

Section 30

Myelodysplastic Syndromes (MDS), Chronic Myeloproliferative Disorders (CMD), and Chronic Myelomonocytic Leukemia (CMML)

This section includes Myelodysplastic Syndromes (MDS), Chronic Myeloproliferative Disorders (CMD), and Chronic Myelomonocytic Leukemia (CMML). In the 3rd edition of the International Classification of Diseases for Oncology, the behavior code of myelodysplastic syndromes and chronic myeloproliferative disorders was changed from /1, borderline malignancy or low malignant potential, to /3, malignant primary site. These diagnoses became reportable for cases diagnosed in 2001+ when ICD-O-3 went into effect. CMML has been reportable for all years. CMML is included here and in the leukemia section.

Table 30.1

Myelodysplastic Syndromes, Chronic Myeloproliferative Disorders, and Chronic Myelomonocytic Leukemia

Counts, Percents and Age-Adjusted Incidence Rates^a for the 17 SEER Geographic Areas by Subtype, 2004-2008

Site	Both Sexes			Males			Females		
	Count	Percent	Rate	Count	Percent	Rate	Count	Percent	Rate
Total	27,164	100.0%	7.4	14,767	100.0%	9.5	12,397	100.0%	5.9
Myelodysplastic Syndromes (MDS)	16,230	100.0%	4.4	9,048	100.0%	6.1	7,182	100.0%	3.4
Refractory anemia (RA), NOS	2,013	12.4%	0.6	1,060	11.7%	0.7	953	13.3%	0.5
RA with ringed sideroblasts	1,397	8.6%	0.4	800	8.8%	0.5	597	8.3%	0.3
RA with excess blasts (RAEB)	2,290	14.1%	0.6	1,348	14.9%	0.9	942	13.1%	0.5
RAEB in transformation	94	0.6%	0.0	52	0.6%	0.0	42	0.6%	0.0
Refractory cytopenia w/multilineage dysplasia	953	5.9%	0.3	619	6.8%	0.4	334	4.7%	0.2
Myelodysplastic syndrome with 5q deletion	328	2.0%	0.1	117	1.3%	0.1	211	2.9%	0.1
Therapy-related myelodysplastic syndrome	278	1.7%	0.1	141	1.6%	0.1	137	1.9%	0.1
Myelodysplastic syndrome, NOS	8,877	54.7%	2.4	4,911	54.3%	3.3	3,966	55.2%	1.8
Chronic Myeloproliferative Disorders (CMD)	9,509	100.0%	2.5	4,845	100.0%	2.9	4,664	100.0%	2.2
Polycythemia vera	3,669	38.6%	1.0	2,127	43.9%	1.2	1,542	33.1%	0.7
Chronic myeloproliferative disease, NOS	1,573	16.5%	0.4	798	16.5%	0.5	775	16.6%	0.4
Myelosclerosis with myeloid metaplasia	992	10.4%	0.3	573	11.8%	0.4	419	9.0%	0.2
Essential thrombocythemia	3,094	32.5%	0.8	1,243	25.7%	0.8	1,851	39.7%	0.9
Chronic neutrophilic leukemia	21	0.2%	0.0	-	-	-	-	-	-
Hypereosinophilic syndrome	160	1.7%	0.0	92	1.9%	0.1	68	1.5%	0.0
Chronic Myelomonocytic Leukemia (CMML)	1,425	100.0%	0.4	874	100.0%	0.6	551	100.0%	0.3

Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

- Statistic not shown due to fewer than 16 cases during the time period.

Table 30.2

Myelodysplastic Syndromes, Chronic Myeloproliferative Disorders, and
Chronic Myelomonocytic LeukemiaAge-Adjusted Incidence Rates^a for the 17 SEER Geographic Areas by Age and Race, 2004-2008

Site	Both Sexes		Males		Females	
	Rate	Count	Rate	Count	Rate	Count
Myelodysplastic Syndromes (MDS)						
By age						
Ages <40	0.2	362	0.2	190	0.2	172
Ages 40-49	0.8	465	0.7	212	0.9	253
Ages 50-59	2.5	1,221	2.8	668	2.2	553
Ages 60-69	9.2	2,619	11.0	1,477	7.6	1,142
Ages 70-79	27.1	5,149	36.6	3,021	19.8	2,128
Ages 80+	49.8	6,414	77.5	3,480	35.2	2,934
By race						
All Races	4.4	16,230	6.1	9,048	3.4	7,182
White	4.5	13,799	6.2	7,795	3.4	6,004
Black	3.8	1,112	4.8	523	3.4	589
Asian/Pacific Islander	3.3	989	4.5	564	2.4	425
American Indian/Alaska Native ^b	2.6	48	2.5	21	2.8	27
Hispanic ^c	3.3	1,254	3.8	623	2.9	631
Chronic Myeloproliferative Disorders (CMD)						
By age						
Ages <40	0.3	725	0.4	413	0.3	312
Ages 40-49	1.7	993	1.9	563	1.5	430
Ages 50-59	3.1	1,522	3.7	868	2.6	654
Ages 60-69	6.8	1,959	7.7	1,045	6.1	914
Ages 70-79	12.2	2,325	14.0	1,161	10.9	1,164
Ages 80+	15.4	1,985	17.5	795	14.3	1,190
By race						
All Races	2.5	9,509	2.9	4,845	2.2	4,664
White	2.5	7,716	2.9	3,957	2.2	3,759
Black	2.5	818	2.8	408	2.2	410
Asian/Pacific Islander	1.9	634	2.0	310	1.7	324
American Indian/Alaska Native ^b	1.5	33	1.6	18	-	-
Hispanic ^c	1.7	799	1.8	392	1.6	407
Chronic Myelomonocytic Leukemia (CMML)						
By age						
Ages <40	0.0	22	-	-	-	-
Ages 40-49	0.0	28	-	-	-	-
Ages 50-59	0.2	91	0.2	56	0.1	35
Ages 60-69	0.9	260	1.3	176	0.6	84
Ages 70-79	2.6	485	3.9	325	1.5	160
Ages 80+	4.2	539	6.4	290	3.0	249
By race						
All Races	0.4	1,425	0.6	874	0.3	551
White	0.4	1,263	0.6	770	0.3	493
Black	0.3	74	0.4	41	0.2	33
Asian/Pacific Islander	0.2	70	0.4	52	0.1	18
American Indian/Alaska Native ^b	-	-	-	-	-	-
Hispanic ^c	0.3	103	0.4	64	0.2	39

Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^b Incidence data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

^c Hispanics are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

- Statistic not shown due to fewer than 16 cases during the time period.