

United States Cancer Statistics Public Information Data: Incidence United States 1999 - 2021 and Puerto Rico 2005 - 2021

Summary

Summary: Cancer incidence data are available for the United States, state and metropolitan areas (MSA) by age group, race, sex, ethnicity, year of diagnosis, childhood cancer classifications and cancer site for the years 1999 - 2021. Cancer incidence data are available for Puerto Rico by age group, sex, year of diagnosis, childhood cancer classifications and cancer site for the years 2005 - 2021.

Source: The [United States Cancer Statistics](#) (USCS) are the official federal statistics on cancer incidence from registries having high-quality data and cancer mortality statistics for 50 states and the District of Columbia. USCS are produced by the Centers for Disease Control and Prevention (CDC) and the National Cancer Institute (NCI). For a list of all USCS contributors and partners, visit [USCS Contributors](#).

Data are provided by:

- The Centers for Disease Control and Prevention [National Program of Cancer Registries \(NPCR\)](#)
- The National Cancer Institute [Surveillance, Epidemiology and End Results \(SEER\)](#) program

Data for years 1999-2021 are provided as reported to NPCR and SEER in the 2023 data submission, released 2024.

In WONDER: You can produce [tables](#), [maps](#), [charts](#), and [data extracts](#). Obtain incidence counts, crude rates, age-adjusted rates, with 95% confidence intervals and standard errors for rates. Select specific disease and demographic criteria to produce cross-tabulated incidence measures. Data are organized into three levels of geographic detail: national, state and Metropolitan Statistical Areas (MSAs). The population estimates used as the denominator for rate calculations are also shown. You can limit and index your data by any and all of the variables:

1. [Location](#) - [Regions](#), [Divisions](#) and [States](#) or Metropolitan Areas ([MSA](#))
2. [Year](#) - 1999-2021 (2005 - 2021 for Puerto Rico)
3. [Age Group](#)
4. [Race](#) - All, American Indian or Alaska Native, Asian or Pacific Islander, Black or African American, White, Other Races Combined (not available for Puerto Rico)
5. [Sex](#) - Female, Male
6. [Ethnicity](#) - Hispanic, Non-Hispanic, Unknown (not available for Puerto Rico)
7. [Leading Cancer Sites](#)
8. [Cancer Sites](#)
9. [Childhood Cancers](#)

The following statistical measures are available as query results:

1. [Disease Incidence Counts](#)
2. [Age-Adjusted Rates](#) (optional)
3. [95% Confidence Intervals for rates](#) (optional)
4. [Standard Errors for rates](#) (optional)
5. [Crude Rates](#) (optional)

Contents: [United States Cancer Statistics Data Request](#)
[Data Source Information](#)
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United States Cancer Statistics Data Request

Output: You can produce [tables](#), [maps](#), [charts](#), and [data extracts](#). Obtain incidence counts, crude rates, age-adjusted rates, with 95% confidence intervals and standard errors for rates, from the United States Cancer Statistics public information data. The population estimates used as the denominator for rate calculations are also shown.

Variables: You can limit and [index](#) your data by any and all of the [variables](#).

How? The Request screen has sections to guide you through the making a data request as step-by-step process. However, to get your first taste of how the system works, you might want to simply press any Send button, and execute the default data request. The data results for your query appear on the Table screen. After you get your data results, try the [Chart](#) and [Map](#) screens. Or [export](#) your data to a file (tab-delimited line listing) for download to your computer.

For more information, see the following:

[Quick Start Guide](#);

[Step 1](#), Organize and label results;

[Step 2](#), Select location;

[Step 3](#), Select year and demographics;

[Step 4](#), Select cancers of interest;

[Step 5](#), Other Options.

'By-Variables' Select variables that serve as keys (indexes) for organizing your data. See [How do I organize my data?](#) for more information.

Notes:

- To map your data, you must "Group Results By" a geographical location, such as "States," in section 1 on the "Request Form" tab.
- Metropolitan areas (MSA) do not combine with Regions, Divisions and States. For example, you cannot group results by State, and limit your data to selected MSA locations in the same query.
- To include Puerto Rico's data, you must select the "States and Puerto Rico" button in section 2 on the "Request Form" tab. When the "States," "Regions," or "MSA" buttons are selected, then Puerto Rico's data are not included.
- The "Group Results By" selections cannot include "Race" nor "Ethnicity" when you have requested Puerto Rico's data, by selecting the "States and Puerto Rico" button in section 2 on the "Request Form" tab.
- When you have requested age-adjusted rates, you cannot "Group Results By" "Age Groups" in section 1 on the "Request Form" tab.

Help: Click on any button labeled "Help", located to the right-hand side of the screen at the top of each section. Each control's label, such as the "Location" label next to the Location entry box, is linked to the on-line help for that item.

Send: Sends your data request to be processed on the CDC WONDER databases. The Send buttons are located on the bottom of the Request page, and also in the upper right corner of each section, for easy access.

Step 1. Organize table layout:

Group Results By: Select up to five variables that serve as keys for grouping your data. See [Group Results By](#) below for hints.

Select Optional Measures: Select the [check box](#) to include optional [measures](#) in your report. Frequency counts are reported by default.

Title: Enter any desired description to display as a title with your results.

Note: See [Hints](#) and [About Requesting Data for Puerto Rico](#) below, in the [Group Results By](#) section.

Measures:

The following statistical measures are available as query results:

1. [Disease Incidence Counts](#)
2. [Age-Adjusted Rates](#) (optional)
3. [95% Confidence Intervals for rates](#) (optional)
4. [Standard Errors for rates](#) (optional)
5. [Crude Rates](#) (optional)

Select the [check box](#) to include optional measures in your report.

Group Results By...

Select up to five variables that serve as keys for grouping your data. For example, you could select to group (summarize, stratify, index) your data by Location (State or MSA) and Race.

How? See [How do I organize my data?](#) for more information.

Hints:

1. **About breast and genital system cancers:**

When generating a report by primary site, it is appropriate to either select cases by sex or generate a report by sex. By default this program includes population data for both sexes in the rate calculations. However, the default for sex-specific cancers such as prostate, ovary or cervix, is to calculate rates for the sex-specific populations. See [About Breast and Genital System Cancers](#) for more information.

2. When age-adjusted rates are calculated, you cannot group the data by Age Group.

3. You cannot group the data by both State and by MSA. You can group by State only when you have chosen State locations. You can group by MSA only when you have chosen MSA locations.

4. **About charts:**

You cannot make charts when your data has more than two selections in the "Group Results By" lists in section 1 on the "Request Form" tab.

5. About maps:

To make a map, you must "Group Results By" a geographic location, such as "State," section 1 on the "Request Form" tab. After you get the results to your query, then click the "Map" tab.

6. About requesting data for Puerto Rico:

- You cannot select "Race" or "Ethnicity", in the "Group Results By" list in section 1 on the "Request Form" tab when requesting data for Puerto Rico.
- Data for Puerto Rico are requested in [section 2](#) on the Request Form, by clicking the round button for "States and Puerto Rico."
- When the "States and Puerto Rico" list is selected in [section 2](#) on the Request Form, then Race and Ethnicity categories are not shown in [section 3](#) on the Request Form.

Counts

Cancer case reports in this data set are counted by or summed by the cancer reported. For example, a single person with more than one primary cancer verified by a medical doctor is counted as a case report for each type of primary cancer reported. Having more than one primary cancer occurs in less than 20% of the population. The counts report the frequency of verified cancer diagnoses in the selected population and time period.

Age-Adjusted Rates

The calculation of age-adjusted rates is optional. Select the [check box](#) on the Request page to include these statistics in your report.

Age-adjusted rates are calculated with age distribution ratios from the Year 2000 "standard million" population, and the rates are shown per 100,000 population.

An age-adjusted rate is a weighted average of the age-specific (crude) rates, where the weights are the proportions of persons in the corresponding age groups of a standard million population. The potential confounding effect of age is reduced when comparing age-adjusted rates computed using the same standard million population.

For more information on how age-adjusted rates are calculated, see:

- [Surveillance, Epidemiology and End Results \(SEER\)](#)
- [How are age-adjusted rates calculated?](#)

Notes:

- Because cancer incidence increases with age, the change to the 2000 U.S. standard population resulted in higher incidence rates for most cancers. The data published here should not be compared with cancer incidence rates adjusted to different standard populations.
- Incidence rates are also influenced by the choice of population denominators used in calculating the rates. Because some state health departments use customized state population projections when calculating incidence rates, the rates published here may differ slightly from those published by individual states.
- Note that the weights used to calculate age-adjusted rates are derived from the specific populations selected as data request criteria. For example, if you limit your request to specific age groups, then the weights are calculated to represent the selected population.
- The population of many counties along the Gulf Coast of Louisiana, Alabama, Mississippi, and Texas were displaced in the fall of 2005 by Hurricanes Katrina and Rita. The Census Bureau estimates that that 203,937 persons were displaced from these four states in 2005, due to Hurricanes Katrina and Rita. CDC WONDER does not include the displaced persons in the 2005 population counts for these states, nor are these counts included in the summary populations for the affected division, regions or national population. However, the [United States Cancer Statistics website](#) does include these displaced persons in the national population figures for 2005. Thus the national rates and population figures for year 2005 are not comparable between CDC WONDER and the United States Cancer Statistics website. State and MSA population figures are comparable.
- Incidence data are not available for all states in all years, and the state populations are excluded from the national totals when the corresponding incidence data are not available. For more information, see [Data Visualizations Tool Technical Notes](#).

How are age-adjusted rates calculated?

The age-adjusted rate is calculated by multiplying the age-specific rate for each age group by the corresponding weight from the specified standard population, then summing across all age groups, and then multiplying this result by 100,000.

$$\text{Age-Adjusted Rate} = (\text{Sum of (Each Age Specific Rate * Each Standard Population Weight)}) * 100,000$$

The age-specific rate is the number of incidents for a given age group, divided by the population of that age group.

$$\text{Number of incidents in age group}$$

$$\text{Age Specific Rate} = \frac{\text{Population of age group}}{\text{Sum of populations for all age groups}}$$

The "standard population weight" for an age group is calculated by dividing the population for the age group by the sum of the populations for all of the age groups in the query.

$$\text{Standard Population Weight} = \frac{\text{Population for age group}}{\text{Sum of populations for all age groups}}$$

What standard population weights are used for age-adjusted rate calculations?

Note that the weights used to calculate age-adjusted rates are derived from the specific populations selected as data request criteria. For example, if you limit your request to specific age groups, then the weights are calculated to represent the selected population.

What are the age-specific populations for the standard populations?

Refer to the following tables to see the age-specific populations for the various "standard million" populations.

- [2000 US Standard Population](#)
- [1970 US Standard Population](#)
- [1940 US Standard Population](#)
- [2000 World Standard Population](#)

2000 US Standard Million Population

Age Group	Standard Population	Weight
00-00 years	13,818	0.013818
01-04 years	55,317	0.055317
05-09 years	72,533	0.072533
10-14 years	73,032	0.073032
15-19 years	72,169	0.072169
20-24 years	66,478	0.066478
25-29 years	64,529	0.064529
30-34 years	71,044	0.071044
35-39 years	80,762	0.080762
40-44 years	81,851	0.081851
45-49 years	72,118	0.072118
50-54 years	62,716	0.062716
55-59 years	48,454	0.048454
60-64 years	38,793	0.038793
65-69 years	34,264	0.034264
70-74 years	31,773	0.031773
75-79 years	26,999	0.026999
80-84 years	17,842	0.017842
85+ years	15,508	0.015508

1970 US Standard Million Population

Age Group	Standard Population	Weight
00-00 years	17,151	0.017151
01-04 years	67,265	0.067265
05-09 years	98,204	0.098204
10-14 years	102,304	0.102304
20-24 years	80,561	0.080561
25-39 years	66,320	0.066320
30-34 years	56,249	0.056249
35-39 years	54,656	0.054656
40-44 years	58,958	0.058958
45-49 years	59,622	0.059622
50-54 years	54,643	0.054643
55-59 years	49,077	0.049077
60-64 years	42,403	0.042403
65-69 years	34,406	0.034406
70-74 years	26,789	0.026789
75-79 years	18,871	0.018871
80-84 years	11,241	0.011241
85+ years	7,435	0.007435

1940 US Standard Million Population

Age Group	Standard Population	Weight
00-00 years	15,343	0.015343
01-04 years	64,718	0.064718
05-09 years	81,147	0.081147
10-14 years	89,208	0.089208
15-19 years	93,670	0.093670
20-24 years	88,007	0.088007
25-29 years	84,277	0.084277
30-34 years	77,789	0.077789
35-39 years	72,495	0.072495
40-44 years	66,742	0.066742
45-49 years	62,697	0.062697
50-54 years	55,114	0.055114
55-59 years	44,383	0.044383
60-64 years	35,911	0.035911
65-69 years	28,911	0.028911
70-74 years	19,515	0.019515
75-79 years	11,422	0.011422
80-84 years	5,881	0.005881
85+ years	2,770	0.002770

2000 World Standard Million Population

Age Group	Standard Population	Weight
00-00 years	24,000	0.024000
01-04 years	96,000	0.096000
05-09 years	100,000	0.100000
10-14 years	90,000	0.090000
15-19 years	90,000	0.090000
20-24 years	80,000	0.080000
25-29 years	80,000	0.080000
30-34 years	60,000	0.060000
35-39 years	60,000	0.060000
40-44 years	60,000	0.060000
45-49 years	60,000	0.060000
50-54 years	50,000	0.050000
55-59 years	40,000	0.040000
60-64 years	40,000	0.040000
65-69 years	30,000	0.030000
70-74 years	20,000	0.020000
75-79 years	10,000	0.010000
80-84 years	5,000	0.005000
85+ years	5,000	0.005000

95% Confidence Intervals for Age-Adjusted Rates

The calculation of 95% confidence intervals for rates is optional. Select the [check box](#) on the Request page to include these statistics in your report.

The 95% confidence intervals calculated for age-adjusted rates use the Chi Square or Gamma distribution method.

- The 1999-2021 USCS online database uses the Tiwari method, see "[Efficient interval estimation for age-adjusted cancer rates](#)" by Ram C. Tiwari, Limin X. Clegg and Zhaohui Zou, published [Statistical Methods in Medical Research](#) 2006; 15: 547-569.
- The 1999-2002 online database uses the Fay and Feuer method, see "[Confidence intervals for directly standardized rates: A method based on the Gamma distribution](#)" by Michael P. Fay and Eric J. Feuer, published [Statistics in Medicine](#) 1997; 16: 791-801.

Standard Errors for Rates

The calculation of standard errors for rates is optional. Select the [check box](#) on the Request page to include these statistics in your report.

Standard errors for rates are calculated with the assumption that the cancer counts have Poisson distributions.

The method for calculating standard errors for age-adjusted rates is shown below, where the age-adjusted rate is comprised of age groups x through y.

$$SE_{Akrate} = \left[\sum_{i=x}^y \left(\frac{stdmil_i}{\sum_{j=x}^y stdmil_j} \right)^2 \times \left(\frac{count_i}{population_i^2} \right) \right]^{\frac{1}{2}} \times 100,000$$

The method for calculating standard errors for crude rates:

$$SE_{AgeRate} = \left[\sum_{i=x}^y \left(\frac{stdm\bar{a}l_i}{\sum_{j=x}^y stdm\bar{a}l_j} \right)^2 \times \left(\frac{count_i}{population_i^2} \right) \right]^{\frac{1}{2}} \times 100,000$$

Crude Rates

Crude Rates are optional. Select the [check box](#) on the Request page to include Crude Rates in your report.

Crude Rates are expressed as the number of cases reported each calendar year per 100,000 population.

$$\text{Crude Rate} = \text{Count} / \text{Population} * 100,000$$

The population estimates for the denominators of incidence rates are race-specific (American Indian or Alaska Native, Asian or Pacific Islander, Black or African American, White), ethnicity-specific (Hispanic, Non-Hispanic), and sex-specific (Male, Female) county population estimates aggregated to the state or metropolitan area level. See [Population Denominator Data Sources](#) below for more information.

Notes:

- Rates are calculated per 100,000 population by default.
- Crude rates are helpful in determining the need for services for a given population, relative to another population, regardless of size. Crude rates are influenced by the underlying age distribution of the state's population. Even if two states have the same age-adjusted rates, the state with the relatively older population (as demonstrated by having a higher median age) will have higher crude rates because incidence or death rates for most cancers increase with increasing age.
- The year 2000 Census population counts varied from previous population estimates for the years 1990-1999. Rates for geographic areas with small populations and for specific racial or ethnic populations appear to be affected to a greater degree and should be interpreted with caution. Furthermore, since corrections to the population denominators extrapolated from the 1990 census were larger in the late 1990s than earlier in the decade, rates calculated for the late 1990s may be subject to more change than rates calculated for the early 1990s.
- Select the precision for rate calculations in the [Other Options](#) section. When the rate calculated for a small numerator (incidence count) is zero, you may increase the precision to reveal the rate by showing more numbers to the right of the decimal point.

Step 2. Select location:

Select the place of interest from one of the following lists:

1. [States](#) in the US
2. [Regions](#) include [Divisions](#) and [States](#) in the US
3. [Metropolitan Statistical Areas](#) (MSA) in the US
4. [States and Puerto Rico](#)

Click the round button to the right of the list's name to display the list.

Region

Regions and Divisions are multi-state groups. For regional data, you can group by Region, or you can select any combination of individual regions. You can also select multi-state divisions or any combination of individual states.

How?

- Click a [round button](#) to switch between the lists of locations.
- See [How do I use a Finder?](#) for more information.
- See [Finder Tool help](#) for more hints.

Hints:

- The default is all values (the United States).
- The Advanced mode let you easily pick several items from different parts of the list. Items are not selected until you click the "Move" button in Advanced mode. You may also enter values by hand, one code per line, in the Advanced mode. Use the [Finder](#) to see the correct code format. For example, 02 is the Alaska state code.
- The "plus" symbol, "+" indicates that you can open the item, to see more items below it.
- The results to a search are shown in blue, and indicated by ">".

Notes:

- Region is based on the person's legal state of residence at the time the case was submitted to the

registry.

- The Regions are identified by both name and codes in [data extracts](#).
- The United States is split into 4 regions: Northeast, Midwest, South and West. To see the Divisions and States that comprise the regions, send a request for data grouped by Region, Division and State. Choose to "Show Zero Values" in order to also see the names of the states which have been omitted from this data set.

States / States and Puerto Rico

Pick the United States or any combination of individual areas desired. Be sure the button above the list of locations is set to your desired list.

How? See [Radio Button](#) to pick your preferred list. See [How do I select items from the list box?](#) to select specific options in the list.

Notes:

- State and MSA data are based on the patient's residence at the time the case was submitted to the registry.
- The states are coded to Federal Information Processing Standard (FIPS) state codes. The codes and labels for each state shown in separate columns in the [data export](#) files. To see the entire list of included states with label and code values, group by State and by Year.
- The Race and Ethnicity categories are not shown on the "Request Form" tab, when the round button is selected to show the "States and Puerto Rico" list in the "Select Locations" section on the "Request Form" tab.
- **About missing data:**
"The United States" in the State list does not include all 50 states. The data shown for "The United States" are the total of all states included in the data set. More information about the missing locations:
 - Cancer registries were required to meet specific data quality criteria for their cancer incidence statistics to be included in this report. Only registries whose data met these specified criteria were included. See [USCS Registry Eligibility Criteria](#) for more information.
 - The 1999-2021 incidence data cover 97.9% of the U.S. population for 2021 diagnoses and 99.6% for cases diagnosed between 1999 and 2021, that meet the data quality criteria for all invasive cancer sites combined. See [registry-specific data quality](#) Year: Percent of Population 1999: 98.7% (excludes Mississippi, South Dakota)
2000: 98.7% (excludes Mississippi, South Dakota)
2001: 99.0% (excludes Mississippi)
2002: 99.0% excludes Mississippi)
2003-2019: 100% population coverage each year
2020: 98.0% (excludes Indiana)
2021: 97.9% (excludes Indiana)
 - These states are missing data for the indicated year in the 1999-2021 cancer incidence data:

State	Year(s)
Indiana	2020-2021
Mississippi	1999-2002
South Dakota	1999-2000
Puerto Rico	1999-2004; July - December 2017

- **About comparisons with other published reports:**

Note that comparisons of the national counts and rates with other published reports may differ because some states are not included in the data. The 1999-2021 data include different states in different years than the previous archive data sets. The locations are documented at:

- Missing locations in this release and prior releases of these data:

[1999-2021 Missing States](#)

[1999-2020 Archive Missing States](#)

[1999-2019 Archive Missing States](#)

[1999-2018 Archive Missing States](#)

[1999-2017 Archive Missing States](#)

[1999-2016 Archive Missing States](#)

[1999-2015 Archive Missing States](#)

[1999-2014 Archive Missing States](#)

[1999-2013 Archive Missing States](#)

[1999-2012 Archive Missing States](#)

[1999-2011 Archive Missing States](#)

[1999-2010 Archive Missing States](#)

[1999-2009 Archive Missing States](#)

[1999-2008 Archive Missing States](#)

[1999-2006 Archive Missing States](#)

[1999-2005 Archive Missing States](#)

[1999-2004 Archive Missing States](#)

[1999-2002 Archive Missing States](#)

- Included locations in this release and prior releases of these data:
[1999-2021 Included States](#)

[1999-2020 Archive Included States](#)

[1999-2019 Archive Included States](#)

[1999-2018 Archive Included States](#)

[1999-2017 Archive Included States](#)

[1999-2016 Archive Included States](#)

[1999-2015 Archive Included States](#)

[1999-2014 Archive Included States](#)

[1999-2013 Archive Included States](#)

[1999-2012 Archive Included States](#)

[1999-2011 Archive Included States](#)

[1999-2010 Archive Included States](#)

[1999-2009 Archive Included States](#)

[1999-2008 Archive Included States](#)

[1999-2006 Archive Included States](#)

[1999-2005 Archive Included States](#)

[1999-2004 Archive Included States](#)

[1999-2002 Archive Included States](#)

- **Impact of Hurricane Maria in 2017**

Puerto Rico's 2017 incidence counts and rates are based on the first six months of reported data coupled with half of the population estimate (January to June 2017). Cases with unknown month of diagnosis were included. Data from July to December 2017 are excluded to account for the population shift that occurred due to Hurricane Maria.

- **Impact of Hurricanes Katrina and Rita in 2005**

The population of many counties along the Gulf Coast of Louisiana, Alabama, Mississippi, and Texas were displaced in the fall of 2005 by Hurricanes Katrina and Rita, resulting in incomplete case ascertainment for the latter half of the year. For these states, state- and county-level incidence rates were calculated based upon the data submitted to CDC.

Metropolitan Statistical Area (MSA)

Pick "The United States" or any combination of individual MSAs desired. Be sure the button for State above the list is set to your choice.

How? See [Radio Button](#) to pick your preferred list. See [How do I select items from the list box?](#) to select specific options in the list.

Metropolitan statistical areas are defined by the federal Office of Management and Budget (OMB). The MSA definitions apply to all areas except the six New England states; for these states, the New England County Metropolitan Areas (NECMAs) are used. Metropolitan areas are named for a central city in the MSA or NECMA, may include several cities and counties, and may cross state boundaries. Further information about MSAs can be found on the U.S. Census Bureau website at www.census.gov; search for "Metropolitan Statistical Area."

Notes:

- State and MSA data are based on the patient's residence at the time the case was submitted to the registry.
- The data shown for "The United States" are the total of all specific metropolitan areas included in the data set. Those cases that are not reported under a specified MSA are included in the "Other" category.
- MSAs are specified in the data if the total population was at least 500,000 persons for the most recent year in the time period presented, and if the state(s) where the MSA is located met the USCS publication criteria.
- Note that comparisons of the national counts and rates with other published reports may differ because some locations are not included in the data set. The 1999-2021 data include different areas in different years than the previous archive data sets.
 - The missing metropolitan locations are documented here:
[1999-2021 Missing MSAs](#)
[1999-2020 Archive Missing MSAs](#)
[1999-2019 Archive Missing MSAs](#)
[1999-2018 Archive Missing MSAs](#)
[1999-2017 Archive Missing MSAs](#)
[1999-2016 Archive Missing MSAs](#)

[1999-2015 Archive Missing MSAs](#)
[1999-2014 Archive Missing MSAs](#)
[1999-2013 Archive Missing MSAs](#)
[1999-2012 Archive Missing MSAs](#)
[1999-2011 Archive Missing MSAs](#)
[1999-2010 Archive Missing MSAs](#)
[1999-2009 Archive Missing MSAs](#)
[1999-2008 Archive Missing MSAs](#)
[1999-2006 Archive Missing MSAs](#)
[1999-2005 Archive Missing MSAs](#)
[1999-2004 Archive Missing MSAs](#)
[1999-2002 Archive Missing MSAs](#)

- The included metropolitan statistical areas are documented at:
 - [1999-2021 MSAs](#)
 - [1999-2020 Archive MSAs](#)
 - [1999-2019 Archive MSAs](#)
 - [1999-2018 Archive MSAs](#)
 - [1999-2017 Archive MSAs](#)
 - [1999-2016 Archive MSAs](#)
 - [1999-2015 Archive MSAs](#)
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 - [1999-2009 Archive MSAs](#)
 - [1999-2008 Archive MSAs](#)
 - [1999-2006 Archive MSAs](#)
 - [1999-2005 Archive MSAs](#)
 - [1999-2004 Archive MSAs](#)
 - [1999-2002 Archive MSAs](#)
- The codes and labels for each state shown in separate columns in [data export](#) files. To see the entire list of metropolitan areas with labels and code values, group by MSA and by Year.

Step 3. Select year and demographics:

Limit your data for any of the following data elements:

1. [Year](#) - 1999 through 2021 (2005 - 2021 for Puerto Rico)
2. [Age Group](#)
3. [Race](#) - All, American Indian or Alaska Native, Asian or Pacific Islander, Black or African American, White, Other Races Combined (not available for Puerto Rico)
4. [Ethnicity](#) - Hispanic, Non-Hispanic, Unknown (not available for Puerto Rico)
5. [Sex](#) - All, Female, Male

Note: The Race and Ethnicity categories are not shown on the "Request Form" tab, when the round button is selected to show the "States and Puerto Rico" list in the "Select Locations" section on the "Request Form" tab.

Year

Pick any combination of years desired. Data are available for years 1999 - 2021 for the United States, and for 2005 - 2021 for Puerto Rico.

How? See [How do I select items from the list box?](#).

Age Group

Select All ages or any combination of the individual age groups.

How? See [How do I select items from the list box?](#).

The following table shows the age group code values and descriptions, as specified for [data export](#).

Code	Description
1	< 1 year
1-4	1-4 years
5-9	5-9 years
10-14	10-14 years
15-19	15-19 years
20-24	20-24 years
25-29	25-29 years
30-34	30-34 years
35-39	35-39 years
40-44	40-44 years
45-49	45-49 years
50-54	50-54 years
55-59	55-59 years
60-64	60-64 years
65-69	65-69 years
70-74	70-74 years
75-79	75-79 years
80-84	80-84 years
85+	85+ years

Sex

Select All or any combination of values.

How? See [How do I select items from the list box?](#).

Note:

- **About genital system cancers:**

Note that genital system cancers and breast cancers are sex-specific. The rates and population denominators for calculating rates represent the associated sex for the cancer site. Cells representing data for the other sex are labeled "Not Applicable." See [About Genital System Cancers](#) for more information.

The following table shows the age group code values and descriptions, as specified for [data export](#).

Code	Description
F	Female
M	Male

Race

Select All or any combination of values.

How? See [How do I select items from the list box?](#).

Notes:

- Race categories are not available for Puerto Rico.
- The "Other Races Combined and Unknown" racial category contains data for the "Other" and "Unknown" racial categories. Note that the previous releases of this data (1999-2005) included the "American Indian or Alaska Native" racial category within the "Other Races Combined" group.
- The "All" races option sums only all racial categories included in the data: "American Indian or Alaska Native," "Asian or Pacific Islander," "Black or African American," "White," and "Other Races Combined and Unknown," which aggregates the "Other" and "Unknown" racial categories.
- The data are coded to Public Health Information Network (PHIN) standard code values. The following table shows the race code values and descriptions, as specified for [data export](#).

Code	Description
1002-5	American Indian or Alaska Native
A-PI	Asian or Pacific Islander
2054-5	Black or African American
2106-3	White
2131-1	Other Races Combined and Unknown

Ethnicity

Select All or any combination of values.

How? See [How do I select items from the list box?](#).

Notes:

- Ethnicity categories are not available for Puerto Rico.
- Rates are not calculated for the "Unknown" category because population data are not available. The phrase "Not Applicable" is shown for in the rate and population cells.
- Ethnicity data are available starting with the 1999-2006 release of USCS Cancer Incidence, and not available for the preceding vintages.
- The data are coded to Public Health Information Network (PHIN) standard code values. The following table shows the race code values and descriptions, as specified for [data export](#).

Code	Description
2135-2	Hispanic
2186-5	Non-Hispanic
UNK	Unknown

Step 4. Select cancers of interest:

Limit your data for any of the following data elements:

1. [Leading Cancer Sites](#)
2. [Cancer Sites](#)
3. [Childhood Cancers](#)

Allow all ages for Childhood Cancer request

Click this check box when you have selected Childhood Cancers and you want your data to include all ages, or to include any selected ages other than persons who are less than 20 years old. If this box is not checked (the default), then the data results are limited to persons 19 years of age or less.

How? See [How do I change a "Check Box"?](#).

Childhood Cancers

Select either "All Invasive Childhood Cancers Combined" or "All Childhood Cancers, invasive and in situ," or select any combination of the other values.

How? See [How do I select items from the list box?](#).

Notes:

- Choose [Allow all ages for Childhood Cancer request](#) when you wish to look at Childhood Cancers in persons older than 19 years of age.
- International Classification of Childhood Cancer (ICCC) is based on tumor morphology.
- Refer to [International Classification of Childhood Cancer \(ICCC\)](#) on the National Cancer Institute (NCI) website (seer.cancer.gov) for more information.
- See also [International Classification of Childhood Cancer \(ICCC\) Group - Morphology - Topography Table](#).
- Childhood Cancer is usually studied in children who are less than age 20.
- "All Invasive Childhood Cancers Combined" are the summary or combined aggregate total for all invasive Childhood Cancers, except urinary bladder, which includes invasive and *in situ*. *In situ* breast cancers are not included in this aggregate category. Aggregate categories should not be shown in pie charts when subordinate categories are included in the same chart.
- The archive 1999-2002 incidence data has a slightly different set of Childhood Cancers codes and titles than used in later data releases.

The following table shows the International Classification of Childhood Cancer (ICCC) code values and descriptions used in the USCS incidence data, as specified for [data export](#).

Code	Description
0	All Invasive Childhood Cancers Combined
*	
10	I Leukemia

11	I(a) Lymphoid leukemias
12	I(b) Acute myeloid leukemias
13	I(c) Chronic myeloproliferative diseases
14	I(d) Myelodysplastic syndrome and other myeloproliferative
15	I(e) Unspecified and other specified leukemias
20	II Lymphoma and reticuloendothelial neoplasms
21	II(a) Hodgkin lymphoma
22	II(b) Non-Hodgkin lymphoma
23	II(c) Burkitt lymphoma
24	II(d) Miscellaneous lymphoreticular neoplasms
25	II(e) Unspecified lymphoma
30	III CNS and misc intracranial and intraspinal neoplasms
31	III(a) Ependymomas and choroid plexus tumors
32	III(b) Astrocytomas
33	III(c) Intracranial and intraspinal embryonal tumors
34	III(d) Other gliomas
35	III(e) Other specified intracranial/intraspinal neoplasms
36	III(f) Unspecified intracranial and intraspinal neoplasms
40	IV Sympathetic nervous system tumors
41	IV(a) Neuroblastoma and ganglioneuroblastoma
42	IV(b) Other sympathetic nervous system tumors
50	V Retinoblastoma
60	VI Renal tumors
61	VI(a) Nephroblastoma and other nonepithelial renal tumors
62	VI(b) Renal carcinomas
63	VI(c) Unspecified malignant renal tumors
70	VII Hepatic tumor
71	VII(a) Hepatoblastoma
72	VII(b) Hepatic carcinomas
73	VII(c) Unspecified malignant hepatic tumors
80	VIII Malignant bone tumors
81	VIII(a) Osteosarcoma
82	VIII(b) Chondrosarcoma
83	VIII(c) Ewing tumor and related sarcomas of bone
84	VIII(d) Other specified malignant bone tumors
85	VIII(e) Unspecified malignant bone tumors
90	IX Soft-tissue sarcomas
91	IX(a) Rhabdomyosarcomas
92	IX(b) Fibrosarcomas, peripheral nerve & other fibrous
93	IX(c) Kaposi sarcoma
94	IX(d) Other specified soft-tissue sarcomas
95	IX(e) Unspecified soft-tissue sarcomas
100	X Germ-cell, trophoblastic and other gonadal neoplasms
101	X(a) Intracranial and intraspinal germ-cell tumors
102	X(b) Extracranial & extragonadal germ cell tumors
103	X(c) Malignant gonadal germ-cell tumors
104	X(d) Gonadal carcinomas
105	X(e) Other and unspecified malignant gonadal tumors
110	XI Carcinomas and other malignant epithelial neoplasms
111	XI(a) Adrenocortical carcinomas
112	XI(b) Thyroid carcinomas
113	XI(c) Nasopharyngeal carcinomas
114	XI(d) Malignant melanomas
115	XI(e) Skin carcinomas
116	XI(f) Other and unspecified carcinomas

- 120 XII Other and unspecified malignant neoplasms
- 121 XII(a) Other specified malignant tumors
- 122 XII(b) Other unspecified malignant tumors
- 253 Not classified by ICCC or in situ
- 254 In Situ Breast Cancer *
- 254F Female Breast, In Situ *
- 254M Male Breast, In Situ *
- * Data for *in situ* Breast Cancers are listed separately from other Childhood Cancers and not included in the "All Invasive Childhood Cancers Combined" category.

Cancer Sites

Select either "All Sites, invasive and in situ" or "All Invasive Cancer Sites Combined," or select any combination of the other values.

How? See [How do I select items from the list box?](#).

Notes:

- The primary cancer site is the organ of origin within the body where a given cancer occurs in an individual.
- Information on primary site, behavior, and histology was coded according to the *International Classification of Diseases for Oncology, Third Edition* (ICD-O-3) and categorized according to the [revised SEER recodes](#), which define standard groupings of primary cancer sites. Beginning with 2010 diagnoses, cases are coded based on ICD-O-3 updated for hematopoietic codes based on *WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues (2008)*.
- **About the "All Invasive Cancer Sites Combined" category:**
"All Invasive Cancer Sites Combined" are the summary or combined aggregate total for all invasive cancer sites, except urinary bladder, which includes invasive and *in situ*. Data for *in situ* breast cancers are listed separately from invasive cancers and are not included in the "All Invasive Cancer Sites Combined" nor in the "Male and Female Breast" cancer categories. The "Show Totals" control on the Table screen is disabled when aggregate values are displayed. Note that pies charts and data distributions in maps are affected by the inclusion of the "All Invasive Cancer Sites Combined" aggregate data.
- **About sex-specific breast and genital system cancers:**
Note that genital system cancers and breast cancers are sex-specific. The rates and population denominators for calculating rates represent the associated sex for the cancer site. Cells representing data for the other sex are labeled "Not Applicable."
The Cancer Site sex-specific cancers are:

Female Genital System
 Cervix Uteri
 Corpus Uteri
 Uterus, Not Otherwise Specified
 Ovary
 Vagina
 Vulva
 Other Female Genital Organs
 Male Genital System
 Prostate
 Testis
 Penis
 Other Male Genital Organs
 Breast cancers:
 Female Breast
 Male Breast
 Female Breast, In Situ
 Male Breast, In Situ

The following table shows the Cancer Site code values and descriptions, as specified for [data export](#). Whenever applicable, the revised [SEER Cause of Death Recodes](#) are used.

Code	Description
0	All Invasive Cancer Sites Combined *
20010-20100	Oral Cavity and Pharynx
20010	Lip
20020	Tongue
20030	Salivary Gland
20040	Floor of Mouth
20050	Gum and Other Mouth

20060	Nasopharynx
20070	Tonsil
20080	Oropharynx
20090	Hypopharynx
20100	Other Oral Cavity and Pharynx
21010-21130	Digestive System
21010	Esophagus
21020	Stomach
21030	Small Intestine
21041-21052	Colon and Rectum
21041-21049	Colon excluding Rectum
21041	Cecum
21042	Appendix
21043	Ascending Colon
21044	Hepatic Flexure
21045	Transverse Colon
21046	Splenic Flexure
21047	Descending Colon
21048	Sigmoid Colon
21049	Large Intestine, NOS
21051-21052	Rectum and Rectosigmoid Junction
21051	Rectosigmoid Junction
21052	Rectum
21060	Anus, Anal Canal and Anorectum
21071-21072	Liver and Intrahepatic Bile Duct
21071	Liver
21072	Intrahepatic Bile Duct
21080	Gallbladder
21090	Other Biliary
21100	Pancreas
21110	Retroperitoneum
21120	Peritoneum, Omentum and Mesentery
21130	Other Digestive Organs
22010-22060	Respiratory System
22010	Nose, Nasal Cavity and Middle Ear
22020	Larynx
22030	Lung and Bronchus
22050	Pleura
22060	Trachea, Mediastinum and Other Respiratory Organs
23000	Bones and Joints
24000	Soft Tissue including Heart
25010-25020	Skin excluding Basal and Squamous
25010	Melanoma of the Skin
25020	Other Non-Epithelial Skin
46	Male and Female Breast *
26000-Female	Female Breast *
26000-Male	Male Breast *
27010-27070	Female Genital System
27010	Cervix Uteri
27020	Corpus Uteri
27030	Uterus, not otherwise specified (NOS)
27040	Ovary
27050	Vagina
27060	Vulva
27070	Other Female Genital Organs
28010-28040	Male Genital System
28010	Prostate
28020	Testis
28030	Penis
28040	Other Male Genital Organs
29010-29040	Urinary System
29010	Urinary Bladder, invasive and in situ ¶
29020	Kidney and Renal Pelvis
29030	Ureter
29040	Other Urinary Organs
30000	Eye and Orbit
31010-31040	Brain and Other Nervous System
31010	Brain
31040	Cranial Nerves Other Nervous System
32010-32020	Endocrine System
32010	Thyroid
32020	Other Endocrine including Thymus
33011-33042	Lymphomas
33011-33012	Hodgkin lymphoma
33011	Hodgkin - Nodal
33012	Hodgkin - Extranodal
33041-33042	Non-Hodgkin Lymphoma
33041	NHL - Nodal
33042	NHL - Extranodal
34000	Myeloma
35011-35043	Leukemias

35011	Acute Lymphocytic Leukemia
35012	Chronic Lymphocytic Leukemia
35021	Acute Myeloid Leukemia
35022	Chronic Myeloid Leukemia
35041-35043	Other Leukemias
35013	Other Lymphocytic Leukemia
35031	Acute Monocytic Leukemia
35041	Other Acute Leukemia
35043	Aleukemic, Subleukemic and not otherwise specified (NOS)
35023	Other Myeloid/Monocytic Leukemia
36010	Mesothelioma
36020	Kaposi Sarcoma
37000	Miscellaneous
Breast-InSitu	In Situ Breast Cancer *
Breast-InSitu-Female	Female Breast, In Situ *
Breast-InSitu-Male	Male Breast, In Situ *

Notes:

* Data for *in situ* Breast Cancers are listed separately from Breast Cancers and not included in the "All Invasive Cancer Sites Combined" category. The *in situ* Breast Cancer categories are not included in the 1999-2002 Archive Cancer Incidence data.

¶ Urinary Bladder includes invasive and *in situ*.

Leading Cancer Sites (by Race and Sex)

Select either "All Leading Invasive Cancers Sites" or "All Leading Invasive Cancer Sites Combined," or select any combination of the other values.

How? See [How do I select items from the list box?](#).

Notes:

- This list contains only the top or leading cancer sites, meaning the primary cancers with the highest incidence for each race and sex.
- The primary cancer site is the organ of origin within the body where a given cancer occurs in an individual.
- About All Sites Combined:**
"All Invasive Leading Cancer Sites Combined" are the summary or combined aggregate total for all invasive leading cancer sites, except urinary bladder, which includes invasive and *in situ*. *In situ* breast cancers are not included in the invasive cancers category. The "Show Totals" control on the Table screen is disabled when aggregate values are displayed. Note that pies charts and data distributions in maps are affected by the inclusion of the "All Leading Sites Combined" aggregate data.

- About genital system cancers:**

Note that genital system cancers are sex specific, thus rates and population denominators represent the associated sex. Cells representing data for the opposite sex display a "Not Applicable" label. The following genital system cancers are included in the Leading Cancers Sites list:

Cervix Uteri
Corpus Uteri
Ovary
Prostate

The following table shows the Leading Cancers code values and descriptions, as specified for [data export](#). Whenever applicable, the revised [SEER Cause of Death Recodes](#) dated March 1, 2018 are used.

Code	Description
31010-31040	Brain and Other Nervous System
26000	Breast
27010	Cervix Uteri
21041-21052	Colon and Rectum
27020	Corpus Uteri
21010	Esophagus
21080	Gallbladder
29020	Kidney and Renal Pelvis
22020	Larynx
35011-35043	Leukemias
21071	Liver
22030	Lung and Bronchus
25010	Melanoma of the Skin
34000	Myeloma
33041-33042	Non-Hodgkin Lymphoma
20010-20100	Oral Cavity and Pharynx
27040	Ovary

21100	Pancreas
28010	Prostate
21020	Stomach
32010	Thyroid
29010	Urinary Bladder, invasive and in situ

Notes:

* Data for *in situ* Breast Cancers are listed separately from Breast Cancers and not included in the "all invasive cancer sites combined" category.

Step 5. Other options:

Export Results: If checked, then query results are exported to a local file. More information on how to import this file into other applications can be found [here](#).

Show Totals: If checked totals and sub-totals will appear in the results table.

Show Zero Values: If checked rows containing zero counts will appear in the results table. If unchecked, zero count rows are hidden.

Precision: Select the precision for rate calculations. When the rate calculated for a small numerator (incidence count) is zero, you may increase the precision to reveal the rate by showing more numbers to the right of the decimal point.

Data Access Timeout: This value specifies the maximum time to wait for the data access for a query to complete. If the data access takes too long to complete, a message will be displayed and you can increase the timeout or simplify your request. If you can't complete a request using the maximum timeout, contact user support and we will try to run a custom data request for you.

Populations for Age-Adjusted Rates: Select the standard population used to calculate age-adjusted rates. See [Age-Adjusted Rates](#) for more information.

Data Source Information

Incidence Data Sources: The United States Cancer Statistics are the official government statistics on cancer. These statistics include cancer registry data from CDC's National Program of Cancer Registries (NPCR) and the National Cancer Institute's (NCI) Surveillance, Epidemiology, and End Results (SEER) Program, as well as mortality data from CDC's National Center for Health Statistics. The statistics provide information on newly diagnosed cancer cases and cancer deaths for the whole U.S. population. For a list of all USCS contributors and partners, visit [USCS Contributors](#).

Data are provided by:

- The Centers for Disease Control and Prevention [National Program of Cancer Registries \(NPCR\)](#)
- The National Cancer Institute [Surveillance, Epidemiology and End Results \(SEER\)](#) program

Data for years 1999 - 2021 are provided in the 2023 data submission.

To learn more about the methods and source of these data please refer to:

- [United States Cancer Statistics \(USCS\)](#) website
- [National Program of Cancer Registries \(NPCR\)](#) website
- [Surveillance, Epidemiology and End Results \(SEER\)](#) website
- Additional technical information:
[United States Cancer Statistics Technical Notes](#)

Population Denominator Data Sources:**United States:**

The population estimates for the denominators of incidence rates are race-specific (American Indian or Alaska Native, Asian or Pacific Islander, Black or African American, White), ethnicity-specific (Hispanic, Non-Hispanic) and sex-specific (Female, Male) county population estimates aggregated to the state or metropolitan area level. The population estimates are a slight modification of the annual time series of July 1 county population estimates (by age, sex, race, and Hispanic origin) produced by the Population Estimates Program of the U.S. Bureau of the Census (Census Bureau) with support from the National Cancer Institute (NCI) through an interagency agreement.

For more information on the Census Bureau's population estimates and documentation of the procedures used to develop them, see [SEER - US Population Data](#).

In general, July 1 population estimates are used to calculate annual incidence and death rates because these estimates are considered to reflect the average population of a defined geographic area for a calendar year. However, the populations of many counties along the Gulf Coast of Louisiana, Alabama, Mississippi, and Texas were displaced in the fall of 2005 by hurricanes Katrina and Rita. The Census Bureau estimates that 203,937 persons were displaced from these four states in 2005.

Incidence data are not available for all states in all years, and the state populations are excluded from the national totals when the corresponding incidence data are not available. For more information, see [Data Visualizations Tool Technical Notes](#).

Puerto Rico

Population estimates used in the calculation of Puerto Rico incidence and death rates are sex-specific, and are not available by race or ethnicity. Population estimates for Puerto Rico for years 2006-2009 are July 1st intercensal estimates of the resident population by sex and age for Puerto Rico, years 2000-2010, released by the U.S. Census Bureau Population Division in September 2011. Population estimates for Puerto Rico for years 2010-2021 are July 1st postcensal estimates of the resident population by sex and age for United States and Puerto Rico Commonwealth, years 2010-2021, released by the U.S. Census Bureau Population Division in May 2022: "Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States, States, and Puerto Rico Commonwealth: April 1, 2010 to July 1, 2020." Please note that for the 2017 year, only half of the annual population estimate for Puerto Rico is used as the denominator to calculate incidence rates. Please see [impact of Hurricane Maria in 2017](#) for more information.

Additional Information

Suggested Data Source Citations: United States Cancer Statistics - Incidence: 1999-2021, WONDER Online Database. United States Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; 2023 submission; 2024 release.

Contact: USCSDData@CDC.gov.

Confidentiality: The following rules are applied in order to protect personal privacy:

- Data are suppressed if the figures represent fewer than 16 cases for the specific category.
- Counts and rates are suppressed for cells at the Metropolitan Statistical Area (MSA) level showing the "American Indian or Alaska Native" racial category, the "Asian or Pacific Islander" racial category, when the specific category's population for rate calculations is less than 50,000 persons.
- Data are suppressed at the state and MSA level for certain race and ethnicity groups:
 1. American Indian or Alaska Native data are suppressed at the state and MSA level for Illinois, Kansas, New Jersey, and New York;
 2. Asian or Pacific Islander are suppressed at the state and MSA level for residents of Kansas for 1999;

States decide whether to suppress data for specific race and ethnicity categories. The suppression criteria may vary in previous releases of these data.

- See Also:**
- [United States Cancer Statistics \(USCS\)](#) website
 - [National Program of Cancer Registries \(NPCR\)](#) website
 - [Surveillance, Epidemiology and End Results \(SEER\)](#) website
 - [Guidance for Comparing States' Cancer Data](#)
 - [United States Cancer Statistics Glossary](#)

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This information is provided as technical reference material. Please contact us at cwus@cdc.gov.