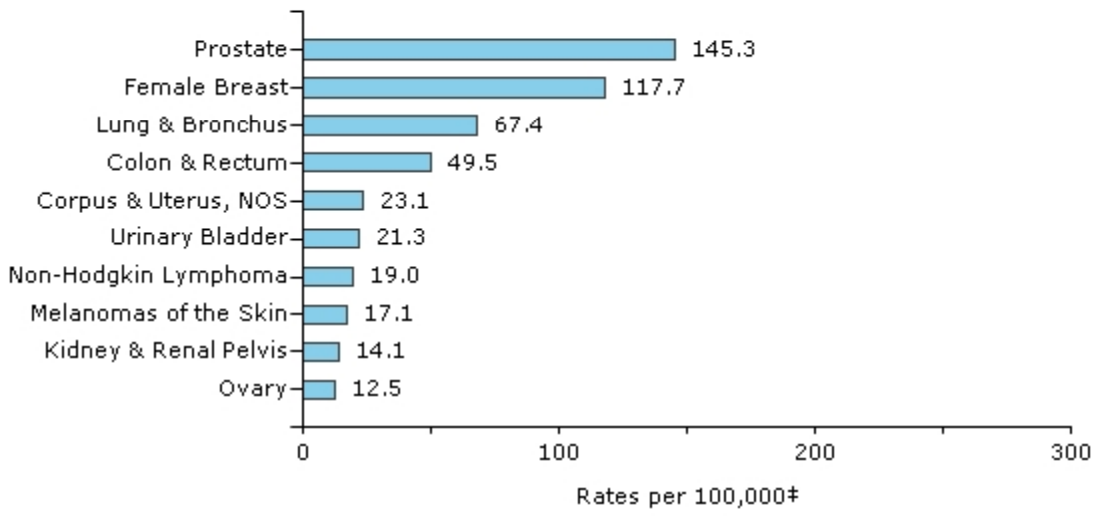
**Age-Adjusted Invasive Cancer Incidence Rates for the 10 Primary Sites with the Highest Rates within Race- and Ethnic-Specific Categories (Table 4.1.MF1) <sup>†</sup>**

★ Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. standard population (19 age groups – Census P25–1130).

[All Races](#) | [White](#) | [Black](#) | [Asian/Pacific Islander](#) | [American Indian/Alaska Native](#) | [Hispanic](#)

95% Confidence Interval :  Hide  Show

**Top 10 Cancer Sites: 2004, Male and Female, United States—All Races**



[View tabular data](#) | [Back to top](#)

http://apps.nccd.cdc.gov/uscs/Table.aspx?Group=TableAll&Year=2004&Display=n

Search web... Maps Favorites PC Health Spaces (1) Allowed Form Fill Tools

Cancer - United States Cancer Statistics (USCS) Data...

Year  Display

[Incidence Rates](#) | 
 [Death Rates](#) | 
 [Incidence Counts](#) | 
 [Death Counts](#) | 
 [Population](#)

Age-Adjusted Invasive Cancer Incidence Rates and 95% Confidence Intervals by Primary Site and Race and Ethnicity, United States (Table 1.1.1.1M) <sup>†††</sup>

★ Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. standard population (19 age groups – Census P25–1130).

95% Confidence Interval :  Hide  Show

Cancer Types	All Races	White	Black	Asian/Pacific Islander <sup>§</sup>	American Indian/Alaska Native <sup>§</sup>	Hispanic <sup>§  </sup>
All Sites <a href="#">Data By Age</a>	537.6	527.2	607.3	325.8	288.6	415.5
All Sites (excl. newly classified as malignant) <sup>¶</sup>	530.1	519.6	602.0	320.7	285.5	410.1
Oral Cavity and Pharynx <a href="#">Data By Age</a>	15.7	15.5	17.6	9.5	9.2	10.4
Lip	1.2	1.3	0.1	~	~	0.5
Tongue	4.2	4.3	3.8	1.7	~	2.5
Salivary Gland	1.5	1.6	1.1	0.9	~	1.0
Floor of Mouth	1.0	1.0	1.3	0.3	~	0.8
Gum and Other Mouth	1.9	1.8	2.4	1.1	~	1.5
Nasopharynx	0.8	0.6	1.3	3.6	~	0.5
Tonsil	2.7	2.7	3.1	0.9	1.5	1.8
Oropharynx	0.7	0.7	1.4	~	~	0.6
Hypopharynx	1.3	1.2	2.5	0.8	~	1.0
Other Oral Cavity and Pharynx	0.4	0.4	0.7	~	~	0.3
Digestive System	105.3	101.6	131.2	100.3	68.9	104.3



# CDC WONDER

- Online databases utilizing an ad hoc query system for analysis of public health data
  - ◆ <http://wonder.cdc.gov/welcome.html>
    - ◆ Under WONDER online databases, click on National Program of Cancer Registries OR
  - ◆ <http://wonder.cdc.gov/cancer.html>

# CDC WONDER

- Request form
  1. Organize table layout
    - ◆ Group results by up to 5 variables: leading cancer sites, cancer sites, childhood cancer, age group, sex, MSA, race, state, year
  2. Select location & years
    - ◆ All, 1999 - 2002

# CDC WONDER

- Request form
  3. Select demographics
    - ◆ Age group, race, sex
  4. Select cancers of interest
    - ◆ All sites, all sites combined, specific site
  5. Other options

# CDC WONDER

- Results
- Map
- Chart
- About

http://wonder.cdc.gov/cancer.html

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National Program of Cancer Registries Invasive Cance...

Request Form Results Map Chart About

[Dataset Documentation](#) [Data Use Restrictions](#) [How to Use WONDER](#)

Reset

Make all desired selections and then click any **Send** button one time to send your request.

1. Organize table layout:

Send

Help

**Group Results By**

**And By**

**And By**

**And By**

**And By**

**Note:** When displaying rates by cancer site, it is usually appropriate to group the results by gender. [More Information](#)

**Include Crude Rates**

**Title**

2. Select location and years:

Send

Help

**Hint:** Use Ctrl + Click for multiple selections, or Shift + Click for a range.

**Pick between:**

**State**  **MSA**

- The United States
- Alabama
- Alaska
- Arizona
- Arkansas
- California

**Year**

- All Years
- 1999
- 2000
- 2001
- 2002

## National Program of Cancer Registries Invasive Cancer Incidence Results

### Leading Cancer Sites by Age Group & Sex

Request Form **Results** Map Chart About

[Dataset Documentation](#) [Help for Results](#) [Printing Tips](#) [Help with Exports](#) [Export Results](#)

[Top](#) [Notes](#) [Citation](#) [Query Criteria](#) [Options](#)

**Messages:**  
 ► **Totals are not available for these results due to suppression constraints. [More Information.](#)**

Leading Cancer Sites ↓	Age Group	Sex	Count ↑↓
All Sites Combined	< 1 year	Female	1,469
All Sites Combined	< 1 year	Male	1,729
All Sites Combined	1-4 years	Female	4,817
All Sites Combined	1-4 years	Male	5,958
All Sites Combined	5-9 years	Female	3,494
All Sites Combined	5-9 years	Male	4,365
All Sites Combined	10-14 years	Female	4,174

# SEER Comparison Data

- <http://seer.cancer.gov>
  - ◆ Finding cancer statistics
    - ◆ Cancer stat fact sheets
      - Statistical summaries for common cancer types

[Statistics Review](#)

- ♦ [Fast Stats](#)
- ♦ [State Cancer Profiles](#)
- ♦ [Cancer Query Systems](#)

**Help**

- ♦ [Glossary of Statistical Terms](#)
- ♦ [What type of cancer statistic do you need?](#)

die of cancer of the colon and rectum in 2008<sup>1</sup>.

The following information is based on NCI's SEER Cancer Statistics Review<sup>2</sup>.

**Incidence & Mortality****SEER Incidence**

From 2001-2005, the median age at diagnosis for cancer of the colon and rectum was 71 years of age<sup>3</sup>. Approximately 0.1% were diagnosed under age 20; 1.0% between 20 and 34; 3.7% between 35 and 44; 11.6% between 45 and 54; 18.3% between 55 and 64; 25.1% between 65 and 74; 28.2% between 75 and 84; and 12.2% 85+ years of age.

The age-adjusted incidence rate was 50.6 per 100,000 men and women per year. These rates are based on cases diagnosed in 2001-2005 from 17 SEER geographic areas.

Incidence Rates by Race

Race/Ethnicity	Male	Female
All Races	59.2 per 100,000 men	43.8 per 100,000 women
White	58.9 per 100,000 men	43.2 per 100,000 women
Black	71.2 per 100,000 men	54.5 per 100,000 women
Asian/Pacific Islander	48.0 per 100,000 men	35.4 per 100,000 women
American Indian/Alaska Native <sup>a</sup>	46.0 per 100,000 men	41.2 per 100,000 women
Hispanic <sup>b</sup>	47.3 per 100,000 men	32.8 per 100,000 women

**US Mortality**

From 2001-2005, the median age at death for cancer of the colon and rectum was 75 years of age<sup>4</sup>. Approximately 0.0% died under age



# SEER Comparison Data

- <http://seer.cancer.gov>
  - ◆ Finding cancer statistics
    - ◆ Fast stats
      - By cancer site
      - By race/ethnicity
      - By gender
      - By race and gender
      - By age at diagnosis/death
      - By data type

**Fast Stats**

- ♦ [Fast Stats](#)
  - ♦ [by Cancer Site](#)
  - ♦ [by Race/Ethnicity](#)
  - ♦ [by Gender](#)
  - ♦ [by Race and Gender](#)
  - ♦ [by Age At Diagnosis/Death](#)
  - ♦ [by Data Type](#)
- ♦ [Fast Stats Help](#)
- ♦ [Fast Stats Resources](#)

**Related Materials**

- ♦ [Glossary of Statistical Terms](#)
- ♦ [Cancer Stat Fact Sheets](#)
- ♦ [SEER Cancer Statistics Review](#)
- ♦ [Cancer Query Systems](#)

**Fast Stats**

Fast Stats is an interactive tool for quick access to key SEER and US cancer statistics for major cancer sites by age, gender, race/ethnicity and data type. Statistics are presented as graphs and tables.

**View Statistics Stratified by...**[Cancer Site](#)

Compare statistics for selected cancer sites.

[Race/Ethnicity](#)

Compare cancer statistics by race or by the expanded race/ethnicity groupings.

[Gender](#)

Compare the differences between male and female cancer statistics.

[Race/Gender](#)

Compare cancer statistics by both race and gender.

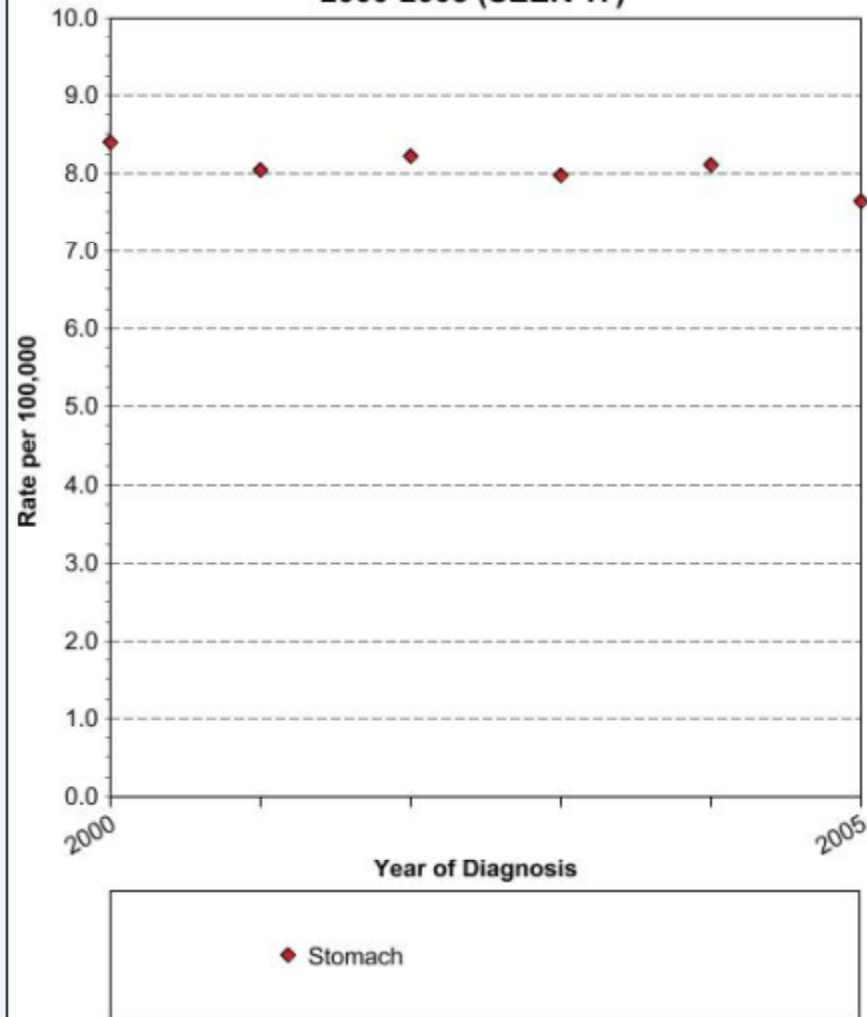
[Age at Diagnosis/Death](#)

Compare statistics by age groups for a selected cancer site, race, and gender.

[Data Type](#)

Compare Incidence, Delay-adjusted Incidence and Mortality cancer statistics.

### Age-Adjusted SEER Incidence Rates By Cancer Site For All Ages, All Races, Both Sexes 2000-2005 (SEER 17)



Incidence source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Regression lines are calculated using the Joinpoint Regression Program Version 3.3, April 2008, National Cancer Institute.

# SEER Comparison Data

- <http://seer.cancer.gov>
  - ◆ Finding cancer statistics
    - ◆ State cancer profiles
    - ◆ Help finding cancer stats
      - Statistical tables
      - Graphs & maps
      - Reports on cancer
      - Research tools
      - Data sources



http://surveillance.cancer.gov/statistics/

Google

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Surveillance Research - Finding Cancer Statistics



**National Cancer Institute**  
 U.S. National Institutes of Health | www.cancer.gov

## Surveillance Research

Cancer Control and Population Sciences

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### Finding Cancer Statistics

> [Statistical Tables, Graphs, and Maps](#)

- > [Cancer Stat Fact Sheets](#)
- > [SEER Cancer Statistics Review, 1975-2005](#)
- > [Fast Stats](#)
- > [State Cancer Profiles](#)
- > [More...](#)

> [Reports on Cancer](#)

- > [Annual Report to the Nation on the Status of Cancer, 1975-2004](#)
- > [US Cancer Statistics: 2004 Incidence & Mortality](#)
- > [New Malignancies Among Cancer Survivors](#)
- > [Cancer Epidemiology in Older Adolescents and Young Adults 15 to 29 Years of Age](#)
- > [Cancer Incidence in Four Middle Eastern Countries Compared with US SEER](#)

> [Research Tools](#)

- > [What tool should I use?](#)
- > [Cancer Query Systems](#)
- > [SEER\\*Stat](#)
- > [Joinpoint Trend Analysis](#)
- > [DevCan - Lifetime Risk](#)
- > [CanSurv - Cancer Survival Analysis](#)
- > [Methods & Software for Population-based Cancer Statistics](#)

> [Data Sources](#)

- > [SEER Program](#)
- > [SEER-Medicare Linked Database](#)
- > [National Center for Health Statistics](#)

Search:

[Where can I find...?](#)

- [Incidence](#)  
the number of **newly diagnosed cases** during a specific time period
- [Mortality](#)  
the number of **deaths** during a specific time period
- [Prevalence](#)  
the number of **new and pre-existing cases** alive on a certain date
- [Survival](#)  
the **proportion of patients alive at some point** subsequent to the diagnosis of their cancer
- [Lifetime Risk](#)  
the probability of **developing or dying** of cancer
- [Statistics by Race/Ethnicity](#)

# State Data

- State cancer profiles
- Access to state website from NAACCR database
  - ◆ State-specific monograph or report
  - ◆ Aggregate data
  - ◆ Public use data file

# Thank You!

Our next Hospital Registry Webinar will be:  
“Hospital Webinar: Abstracting Upper  
Gastrointestinal Tract Cancer Incidence &  
Treatment Data ”

7/10/08

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**Shannon Vann**  
svann@naaccr.org

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**NAACCR**