

Table 6A.B.1.4: Frequency of Cancers of Bones and Joints, by Histology, by Age, United States 2004-2015

Group Histology	Age at Diagnosis																		Total (ALL)	
	0 - 9		10 - 19		20 - 29		30 - 39		40 - 49		50 - 59		60 - 69		70 - 79		80+		N	% Total
	N	% Total	N	% Total	N	% Total	N	% Total	N	% Total	N	% Total	N	% Total	N	% Total	N	% Total		
Osteosarcoma	404	6.3%	2,464	38.6%	1,078	16.9%	611	9.6%	560	8.8%	491	7.7%	391	6.1%	214	3.4%	165	2.6%	6,378	33.8%
Central osteosarcoma	23	0.12	127	0.67	37	0.20	18	0.10	21	0.11	23	0.12	17	0.09	5	0.03	2	0.01	273	4.3%
Chondroblastic osteosarcoma	44	0.23	396	2.10	186	0.99	108	0.57	78	0.41	83	0.44	52	0.28	21	0.11	14	0.07	982	15.4%
Fibroblastic osteosarcoma	12	0.06	84	0.44	65	0.34	46	0.24	58	0.31	38	0.20	33	0.17	10	0.05	7	0.04	353	5.5%
High grade surface osteosarcoma	.	.	17	0.09	4	0.02	7	0.04	6	0.03	1	0.01	2	0.01	3	0.02	4	0.02	44	0.7%
Intracortical osteosarcoma	.	.	1	0.01	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	0.0%
Intraosseous well differentiated osteosarcoma	.	.	2	0.01	2	0.01	.	.	4	0.02	3	0.02	2	0.01	.	.	.	.	13	0.2%
Osteosarcoma in Paget disease of bone	.	.	1	0.01	.	.	.	.	2	0.01	14	0.07	18	0.10	13	0.07	20	0.11	68	1.1%
Osteosarcoma, NOS	292	1.55	1,647	8.72	611	3.24	324	1.72	323	1.71	290	1.54	250	1.32	148	0.78	112	0.59	3,997	62.7%
Parosteal osteosarcoma	2	0.01	47	0.25	97	0.51	71	0.38	38	0.20	28	0.15	6	0.03	4	0.02	3	0.02	296	4.6%
Periosteal osteosarcoma	2	0.01	30	0.16	28	0.15	12	0.06	9	0.05	4	0.02	2	0.01	2	0.01	.	.	89	1.4%
Small cell osteosarcoma	7	0.04	24	0.13	11	0.06	8	0.04	7	0.04	3	0.02	1	0.01	1	0.01	.	.	62	1.0%
Telangiectatic osteosarcoma	22	0.12	88	0.47	37	0.20	17	0.09	14	0.07	4	0.02	8	0.04	7	0.04	3	0.02	200	3.1%
Chondrosarcoma	15	0.2%	175	2.7%	504	7.9%	772	12.1%	1,109	17.4%	1,274	20.0%	1,078	16.9%	647	10.1%	409	6.4%	5,983	31.7%
Chondrosarcoma, NOS	12	0.06	134	0.71	409	2.17	655	3.47	943	4.99	1,066	5.65	846	4.48	472	2.50	303	1.60	4,840	
Clear cell chondrosarcoma	.	.	4	0.02	16	0.08	20	0.11	18	0.10	21	0.11	15	0.08	3	0.02	1	0.01	98	
Dedifferentiated chondrosarcoma	.	.	.	.	1	0.01	10	0.05	56	0.30	99	0.52	140	0.74	120	0.64	78	0.41	504	
Juxtacortical chondrosarcoma	1	0.01	6	0.03	10	0.05	20	0.11	15	0.08	8	0.04	9	0.05	2	0.01	1	0.01	72	
Mesenchymal chondrosarcoma	2	0.01	26	0.14	29	0.15	14	0.07	12	0.06	5	0.03	10	0.05	2	0.01	.	.	100	
Myxoid chondrosarcoma	.	.	5	0.03	39	0.21	53	0.28	65	0.34	75	0.40	58	0.31	48	0.25	26	0.14	369	
Ewing Sarcoma	434	6.8%	1,380	21.6%	711	11.1%	222	3.5%	148	2.3%	78	1.2%	27	0.4%	17	0.3%	6	0.1%	3,023	16.0%
Ewing sarcoma	434	2.30	1,380	7.31	711	3.77	222	1.18	148	0.78	78	0.41	27	0.14	17	0.09	6	0.03	3,023	
Chordoma	32	0.5%	61	1.0%	115	1.8%	197	3.1%	225	3.5%	328	5.1%	329	5.2%	260	4.1%	131	2.1%	1,678	8.9%
Chondroid chordoma	4	0.02	3	0.02	10	0.05	20	0.11	7	0.04	16	0.08	17	0.09	7	0.04	2	0.01	86	
Chordoma, NOS	25	0.13	57	0.30	103	0.55	177	0.94	216	1.14	310	1.64	307	1.63	251	1.33	128	0.68	1,574	
Dedifferentiated chordoma	3	0.02	1	0.01	2	0.01	.	.	2	0.01	2	0.01	5	0.03	2	0.01	1	0.01	18	
Giant Cell Tumor of bone	1	0.0%	32	0.5%	87	1.4%	60	0.9%	44	0.7%	42	0.7%	24	0.4%	9	0.1%	10	0.2%	309	1.6%
Giant cell tumor of bone, malignant	1	0.01	32	0.17	87	0.46	60	0.32	44	0.23	42	0.22	24	0.13	9	0.05	10	0.05	309	
Sarcoma NOS	4	0.1%	16	0.3%	16	0.3%	27	0.4%	44	0.7%	46	0.7%	42	0.7%	41	0.6%	26	0.4%	262	1.4%
Spindle cell sarcoma	3	0.02	10	0.05	11	0.06	19	0.10	38	0.20	30	0.16	29	0.15	34	0.18	17	0.09	191	
Undifferentiated sarcoma	1	0.01	6	0.03	5	0.03	8	0.04	6	0.03	16	0.08	13	0.07	7	0.04	9	0.05	71	
Malignant Fibrous Histiocytoma	1	0.0%	6	0.1%	8	0.1%	21	0.3%	41	0.6%	50	0.8%	42	0.7%	34	0.5%	32	0.5%	235	1.2%
Malignant fibrous histiocytoma	1	0.01	6	0.03	8	0.04	21	0.11	41	0.22	50	0.26	42	0.22	34	0.18	32	0.17	235	

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Histology	N	% Total	N	% Total	N	% Total	N	% Total	N	% Total	N	% Total	N	% Total	N	% Total	N	% Total	N	% Total
Angiosarcoma	2	0.0%	4	0.1%	3	0.0%	9	0.1%	20	0.3%	29	0.5%	47	0.7%	47	0.7%	36	0.6%	197	1.0%
Hemangiosarcoma	2	0.01	4	0.02	3	0.02	9	0.05	20	0.11	29	0.15	47	0.25	47	0.25	36	0.19	197	
Neoplasm	3	0.0%	14	0.2%	12	0.2%	7	0.1%	13	0.2%	20	0.3%	24	0.4%	19	0.3%	36	0.6%	148	0.8%
Neoplasm, malignant	3	0.02	14	0.07	12	0.06	7	0.04	13	0.07	20	0.11	24	0.13	19	0.10	36	0.19	148	
PNET	18	0.3%	51	0.8%	38	0.6%	17	0.3%	10	0.2%	6	0.1%	2	0.0%	5	0.1%	1	0.0%	148	0.8%
Peripheral neuroectodermal tumor	8	0.04	24	0.13	11	0.06	7	0.04	4	0.02	2	0.01	1	0.01	3	0.02	1	0.01	61	
Primitive neuroectodermal tumor, NOS	10	0.05	27	0.14	27	0.14	10	0.05	6	0.03	4	0.02	1	0.01	2	0.01	.	.	87	
Leiomyosarcoma	.	.	3	0.0%	8	0.1%	12	0.2%	30	0.5%	29	0.5%	31	0.5%	21	0.3%	10	0.2%	144	0.8%
Leiomyosarcoma, NOS	.	.	3	0.02	8	0.04	12	0.06	30	0.16	29	0.15	31	0.16	21	0.11	10	0.05	144	
Adamantinoma	4	0.1%	38	0.6%	27	0.4%	15	0.2%	14	0.2%	13	0.2%	7	0.1%	2	0.0%	2	0.0%	122	0.6%
Adamantinoma of long bones	4	0.02	38	0.20	27	0.14	15	0.08	14	0.07	13	0.07	7	0.04	2	0.01	2	0.01	122	
Hemangioendothelioma	.	.	4	0.1%	12	0.2%	10	0.2%	19	0.3%	21	0.3%	18	0.3%	18	0.3%	9	0.1%	111	0.6%
Epithelioid hemangioendothelioma, malignant	.	.	2	0.01	7	0.04	7	0.04	15	0.08	15	0.08	14	0.07	14	0.07	6	0.03	80	
Hemangioendothelioma, malignant	.	.	2	0.01	5	0.03	3	0.02	4	0.02	6	0.03	4	0.02	4	0.02	3	0.02	31	
Fibrosarcoma	2	0.0%	8	0.1%	9	0.1%	11	0.2%	12	0.2%	21	0.3%	16	0.3%	10	0.2%	10	0.2%	99	0.5%
Fibrosarcoma, NOS	2	0.01	8	0.04	9	0.05	11	0.06	12	0.06	21	0.11	16	0.08	10	0.05	10	0.05	99	
Chondroblastoma	.	.	15	0.2%	14	0.2%	4	0.1%	3	0.0%	4	0.1%	3	0.0%	1	0.0%	.	.	44	0.2%
Chondroblastoma, malignant	.	.	15	0.08	14	0.07	4	0.02	3	0.02	4	0.02	3	0.02	1	0.01	.	.	44	
Total Bone and Joint Cancers	920	4.9%	4,271	22.6%	2,642	14.0%	1,995	10.6%	2,292	12.1%	2,452	13.0%	2,081	11.0%	1,345	7.1%	883	4.7%	18,881	200.0%

Source: The National Cancer Data Base (NCDB) of the American College of Surgeons (ACS), 2004-2015.