

Section 30<h2>

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, 2003-2007

Site	Both Sexes			Males			Females		
	Count	Percent	Rate	Count	Percent	Rate	Count	Percent	Rate
Total	25,844	100.0%	7.1	14,054	100.0%	9.2	11,790	100.0%	5.6
Myelodysplastic Syndromes (MDS)	15,481	100.0%	4.3	8,575	100.0%	5.8	6,906	100.0%	3.3
Refractory anemia (RA), NOS	2,091	13.5%	0.6	1,092	12.7%	0.7	999	14.5%	0.5
RA with ringed sideroblasts	1,456	9.4%	0.4	826	9.6%	0.6	630	9.1%	0.3
RA with excess blasts (RAEB)	2,157	13.9%	0.6	1,284	15.0%	0.8	873	12.6%	0.4
RAEB in transformation	119	0.8%	0.0	57	0.7%	0.0	62	0.9%	0.0
Refractory cytopenia w/multilineage dysplasia	860	5.6%	0.2	555	6.5%	0.4	305	4.4%	0.1
Myelodysplastic syndrome with 5q deletion	271	1.8%	0.1	100	1.2%	0.1	171	2.5%	0.1
Therapy-related myelodysplastic syndrome	251	1.6%	0.1	118	1.4%	0.1	133	1.9%	0.1
Myelodysplastic syndrome, NOS	8,276	53.5%	2.3	4,543	53.0%	3.1	3,733	54.1%	1.7
Chronic Myeloproliferative Disorders (CMD)	8,980	100.0%	2.4	4,633	100.0%	2.8	4,347	100.0%	2.1
Polycythemia vera	3,627	40.4%	1.0	2,117	45.7%	1.2	1,510	34.7%	0.7
Chronic myeloproliferative disease, NOS	1,543	17.2%	0.4	784	16.9%	0.5	759	17.5%	0.4
Myelosclerosis with myeloid metaplasia	940	10.5%	0.3	553	11.9%	0.4	387	8.9%	0.2
Essential thrombocythemia	2,691	30.0%	0.7	1,083	23.4%	0.7	1,608	37.0%	0.8
Chronic neutrophilic leukemia	18	0.2%	0.0	-	-	-	-	-	-
Hypereosinophilic syndrome	161	1.8%	0.0	86	1.9%	0.0	75	1.7%	0.0
Chronic Myelomonocytic Leukemia (CMML)	1,383	100.0%	0.4	846	100.0%	0.6	537	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 Leukemia

Age-Adjusted Incidence Rates^a for the 17 SEER Geographic Areas by Age and Race, 2003-2007

Site	Both Sexes		Males		Females	
	Rate	Count	Rate	Count	Rate	Count
Myelodysplastic Syndromes (MDS)						
By age						
Ages <40	0.2	349	0.2	192	0.1	157
Ages 40-49	0.8	468	0.7	216	0.8	252
Ages 50-59	2.4	1,158	2.7	637	2.1	521
Ages 60-69	8.9	2,455	10.6	1,377	7.4	1,078
Ages 70-79	26.2	4,968	35.5	2,900	19.2	2,068
Ages 80+	47.6	6,083	71.9	3,253	34.3	2,830
By race						
All Races	4.3	15,481	5.8	8,575	3.3	6,906
White	4.3	13,158	6.0	7,399	3.3	5,759
Black	3.7	1,084	4.6	516	3.3	568
Asian/Pacific Islander	3.2	931	4.1	504	2.5	427
American Indian/Alaska Native ^b	2.7	49	2.5	21	2.9	28
Hispanic ^c	3.0	1,129	3.6	582	2.6	547
Chronic Myeloproliferative Disorders (CMD)						
By age						
Ages <40	0.3	685	0.3	372	0.3	313
Ages 40-49	1.6	935	1.8	526	1.4	409
Ages 50-59	3.1	1,450	3.7	853	2.5	597
Ages 60-69	6.6	1,822	7.6	992	5.7	830
Ages 70-79	11.9	2,260	13.9	1,139	10.4	1,121
Ages 80+	14.3	1,828	16.5	751	13.1	1,077
By race						
All Races	2.4	8,980	2.8	4,633	2.1	4,347
White	2.4	7,302	2.8	3,811	2.1	3,491
Black	2.4	774	2.7	380	2.1	394
Asian/Pacific Islander	1.8	602	1.9	293	1.7	309
American Indian/Alaska Native ^b	1.1	24	-	-	-	-
Hispanic ^c	1.6	711	1.7	355	1.5	356
Chronic Myelomonocytic Leukemia (CMML)						
By age						
Ages <40	0.0	23	-	-	-	-
Ages 40-49	0.0	22	-	-	-	-
Ages 50-59	0.2	87	0.2	46	0.2	41
Ages 60-69	0.9	237	1.3	163	0.5	74
Ages 70-79	2.6	490	4.1	335	1.4	155
Ages 80+	4.1	524	6.1	279	3.0	245
By race						
All Races	0.4	1,383	0.6	846	0.3	537
White	0.4	1,225	0.6	746	0.3	479
Black	0.3	79	0.4	45	0.2	34
Asian/Pacific Islander	0.2	64	0.4	47	0.1	17
American Indian/Alaska Native ^b	-	-	-	-	-	-
Hispanic ^c	0.3	91	0.4	57	0.2	34

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.