MICHIGAN CANCERS

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Abstract

This dataset allows for calculation of single-year and five-year incidence counts and rates, by age group (for childhood cancers and for breast cancer only in adults), race/ethnicity, sex, and county and/or state of residence at time of diagnosis for eighteen specific cancer types and sub-types. These cancers are:

1. Acute Lymphocytic Leukemia
2. Acute Myeloid Leukemia
3. Bladder
4. Brain
5. Breast
6. Chronic Lymphocytic Leukemia
7. Esophagus
8. Kidney
9. Larynx
10. Leukemia
11. Liver
12. Lung
13. Melanoma
14. Mesothelioma
15. Non-Hodgkin Lymphoma
16. Oral
17. Pancreas
18. Thyroid

Data from the Michigan Cancer Surveillance Program (MCSP) were used to create this dataset through the Michigan Department of Health and Human Services (MDHHS), Division for Vital Records and Health Statistics (DVRHS) through a Data Use Agreement and review by the Scientific Advisory Board.

All users are recommended to read and fully comprehend the metadata prior to data use. *To access these data, please visit the [MiTracking data portal](#).*

Purpose[1]

This dataset will be used to calculate the nationally consistent data and measures (single-year and 5-year rolling incidence counts and rates) for adult cancers for use on the national and Michigan public portals. The public data portal will provide public health professionals, researchers, Tracking grantees, and the general public with aggregate information on cancers in the State of Michigan.

MDHHS is mandated by Act 82 of 1984, effective July 1, 1984, to establish a cancer registry for the State of Michigan. This statute states that "the department shall establish a registry to record cases of cancer and other specified tumorous and precancerous diseases that occur in the state, and to record information concerning these cases as the department considers necessary and

[1] Michigan Cancer Surveillance Program Manual & CDC National Tracking Indicator Templates

appropriate in order to conduct epidemiologic surveys of cancer and cancer-related diseases in the state."

Any facility diagnosing and/or treating a cancer patient is required to submit reports of diagnosed cancers. In addition, all hospitals, clinical laboratories, physician offices, dentists, and clinic directors who have knowledge of a case of cancer shall report the case to MDHHS.

In October 1, 2004, the MCSP implemented the collection of benign/borderline intracranial and Central Nervous System (CNS) tumors as a new requirement.

A statewide population-based cancer registry is the only means whereby statewide incidence data for cancers by type and by area of residence can be developed. Timely information on cancer cases is employed as a basis for cancer surveillance, as a tool for initial evaluation of cancer incidence within regions of particular interest, and as a source of baseline incidence data. The registry is of value in examining the frequency of cancer by demographic characteristics such as age, race, and sex, and is of significant value to researchers in epidemiological case control studies. These data are also helpful in the areas of planning health education and addressing public health concerns.

Supplemental Information[2]

MCSP began tabulating cancer incidence reports on January 1, 1985. By the end of 2005, the state central cancer registry contained 1.5 million reports with 1 million individual cancer cases. These cases represent approximately 180 reporting facilities, which include hospitals, physician offices and laboratories. The Metropolitan Detroit Cancer Surveillance System (MDCSS) operates a Surveillance Epidemiology End Results (SEER) registry which reports for all hospitals and a majority of the laboratories within Oakland, Macomb, and Wayne counties. The SEER registry represents approximately 100 hospitals and laboratories in these three counties.

Facilities can report cancer cases to the state central cancer registry either manually on the cancer report form or electronically through the State's free software, Abstract Plus. Hospital registries are becoming more sophisticated in their collection and transferal methods since the state cancer registry began in 1985. As of October 2007, approximately 90 percent of the cases from hospitals and regional registries are involved in an automated reporting system. Automated facilities send their data through a secure FTP (file transfer protocol) site.

Keywords

Cancer; Acute lymphocytic leukemia; Acute myeloid leukemia; Bladder; Brain; Breast; Chronic lymphocytic leukemia; Kidney; Leukemia; Liver; Lung: Melanoma: Mesothelioma; Non-Hodgkin's lymphoma; Thyroid; Oral; Larynx; Esophagus; Pancreas; Health outcomes; Health effects

Bounding Coordinates

West Bounding Coordinate: -90.418133999999995

East Bounding Coordinate: -82.418394000000006

North Bounding Coordinate: 48.189534000000002

South Bounding Coordinate: 41.696088000000003

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[2] From Michigan Cancer Surveillance Program Manual

Level of Geographic Detail*:* State and County

Currentness Reference (when data were last updated**)***:* 07/29/2016

Frequency at which the data are updated: Annually

Data Status*:* Complete

Completeness Report[3]

Sources of data submissions (incidence cases) come from hospitals, laboratories, out-patient treatment centers, nursing homes, hospices, physicians, dentists, freestanding diagnostic treatment centers, Indian Health Service (IHS)/Local Tribal Councils and death certificates. Consolidated reports of cancer case reports within Oakland, Macomb and Wayne counties are submitted to the MCSP via the MDCSS. As data come from multiple sources, the data are consolidated by the cancer registry staff to make a case report for each reportable tumor type.

Statewide cancer data are compiled and analyzed every year. The processing time for a report from diagnosis to statistics is usually about two years.

The central cancer registry Call for Data is conducted on a yearly basis. Submission files (data) are forwarded to the North American Association of Central Cancer Registries (NAACCR), and the Centers for Disease Control and Prevention (CDC) National Program of Cancer Registries (NPCR) (data quality standards).

The NAACCR Call for Data for is conducted for its certification process and to produce a new set of Cancer in North America (CiNA) data products. This dataset includes data from the years 2000-2013.

Data are also evaluated annually by NPCR for the national data quality standards and must meet five data quality criteria:

- 95% complete based on observed-to-expected cases computed by CDC
- 3% or fewer death-certificate only cases
- No greater than 1 per 1,000 unresolved duplicate rate
- Maximum percent missing critical data elements
  - 2% age
  - 2% sex
  - 3% race
  - 2% county
- 99% pass a CDC-prescribed set of standard edits

All Grantees funded by CDC NPCR are expected to meet the established NPCR standards.

Data Processing Description

The dataset was processed and created using data from the MCSP through the Michigan DVRHS. The dataset was prepared using the instructions found in the CDC Indicator Templates for Cancers,

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[3] From Jetty Alverson and Michigan Cancer Surveillance Program Manual

3/19/2013. Any facility diagnosing and/or treating a cancer patient is required to submit reports of diagnosed cancers. In addition, all hospitals, clinical laboratories, physician offices, dentists, and clinic directors who have knowledge of a case of cancer shall report the case to MDHHS.

- The Michigan Tracking Program staff requested incident cancer counts and rates in data files from DVRHS following a signed Data Use Agreement and review from the Scientific Advisory Board.
- All new, unique cases of cancer for people living in Michigan were counted. That number was filtered by sex and race. These steps were repeated for each available year of data.
- All new, unique cases of cancer for people living in Michigan were counted. That number was divided by the total number of people living in Michigan, and filtered by sex and race. Because cancer can be rare, the divided number was multiplied by 100,000 to get the number of new cases for every 100,000 people. These steps were repeated for each available year of data.
- All new, unique cases of cancer for people living in Michigan and each Michigan county were counted. Those numbers were filtered by sex and race. These steps were repeated for each available 5-year range of data. To protect individuals, many years of data are sometimes grouped together because the number of cases per year are too small to provide to the public.
- All new, unique cases of cancer for people living in Michigan were counted. That number was divided by the total number of people living in Michigan and filtered by sex and race. Because cancer can be rare, the divided number was multiplied by 100,000 to get the number of new cases for every 100,000 people. In the same way, all new, unique cases of bladder cancer for people living in each Michigan county were counted and divided by the total number of people living in that county. These steps were repeated for each available 5-year range of data.

Access Constraints

There are no access constraints for data available through the Michigan Environmental Public Health Tracking data portal.

Although these data are intended for use on the EPHTN national public portal, there may be certain requirements related to privacy/disclosure concerns, given the potentially sensitive nature of the data. Such requirements may involve special suppression rules when there are small counts. Data will be displayed via the national and Michigan public portals only when sufficient conditions have been met to protect data privacy.

Use Constraints

It is recommended that all users read and fully comprehend metadata prior to data use.

These data cannot be used for commercial purposes and shall not be used to engage in any method, act, or practice to conduct the solicitation or advertisement of goods, services, or real estate to Michigan consumers.

Data users are prohibited from attempting to learn the identity of any person included in the data and from linking these data with any other data for the purpose of matching records to identify individuals or entities (such as hospitals).

Differences in rates over time or by area may reflect differences or changes in diagnostic techniques and criteria and in the coding of cancers.

Differences in rates by area may be due to different socio-demographic characteristics and associated behaviors. When comparing rates across geographic areas, a variety of non-environmental factors, such as access to medical care and diet, can impact the likelihood of developing a cancer.

The Michigan Environmental Public Health Tracking Program and its data partners have applied appropriate cell suppression rules imposed by the data providers and/or using guidance from the CDC. Even at the county level it can be expected that the measures generated will often be based upon numbers too small to report or present without violating state and federal privacy guidelines and regulations. Staff have adhered to the cell suppression rules by suppressing all counts than 0 and less than 6, along with their corresponding rates. Age-adjusted rates based on counts less than 20 have been suppressed in order to provide reliable rates only. Complimentary suppression has also been completed to prevent any back calculation of suppressed cells. For some data, it was necessary to increase cell sizes by combining data across time (e.g., years) and geographic areas (statewide instead of county-level data).

Security Handling Description

If data are distributed, the use constraints specified in this metadata apply to all recipients of the data.

Confidentiality of all data is required by law and strictly maintained by the Health Department staff. Section 2631 of the Public Health Code regulates procedures protecting confidentiality and regulating disclosure of data and records.

Distribution Liability

The Michigan Public Health Tracking Network is maintained, managed, and operated by the Environmental Health Bureau (EHB) within MDHHS. In preparation of these data, every effort has been made to offer the most current, correct, complete, and clearly expressed information possible. Nevertheless, some errors in the data may exist. In particular, MDHHS disclaims any responsibility for source data, compilation and typographical errors and accuracy of the information that may be contained in these data.

These data do not represent the official legal version of source documents or data used to compile these data. MDHHS further reserves the right to make changes to these data at any time without notice.

It is strongly recommended that careful attention be paid to the contents of the metadata file associated with these data to evaluate dataset limitations, restrictions, or intended uses. MDHHS shall not be held liable for improper or incorrect use of the data described and/or contained herein.

MDHHS makes no warranties or representations whatsoever regarding the quality, content, condition, functionality, performance, completeness, accuracy, compilation, fitness, or adequacy of the data. By using the data, you assume all risk associated with the acquisition, use, management, and disposition of data in your information system, including any risks to your

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MDHHS shall not be liable, without limitations, for any direct, indirect, special, incidental, compensatory, or consequential damages, or third-party claims, resulting from the use or misuse of the acquired data, even if MDHHS has been advised of the possibility of such potential damages or loss. Format compatibility is the user's responsibility.

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Use of the data with other data shall not terminate, void, or otherwise contradict this statement of liability.

The sale or resale of the data, or any portions thereof, is prohibited unless with the express written permission of MDHHS, MCSP, and the DVRHS. These data may not be used for commercial purposes without first obtaining written permission from the MCSP and the DVRHS.

If errors or otherwise inappropriate information is brought to our attention, a reasonable effort will be made to fix or remove it. Such concerns should be addressed to the Michigan Tracking Program via email or telephone (See Contact Information below).

Custom Order Process

For access to national and multi-state unrestricted or public use data, please see: http://ephtracking.cdc.gov

For access to unrestricted or public use Michigan-specific data, please contact the Michigan Cancer Surveillance Program.

Contact Information

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