Surveillance Research Program



The Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute (NCI)



# **Accessing SEER Data**

## **Overview of the SEER Program**

The Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute (NCI) currently collects and publishes cancer incidence, prevalence, and survival data from population-based cancer registries covering approximately 34.6 percent of the U.S. population. The SEER registries routinely collect data on patient demographics, primary tumor site, tumor morphology, stage at diagnosis, and first course of treatment, and they follow up with patients for vital status. The SEER Program is the only comprehensive source of population-based information in the United States that includes stage of cancer at the time of diagnosis and patient survival data. It provides the greatest longevity for population-based cancer statistics in the United States, having begun with nine registries in 1973.

#### Use SEER Data To...

... address multiple issues. Some examples of these include:

- Examine stage at diagnosis by race/ethnicity.
- Calculate survival by stage at diagnosis, age at diagnosis, and grade or size of tumor.
- Determine trends and incidence rates of cancers at various sites over time.

#### **How To Access SEER Data**

The SEER\*Stat statistical software provides a convenient, intuitive mechanism for the analysis of SEER and other cancer-related databases. It is a powerful personal computer tool to produce statistics for studying the impact of cancer on a population. SEER research data files and SEER\*Stat software are available to users in three ways: (i) through SEER\*Stat in a client server mode, (ii) downloadable binary and text data in compressed format through your Internet connection and (iii) via DVD discs shipped directly to you.

A signed SEER Data-Use Agreement form is required to access the SEER data. Request forms may be accessed at <a href="https://seer.cancer.gov/seertrack/data/request">https://seer.cancer.gov/seertrack/data/request</a>. The SEER Program will process your request within 2 business days of receiving your signed agreement, and there is no charge for this service. For detailed instructions on accessing SEER data, please visit our Web site at: <a href="https://seer.cancer.gov/data/">https://seer.cancer.gov/data/</a>.

#### **SEER\*Stat Tutorials**

Tutorials are designed to provide step-by-step instructions for using SEER\*Stat to calculate statistics, view statistical output database values, and export results. The tutorials cover the following topic areas:

Fundamentals:

SEER\*Stat Basics, Frequencies, Case Listings

Rates and Trends:

Age-Specific and Age-Adjusted Incidence Rates, Trends

Survival Statistics:

Relative Survival, Period Survival, Conditional Survival

Advanced Statistical Topics:

Prevalence, Multiple Primary-Standardized Incidence Rates (MPSIR)

County Attributable Data:

Generate County-wise Case Listing, Incidence & Mortality Rates

Tutorials may be accessed at: <a href="https://seer.cancer.gov/seerstat/tutorials/">https://seer.cancer.gov/seerstat/tutorials/</a>.

## SEER\*Prep: Analyze Your Own Data

The SEER\*Prep software converts user-supplied ASCII text data files to the SEER\*Stat database format, allowing analysis of population-based registry data using SEER\*Stat. SEER\*Prep performs two main functions: converting text data to the specific binary format required by SEER\*Stat and creating the SEER\*Stat data dictionary.

The latest version of SEER\*Prep may be downloaded at: <a href="https://seer.cancer.gov/seerprep/">https://seer.cancer.gov/seerprep/</a>.

If you are a new SEER\*Prep user, see "How to Use SEER\*Prep to Create a Database" at: https://seer.cancer.gov/seerprep/example.

### **Additional Software**

## Joinpoint Regression Software: Determine Trends

Joinpoint is statistical software for the analysis of trends over time using regression models in which multiple line segments that represent individual trends are connected at the "joinpoints." Cancer trends reported in NCI publications are generally calculated using this software. https://surveillance.cancer.gov/joinpoint/

# DevCan Software: Calculate the Probability of Developing or Dying of Cancer

DevCan calculates incidence and mortality rates using cross-sectional counts of incidence cases from SEER areas, mortality counts of the same areas or for the United States from National Center for Health Statistics data, and mortality rates using population estimates from Census data for these areas. These rates are converted to the probabilities of developing or dying from cancer for a hypothetical population.

DevCan software may be downloaded at: <a href="https://surveillance.cancer.gov/devcan/download">https://surveillance.cancer.gov/devcan/download</a>.

Additional statistical methods and associated software tools for the analysis and reporting of cancer statistics may be accessed at: <a href="https://surveillance.cancer.gov/software/">https://surveillance.cancer.gov/software/</a>.

