Ontario Health
Cancer Care Ontario

Ontario Cancer Registry SEER*Stat Package

Frequently Asked Questions

Contents

The SEER*Stat Software

1. What is SEER*Stat?

SEER*Stat is a free statistical software created and maintained by the [National Cancer Institute (NCI)](#) in the United States. The current version is 8.4.1 (released March 29, 2023). The software is designed to work with the NCI's Surveillance, Epidemiology and End Results (SEER) data, but can also be used to analyze data from other cancer registries that have been prepared to comply with the software.

Ontario Health (Cancer Care Ontario) prepares data from the Ontario Cancer Registry to be compatible with the SEER*Stat software and offers these databases through the Ontario Cancer Registry SEER*Stat Package.

Ontario Cancer Registry SEER*Stat Package

2. What is included in the Ontario Cancer Registry SEER*Stat Package—Release 13?

The Ontario Cancer Registry SEER*Stat Package can be used to produce cancer incidence and mortality frequencies and rates (crude and age standardized), as well as survival and limited-duration prevalence statistics. The package includes:
- SEER*Stat Software Version 8.4.1 (ss8_4_1.exe);
- Ontario Cancer Data Files (Ontario cancer incidence and mortality);
- User Guide: Data Notes and Description;
- Quick Start Guide: Installation and SEER*Stat Examples with Ontario Cancer Data;
- Important Notes to All Users of Ontario Cancer Registry SEER*Stat Package—Release 13; and
- Frequently Asked Questions: Ontario Cancer Registry SEER*Stat Package—Release 13.

3. How do I request a copy of the Ontario Cancer Registry SEER*Stat Package— Release 13?

To request a copy of the package, you will need to complete a [Confidentiality Agreement](#) available on the Ontario Health (Cancer Care Ontario) website. Once a completed agreement form is submitted, you can expect to hear from Ontario Health (Cancer Care Ontario) within three business days with further instructions.

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4. Can I submit one Confidentiality Agreement on behalf of several users?

Each user must complete the Ontario Health Confidentiality Agreement for the Ontario Cancer Registry SEER*Stat Package—Release 13. However, if there are two or more applicants from the same institution, a designate from among those applicants must be assigned to receive the data on the group's behalf. The designate may represent an unlimited number of applicants from the same institution. The data will only be disclosed to the designate once all applicants have submitted the Ontario Health Confidentiality Agreement.

5. Do I need to submit another Confidentiality Agreement if I have received the package before?

Yes. All new and previous users are required to submit a Confidentiality Agreement with each new release of the Ontario Cancer Registry SEER*Stat Package.

6. How can I get the Ontario Cancer Registry SEER*Stat Package—Release 13?

This release will be available for download via Ontario Health's secure web-based managed file transfer (MFT) system). When your request is approved, Ontario Health (Cancer Care Ontario) will provide you with the necessary login credentials to access the downloadable package. See below for the minimum browser requirements needed to use the MFT:

- Apple Safari 9 on OS X only;
- Google Chrome latest version;
- Microsoft Internet Explorer 11 (Compatibility View is not supported);
- Mozilla Firefox latest version; or
- Microsoft Edge.

7. What if I do not have permission to install software onto my work computer?

Please contact your IT administrator for help downloading and installing SEER*Stat software.

8. How often is a new Ontario Cancer Registry SEER*Stat Package released?

A new release of the package is expected to be released every two years, when there are additional years of Ontario cancer data available for distribution.

9. Can I get an email notification when a new version is released?

Yes. There are two options:

- New users can choose to receive notifications about future releases and updates to the latest release of the Ontario Cancer Registry SEER*Stat Package by checking "Yes" under the section called "Consent to Receive Email" in the Confidentiality Agreement.
- Anyone interested in receiving emails about the Ontario Cancer Registry SEER*Stat Package and other Ontario Health (Cancer Care Ontario) products related to cancer surveillance can email cancersurveillance@ontariohealth.ca to be added to our distribution list.

The release of the Ontario Cancer Registry SEER*Stat Package is also announced through other communication channels, such as the Association of Public Health Epidemiologists in Ontario (APHEO) forum.

Ontario Cancer Data

10. What years of data are included in this release?

The Ontario Cancer Registry SEER*Stat Package—Release 13 includes Ontario cancer incidence and mortality data from 1981 to 2020.

11. Can I use the new data files in this release with an older version of the SEER*Stat software?

Using new data files with an older version of the software is not recommended because there have been important updates to the SEER*Stat software since earlier releases. We recommend using the version of SEER*Stat included in the package for Release 13.

12. Is there a data dictionary provided with this release?

Yes. A detailed data dictionary can be found in the "User Guide: Data Notes and Description" document.

13. Can I get race or ethnicity information in this release?

No. Because the Ontario Cancer Registry does not collect any data on race or ethnicity, we do not provide this information in the data files for the Ontario Cancer Registry SEER*Stat Package.

Variables and Analyses

14. Can I compare analyses generated using a previous release with analyses generated from Release 13?

No. The Ontario Cancer Registry is a dynamic database that regularly receives new case information and updates to existing records, so data from earlier years of the Ontario Cancer Registry SEER*Stat Package (formerly known as the CCO SEER*Stat Package) may be slightly different.

15. Can I create user-defined variables or share my user-defined variables?

Yes. Instructions for creating user-defined variables are in the "Quick Start Guide" included in the package. User-defined variables may also be shared with other Ontario Cancer Registry SEER*Stat Package users. For a detailed guide to sharing user-defined variables, please visit the [U.S. National Cancer Institute's SEER*Stat Frequently Asked Questions web page](#).

16. What are moving averages and how can I compute them?

A moving average is a calculation used to minimize short-term fluctuations by taking the average value of consecutive years (three, five, etc.), centered around the year of interest. To compute moving averages in SEER*Stat, you need to first create a user-defined variable for Year of Diagnosis (incidence rates) or Year of Death (mortality rates). Instructions on how to create a user-defined variable are provided in the "Quick Start Guide" included in the package.

Here is an example of how to compute a **three-year moving average**:

1. Define three-year groupings and use the middle year (the year of interest) as the label:
   - For 2000, use the years 1999, 2000 and 2001 and label as 2000;
   - For 2001, use the years 2000, 2001 and 2002 and label as 2001; and
   - For 2002, use the years 2001, 2002 and 2003 and label as 2002.

2. Save the newly created variable with an appropriate name (e.g., "Year of Diagnosis, Three-Year Moving Avg").

3. From the appropriate session in SEER*Stat, select the "Table" tab. From there, select your user-defined variable to be displayed in the output. Three-year moving averages will then be displayed in your output table.

Use the same method with five-year groupings to compute a five-year moving average.

17. How will the SEER multiple primary and histology rules affect my analyses?

Beginning with 2010 diagnoses, the Ontario Cancer Registry adopted the SEER Multiple Primary and Histology Coding Rules for counting additional primary cancers. Because of their more liberal consideration of subsequent primaries, the SEER rules result in an increase in the number of new cases compared to pre-2010 incidence counts, when a more conservative, modified version of the International Association of Cancer Registries (IACR) rules were used. However, this change in number is due to *how* cancers are being counted; it does not mean that *more* people in Ontario are being diagnosed with cancer.

In the SEER*Stat software, users can select the "IACR Multiple Primary Flag" variable in the "Multiple Primary Fields" folder to distinguish between cases that meet the IACR multiple primary rules and other cases, which allows for a comparison of years before and after 2010. For more information on using the IACR Multiple Primary Flag, please refer to the "Quick Start Guide" included in the Ontario Cancer Registry SEER*Stat Package—Release 13.

18. How will the changes in coding and case creation standards introduced with the 2018 diagnosis year affect my analyses?

Multiple primary and histology coding rules provide cancer registries with a standard set of rules to follow when coding and counting distinct cancers. The 2018 SEER Solid Tumor Coding Rules replaced the 2007 SEER Multiple Primary and Histology Coding Rules for cases diagnosed from January 1, 2018, onward. As a result of this update, there have been changes to some subtypes and histology codes. However, this update has not resulted in significant changes in incidence for overall cancer sites. Please refer to the "User Guide: Data Notes and Description" document for details on these changes.

19. How will the changes in staging classification introduced with the 2018 diagnosis year affect my analyses?

Beginning with the 2018 diagnosis year, the Collaborative Stage Data Collection System (CS) was decommissioned by the Canadian Council of Cancer Registries and use of the eighth edition of the American Joint Committee on Cancer Tumor Nodes Metastases Staging Classification (AJCC TNM8) was mandated. AJCC TNM8 has stricter requirements than CS for key data elements when mapping to an overall stage group. Due to these stricter requirements, starting in 2018 there is an increase in cancers with unknown stage and a shift in stage distribution for certain cancer types compared with previous years. Please refer to the "User Guide: Data Notes and Description" document for details on

these changes before comparing any cancer stage from the 2018 diagnosis year onward with previous years. Direct comparison is not recommended for all cancer types.

Citation

20. How do I cite Ontario Cancer Registry data analyzed from this release in publications?

The suggested citation may be retrieved from the session information. Please check the "User Guide: Data Notes and Description" document included in the package to find out how to copy session information. The following are examples of the citation formats:

- Software:
      Surveillance Research Program, National Cancer Institute SEER*Stat software
      (www.seer.cancer.gov/seerstat) version 8.4.1.

- Ontario Cancer Incidence, 1981–2020 Database:
      Ontario Cancer Registry SEER*Stat Package - Release 13 - OCR (Dec. 2022). Statistics
      Canada. Table 17-10-0005-01 Population estimates on July 1st, by age and sex [Internet].
      Ottawa (CA): Government of Canada; 2022 Dec 21 [cited 2023-01-27]. Available from:
      https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000501.

You are required to acknowledge Ontario Health (Cancer Care Ontario) as the source of data in all papers, publications and reports that result from the use of the data. The acknowledgement must be in the following form: "Parts of this material are based on data and information provided by Ontario Health. The analyses, conclusions, opinions and statements expressed herein are those of the author(s), and not necessarily those of Ontario Health."

21. Do I need to let Ontario Health (Cancer Care Ontario) know about publications I develop using this release?

Yes, all publications (e.g., reports, factsheets, memos) using the data from the Ontario Cancer Registry SEER*Stat Package must be supplied to Ontario Health (Cancer Care Ontario) by emailing OCRSEERStat@ontariohealth.ca.

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Resources and Contact

22. Where can I get supporting materials?

Training videos for producing basic cancer incidence, mortality, survival and prevalence statistics for Ontario using the Ontario Cancer Registry SEER*Stat Package are available on the [Ontario Cancer Registry SEER*Stat Package website](#).

[SEER*Stat tutorials are also offered on the National Cancer Institute website](#). Additional SEER*Stat training materials are available for download for members from the [Association of Public Health Epidemiologists in Ontario (APHEO) website](#) under the "Cancer Resources" section.

Other relevant information and resources on Ontario cancer data, including more information about the Ontario Cancer Registry, can be found on the [Cancer Care Ontario website](#).

23. Who should I contact if I have other questions?

If you have questions or comments, or want to let us know about any publications using Ontario Cancer Registry SEER*Stat Package Release 13, contact us at OCRSEERStat@ontariohealth.ca.

If you have questions about the cancer registry, contact the Ontario Cancer Registry at OH-CCO_ocrquestions@ontariohealth.ca.

For statistics that cannot be found in the Ontario Cancer Registry SEER*Stat Package, email OH-CCO_Datarequest@ontariohealth.ca.

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