## APPENDIX A – CODES USED FOR GROUPING

One of the challenges of this report was to combine information on cancer from several different sources and develop a comprehensive report that details the burden and risk of cancer in the State of Nevada. To add to the complexity of it all, each data source did not use identical coding to identify each type of cancer.

The Nevada Central Cancer Registry uses the International Classification of Diseases – Oncology (ICD-O) coding system that is then broken down into the Topography, or Primary Site, as well as the Morphology of the specific cancer. The Topography section of the ICD-O coding structure is fairly comparable to the ICD-10 mortality classification system, with very little variation between the two systems. However, there are some variations, so this report uses the ICD-O coding structure as the primary source for identifying the type of cancer for this report.

Furthermore, the cancer incidence data for 2001 and beyond that are included in this report were classified using the ICD-O3 coding classification structure, while data in previous years were classified using the ICD-O2 coding system. However, this classification change is done within the Cancer Registry. Therefore, this report only shows the classification of the ICD-O code system.

The ICD-10 structure was implemented in 2000 for the coding of the underlying cause of death. However, for this report, due to the variations between the ICD-O and ICD-10 coding structures and the fact that the ICD-O system is the primary one used, there have not been any adjustments made to account for potential coding differences that may have occurred due to the change from the ICD-9 to the ICD-10 system in 2000 for all mortality data used in this report.

The inpatient hospital discharge (UB92) database that was used to provide the inpatient hospital discharge statistics for this report uses the ICD-9 coding structure.

The following pages detail the codes used for each type of coding structure present in the data used for this report. The codes used to identify the leading types of cancer for this report are highlighted. Those not falling under any of the highlighted leading groups were categorized into the All Other Sites grouping.

# Table 296. ICD-O Codes Used

	ICD-O2 Codes		
Type of Cancer	Topography	Morphology	Excluding (M = Morphology)
Total	Sum	Sum	
Lip, Oral Cavity and Pharynx	Sum of subgroups		
Lip	C00		M-9590:9989
Base of Tongue	C01		M-9590:9989
Other & Unspecified Parts of Tongue	C02		M-9590:9989
Parotid Gland	C07		M-9590:9989
Other & Unspecified Major Salivary glands	C08		M-9590:9989
Floor of Mouth	C04		M-9590:9989
Gum	C03		M-9590:9989
Palate	C05		M-9590:9989
Other & Unspecified Parts of Mouth	C06		M-9590:9989
Nasopharynx	C11		M-9590:9989
Tonsil	C09		M-9590:9989
Oropharynx	C10		M-9590:9989
Pyriform Sinus	C12		M-9590:9989
Hypopharynx	C13		M-9590:9989
Other & Unspecified Oral (Buccal) Cavity & Pharynx	C14		M-9590:9989
Digestive System	Sum of Subgroups		0000.0000
Esophagus	C15		M-9590:9989
Stomach	C16		M-9590:9989
Small Intestine	C17		W 3030.3300
Colorectal	Sum of Colon, Rectum, Rect	osiamoid Junction Anus A	nal Canal and Angrectum
Colon (excluding Rectum)	Sum of Subgroups	osiginiola danolion, 7 mas, 7	
Cecum	C18.0		M-9590:9989
Appendix	C18.1		M-9590:9989
Ascending Colon	C18.2		M-9590:9989
Hepatic Flexure	C18.3		M-9590:9989
Transverse Colon	C18.4		M-9590:9989
Splenic Flexure	C18.5		M-9590:9989
Descending Colon	C18.6		M-9590:9989
Sigmoid Colon	C18.7		M-9590:9989
Large Intestine, NOS	C18.8-C18.9, C26.0		M-9590:9989
Rectum	C20		M-9590:9989
Rectosigmoid Junction	C19		M-9590:9989
Anus, Anal Canal and Anorectum	C21		M-9590:9989
Liver	C22.0		M-9590:9989
Intrahepatic Bile Ducts	C22.1		M-9590:9989
Gallbladder	C23		M-9590:9989
Other & Unspecified Biliary Tract	C24		M-9590:9989
Pancreas	C25		M-9590:9989
Retroperitoneum	C48.0		M-9590:9989
Peritoneum, Omentum and Mesentery	C48.1-C48.2		M-9590:9989
Other Digestive Organs	C26.8-C26.9, C48.8		M-9590:9989
Respiratory System	Sum of Subgroups		W-9090.9909
Nasal Cavity and Middle Ear	C30		M-9590:9989
Accessory Sinuses	C31		M-9590:9989
Larynx	C32		M-9590:9989
Lung and Bronchus	C34		M-9590:9989
Pleura	C38.4		M-9590:9989
Trachea	C33		M-9590:9989
Mediastinum and Other Respiratory Organs	C38.1, C38.3, C38.8, C39		M-9590:9989
Bones, Joints and Articular Cartilage	Sum of Subgroups		141-3030.3303
Bones, Joints & Articular Cartilage of Limbs	C40		M-9590:9989
Bones, Joints & Articular Cartilage of Other & Unspec Sites	C40 C41		M-9590:9989
Soft Tissue (Including Heart)	Sum of Subgroups		1VI-2020.2363
Heart	C38.0		M-9590:9989
Peripheral Nerves & Autonomic Nervous System	C38.0 C47		M-9590:9989
Connective, Subcutaneous & Other Soft Tissues	C49		
Connective, Subcutaneous & Other Soft Tissues	<u>C49</u>		M-9590:9989

# **Table 296. ICD-O Codes Used (Continued)**

	ICD-O2 Codes		
Type of Cancer	Topography	Morphology	Excluding (M = Morphology)
Skin (Excluding Basal And Squamous)	Sum of Subgroups		
Melanomas Of The Skin	C4	4 M-8720-8790	
Other Non-Epithelial Skin	C4		M-8000:8004, 8010:8045, 8050:8082, 8090:8110, 8720:8790,
Breast	C5	0	M-9590:9989
Female Genital System	Sum of Subgroups		11 0500 0000
Cervix Uteri	C5		M-9590:9989
Corpus Uteri & Uterus, NOS Corpus Uteri	Sum of Corpus Uteri an C5		M-9590:9989
Uterus, NOS	C5		M-9590:9989
Ovary	C5		M-9590:9989
Vagina	C5		M-9590:9989
Vulva	C5		M-9590:9989
Placenta	C5		M-9590:9989
Other Female Genital Organs	C5	7	M-9590:9989
Male Genital System	Sum of Subgroups		
Prostate	C6	1	M-9590:9989
Testis	C6	2	M-9590:9989
Penis	C6	0	M-9590:9989
Other Male Genital Organs	C6	3	M-9590:9989
Urinary System	Sum of Subgroups		
Urinary Bladder	C6		M-9590:9989
Kidney and Renal Pelvis	Sum of Kidney and Ren		M 0500 0000
Kidney	C6		M-9590:9989 M-9590:9989
Renal Pelvis Ureter	C6 C6		M-9590:9989
Other Urinary Organs	C6		M-9590:9989
Eye and Orbit	C6		W-9590.9909
Brain and Other Central Nervous System	Sum of Subgroups		
Brain	C7	· '1	M-9530:9539, 9590:9989
Meninges	C7		M-9590:9989
Spinal Cord, Cranial Nerves, & Other Parts of CNS	C7	2 C71 & M-9530:9539	M-9590:9989
Endocrine System	Sum of Subgroups		
Thyroid Gland	C7		
Adrenal Gland	C7		
Other Endocrine (Including Thymus)	C37, C7		M-9590:9989
Hodgkin's Lymphoma Non-Hodgkin's Lymphoma		M-9650:9667 M-9590-9595, 9670- 9677, 9680-9688, 9690- 9698, 9700-9717, 9823,	C42.0, C42.1, C42.4
Multiple Myeloma	Cum of outparoups	M-9731-9732	
Leukemia Lymphocytic	Sum of subgroups Sum of subgroups		
Acute Lymphocytic	Sum of subgroups	M-9821, 9826, 9828	
Chronic Lymphocytic	C42.0, C42.1, C42.		
Other Lymphocytic	0 12.0, 0 12.1, 0 12.	M-9820, 9822, 9824-	
3 <u>2</u> /		9825, 9850, 9940-9941	
Myeloid and Monocytic	Sum of subgroups	,	
Acute Myeloid Leukemia	<b>5</b> .	9866, 9867, 9871-9874,	
		9910	
Acute Monocytic Leukemia		M-9891	
Chronic Myeloid Leukemia		M-9863, 9868	
Other Myeloid/Monocytic Leukemia		9880, 9890, 9892-9894, 9930	
Other	Sum of subgroups	M 0004 0004 000	
Other Acute Aleukemic, Subleukemic and NOS		M-9801, 9931, 9932 M-9800, 9802-9804, 9830, 9842, 9870, 9900	
	C42.0, C42.1, C42.	4 M-9827	
Mesothelioma	, , ,=-	M-9050-9055	
Kaposi's Sarcoma		M-9140	
Other, III-Defined and Unspecified Sites	All Other	<u> </u>	

# Table 297. ICD-9 and ICD-10 Codes Used

December	Type of Cancer	ICD-9	ICD-10	
Lip   Sase of Tongue	Total	Sum	Sum	
Lip   Sase of Tongue	Lip, Oral Cavity and Pharynx	Sum of subgroups	Sum of subgroups	
Olher & Unspecified Parts of Tongue				
Olher & Unspecified Parts of Tongue		141.0	C01	
Parotid Gland   142.0   C070   C014er & Unspecified Major Sallvary glands   142.144.29   C080   Floor of Mouth   144   C040   C080   C080   C014er & C080		_		
Other & Unspecified Major Salivary glands         142,1142,9         CO88           Floor of Mouth         144         CO48           Gum         145,2145,5         CO56           Other & Unspecified Parts of Mouth         145,0,145,1,145,6-145,5         CO56           Other & Unspecified Parts of Mouth         145,0,145,1,145,6-145,9         CO69           Nasophapmx         146,0-146,2         CO99           Orophapmy         148,0-146,2         CO99           Pyriform Sirus         148,148,2-148,9         CC10           Hypriform Sirus         148,0,148,2-148,9         CC13           Other & Unspecified Oral (Buccal) Cavity & Pharymx         148,0,148,2-148,9         CC13           Digestive System         Sum of Subgroups         150         CC13           Ecophagus         150         CC15         CC16           Small Intestine         50         CC1         CC16           Colorectal         Sum of Colon, Rectum, Rectosignoid Junction, Anus, Anal Canal and Anorectum         Sum of Subgroups         Sum of Subgroups           Cecum         CC20         Sum of Colon, Rectum, Rectosignoid Junction, Anus, Anal Canal and Anorectum         Sum of Subgroups           Appendix         Sum of Colon, Rectum, Rectosignoid Junction         Sum of Subgroups         Sum of Subgro				
Floor of Mouth				
Gum         145.2-145.5         COS           Palate         145.0-145.1, 145.6-145.9         COS           Nasopharynx         146.0-146.2         COS           Tronsil         146.0-146.2         COS           Orpopharynx         148.0-148.2         COS           Hypotharynx         148.0-148.2         COS           Other & Unspecified Oral (Buccal) Cavity & Pharynx         148.0-148.2-148.9         C13           Digestive System         Sum of Subgroups         bum of Subgroups           Esophagus         150         C16           Small Intestine         Sum of Colon, Rectum, Rectosigmoid Junction, Anus, Anal Canal and Anorectum           Colorectal         Sum of Subgroups         Sum of Subgroups           Cecum         153.4         C16           Appendix         153.4         Sum of Subgroups           Cecum         153.4         Sum of Subgroups           Cecum         153.4         Sum of Subgroups           Cecum         153.4         Sum of Subgroups           Appendix         153.4         Sum of Subgroups           Appendix         153.6         Sum of Subgroups           Appendix         153.6         Sum of Subgroups           Appendix         153.6				
Palate         145.21.45.5 - 145.9   C.056           Ohr & Unspecified Parts of Mouth         145.01.45.1,145.6 - 145.9   C.056           Nasophanym         146.01.46.2   C.079           Orophanym         146.01.46.2   C.079           Pyrform Ginus         148.1   C.022           Hypophanym         148.0   148.2   L.08.9   C.03           Other & Unspecified Oral (Buccal) Cavilty & Phanym         148.0   L.08.2   C.07           Esophagus         150         Unrol Older School           Storal Intestine         Sum of Colon, Rectum, Rectosignoid Junction, Anus, Anal Canal and Anorectum         Color (excluding Rectum)         Sum of Subgroups         Sum of Subgroups           Cocon         Colon (excluding Rectum)         Sum of Subgroups         Sum of Subgroups         Sum of Subgroups         Sum of Subgroups         Ceaum         Ceaum         Ceaum         153.1         Ceaum         Ceaum         153.0         Ceaum         Ceaum         153.0         Ceaum         Ceaum         153.1         Ceaum         Ceaum         Ceaum         153.1         Ceaum         Ceaum         153.1         Ceaum         Ceaum         Ceaum         153.1         Ceaum				
Other & Unspecified Parts of Mouth         145.0, 145.1, 145.6, 145.9         CO6           Nasophamynx         146.0, 146.2         CO9           Orophamynx         146.0, 146.2         CO9           Hypophramynx         148.1, 148.2, 148.2         CO1           Hypophramynx         148.0, 148.2, 148.2         CO1           Hypophramynx         148.0, 148.2, 148.2         CO1           Digestive System         Sum of Subgroups         Sum of Subgroups           Esophagus         150         CO1           Stomach         152         CO1           Colorectal         Sum of Colon, Rectum, Rectassigmoid Junction, Annus, Anal Canal and Anorectum         CO1           Colorectal         Sum of Colon, Rectum, Rectassigmoid Junction         Sum of Subgroups           Cocum         153.2         CO1           Ascending Colon         153.5         CO1           Ascending Colon         153.5         CO1           Pescending Colon         153.2         CO1           Rectum         154.2         CO1           Rectum         154.2         CO2           Rectum         154.2         CO2           Anus, Anal Canal and Anorectum         155.2         CO2           Anus, Anal Canal and				
Nasopharynx				
Tonsi		The state of the s		
Orophanym         146.3-146.9         C10           Pyfform Sinus         148.0, 148.2-148.9         C13           Clay         148.0, 148.2-148.9         C13           Clay         148.0, 148.2-148.9         C13           Clay         150         C15           Esophagus         150         C15           Simul Intestine         5um of Colon, Rectum, Rectassignoid Lumctin, Anux, Anal Canal and Anorectum         Sum of Subgroups         Sum of Subgroups           Colon (excluding Rectum)         5um of Subgroups         Sum of Subgroups         Sum of Subgroups           Appendix         5um of Subgroups         Sum of Subgroups         C16           Appendix         153.4         C18.1           Appendix         153.5         C18.1           Appendix         153.6         C18.1           Appendix         153.6         C18.1           Appendix         153.0         C18.1           Appendix         154.1         C18.1           Appendix         153.1<				
Pyriform Sinus         148.0, 148.2, 14				
HypopharyN				
Other & Unspecified Oral (Buccal) Cavity & Pharynx         Sum of Subgroups         Unior Subgroups         Cot of Subgroups         Cot of Subgroups         Sum of Subgroups         Cot of Subgroups         Sum of Subgroups </td <td>· · · · · · · · · · · · · · · · · · ·</td> <td></td> <td></td>	· · · · · · · · · · · · · · · · · · ·			
Digestive System	, , , , , , , , , , , , , , , , , , ,	•		
Esophagus				
Stomach	,			
Small Intestine         5tm of Colon, Rectum, Rectosignost Junction, Anus, Anal Canal and Anorectum Colon (excluding Rectum)         Sum of Colon, Rectum, Rectosignost Junction, Anus, Anal Canal and Anorectum Colon (excluding Rectum)         Sum of Subgroups         Sum of Subgroups         Cecum         C18.0           Appendix         153.5         C18.1         C18.1         C18.1         C18.2         C18.2 <td></td> <td></td> <td></td>				
Colorectal         Sum of Colon, Rectum, Rectosigmoid Junction, Anus, Anal Canal and Anorectum           Colorn (excluding Rectum)         Sum of Subgroups         Sum of Subgroups           Cecum         153.4         C18.0           Appendix         153.5         C18.1           Appendix         153.6         C18.2           Hepatic Flexure         153.6         C18.2           Transverse Colon         153.1         C18.4           Splenic Flexure         153.7         C18.5           Descending Colon         153.2         C18.6           Sigmoid Colon         153.3         C18.7           Large Intestine, NOS         153.8-153.9, 159.0         C18.8-C18.9, C26.0           Rectum         154.1         C20           Rectum Anus, Anal Canal and Anorectum         154.1         C20           Rectsigmoid Junction         154.2-154.8         C21           Liver         155.0         C25.2         C22.2-C22.4, C22.7, C22.9           Intrahepatic Bile Ducts         156.0         C23           Other & Unspecified Biliary Tract         156.0         C23           Other & Unspecified Biliary Tract         158.1         S2         C22.0, C22.2-C22.4, C22.7, C22.9           Respiratory System         Sum				
Colon (excluding Rectum)         Sum of Subgroups         Sum of Subgroups           Cecum         153.4         C18.0           Appendix         153.5         C18.1           Ascending Colon         153.5         C18.1           Hepatic Flexure         153.0         C18.3           Transverse Colon         153.1         C18.6           Splenic Flexure         153.7         C18.5           Descending Colon         153.2         C18.6           Sigmoid Colon         153.8-153.9, 159.0         C18.8-C18.9, C26.0           Rectum         153.8-153.9, 159.0         C18.8-C18.9, C26.0           Rectum         154.0         L40.0         C19.0           Anus, Anal Canal and Anorectum         154.2-154.8         C22.0         C22.1           Liver         155.1         C22.2         C22.2, C22.2-C22.4, C22.7, C22.9         C22.1           Liver         155.1         L50.1         C22.2         C22.0         C22.1         C22.1           Gallbladder         156.1         S5.2         C22.0, C22.2-C22.4, C22.7, C22.9         C22.1				
Cecum         153.4         C18.0           Appendix         153.5         C18.1           Ascending Colon         153.5         C18.1           Hepatic Flexure         153.0         C18.2           Transverse Colon         153.1         C18.5           Descending Colon         153.7         C18.5           Sigmoid Colon         153.8         C18.0         C18.7           Large Intestine, NOS         153.8-153.9, 159.0         C18.8-C18.9, C26.0           Rectum         154.1         C20           Rectosigmoid Junction         154.2-154.8         C22.0         C22.0           Rectosigmoid Junction         154.2-154.8         C22.0         C22.1           Anus, Anal Canal and Anorectum         154.2-154.8         C22.0         C22.1           Liver         155.0, 155.2         C22.0         C22.2-C22.4, C22.7, C22.9           Intrahepatic Bile Ducts         155.0, 155.2         C22.0         C22.1           Gallbiadder         156.0         C23.0         C24.0         C22.1           Retroperitoneum         158.0         C48.0         C24.0         C22.0         C22.0         C22.0         C22.0         C22.0         C22.0         C22.0         C23.0         C48.0 </td <td></td> <td></td> <td></td>				
Appendix         153.5         C18.1           Ascending Colon         153.6         C18.2           Hepatic Flexure         153.0         C08.2           Transverse Colon         153.1         C18.4           Splenic Flexure         153.1         C18.5           Descending Colon         153.2         C18.6           Sigmoid Colon         153.8         C18.7           Large Intestine, NOS         153.8         C18.4         C20           Rectusi gmoid Junction         154.1         C20           Rectusi gmoid Junction         154.2         C22.0         C22.0           Rectosigmoid Junction         154.2         C22.0         C22.0         C22.0           Rectosigmoid Junction         154.2         C54.8         C29.0         C22.0	,			
Ascending Colon		153.4		
Hepatic Flexure	· ·	153.5	C18.1	
Transverse Colon         153.1         C18.4           Splenic Flexure         153.7         C18.5           Descending Colon         153.2         C18.6           Sigmoid Colon         153.8153.91530         C18.8-C18.9, C26.0           Rectural Large Intestine, NOS         153.8153.9, 159.0         C18.8-C18.9, C26.0           Rectosigmoid Junction         154.2154.1         C20           Anus, Anal Canal and Anorectum         154.2154.8         C21           Liver         155.0, 155.2         C22.0, C22.2-C22.4, C22.7, C22.9           Intrahepatic Bile Ducts         155.0, 155.2         C22.0, C22.2-C22.4, C22.7, C22.9           Quiter & Unspecified Biliary Tract         156.1-156.9         C24.           Pancreas         156.1-156.9         C24.           Pancreas         157.1-156.9         C26.           Retroperitoneum         158.1-156.9         C26.           Peritoneum, Omentum and Mesentery         158.8-158.9         C26.8-C26.9, C48.8           Respiratory System         Sum of Subgroups         Sum of Subgroups           Accessory Sinuses         160.0, 160.1         C3           Lung and Bronchus         161.0, 160.1         C3           Pieura         162.2-162.9         C3           Pieura	Ascending Colon	153.6	C18.2	
Splenic Flexure         153.7         C18.5           Descending Colon         153.2         C18.6           Sigmoid Colon         153.3         C18.7           Large Intestine, NOS         153.8-153.9,159.0         C18.8-C18.9, C26.0           Rectum         154.1         C20           Rectosigmoid Junction         154.2         154.0         C19           Anus, Anal Canal and Anorectum         155.2,155.2         C22.0, C22.2-C22.4, C22.7, C22.9         C11           Liver         155.0,155.2         C22.0, C22.2-C22.4, C22.7, C22.9         C22.1         C22.1         C22.1         C22.1         C22.0         C22.2-C22.4, C22.7, C22.9         C22.1         C22.1         C31         C22.1         C22.1         C22.0         C22.2-C22.4, C22.7, C22.9         C22.1         C2	Hepatic Flexure	153.0	C18.3	
Descending Colon         153.2         C18.6           Sigmoid Colon         153.8-153.9, 159.0         C18.8-C18.9, C26.0           Rectum         153.8-153.9, 159.0         C18.8-C18.9, C26.0           Rectusigmoid Junction         154.1         C20           Rectosigmoid Junction         154.2         C22.0, C22.2-C22.4, C22.9           Liver         155.0, 155.2         C22.0, C22.2-C22.4, C22.7, C22.9           Intrahepatic Bile Ducts         155.1         C2.1           Gallbaldeder         155.1         C2.1           Gallbaldeder         156.1         C2.2           Other & Unspecified Biliary Tract         156.1-156.9         C22.0, C22.2-C22.4, C22.7, C22.9           Pancreas         157         C25           Retroperitoneum         158.8-158.9         C24.4           Peritoneum, Omentum and Mesentery         158.8-158.9         C24.4           Other Digestive Organs         Sum of Subgroups         Sum of Subgroups           Respiratory System         Sum of Subgroups         Sum of Subgroups           Nasal Cavity and Middle Ear         160.0, 160.1         C30           Accessory Sinuses         160.2-160.9         C31           Lung and Bronchus         162.2-162.9         C33           Pleura	Transverse Colon	153.1	C18.4	
Sigmoid Colon         153.8         C18.7           Large Intestine, NOS         153.8-153.9, 159.0         C18.8-C18.9, C26.0           Rectum         154.1         C20.0           Rectosigmoid Junction         154.1         C20.0           Anus, Anal Canal and Anorectum         155.0         C52.0           Liver         155.0         C52.0         C22.2-C22.4         C22.7         C22.9           Intrahepatic Bile Ducts         155.0         C22.0         C22.2-C22.4         C22.7         C22.0           Gallbladder         156.0         156.0         C22.1         C22.1           Gallbladder         156.1-156.9         C22.0         C22.2-C22.4         C22.7         C22.9           Pancreas         156.1-156.9         C28.0	Splenic Flexure	153.7	C18.5	
Large Intestine, NOS         153.8-153.9, 159.0         C18.8-C18.9, C26.0           Rectum         154.1         C20           Rectosigmoid Junction         154.0         C10           Anus, Anal Canal and Anorectum         154.2-154.8         C22.0         C22.0           Liver         155.0, 155.2         C22.0, C22.2-C22.4, C22.7, C22.9         C24           Intrahepatic Bile Ducts         155.1         156.1         C22.1           Gallbladder         156.1-156.9         C22.0         C22.4           Pancreas         156.1-156.9         C24           Pancreas         157.7         C25.           Retroperitioneum         158.8-156.9         C24.80.0           Peritioneum, Omentum and Mesentery         158.8-156.9         C26.8-C26.9, C48.0           Other Digestive Organs         Sum of Subgroups         Sum of Subgroups           Respiratory System         Sum of Subgroups         Sum of Subgroups           Nasal Cavity and Middle Ear         160.2, 160.9         Sum of Subgroups           Accessory Sinuses         160.2-160.9         C30.           Lung and Bronchus         160.2-160.9         C30.           Pileura         162.2         C32.           Trachea         162.2         C33.		153.2	C18.6	
Rectum         154.1         C20           Rectosigmoid Junction         154.0         C19           Anus, Anal Canal and Anorectum         154.2-164.8         C21           Liver         155.0, 155.2         C22.0, C22.2-C22.4, C22.7, C22.9           Intrahepatic Bile Ducts         155.0, 155.0         C22.0         C22.2-C22.4, C22.7, C22.9           Intrahepatic Bile Ducts         156.0         C23         C24           Gallbladder         156.1-156.9         C24         C24           Pancreas         156.1-156.9         C24         C24           Pancreas         158.0-156.9         C25         C24           Retroperitoneum         158.0         C8.0         C24           Peritoneum, Omentum and Mesentery         158.8-158.9         C26.8-C26.9, C48.0         C48.0           Other Digestive Organs         Sum of Subgroups         C34.0         C38.4         C38.4 </td <td>Sigmoid Colon</td> <td>153.3</td> <td>C18.7</td>	Sigmoid Colon	153.3	C18.7	
Rectum         154.1         C20           Rectosigmoid Junction         154.0         C19           Anus, Anal Canal and Anorectum         154.2-164.8         C21           Liver         155.0, 155.2         C22.0, C22.2-C22.4, C22.7, C22.9           Intrahepatic Bile Ducts         155.0, 155.0         C22.0         C22.2-C22.4, C22.7, C22.9           Intrahepatic Bile Ducts         156.0         C23         C24           Gallbladder         156.1-156.9         C24         C24           Pancreas         156.1-156.9         C24         C24           Pancreas         158.0-156.9         C25         C24           Retroperitoneum         158.0         C8.0         C24           Peritoneum, Omentum and Mesentery         158.8-158.9         C26.8-C26.9, C48.0         C48.0           Other Digestive Organs         Sum of Subgroups         C34.0         C38.4         C38.4 </td <td>Large Intestine, NOS</td> <td>153.8-153.9, 159.0</td> <td>C18.8-C18.9, C26.0</td>	Large Intestine, NOS	153.8-153.9, 159.0	C18.8-C18.9, C26.0	
Anus, Anal Canal and Anorectum         154.2-154.8         C21           Liver         155.0, 155.2         C22.0, C22.2-C22.4, C22.7, C22.9           Intrahepatic Bile Ducts         155.0, 155.2         C22.0, C22.2-C22.4, C22.7, C22.9           Gallbladder         156.1         C23           Other & Unspecified Biliary Tract         156.1-156.9         C24           Pancreas         157         C25           Retroperitoneum         158.0         C8.0           Peritoneum, Omentum and Mesentery         158.8-158.9         C26.8-C26.9, C48.0           Other Digestive Organs         Sum of Subgroups         Sum of Subgroups           Respiratory System         Sum of Subgroups         Sum of Subgroups           Nasal Cavity and Middle Ear         160.0, 160.1         C30           Accessory Sinuses         160.2-160.9         C31           Larynx         161         C32           Larynx         162.162.162.9         C33           Pleura         162.2-162.9         C33           Pleura         163         C38.4           Trachea         162.2-162.9         C38.1, C38.3, C38.8, C38.           Bones, Joints and Articular Cartilage         Sum of Subgroups         Sum of Subgroups         Sum of Subgroups         Sum of Subg	Rectum	154.1	C20	
Liver         155.0, 155.2         C22.0, C22.2-C22.4, C22.7, C22.9           Intrahepatic Bile Ducts         155.1         C22.1           Gallbladder         156.0         C23.1           Other & Unspecified Biliary Tract         156.1-156.9         C22.2           Pancreas         157.7         C25.2           Retroperitoneum         158.6-158.9         C26.8-C26.9           Peritoneum, Omentum and Mesentery         158.8-158.9         C26.8-C26.9, C48.0           Other Digestive Organs         Sum of Subgroups         Sum of Subgroups           Respiratory System         Sum of Subgroups         Sum of Subgroups           Nasal Cavity and Middle Ear         160.0, 160.1         C30.           Accessory Sinuses         160.2-160.9         C31.           Larynx         162.2-162.9         C33.           Lung and Bronchus         162.2-162.9         C33.           Pleura         162.2-162.9         C33.           Trachea         162.2-162.9         C38.1           Mediastinum and Other Respiratory Organs         164.2-164.9, 165.         C38.1, C38.3, C38.8, C38.           Bones, Joints and Articular Cartilage         Sum of Subgroups         Sum of Subgroups           Bones, Joints & Articular Cartilage of Other & Unspec Sites         170.0-170	Rectosigmoid Junction	154.0	C19	
Liver         155.0, 155.2         C22.0, C22.2-C22.4, C22.7, C22.9           Intrahepatic Bile Ducts         155.1         C22.1           Gallbladder         156.0         C23.1           Other & Unspecified Biliary Tract         156.1-156.9         C22.2           Pancreas         157.7         C25.2           Retroperitoneum         158.6-158.9         C26.8-C26.9, C48.0           Peritoneum, Omentum and Mesentery         158.8-158.9         C26.8-C26.9, C48.0           Other Digestive Organs         Sum of Subgroups         Sum of Subgroups           Respiratory System         Sum of Subgroups         Sum of Subgroups           Nasal Cavity and Middle Ear         160.0, 160.1         C30.           Accessory Sinuses         160.2-160.9         C30.           Lurynx         161.2-160.9         C32.           Lung and Bronchus         162.2-162.9         C33.           Pleura         162.2-162.9         C33.           Trachea         162.2-162.9         C38.1           Mediastinum and Other Respiratory Organs         164.2-164.9, 165.         C38.1, C38.3, C38.8, C38.           Bones, Joints and Articular Cartilage of Limbs         170.4, 170.5, 170.7, 170.8         C37.0         C40.           Bones, Joints & Articular Cartilage of Other & Un	Anus, Anal Canal and Anorectum	154.2-154.8	C21	
Intrahepatic Bile Ducts	Liver	155.0, 155.2	C22.0, C22.2-C22.4, C22.7, C22.9	
Gallbladder         156.0         C23           Other & Unspecified Biliary Tract         156.1-156.9         C24           Pancreas         157         C25           Retroperitoneum         158.0         C48.0           Peritoneum, Omentum and Mesentery         158.8-158.9         C26.8-C26.9 C48.8           Other Digestive Organs         Sum of Subgroups         Sum of Subgroups           Respiratory System         Sum of Subgroups         Sum of Subgroups           Nasal Cavity and Middle Ear         160.0, 160.1         C30           Accessory Sinuses         160.2-160.9         C31           Larynx         161         C32           Lung and Bronchus         162.2-162.9         C34           Pleura         162.2-162.9         C34           Trachea         162.2-162.9         C34           Mediastinum and Other Respiratory Organs         164.2-164.9         C38.1, C38.3, C38.8, C38           Bones, Joints & Articular Cartilage of Limbs         170.4, 170.5, 170.7, 170.8         C40           Bones, Joints & Articular Cartilage of Cther & Unspec Sites         170.0-170.3, 170.6, 170.9         Sum of Subgroups           Soft Tissue (Including Heart         Sum of Subgroups         Sum of Subgroups           Heart         Sum of Subgroups	Intrahepatic Bile Ducts	•		
Other & Unspecified Biliary Tract         156.1-156.9         C24           Pancreas         157         C25           Retroperitoneum         158.0         C48.0           Peritoneum, Omentum and Mesentery         158.8-158.9         C26.8-C26.9-C24.8           Other Digestive Organs         Sum of Subgroups         Sum of Subgroups           Respiratory System         Sum of Subgroups         Sum of Subgroups           Nasal Cavity and Middle Ear         160.0, 160.1         C30           Accessory Sinuses         160.2-160.9         C31           Larynx         162.2-162.9         C34           Lung and Bronchus         162.2-162.9         C34           Pleura         163.         C38.4           Trachea         162.2-162.9         C38.4           Mediastinum and Other Respiratory Organs         164.2-164.9, 165         C38.1, C38.3, C38.8, C38           Bones, Joints & Articular Cartilage of Limbs         170.4, 170.5, 170.7, 170.8         C40           Bones, Joints & Articular Cartilage of Limbs         170.4, 170.5, 170.7, 170.8         Sum of Subgroups           Soft Tissue (Including Heart)         Sum of Subgroups         Sum of Subgroups           Heart         Sum of Subgroups         Sum of Subgroups           Peripheral Nerves & Autonomic Ne				
Pancreas         157         C25           Retroperitoneum         158.0         C48.0           Peritoneum, Omentum and Mesentery         158.8-158.9         C48.1, C48.2           Other Digestive Organs         Sum of Subgroups         Sum of Subgroups           Respiratory System         Sum of Subgroups         Sum of Subgroups           Nasal Cavity and Middle Ear         160.0, 160.1         C30           Accessory Sinuses         160.2-160.9         C31           Larynx         161         C32           Pleura         162.2-162.9         C34           Pleura         162.2-162.9         C38.4           Trachea         162.2-162.9         C38.4           Mediastinum and Other Respiratory Organs         164.2-164.9, 165         C38.1, C38.3, C38.8, C38           Bones, Joints and Articular Cartilage         Sum of Subgroups         Sum of Subgroups           Bones, Joints & Articular Cartilage of Limbs         170.0-170.3, 170.7, 170.8         C40           Bones, Joints & Articular Cartilage of Other & Unspec Sites         170.0-170.3, 170.6, 170.9         Sum of Subgroups           Soft Tissue (Including Heart)         Sum of Subgroups         Sum of Subgroups         Sum of Subgroups         Sum of Subgroups           Heart         Sum of Subgroups <td< td=""><td></td><td></td><td></td></td<>				
Retroperitoneum         158.0         C48.0           Peritoneum, Omentum and Mesentery         158.8-158.9         C48.1, C48.2           Other Digestive Organs         159.8, 159.9         C26.8-C26.9, C48.8           Respiratory System         Sum of Subgroups         Sum of Subgroups           Nasal Cavity and Middle Ear         160.0, 160.1         C30           Accessory Sinuses         160.2-160.9         C31           Larynx         161         C32           Lung and Bronchus         162.2-162.9         C34           Pleura         163         C38.4           Trachea         162.2-162.9         C38.1           Mediastinum and Other Respiratory Organs         164.2-164.9, 165         C38.1, C38.3, C38.8, C38           Bones, Joints and Articular Cartilage         Sum of Subgroups         Sum of Subgroups         Sum of Subgroups           Bones, Joints & Articular Cartilage of Limbs         170.4, 170.5, 170.7, 170.8         C40         C41           Soft Tissue (Including Heart)         Sum of Subgroups         Sum of Subgroups         Sum of Subgroups         Sum of Subgroups           Heart         Sum of Subgroups         Sum of Subgroups         Sum of Subgroups         Sum of Subgroups			_	
Peritoneum, Omentum and Mesentery         158.8-158.9         C48.1, C48.2           Other Digestive Organs         159.8, 159.9         C26.8-C26.9, C48.8           Respiratory System         Sum of Subgroups         Sum of Subgroups           Nasal Cavity and Middle Ear         160.0, 160.1         C30           Accessory Sinuses         160.2-160.9         C31           Larynx         161         C32           Lung and Bronchus         162.2-162.9         C34           Pleura         163         C38.4           Trachea         163.2-162.9         C38.1         C38.4           Mediastinum and Other Respiratory Organs         164.2-164.9, 165         C38.1, C38.3, C38.8, C39         C38.1           Bones, Joints and Articular Cartilage         Sum of Subgroups         Sum of Subgroups         Sum of Subgroups         Sum of Subgroups         C40           Soft Tissue (Including Heart)         Sum of Subgroups         Sum of Subgroups         Sum of Subgroups         Sum of Subgroups           Heart         Sum of Subgroups         Sum of Subgroups         Sum of Subgroups         Sum of Subgroups           Peripheral Nerves & Autonomic Nervous System         Sum of Subgroups         Sum of Subgroups         Sum of Subgroups				
Other Digestive Organs         159.8, 159.9         C26.8-C26.9, C48.8           Respiratory System         Sum of Subgroups         Sum of Subgroups           Nasal Cavity and Middle Ear         160.0, 160.1         C30           Accessory Sinuses         160.2-160.9         C31           Larynx         161         C32           Lung and Bronchus         162.2-162.9         C34           Pleura         163         C38.4           Trachea         162.0         C30           Mediastinum and Other Respiratory Organs         164.2-164.9, 165         C38.1, C38.3, C38.8, C38.           Bones, Joints and Articular Cartilage         Sum of Subgroups         Sum of Subgroups           Bones, Joints & Articular Cartilage of Limbs         170.4, 170.5, 170.7, 170.8         C40           Bones, Joints & Articular Cartilage of Other & Unspec Sites         170.0-170.3, 170.6, 170.9         Sum of Subgroups           Soft Tissue (Including Heart)         Sum of Subgroups         Sum of Subgroups           Heart         Sum of Subgroups         Sum of Subgroups           Peripheral Nerves & Autonomic Nervous System         164.2         Sum of Subgroups	<b>-</b>			
Respiratory System         Sum of Subgroups         Sum of Subgroups           Nasal Cavity and Middle Ear         160.0, 160.1         C30           Accessory Sinuses         160.2-160.9         C31           Larynx         161         C32           Lung and Bronchus         162.2-162.9         C34           Pleura         163         C38.4           Trachea         162.0         C3           Mediastinum and Other Respiratory Organs         164.2-164.9, 165         C38.1, C38.3, C38.8, C39           Bones, Joints and Articular Cartilage         Sum of Subgroups         Sum of Subgroups           Bones, Joints & Articular Cartilage of Limbs         170.4, 170.5, 170.7, 170.8         C40           Bones, Joints & Articular Cartilage of Other & Unspec Sites         170.0-170.3, 170.6, 170.9         C41           Soft Tissue (Including Heart)         Sum of Subgroups         Sum of Subgroups           Heart         C38.0           Peripheral Nerves & Autonomic Nervous System         164.1         C38.0	· · · · · · · · · · · · · · · · · · ·		•	
Nasal Cavity and Middle Ear       160.0, 160.1       C30         Accessory Sinuses       160.2-160.9       C31         Larynx       161       C32         Lung and Bronchus       162.2-162.9       C34         Pleura       163       C38.4         Trachea       162.0       C33         Mediastinum and Other Respiratory Organs       164.2-164.9, 165       C38.1, C38.3, C38.8, C39         Bones, Joints and Articular Cartilage       Sum of Subgroups       Sum of Subgroups         Bones, Joints & Articular Cartilage of Limbs       170.4, 170.5, 170.7, 170.8       C40         Bones, Joints & Articular Cartilage of Other & Unspec Sites       170.0-170.3, 170.6, 170.9       C41         Soft Tissue (Including Heart)       Sum of Subgroups       Sum of Subgroups         Heart       164.1       C38.0         Peripheral Nerves & Autonomic Nervous System       164.1       C38.0		•		
Accessory Sinuses         160.2-160.9         C31           Larynx         161         C32           Lung and Bronchus         162.2-162.9         C34           Pleura         163         C38.4           Trachea         162.0         C38.4           Mediastinum and Other Respiratory Organs         164.2-164.9, 165         C38.1, C38.3, C38.8, C39           Bones, Joints and Articular Cartilage         Sum of Subgroups         Sum of Subgroups           Bones, Joints & Articular Cartilage of Limbs         170.4, 170.5, 170.7, 170.8         C40           Bones, Joints & Articular Cartilage of Other & Unspec Sites         170.0-170.3, 170.6, 170.9         C41           Soft Tissue (Including Heart)         Sum of Subgroups         Sum of Subgroups           Heart         164.1         C38.0           Peripheral Nerves & Autonomic Nervous System         164.1         C38.0		<b>3</b> .	9 1	
Larynx       161       C32         Lung and Bronchus       162.2-162.9       C34         Pleura       163       C38.4         Trachea       162.0       C33         Mediastinum and Other Respiratory Organs       164.2-164.9, 165       C38.1, C38.3, C38.8, C39         Bones, Joints and Articular Cartilage       Sum of Subgroups       Sum of Subgroups         Bones, Joints & Articular Cartilage of Limbs       170.4, 170.5, 170.7, 170.8       C40         Bones, Joints & Articular Cartilage of Other & Unspec Sites       170.0-170.3, 170.6, 170.9       C41         Soft Tissue (Including Heart)       Sum of Subgroups       Sum of Subgroups         Heart       164.1       C38.0         Peripheral Nerves & Autonomic Nervous System       164.1       C38.0		· · · · · · · · · · · · · · · · · · ·		
Lung and Bronchus         162.2-162.9         C34           Pleura         163         C38.4           Trachea         162.0         C33           Mediastinum and Other Respiratory Organs         164.2-164.9, 165         C38.1, C38.3, C38.8, C39           Bones, Joints and Articular Cartilage         Sum of Subgroups         Sum of Subgroups           Bones, Joints & Articular Cartilage of Limbs         170.4, 170.5, 170.7, 170.8         C40           Bones, Joints & Articular Cartilage of Other & Unspec Sites         170.0-170.3, 170.6, 170.9         C41           Soft Tissue (Including Heart)         Sum of Subgroups         Sum of Subgroups           Heart         164.1         C38.0           Peripheral Nerves & Autonomic Nervous System         164.1         C38.0	•			
Pleura         163         C38.4           Trachea         162.0         C33           Mediastinum and Other Respiratory Organs         164.2-164.9, 165         C38.1, C38.3, C38.8, C39           Bones, Joints and Articular Cartilage         Sum of Subgroups         Sum of Subgroups           Bones, Joints & Articular Cartilage of Limbs         170.4, 170.5, 170.7, 170.8         C40           Bones, Joints & Articular Cartilage of Other & Unspec Sites         170.0-170.3, 170.6, 170.9         C41           Soft Tissue (Including Heart)         Sum of Subgroups         Sum of Subgroups           Heart         164.1         C38.0           Peripheral Nerves & Autonomic Nervous System         164.1         C38.0	•			
Trachea       162.0       C33         Mediastinum and Other Respiratory Organs       164.2-164.9, 165       C38.1, C38.3, C38.8, C39         Bones, Joints and Articular Cartilage       Sum of Subgroups       Sum of Subgroups         Bones, Joints & Articular Cartilage of Limbs       170.4, 170.5, 170.7, 170.8       C40         Bones, Joints & Articular Cartilage of Other & Unspec Sites       170.0-170.3, 170.6, 170.9       Sum of Subgroups         Soft Tissue (Including Heart)       Sum of Subgroups       Sum of Subgroups         Heart       164.1       C38.0         Peripheral Nerves & Autonomic Nervous System       164.1       C38.0	•			
Mediastinum and Other Respiratory Organs  Bones, Joints and Articular Cartilage Bones, Joints & Articular Cartilage of Limbs Bones, Joints & Articular Cartilage of Climbs Bones, Joints & Articular Cartilage of Other & Unspec Sites Bones, Joints & Articular Cartilage of Other & Unspec Sites Bones, Joints & Articular Cartilage of Other & Unspec Sites Bones, Joints & Articular Cartilage of Other & Unspec Sites Bones, Joints & Articular Cartilage of Other & Unspec Sites Bones, Joints & Articular Cartilage of Other & Unspec Sites Bones, Joints & Articular Cartilage of Other & Unspec Sites Bones, Joints & Articular Cartilage of Other & Unspec Sites Bones, Joints & Articular Cartilage of Other & Unspec Sites Bones, Joints & Articular Cartilage of Limbs Bones, Joints & Bones, J				
Bones, Joints and Articular Cartilage Bones, Joints & Articular Cartilage of Limbs Bones, Joints & Articular Cartilage of Limbs Bones, Joints & Articular Cartilage of Other & Unspec Sites Bones, Joints & Articular Cartilage of Other & Unspec Sites Bones, Joints & Articular Cartilage of Other & Unspec Sites Bones, Joints & Articular Cartilage of Other & Unspec Sites Bones, Joints & Articular Cartilage of Limbs Bones, Joints & Bones, Joints & Limbs Bones, Joints & Limbs Bones, Joints & Bones, Joints & Limbs Bones, Joints & Limbs Bones, Joints & Limbs Bones, Joints & Limbs Bones, Joint				
Bones, Joints & Articular Cartilage of Limbs Bones, Joints & Articular Cartilage of Other & Unspec Sites Bones, Joints & Articular Cartilage of Other & Unspec Sites Soft Tissue (Including Heart) Heart Peripheral Nerves & Autonomic Nervous System  170.4, 170.5, 170.7, 170.8 170.4, 170.5, 170.7 170.4, 170.5, 170.7 170.4, 170.5, 170.7 170.4, 170.	· · · · ·	· · · · · · · · · · · · · · · · · · ·		
Bones, Joints & Articular Cartilage of Other & Unspec Sites Soft Tissue (Including Heart) Heart Peripheral Nerves & Autonomic Nervous System  170.0-170.3, 170.6, 170.9 Sum of Subgroups Sum of Subgroups 164.1 C38.0 C47			<u> </u>	
Soft Tissue (Including Heart)  Heart Peripheral Nerves & Autonomic Nervous System  Sum of Subgroups 164.1 C38.0 C47				
Heart164.1C38.0Peripheral Nerves & Autonomic Nervous SystemC47	·			
Peripheral Nerves & Autonomic Nervous System C47	` <del>-</del> /	- · · · · · · · · · · · · · · · · · · ·	• .	
		164.1		
Connective, Subcutaneous & Other Soft Tissues 171 C49				
	Connective, Subcutaneous & Other Soft Tissues	171	C49	

# Table 297. ICD-9 and ICD-10 Codes Used (Continued)

Type of Cancer	ICD-9	ICD-10	
Skin (Excluding Basal And Squamous)	Sum of Subgroups	Sum of Subgroups	
Melanomas Of The Skin	172	C43	
Other Non-Epithelial Skin	173	C44	
Breast	174-175	C50	
Female Genital System	Sum of Subgroups	Sum of Subgroups	
Cervix Uteri	180	C53	
Corpus Uteri & Uterus, NOS	Sum of Corpus Uteri and Uterus, NOS	Sum of Corpus Uteri and Uterus, NOS	
Corpus Uteri	182	C54	
Uterus, NOS	179	C55	
Ovary	183.0	C56	
Vagina	184.0	C52	
Vulva	184.1-184.4	C51	
Placenta	181	C58	
Other Female Genital Organs	183.2-183.9, 184.8, 184.9	C57	
Male Genital System	Sum of Subgroups	Sum of Subgroups	
Prostate	185	C61	
Testis	186	C62	
Penis	187.1-187.4	C60	
Other Male Genital Organs	187.5-187.9	C63	
Urinary System	Sum of Subgroups	Sum of Subgroups C67	
Urinary Bladder	Sum of Kidney and Renal Pelvis	Sum of Kidney and Renal Pelvis	
Kidney and Renal Pelvis Kidney	189.0	C64	
Renal Pelvis	189.1	C65	
Ureter	189.2	C66	
Other Urinary Organs	189.3-189.9	C68	
Eye and Orbit	190	C69	
Brain and Other Central Nervous System	Sum of Subgroups	Sum of Subgroups	
Brain	191	C71	
Meninges	192.1, 192.3	C70	
Spinal Cord, Cranial Nerves, & Other Parts of CNS	192.0, 192.2, 192.8, 192.9	C72	
Endocrine System	Sum of Subgroups	Sum of Subgroups	
Thyroid Gland	193	C73	
Adrenal Gland	194.0	C74	
Other Endocrine (Including Thymus)	164.0, 194.1-194.9	C37, C75	
Hodgkin's Lymphoma	201	C81	
Non-Hodgkin's Lymphoma	200, 202.8, 202.9, 202.0-202.2	C82-C85, C96.3	
Multiple Myeloma	203.0, 238.6	C90.0, C90.2	
Leukemia	Sum of subgroups		
Lymphocytic	Sum of subgroups		
Acute Lymphocytic	204.0	C91.0	
Chronic Lymphocytic	204.1	C91.1	
Other Lymphocytic	202.4, 204.2, 204.8-204.9	C91.2-C91.4, C91.7, C91.9	
Myeloid and Monocytic	Sum of subgroups		
Acute Myeloid Leukemia	205.0, 207.0, 207.2	C92.0, C92.4-C92.5, C94.0, C94.2	
Acute Monocytic Leukemia	206.0	C93.0	
Chronic Myeloid Leukemia	205.1	C92.1	
Other Myeloid/Monocytic Leukemia	205.2-205.3, 205.8-205.9, 206.1-206.2,	C92.2-C92.3, C92.7, C92.9, C93.1-	
Othor	206.8-206.9	C93.2, C93.7, C93.9	
Other Acute	Sum of subgroups	004.4.004.5.005.0	
Other Acute	208.0	C94.4, C94.5, C95.0	
Aleukemic, Subleukemic and NOS	203.1, 207.1, 207.8, 208.1-208.2, 208.8 208.9	C90.1, C91.5, C94.1, C94.3, C94.7, C95.1, C95.2, C95.7, C95.9	
Mesothelioma	N/A	C45	
Kaposi's Sarcoma	176	C45	
Other, Ill-Defined and Unspecified Sites	All Others	All Others	
Carer, in Definited and Oriopeonica Oiles	All Others	All Others	

## APPENDIX B - FORMULAS

#### **AGE-ADJUSTED RATE:**

$$\frac{E_t}{S}$$
 ×100,000

$$E_t$$
 = Total Expected Number of Events =  $\sum_{i=1}^{k} E_i$ 

$$S_t$$
 = Total Standard Population =  $\sum_{i=1}^k S_i$ 

$$CR$$
 = Crude Rate =  $\frac{N_t}{P_t} \times 100,000$ 

$$P_t$$
 = Total State Population =  $\sum_{i=1}^{k} P_i$ 

$$N_t$$
 = Total Number of Events =  $\sum_{i=1}^{k} N_i$ 

$$E_i$$
 = Age-Specific Expected Number of Events =  $\frac{N_i}{P_i} \times S_i$ 

$$S_i$$
 = Standard Age-Specific Population

$$k$$
 = Number of Age Groups

# AGE-ADJUSTED RATE CONFIDENCE INTERVALS:

$$w_{i} = \frac{stdmil_{i}}{\left(pop_{i} \times \sum_{j=x}^{y} stdmil_{j}\right)}$$

$$w_m = \max(w_i)$$

$$v = \sum_{i=x}^{y} (w_i^2 \times count_i)$$

$$CI_{low} = \left(\frac{v}{2 \times rate}\right) \times \left(ChiInv\left(\frac{p}{2}, \frac{\left(2 \times rate^{2}\right)}{v}\right)\right) \times 100,000$$

$$CI_{upper} = \left(\frac{v + w_m^2}{2(rate + w_m)}\right) \times \left(ChiInv\left(1 - \frac{p}{2}, \frac{2(rate + w_m)^2}{(v + w_m^2)}\right)\right) \times 100,000$$

# AGE-ADJUSTED RATE STANDARD ERROR:

$$SE_{AArate} = \left[ \sum_{i=x}^{y} \left( \frac{stdmil_i}{\sum_{j=x}^{y} stdmil_j} \right)^2 \times \left( \frac{count_i}{population_i^2} \right) \right]^{\frac{1}{2}} \times 100,000$$

#### **CAUSE SPECIFIC SURVIVAL RATE:**

$$L_{x} = L_{x-1} - D_{x-1} - U_{x-1} - W_{x-1}$$

$$L_x^* = L_x - \frac{1}{2} \left( U_x + W_x \right)$$

$$P_x = 1 - \frac{D_x}{L_x^*}$$

$$CP_x = P_1, P_2, \dots, P_x$$

 $L_1$  = Total number of cases included in table

 $L_x$  = Number of cases alive at beginning of interval x

 $L_x^*$  = Adjusted number of cases alive at during interval x

 $D_x$  = Number of cases dying from Cancer during interval x

 $U_x$  = Number of cases untraced (lost to follow up) during interval x, where the definition for "lost to follow up" is: alive with follow up date prior to some prescribed date

 $W_x$  = Number of cases withdrawn alive during interval x, where the definition of "withdrawn alive" is: alive with follow up date later than some specified date (This is the same as in previous definition.)

 $P_x$  = Cause specific survival rate for interval x

 $CP_x$  = Cumulative cause specific survival rate

#### **CRUDE RATE:**

$$CR = \frac{Number of Events}{Population} \times 100,000$$

# CRUDE RATE CONFIDENCE INTERVALS:

$$CI_{lower} = \left(\frac{100,000}{Population}\right) \times \left(Events - \left(1.96 \times \sqrt{Events}\right)\right)$$

$$CI_{upper} = \left(\frac{100,000}{Population}\right) \times \left(Events + \left(1.96 \times \sqrt{Events}\right)\right)$$

#### **MEDIAN SURVIVAL RATE:**

$$MedianSurvival = \left(Interval - 1\right) + \left(\frac{\left(CP_{x-1} - .5\right)}{\left(CP_{x-1} - CP_{x}\right)}\right)$$

**ELSE IF:**  $CP_x$  for first interval is less than .5, then median survival:

$$MedianSurvival = \frac{.5}{(1 - CP_x)}$$

**ELSE IF:**  $CP_x$  for interval is equal to .5, then median survival:

MedianSurvival = Interval

 $CP_x$  = Cumulative cause specific survival rate for interval x

# PERCENTAGE (BRFSS) CONFIDENCE INTERVALS:

$$CI_{lower} = Weighted\% - 1.96 \times \sqrt{\frac{Weighted\% \times (1 - Weighted\%)}{Total \text{ Re sponses}}}$$

$$CI_{upper} = Weighted\% + 1.96 \times \sqrt{\frac{Weighted\% \times (1 - Weighted\%)}{Total \text{Re sponses}}}$$

### REFERENCES

- 1). Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov) SEER\*Stat Database: Incidence SEER 17 Regs Limited-Use, Nov 2006 Sub (2000-2004) Linked To County Attributes Total U.S., 1969-2004 Counties, National Cancer Institute, DCCPS, Surveillance Research Program, Cancer Statistics Branch, released April 2007, based on the November 2006 submission.
- 2). Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov) SEER\*Stat Database: Incidence - SEER 17 Regs Limited-Use, Nov 2006 Sub (1973-2004 varying) - Linked To County Attributes - Total U.S., 1969-2004 Counties, National Cancer Institute, DCCPS, Surveillance Research Program, Cancer Statistics Branch, released April 2007, based on the November 2006 submission.
- 3). "ICD-9 to ICD-10" text document, ICD Conversion Programs, Surveillance, Epidemiology and End Results (SEER), National Cancer Institute, October 2002. <a href="http://seer.cancer.gov/tools/">http://seer.cancer.gov/tools/</a>, 2002.
- National Cancer Institute, Surveillance, Epidemiology and End Results (SEER), February 2003. <a href="http://seer.cancer.gov/">http://seer.cancer.gov/</a>, 2003.
- 5). National Cancer Institute, "What you need to know about..." publications. <a href="http://cancer.gov/cancer\_information/list.aspx?viewid=920AFA90-5547-4739-8D2D-89968F77A87D">http://cancer.gov/cancer\_information/list.aspx?viewid=920AFA90-5547-4739-8D2D-89968F77A87D</a>, 2003.
- 6). Young JL Jr, Roffers SD, Ries LAG, Fritz AG, Hurlbut AA (eds). SEER Summary Staging Manual 2000: Codes and Coding Instructions, National Cancer Institute, NIH Pub. No. 01-4969, Bethesda, MD, 2001. <a href="http://seer.cancer.gov/tools/ssm/">http://seer.cancer.gov/tools/ssm/</a>. 2003.