

Appendices

Appendix 1. SEER Site Recode for ICD-O-3 Incidence Data

| Site Description | <i>ICD-O-3 Site</i> | ICD-O-3 Histology (Type) |
|--------------------------------|--------------------------------|--|
| Oral Cavity and Pharynx | C000-C149 | (exc Types 9590-9989) |
| Esophagus | C150-C159 | (exc Types 9590-9989) |
| Stomach | C160-C169 | (exc Types 9590-9989) |
| Colorectal | C180-C189, C199, C209, C260 | (exc Types 9590-9989) |
| Liver | C220 | (exc Types 9590-9989) |
| Pancreas | C250-C259 | (exc Types 9590-9989) |
| Larynx | C320-C329 | (exc Types 9590-9989) |
| Lung and Bronchus | C340-C349 | (exc Types 9590-9989) |
| Melanoma of the Skin | C440-C449 | (Types 8720-8790) |
| Kaposi's Sarcoma | all sites | (Type 9140) |
| Breast | C500-C509 | (exc Types 9590-9989) |
| Cervix Uteri | C530-C539 | (exc Types 9590-9989) |
| Corpus and Uterus, NOS | C540-C549, C559 | (exc Types 9590-9989) |
| Ovary | C569 | (exc Types 9590-9989) |
| Prostate | C619 | (exc Types 9590-9989) |
| Testis | C620-C629 | (exc Types 9590-9989) |
| Bladder | C670-C679 | (exc Types 9590-9989) |
| Kidney and Renal Pelvis | C649, C659 | (exc Types 9590-9989) |
| Brain and Other Nervous System | C700-C729 | (exc Types 9530, 9590-9989) |
| Thyroid | C739 | (exc Types 9590-9989) |
| Hodgkin Lymphoma | all sites | (Types 9650-9667) |
| Non-Hodgkin Lymphoma | all sites | (Types 9673, 9675, 9684, 9687, 9695, 9705, 9823, 9827, 9590- 9596, 9670-9671, 9678-9680, 9689-9691, 9698-9702, 9708- 9709, 9714-9719, 9727-9729) |
| Multiple Myeloma | all sites | (Types 9731-9732, 9734) |
| Leukemia | all sites | (Types 9800-9941) |
| Leukemia (Acute Lymphocytic) | all sites | (Types 9826, 9835-9837) |
| Leukemia (Chronic Lymphocytic) | C420, C421, C424 | (Type 9823) |
| Leukemia (Acute Myeloid) | all sites | (Types 9840, 9861, 9866, 9867, 9871-9874, 9895-9897, 9910, 9920) |
| Leukemia (Chronic Myeloid) | all sites | (Types 9863, 9875, 9876, 9945, 9946) |

*exc = excludes

Appendix 2. SEER Site Recode for ICD-9 and ICD-10 Mortality Data

| Site Description | ICD-9 (1979-1998 deaths) | ICD-10 (1999+ deaths) |
|--------------------------------|---|----------------------------------|
| All Malignant Cancers | 140-208, 238.6 | C00-C97 |
| Oral Cavity and Pharynx | 140-149 | C00-C14 |
| Esophagus | 150 | C15 |
| Stomach | 151 | C16 |
| Colorectal | 153, 154.0-154.1, 159.0 | C18-C20, C26.0 |
| Liver | 155.0, 155.2 | C22.0, C22.2-C22.4, C22.7, C22.9 |
| Pancreas | 157 | C25 |
| Larynx | 161.0-161.9 | C32 |
| Lung and Bronchus | 162.2-162.9 | C34 |
| Melanoma of the Skin | 172.0-172.9 | C43 |
| Breast | 174.0-174.9, 175._ | C50 |
| Cervix Uteri | 180.0-180.9 | C53 |
| Corpus and Uterus, NOS | 179._, 182.0, 182.1, 182.8 | C54-C55 |
| Ovary | 183.0 | C56 |
| Prostate | 185._ | C61 |
| Testis | 186.0-186.9 | C62 |
| Bladder | 188.0-188.9 | C67 |
| Kidney and Renal Pelvis | 189.0, 189.1 | C64-C65 |
| Brain and Nervous System | 191.0-191.9, 192.0-192.3, 192.8-192.9 | C70-C72 |
| Thyroid | 193._ | C73 |
| Hodgkin Lymphoma | 201.0-201.9 | C81 |
| Non-Hodgkin Lymphoma | 200.0-200.8, 202.0-202.2, 202.8-202.9 | C82-C85, C96.3 |
| Multiple Myeloma | 203.0, 203.2-203.8 | C90.0, C90.2 |
| Leukemia | 202.4, 203.1, 204.0-207.2, 207.8, 208.0-208.9 | C91-C95 |
| Leukemia (Acute Lymphocytic) | 204.0 | C91.0 |
| Leukemia (Chronic Lymphocytic) | 204.1 | C91.1 |
| Leukemia (Acute Myeloid) | 205.0 | C92.0, C92.4-C92.5 |
| Leukemia (Chronic Myeloid) | 205.1 | C92.1 |

Appendix 3. Five-Year Population Totals by Sex, County, and Race/Ethnicity for Region 1/8 (Greater Bay Area), 2001-2005⁴

| MALES | | | | |
|------------------------|---------------------------------|---------------------------------|-----------------|--|
| County | Race/Ethnicity | | | |
| | WHITE (non-Hispanic) | BLACK (non-Hispanic) | HISPANIC | ASIAN/PACIFIC ISLANDER (non-Hispanic) |
| Alameda | 1,45,083 | 483,882 | 775,879 | 864,773 |
| Contra Costa | 1,375,974 | 225,546 | 514,936 | 317,040 |
| Marin | 469,516 | 25,822 | 83,717 | 31,978 |
| Monterey | 399,649 | 49,114 | 546,169 | 67,244 |
| San Benito | 63,553 | 1,634 | 71,481 | 3,849 |
| San Francisco | 903,089 | 141,011 | 284,380 | 585,267 |
| San Mateo | 858,589 | 62,166 | 405,629 | 409,081 |
| Santa Clara | 1,820,910 | 122,765 | 1,088,274 | 1,251,068 |
| Santa Cruz | 409,880 | 8,241 | 181,852 | 26,161 |
| Total Greater Bay Area | 7,758,243 | 1,120,181 | 3,952,317 | 3,556,461 |

| FEMALES | | | | |
|------------------------|---------------------------------|---------------------------------|-----------------|--|
| County | Race/Ethnicity | | | |
| | WHITE (non-Hispanic) | BLACK (non-Hispanic) | HISPANIC | ASIAN/PACIFIC ISLANDER (non-Hispanic) |
| Alameda | 1,498,238 | 563,258 | 710,303 | 913,247 |
| Contra Costa | 1,444,688 | 255,364 | 484,408 | 347,680 |
| Marin | 502,078 | 13,559 | 65,694 | 38,824 |
| Monterey | 412,080 | 26,983 | 472,924 | 76,988 |
| San Benito | 64,512 | 1,501 | 65,795 | 4,633 |
| San Francisco | 798,616 | 144,868 | 249,239 | 657,479 |
| San Mateo | 878,100 | 59,714 | 381,527 | 446,123 |
| Santa Clara | 1,787,862 | 112,835 | 991,411 | 1,236,377 |
| Santa Cruz | 424,269 | 6,726 | 166,418 | 28,626 |
| Total Greater Bay Area | 7,810,443 | 1,184,808 | 3,587,719 | 3,749,977 |

Appendix 4. Formulae for Rates and Confidence Intervals¹⁶

Mathematical definitions used in rate calculations:

Age-specific rate:

$$r_i = \left(\frac{c_i}{n_i} \right)$$

where r_i is the age-specific rate for age and/or gender group i , c_i is the count of cases for that age and/or gender group, and n_i is the count of persons at risk (i.e., the population) for that age and/or gender group; rates in all tables are presented per 100,000 population.

Confidence interval of age-specific rate:

$$\text{Lower Limit} = 100,000 \left(\left[\frac{\text{CINV}(\alpha/2, 2c_i)}{2} \right] / n_i \right)$$

$$\text{Upper Limit} = 100,000 \left(\left[\frac{\text{CINV}\left(1 - \frac{\alpha}{2}, 2c_i + 2\right)}{2} \right] / n_i \right)$$

where CINV (p, df) is the inverse chi-squared function with df degrees of freedom, and $\alpha = .05$ for a 95% confidence interval.

Age-adjusted rate:

$$A.A.R. = \sum_{i=0-4}^{85+} (w_i r_i)$$

where w_i is the proportion of that age group in the 2000 US standard population.

Confidence interval of age-adjusted rate:

$$\text{Lower Limit} = \frac{V}{2AAR} \left[\text{CINV}\left(\frac{\alpha}{2}, \frac{2(AAR)^2}{V}\right) \right]$$

$$\text{Upper Limit} = \frac{V + W_m^2}{2(AAR + W_m)} \left[\text{CINV}\left(1 - \frac{\alpha}{2}, \frac{2(AAR + W_m)^2}{V + W_m^2}\right) \right]$$

$$\text{where } V = \text{var}(AAR) = \sum \left(\frac{w_i}{n_i} \right)^2 c_i \text{ and } W_m = \text{MAX}(w_i)$$

Appendix 5. 2000 US Standard Million Population¹²

| <u>Age Group</u> | <u>Standard Population</u> |
|------------------|----------------------------|
| All Ages..... | 1,000,000 |
| <5..... | 69,135 |
| 5-9..... | 72,532 |
| 10-14..... | 73,032 |
| 15-19..... | 72,168 |
| 20-24..... | 66,478 |
| 25-29..... | 64,530 |
| 30-34..... | 71,044 |
| 35-39..... | 80,762 |
| 40-44..... | 81,851 |
| 45-49..... | 72,118 |
| 50-54..... | 62,716 |
| 55-59..... | 48,454 |
| 60-64..... | 38,793 |
| 65-69..... | 34,264 |
| 70-74..... | 31,773 |
| 75-79..... | 27,000 |
| 80-84..... | 17,842 |
| 85+..... | 15,508 |

Appendix 6.

Vietnamese and Hmong Surnames

Vietnamese

CAO
DINH
DO
DOAN
DUONG
NGUYEN
VU
VUONG
HUYNH*
TRAN**
TRINH**
TRUONG**

Hmong

HER
KUE
KHANG
HANG
MOUA
THAO
THOR
THOW
VANG
VUE
XIONG

* Not applied to persons identified as Korean on medical record or death certificate.

** Not applied to persons identified as Chinese on medical record or death certificate.

Appendix 7. References

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2. State of California, Department of Finance, *Race/Ethnic Population with Age and Sex Detail, 1970-1989*. Sacramento, CA, December 1998.
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7. Miller T. *On Benchmarking DOF's 1988 and 1989 Estimates to the Census Bureau Estimates*. Fremont, CA: Northern California Cancer Center, June 6, 2006.
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Appendix 8. Directory of California Cancer Regional Registries

California Cancer Registry

California Cancer Registry
Public Health Institute
1700 Tribute Road, Suite 100
Sacramento, CA 95815-4413
(916) 779-0300
Website: <http://www.ccrca.org>

FAX (805) 569-3126
Counties covered: Tri-County Region (San Louis Obispo, Santa Barbara, and Ventura Counties)

Region 1/8

Northern California Cancer Center
2201 Walnut Ave., Suite 300
Fremont, CA 94538
(510) 608-5000
FAX (510) 608-5085
Website: <http://www.nccc.org>

Counties covered:

Region 1: Santa Clara Region (Monterey, San Benito, Santa Clara, and Santa Cruz Counties)

Region 8: San Francisco Bay Area Region (Alameda, Contra Costa, Marin, San Francisco, and San Mateo Counties)

Region 2

Cancer Registry of Central California
1320 East Shaw Ave., Suite 160
Fresno, CA 93710-8100
(559) 222-9272
FAX (559) 222-8960
Counties covered: Central Region (Fresno, Kern, Kings, Madera, Mariposa, Merced, Stanislaus, Tulare, and Tuolumne Counties)

Region 3

Cancer Surveillance Program, Region 3
1700 Tribute Road, Suite 100
Sacramento, CA 95815
(916) 779-2687
FAX (916) 779-2608
Counties covered: Sacramento Region (Alpine, Amador, Calaveras, El Dorado, Nevada, Placer, Sacramento, San Joaquin, Sierra, Solano, Sutter, Yolo, and Yuba Counties)

Region 4

Tri-Counties Regional Cancer Registry
3944 State Street, Suite 330
Santa Barbara, CA 93105
(805) 569-3101

Region 5

Desert Sierra Cancer Surveillance Program
11368 Mountain View Avenue, Suite C
Loma Linda, CA 92354-3834
(909) 558-6181
FAX (909) 558-6178
Counties covered: Inland Empire Region (Inyo, Mono, Riverside, and San Bernardino Counties)

Region 6

Cancer Surveillance Program, Region 6
1700 Tribute Road, Suite 100
Sacramento, CA 95815
(916) 779-2687
FAX (916) 779-2608
Counties covered: Northern Region (Butte, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Napa, Plumas, Shasta, Siskiyou, Sonoma, Tehama, and Trinity Counties)

Region 9

Cancer Surveillance Program
University of Southern California
1540 Alcazar Street, CHP-204
Los Angeles, CA 90089*
(323) 442-2300
FAX (323) 442-2301
Counties covered: Los Angeles County
*Use zip code 90033 for UPS/GSO/FedEx

Region 10/7

CSPOC/SANDIOCC
Department of Medicine
224 Irvine Hall
University of California
Irvine, CA 92717
(949) 824-6903
FAX (949) 824-4773
Counties covered:
Region 7: San Diego Region (Imperial and San Diego Counties)
Region 10: Orange County

Appendix 9. Publications from the Greater Bay Area Cancer Registry (1995 - 2006)

Monographs and Incidence Reports

Glaser SL, Satariano ER, Leung RW, Prehn AW, Cady CM, West DW (eds). Cancer Incidence by Race/Ethnicity in the San Francisco Bay Area: Twenty years of cancer reporting, 1973-1992. Union City, CA: Northern California Cancer Center, 1995.

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Le G, O'Malley C, Leung R, Clarke C, Lin S, Glaser S, West D. Cancer Incidence and Mortality in the Santa Clara Region, 1988-1999. Union City, CA: Northern California Cancer Center, 2001.

Le G, O'Malley C, Leung R, Stroup A, Clarke C, Gomez S, Glaser S, West D. Cancer Incidence and Mortality in the Greater Bay Area, 1988-2000. Union City, CA: Northern California Cancer Center, 2003.

Le G, O'Malley C, Gomez S, Clarke C, Keegan THM, Unger Hu K, Leung R, Glaser S, West D. Cancer Incidence and Mortality in the Greater Bay Area, 1988-2001. Union City, CA: Northern California Cancer Center, 2004.

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Greater Bay Area Cancer Registry Report. Cancer Incidence in the Santa Clara Region. Union City, CA: Northern California Cancer Center, Volume 9(2), 1999.

Greater Bay Area Cancer Registry Report. Childhood Cancer in the Greater Bay Area, 1988-1996. Union City, CA: Northern California Cancer Center, Volume 10(1), 2000.

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