Illinois Department of Public Health Division of Epidemiologic Studies Illinois State Cancer Registry

User Manual

Cancer Incidence Public Dataset (22th edition), data as of November 2014, released April 2015.

Illinois data IL8612.dat

County data CNTY8812.dat

ZIP code data ZPCD8812.dat

Cook County with Cook suburbs and Chicago COOK0312.dat

Data Use Agreement

By using these data, you signify your agreement to comply with the following statutorily based requirements.

The Illinois Health and Hazardous Substances Registry Act (410 ILCS 525/12) provides data collected by the Illinois State Cancer Registry (ISCR) be made available to the public. However, the identification or contact of individuals is prohibited.

In an effort to exclude identifying information on individual patients, the data (e.g. age, race, Hispanic ethnicity, year of diagnosis and type of cancer) have been aggregated into categories within individual records, the number of which depends on the size of the geographic area.

These data are provided as a public service for the purpose of statistical reporting and analysis only. There should be no attempt to learn the identity of any person included in these data. If the identity of any person is discovered inadvertently, no disclosure or other use of the identity will be made.

Uses of these data do not constitute an endorsement of the user's opinion or conclusions by the Department and none should be inferred.

Citation

Please reference the source of these data in any published document as follows; Illinois Department of Public Health, Illinois State Cancer Registry, public data set v22, 1986-2012, data as of November 2014.

Technical Notes

The Illinois public dataset is in ASCII format and contains sanitized individual records of cancer incidence among Illinois residents diagnosed from 1986 through 2012. Separate files are available for the state, counties, ZIP code areas, Cook County with Cook suburbs and Chicago. Confidentiality is maintained by aggregating data within individual records into categories, the number of which depends on the size of the geographic area. Individual year of diagnosis is available for the Illinois data file.

However for the county and ZIP code files, the diagnosis year is a five-year aggregate (1988-92, 1993-97, 1998-02, 2003-07, and 2008-12). For Cook County with Cook suburbs and Chicago (2003-07 and 2008-2012 are available). The following article describes the method used to measure uniqueness of the files.

Howe HL, Lake AJ, Shen T. Method to assess Identifiability in electronic data files. Am J epidemiol 2006; doi:10.1093/aje/kwk049.

The files include incidence data for invasive cancers only with the exception of cancer of the bladder. Carcinoma *insitu* of the breast is provided in a separate category. Non-melanoma skin cancers, cases reported with unknown or "other" sex, and cases with an unknown age are omitted.

The ASCII data files are NOT incorporated into a software program and therefore require the use of other statistical or database software packages for data analysis (spreadsheet programs such as Excel or QPRO may not work since the number of records in each file is in excess of 1,400,000).

Identification of cancer cases in ISCR is dependent upon reporting by hospitals, freestanding clinics, radiation treatment facilities, laboratories and physician offices as mandated by state law.

In addition, ISCR has agreements with other central cancer registries in Arkansas, California, Florida, Indiana, Iowa, Kentucky, Michigan, Minnesota (Mayo Clinic, through October 2005), Missouri, Mississippi (through 2004), North Carolina, Washington, Wisconsin, and Wyoming (through February 2008), to exchange cancer data. Completeness of out-of-state reporting depends upon the years of operation of these other central registries, the extent of their identification of out-of-state residents, and their standards of quality (see Cancer in North America: 2006-2011, Volume Two. http://naaccr.org/DataandPublications/CINAPubs.aspx

A death certificate clearance process involving follow-back of cancer deaths in an effort to identify missed cases has served as an additional means of case identification since August 1993.

Cancer cases are reported continuously to central registries in accordance with statutory reporting requirements. Cancer registries continue to revise and update data on the basis of new information. For this reason, an updated version of previous years data are published each year (e.g. data for diagnosis year 2010 reported with this version of the public data set may differ from the last version). Users of Illinois cancer data should be mindful of the "data as of" date.

The following completeness of case ascertainment for each year of the Illinois data and for each five-year group of the county, ZIP code, and Cook county data was estimated using the standard developed by the North American Association of Central Cancer Registries (NAACCR) and adopted by the National Program for Cancer Registries. This method uses a sex- and site-specific incidence-to-mortality ratio for whites in order to compare the number of reported cases to the number of expected cases. This method was used for data from 1986-1994. A detailed description of the original method is in the November 1996 issue of the NAACCR Newsletter and can be located on-line. http://www.naaccr.org/AboutNAACCR/Newsletter.aspx

DxYr	Completeness	DxYrGrp Completeness
1986	88%	
1987	90%	1988-92 89%
1988	87%	
1989	88%	
1990	89%	
1991	88%	
1992	91%	1993-97 97%
1993	92%	
1994	97%	

For data from 1995-2012 the revised method was used. A detailed description of the revised method is in the Winter 2001 edition of the NAACCR Narrative and can be located on-line. http://www.naaccr.org/AboutNAACCR/Newsletter.aspx

1995	100%	
1996	100%	
1997	100%	1998-02 100%
1998	100%	
1999	100%	
2000	100%	
2001	100%	
2002	100%	2003-07 100%
2003	100%	
2004	100%	
2005	100%	
2006	100%	
2007	100%	2008-12 100%
2008	100%	
2009	100%	
2010	100%	
2011	100%	
2012	100%	

In addition to the estimates for completeness of case ascertainment (as of 11/14), NAACCR has developed a certification process that reviews registry data for completeness, accuracy, and timeliness of reporting. The criteria for silver and gold certification can be found on the NAACCR web site http://www.naaccr.org/Certification/criteria.aspx As of November 2014, ISCR data met the criteria for gold certification for diagnosis years 1996-2011. Certification status for 2012 data will be awarded in June 2015. [NOTE: diagnosis year 1995 now meets criteria for gold certification]

Criteria				Missing Data Fields			
	Pass		Unresolved				
	EDITS	DCO*	Duplicates**	Sex	Age	County	Race***
Year	(%)	(%)	(%)	(%)	(%)	(%)	(%)
1986	~	~	~	0.0	0.0	0.0	0.2
1987	~	~	~	0.0	0.0	0.0	0.2
1988	~	~	0.04	0.0	0.0	0.0	0.3
1989	~	~	0.04	0.0	0.0	0.0	0.2
1990	100	~	0.04	0.0	0.0	0.0	0.3
1991	100	~	0.04	0.0	0.0	0.0	0.6
1992	100	~	0.04	0.0	0.0	0.0	0.4
1993	100	2.2	0.04	0.0	0.0	0.0	0.3
1994	100	6.1	0.06	0.0	0.0	0.0	0.3
1995	100	2.7	0.03	0.0	0.0	0.0	0.4
1996	100	1.8	0.02	0.0	0.0	0.0	0.5
1997	100	1.8	0.09	0.0	0.0	0.0	0.7
1998	100	1.5	0.03	0.0	0.0	0.0	1.0
1999	100	1.8	0.02	0.0	0.0	0.0	0.9
2000	100	2.4	0.03	0.0	0.0	0.0	1.0
2001	100	2.4	0.00	0.0	0.0	0.0	0.9
2002	100	2.6	0.00	0.0	0.0	0.0	1.1
2003	100	1.5	0.02	0.0	0.0	0.0	1.2
2004	100	1.7	0.01	0.0	0.0	0.0	1.2
2005	100	1.9	0.00	0.0	0.0	0.0	1.4
2006	100	2.0	0.00	0.0	0.0	0.0	1.0
2007	100	1.2	0.00	0.0	0.0	0.0	1.1
2008	100	1.7	0.07	0.0	0.0	0.0	1.3
2009	100	1.6	0.03	0.0	0.0	0.0	1.5
2010	100	1.8	0.03	0.0	0.0	0.0	1.4
2011	100	1.8	0.00	0.0	0.0	0.0	1.8
2012	100	0.9	0.02	0.0	0.0	0.0	1.6
~ not applicable							
*DCO follow-back not started until end of the 1993 reporting year							
2007 2008 2009 2010 2011 2012 ~ not a *DCO	100 100 100 100 100 100 applicable follow-back	1.2 1.7 1.6 1.8 1.8 0.9 not starte	0.00 0.07 0.03 0.03 0.00 0.02	0.0 0.0 0.0 0.0 0.0 0.0 0.0 e 1993 r	0.0 0.0 0.0 0.0 0.0 0.0 eporting	0.0 0.0 0.0 0.0 0.0 0.0 0.0	1.1 1.3 1.5 1.4 1.8

** NAACCR's duplicate protocol was run for each year at the time of data submission for registry certification

***race 98 "other unspecified" for diagnosis year 1991+ is included with unknown to be compatible with national reporting

CANCER CODING CHANGES DURING 2001-201&

Cancer Incidence. Several definitional changes occurred in some histology and behavior codes in ICD-O-3 that affected the inclusion and exclusion of reportable cancers diagnosed beginning in 2001. The changes predominately affected leukemias, lymphomas, and cancer of the ovary. One category of change between ICD-O-2 and ICD-O-3 is the manner in which leukemias and lymphomas are classified and coded. Although conversion of histology codes from ICD-O-2 to ICD-O-3 for cases diagnosed prior to 2001 will help to minimize these differences, some minor differences may still exist, particularly with respect to some relatively rare lymphocytic cancers that can be coded to either leukemia or lymphoma.

Starting with ICD-O-3, several myelodysplastic diseases and syndromes are considered malignant, and therefore are now reportable for cases diagnosed in 2001 and later and are included in these data. Leukemias that represent a disease progression from one of the myelodysplastic diseases or syndromes diagnosed in 2001 and forward are no longer reportable.

For pediatric cancers, differences in incidence rates may be due to changes between the second and third edition of the International Classification of Childhood Cancers (ICCC). Two changes in the ICCC-3 classification are main contributors to this change. 1) Burkitt lymphoma and unspecified lymphoma, which were separated from non-Hodgkin lymphoma previously are combined with non-Hodgkin lymphoma; 2) Some lymphomas, which were grouped in the miscellaneous lymphoreticular neoplasms previously, are now included in the non-Hodgkin lymphoma category.

Pilocytic astrocytoma is considered to have uncertain behavior in the published version of ICD-O-3, but is reportable as a malignant cancer in North America. Including the childhood astrocytomas in the category of malignant brain tumors may introduce differences between childhood brain cancer rates in North America compared to other areas of the world that may not include these tumors as malignant.

In addition, mesothelioma and Kaposi sarcoma cases are reported as separate categories. This change has little or no impact on most rates for specific cancers.

CODING CHANGES for 2010 cases:

SEER Site recode ICD-O-3/WHO 2008 – Used for cases diagnosed 2010. Based on ICD-O-3, updated for Hematopoietic codes based on WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues (2008). <u>http://seer.cancer.gov/tools/heme</u>

If you have questions about the dataset, please contact

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FILE LAYOUT for state file IL861&DAT (number of records 1,587,097)

Record Format (all fields are numeric)

Data Field	Positions	Length
sex code	1-1	1
diagnosis year	2-5	4

report source	6-6	1
stage of disease code	7-7	1
histology 4-digit code	8-11	4
behavior code	12-12	1
SEER groups	13-17	5
pediatric group level 1	18-19	2
pediatric group level 2	20-22	3
5-yr. age at diagnosis group	23-24	2
race group code	25-25	1
Hispanic code	26-26	1
method of diagnosis code	27-27	1

CODES FOR DATA FIELDS

sex code

1 male

2 female

diagnosis year

Report Source

- 1 hospital or clinic
- 2 radiation treatment centers/medical oncology centers
- 3 laboratory only

- 4 physician's office
- 5 nursing home or hospice
- 6 autopsy only
- 7 death certificate only
- 8 other hospital out-patient units/surgery

stage of disease code

- 0 in situ
- 1 localized
- 2 regional
- 3 distant
- 9 unknown, unstaged, or unspecified

histology (4-digit)

NOTE: Although cases diagnosed in 1986 and 2000 were reported with The International Classification of Diseases for Oncology version 2 ICD-O-2) codes2, and cases diagnosed 2001-2012, were reported with version 3 (ICD-O-3) codes3, all cases were converted to version 3 codes and grouped according to sites group definitions established by the SEER program of the National Cancer Institute (NCI) and also used by NAACCR. These standardized classification schemes allow direct comparisons of Illinois data with international, national and state publications. Kaposi sarcoma and mesothelioma are classified as separate site groups. This change has a slight impact on cancer incidence rates for a few specific cancers, compared to using the previous site grouping method.

ICD-O-3 For specific codes see:

Fritz A, Percy C, Jack A, Shanmugaratnam K, Sobin L, Parkin D, Whelan S. International classification of Diseases for Oncology,3rd ed. Geneva: World Health Organization; 2000.

behavior code (5th digit of morphology code)

- 2 in situ
- 3 malignant

SEER groups

The recode, primary site code, and morphology codes used to categorize cancer incidence into the following SEER groups can be found on the SEER website http://seer.cancer.gov/siterecode/

- 20010 lip 20020 tongue
- 20020 longue
- 20030 salivary gland
- 20040 floor of mouth
- 20050 gum & other mouth
- 20060 nasopharynx
- 20070 tonsil
- 20080 oropharynx
- 20090 hypopharynx
- 20100 other oral cavity & pharynx

21010 esophagus 21020 stomach 21030 small intestine 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 rectosigmoid junction 21052 rectum 21060 anus, anal canal, anorectum 21071 liver 21072 intrahepatic bile duct 21080 gallbladder 21090 other biliary 21100 pancreas 21110 retroperitoneum 21120 peritoneum, omentum, mesentery 21130 other digestive organs 22010 nose, nasal cavity, middle ear 22020 larvnx 22030 lung & bronchus 22050 pleura 22060 trachea, mediastinum, other respiratory organs 23000 bones & joints 24000 soft tissue including heart 25010 melanoma of skin 25020 other non-epithelial skin 26000 breast 27010 cervix uteri 27020 corpus uteri 27030 uterus NOS 27040 ovary 27050 vagina 27060 vulva 27070 other female genital organs 28010 prostate 28020 testis 28030 penis 28040 other male genital organs 29010 urinary bladder 29020 kidney & renal pelvis 29030 ureter 29040 other urinary organs 30000 eye & orbit 31010 brain 31040 cranial nerves other nervous system

- 32010 thyroid 32020 other endocrine including thymus 33011 hodgkin lymphoma - nodal 33012 hodgkin lymphoma - extranodal 33041 non-hodgkin lymphoma - nodal 33042 non-hodgkin lymphoma - extranodal 34000 myeloma 35011 acute lymphocytic leukemia 35012 chronic lymphocytic leukemia 35013 other lymphocytic leukemia 35021 acute myeloid leukemia 35022 chronic myeloid leukemia 35023 other myeloid/monocytic leukemia 35031 acute monocytic leukemia 35041 other acute leukemia 35043 aleukemic, subleukemic & NOS 36010 mesothelioma 36020 kaposi sarcoma
- 37000 miscellaneous

Pediatric codes Level 1 (ICCC ICD-0-3)

NOTE: The following article describes the current method used to group pediatric cancer: Steliarova-Foucher E, Stiller C, Lacour B, Kaatsch P. International classification of Chicldhood Cancer, Third Edition. Cancer. 2005;103:1457-67

- 1 I Leukemias, myeloproliferative diseases, and mylodysplastic diseases
- 2 II Lymphomas and reticuloendothelial neoplasms
- 3 III Central nervous system and miscellaneous intracranial & intraspinal neoplasms
- 4 IV Neuroblastoma and other peripheral nervous cell tumors
- 5 V Retinoblastoma
- 6 VI Renal tumors
- 7 VII Hepatic tumors
- 8 VIII Malignant bone tumors
- 9 IX Soft tissue and other extraosseous sarcomas
- 10 X Germ cell tumors, trophoblastic tumors, and neoplasms of gonads
- 11 XI Other malignant epithelial neoplasms and malignant melanomas
- 12 XII Other and unspecified malignant neoplasms
- 98 pediatric case (aged 0-19) not classified by ICCC3
- 99 not pediatric case (age > 19)

Pediatric codes -level 2 (ICCC ICD-O-3)

- 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 diseases
- 15 I(e) Unspecified and other specified leukemias

- 21 II(a) Hodgkin lymphomas
- 22 II(b) Non-Hodgkin lymphomas (except Burkitt lymphoma)
- 23 II(c) Burkitt lymphoma
- 24 II(d) Miscellaneous lymphoreticular neoplasms
- 25 II(e) Unspecified lymphomas
- 31 III(a) Ependymomas and choroid plexus tumor
- 32 III(b) Astrocytomas
- 33 III(c) Intracranial and intraspinal embryonal tumors
- 34 III(d) Other gliomas
- 35 III(e) Other specified intracranial and intraspinal neoplasms
- 36 III(f) Unspecified intracranial and intraspinal neoplasms
- 41 IV(a) Neuroblastoma and ganglioneuroblastoma
- 42 IV(b) Other peripheral nervous cell tumors
- 50 V Retinoblastoma
- 61 VI(a) Nephroblastoma and other nonepithelial renal tumors
- 62 VI(b) Renal carcinomas
- 63 VI(c) Unspecified malignant renal tumors
- 71 VII(a) Hepatoblastoma
- 72 VII(b) Hepatic carcinomas
- 73 VII(c) Unspecified malignant hepatic tumors
- 81 VIII(a) Osteosarcomas
- 82 VIII(b) Chondrosarcomas
- 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
- 91 IX(a) Rhabdomyosarcomas
- 92 IX(b) Fibrosarcomas, peripheral nerve sheath tumors & other fibrous neoplasms
- 93 IX(c) Kaposi sarcoma
- 94 IX(d) Other specified soft tissue sarcomas
- 95 IX(e) Unspecified soft tissue sarcomas
- 101 X(a) Intracranial and intraspinal germ cell tumors
- 102 X(b) Malignant extracranial and 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
- 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
- 121 XII(a) Other specified malignant tumors
- 122 XII(b) Other unspecified malignant tumors
- 998 pediatric case (aged 0-19) not classified in ICCC3
- 999 not pediatric case (age > 19)

5-yr. age at diagnosis groups

- 0 < 1
- 1 1-4
- 2 5-9

3	10-14
4	15-19
5	20-24
6	25-29
7	30-34
8	35-39
9	40-44
10	45-49
11	50-54
12	55-59
13	60-64
14	65-69
15	70-74
16	75-79
17	80-84

18 85 +

race code

- 1 white
- 2 black
- 3 other*
- 9 unknown (includes race code 98 "other unspecified" for diagnosis yrs. 1991+ to be compatible with national reporting of race)
- * other race includes Asian-American, Pacific Islanders, American Indians, Alaska Natives, and all other races. In order to improve the quality of cancer surveillance data on American Indians the race has been enhanced with a linkage to the Indian Health Services patient registration database. This linkage identifies cancer cases among American Indians who were misclassified as non-Indians in the registry database.

Hispanic code

- 0 non-Hispanic (incl unk)
- 1 Hispanic*
- 9 Hispanic data not available for diagnosis years 1986-1989

*Hispanic ethnicity was enhanced according to the NAACCR Hispanic identification algorithm (NHIA). NHIA is a generally reliable method to enhance the ethnic identification of the Latino population in the United States.

Howe HL. Evaluation of NHIA Submission for 1997-2001. Springfield, III.: North American Association of Central Cancer Registries, October 2004.

Schenke N and Gentleman JF On judging the significance of differences by examining the overlap between confidence intervals. The American Statistician 2001;55:182-186.

method of diagnosis

- 1 positive histology
- 2 positive exfoliative cytology, no positive histology
- 3 positive histology & positive immunophenotyping and/or positive genetic studies
- 4 positive microscopic confirmation, method not speccified
- 5 positive laboratory test or marker study

- 6 direct visualization without microscopic confirmation
- 7 radiography & other imaging techniques without microscopic confirmation
- 8 clinical diagnosis only (other than 5, 6 or 7)
- 9 unknown whether or not microscopically confirmed

FILE LAYOUT for county file CNTY8, % DAT (number of records 1,497,681)

Record Format (all fields are numeric)

Data Field	Positions	Length
sex code	1-1	1
diagnosis yr. group	2-2	1
county at diagnosis	3-5	3
report source	6-6	1
stage of disease at dx.	7-7	1
cancer site groups	8-9	2
age at diagnosis group	10-10	1
race group code	11-11	1
Hispanic code	12-12	1

CODES FOR DATA FIELDS

sex code

- 1 male
- 2 female

diagnosis year group (5yr groups)

- 1 1988-1992
- 2 1993-1997
- 3 1998-2002
- 4 2003-2007
- 5 2008-2012

county at diagnosis code with race and (Hispanic) availability

1	Adams	all race only
3	Alexander	all race only
5	Bond	all race only
7	Boone	all race only
9	Brown	all race only
11	Bureau	all race only
13	Calhoun	all race only
15	Carroll	all race only
17	Cass	all race only
19	Champaign	all race, white, black
21	Christian	all race only
23	Clark	all race only
25	Clay	all race only
27	Clinton	all race only
29	Coles	all race only
31	Cook	all race, white, black, other (Hispanic/non-Hispanic)

33 Crawford all race only 35 Cumberland all race only 37 DeKalb all race only 39 DeWitt all race only 41 Douglas all race only 43 DuPage all race, white, black, other (Hispanic/non-Hispanic) 45 Edgar all race only 47 Edwards all race only 49 Effingham all race only 51 Fayette all race only 53 Ford all race only 55 Franklin all race only 57 Fulton all race only 59 Gallatin all race only all race only 61 Greene 63 Grundy all race only 65 Hamilton all race only 67 Hancock all race only 69 Hardin all race only 71 Henderson all race only 73 Henry all race only 75 Iraquois all race only 77 Jackson all race only 79 Jasper all race only 81 Jefferson all race only 83 Jersey all race only 85 JoDaviess all race only 87 Johnson all race only 89 Kane all race, white, black (Hispanic/non-Hispanic) 91 Kankakee all race, white, black 93 Kendall all race only 95 Knox all race only 97 Lake all race, white, black, other (Hispanic/non-Hispanic) 99 LaSalle all race only 101 Lawrence all race only 103 Lee all race only 105 Livingston all race only 107 Logan all race only 109 McDonough all race only 111 McHenry all race only 113 McLean all race only 115 Macon all race, white, black 117 Macoupin all race only 119 Madison all race, white, black 121 Marion all race only 123 Marshall all race only 125 Mason all race only 127 Massac all race only 129 Menard all race only 131 Mercer all race only 133 Monroe all race only

137 139 141 143 145 147 149 151 153 155 157 159 161 163 165 167 169 171 173 175 177 179 181 183 185 187	Ogle Peoria Perry Piatt Pike Pope Pulaski Putnam Randolph Richland Rock Isand St Clair Saline Sangamon Schuyler Scott Shelby Stark Stephenson Tazewll Union Vermilion Wabash Warren	all race all race	e only only only only only only only only	black black black	
189	Washington	all race	only		
	Wayne White	all race all race			
	Whiteside				
	Will			black	(Hispanic/non-Hispanic)
	Williamson	all race	only		
	Winnebago			black	
203	Woodford	all race	oniy		

report source

- 1 hospital or clinic
- 2 radiation treatment centers/medical oncology centers3 laboratory only
- 4 physician's office
- 5 nursing home or hospice
- 6 autopsy only7 death certificate only
- 8 other hospital out-patient units/surgery

summary stage of disease code

- 0 in situ
- 1 localized
- 2 regional

- 3 distant metastases/systemic disease
- 9 unknown, unstaged, or unspecified

cancer site group (based on SEER group codes see above for state)

- 1 oral cavity & pharnyx (20010-20100)
- 2 esophagus (21010)
- 3 stomach (21020)
- 4 colorectal (21041-21052)
- 5 liver (21071)
- 6 pancreas (21100)
- 7 lung & bronchus (22030)
- 8 bone (23000)
- 9 melanomas (25010)
- 10 breast-invasive only (26000 behavior code 3)
- 11 cervix (27010)
- 12 uterus (27020-27030)
- 13 ovary (27040)
- 14 prostate (28010)
- 15 testis (28020)
- 16 bladder (29010)
- 17 kidney (29020)
- 18 nervous system (31010-31040)
- 19 Hodgkin's lymphomas (33011-33012)
- 20 non-Hodgkin's lymphomas (33041-33042)
- 21 myelomas (34000)
- 22 leukemias (35011-35043)
- 23 all other sites

(21030,21060,21072,21080,21090,21110,21120,21130,22010,22020,22050,22060, 24000,25020,27050,27060,27070,28030,8040,29030,29040,30000,32010,32020, 36010,36020,37000)

24 breast-insitu only (26000 behvior code 2)

age at diagnosis group code

- 1 < 5
- 2 5-14
- 3 15-34
- 4 35-44
- 5 45-54
- 6 55-64
- 7 65-74
- 8 75 +

race code

- 1 white
- 2 black
- 3 other*
- 9 unknown (includes unknown race, race code 98 'other unspecified' for diagnosis yrs. 1991+, or race suppressed)

- * other race includes Asian-American, Pacific Islanders, American Indians, Alaska Natives, and all other races. In order to improve the quality of cancer surveillance data on American Indians the race has been enhanced with a linkage to the Indian Health Services patient registration database. This linkage identifies cancer cases among American Indians who were misclassified as non-Indians in the registry database.
- **Note:** Data for white residents, black residents and residents of all other races, are not available for every county (see list of counties above). Fifteen counties have sufficiently large black populations and three counties had sufficiently large other populations to allow meaningful statistics for the race group. For the remaining counties, race data are suppressed, therefore, you must use the state file to obtain a rate by race for Illinois.

Hispanic codes

- 1 Hispanic*
- 0 non-Hispanic (incl unk for appropriate counties)
- 9 Hispanic data suppressed or not available for diagnosis yrs 1988-1992
- **NOTE**: Five counties have sufficiently large Hispanic populations (see list of counties above) to allow meaningful statistics for the ethnicity group. For the remaining counties, Hispanic data are suppressed, therefore, you must use the state file to obtain a rate by Hispanic ethnicity for Illinois
- *Hispanic ethnicity was enhanced according to the NAACCR Hispanic identification algorithm (NHIA). NHIA is a generally reliable method to enhance the ethnic identification of the Latino population in the United States.
- Howe HL. Evaluation of NHIA Submission for 1997-2001. Springfield, III.: North American Association of Central Cancer Registries, October 2004.
- Schenke N and Gentleman JF On judging the significance of differences by examining the overlap between confidence intervals. The American Statistician 2001;55:182-186.
- NOTE: As noted above, some data for race and Hispanic ethnicity in the county file have been suppressed. Therefore to compare county race or ethnicity data with IL you will need to obtain the state data from the IL8612 file.

FILE LAYOUT for ZIP code file ZPCD8, % DAT (number of records 1,497,542)

Record Format - all fields are numeric

Data Field	Positions	Length
sex	1-1	1 1
diagnosis year group	2-2	1
ZIP code at diagnosis	3-7	5
stage of disease	8-8	1
cancer site groups	9-10	2
age at diagnosis group code	11-11	1
latitude to the CENTROID of the ZIP co	de 12-24	13.7
longitude to the CENTROID of the ZIP of	code 25-37	13.7

CODES FOR DATA FIELDS

sex code

- 1 male
- 2 female

diagnosis year group (5yr groups)

- 1 1988-1992
- 2 1993-1997
- 3 1998-2002
- 4 2003-2007
- 5 2008-2012

ZIP code at diagnosis

Valid Illinois ZIP codes

stage of disease

- 0 in situ
- 1 localized
- 2 regional
- 3 distant metastases/systemic disease
- 9 unknown, unstaged, or unspecified

cancer site group (based on cancer groups at county level-see above)

- 1 oral cavity & pharnyx (1)
- 2 colorectal (4)
- 3 lung & bronchus (7)
- 4 breast-invasive female (10 for females only)
- 5 cervix (11)
- 6 prostate (14)
- 7 urinary system (16,17)
- 8 central nervous system (18)
- 9 leukemias and lymphomas(19,20,22)
- 10 all other cancers (2,3,5,6,8,9,12,13,15,21,and 23 (10 for males only)
- 11 breast-insitu female (24 for females only)
- **NOTE:** due to very small number of cases, male breast insitu case have been omitted from the file (n=139 for all years combined 1988-2012)

age at diagnosis group code

- 1 0-14
- 2 15-44
- 3 45-64
- 4 65 +
- **Note:** ZIP code data are 100% complete with 99.9% accuracy. Please note the latitude and longitude provided are to the CENTROID of the ZIP code, not to a street-level address and are expressed in decimal degrees. Data were geocoded with MapMarker v27 using coordinate system North American Datum of 1983 (NAD83)

The following website has a utility available that will convert decimal degrees to degrees, minutes and seconds http://transition.fcc.gov/mb/audio/bickel/DDDMMSS-decimal.html

latitude to the CENTROID of the ZIP code

longitude to the CENTROID of the ZIP code

FILE LAYOUT for Cook County file COOK\$' % DAT (number of records 259,911)

Record Format (all fields are numeric)

Data Field	Positions	Length
sex	1-1	1
diagnosis year group	2-2	1
Cook County part	3-3	1
report source	4-4	1
stage of disease at diagnosis	5-5	1
cancer site groups	6-7	2
age at diagnosis group code	8-8	1
race group code	9-9	1
Hispanic code	10-10	1

CODES FOR DATA FIELDS

sex code

- 1 male
- 2 female

diagnosis year group

- 4 2003-2007
- 5 2008-2012

Cook County Part

- 1 Chicago
- 2 Cook suburbs

report source

- 1 hospital or clinic
- 2 radiation treatment centers/medical oncology centers
- 3 laboratory only
- 4 physician's office
- 5 nursing home or hospice
- 6 autopsy only
- 7 death certificate only
- 8 other hospital out-patient units/surgery

summary stage of disease code

- 0 in situ
- 1 localized
- 2 regional
- 3 distant metastases/systemic disease
- 9 unknown, unstaged, or unspecified

cancer site group (based on SEER group codes-see above)

- 1 oral cavity & pharnyx (20010-20100)
- 2 esophagus (21010)
- 3 stomach (21020)
- 4 colorectal (21041-21052)
- 5 liver (21071)
- 6 pancreas (21100)
- 7 lung & bronchus (22030)
- 8 bone (23000)
- 9 melanomas (25010)
- 10 breast-invasive only (26000 behavior code 3)
- 11 cervix (27010)
- 12 uterus (27020-27030)
- 13 ovary (27040)
- 14 prostate (28010)
- 15 testis (28020)
- 16 bladder (29010)
- 17 kidney (29020)
- 18 nervous system (31010-31040)
- 19 Hodgkin's lymphomas (33011-33012)
- 20 non-Hodgkin's lymphomas (33041-33042)
- 21 myelomas (34000)
- 22 leukemias (35011-35043)
- 23 all other sites (21030,21060,21072,21080,21090,21110,
- 21120,21130,22010,22020,22050,22060, 24000,25020,27050,27060,27070,28030, 28040,29030,29040,30000,32010,32020, 36010,36020,37000)
- 24 breast-insitu only (26000 behvior code 2)

age at diagnosis group code

- 1 <5
- 2 5-14
- 3 15-34
- 4 35-44
- 5 45-54
- 6 55-64
- 7 65-74
- 8 75 +

race code

- 1 white
- 2 black
- 3 other*

9 unknown (includes unknown race and race code 98 'other unspecified' to be compatible with national reporting of race)

* other race includes Asian-American, Pacific Islanders, American Indians, Alaska Natives, and all other races. In order to improve the quality of cancer surveillance data on American Indians the race has been enhanced with a linkage to the Indian Health Services patient registration database. This linkage identifies cancer cases among American Indians who were misclassified as non-Indians in the registry database.

Hispanic codes

- 1 Hispanic*
- 0 non-Hispanic (includes unknown)

*Hispanic ethnicity was enhanced according to the NAACCR Hispanic identification algorithm (NHIA). NHIA is a generally reliable method to enhance the ethnic identification of the Latino population in the United States.

Howe HL. Evaluation of NHIA Submission for 1997-2001. Springfield, III.: North American Association of Central Cancer Registries, October 2004.

Schenke N and Gentleman JF On judging the significance of differences by examining the overlap between confidence intervals. The American Statistician 2001;55:182-186.