

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 18 SEER Geographic Areas by Subtype, 2005-2009

Site	Both Sexes			Males			Females		
	Count	Percent	Rate	Count	Percent	Rate	Count	Percent	Rate
Total	30,199	100.0%	7.5	16,353	100.0%	9.7	13,846	100.0%	6.0
Myelodysplastic Syndromes (MDS)	18,169	100.0%	4.5	10,082	100.0%	6.2	8,087	100.0%	3.5
Refractory anemia (RA), NOS	2,065	11.4%	0.5	1,064	10.6%	0.7	1,001	12.4%	0.4
RA with ringed sideroblasts	1,368	7.5%	0.3	776	7.7%	0.5	592	7.3%	0.3
RA with excess blasts (RAEB)	2,508	13.8%	0.6	1,483	14.7%	0.9	1,025	12.7%	0.4
RAEB in transformation	102	0.6%	0.0	56	0.6%	0.0	46	0.6%	0.0
Refractory cytopenia w/multilineage dysplasia	1,068	5.9%	0.3	688	6.8%	0.4	380	4.7%	0.2
Myelodysplastic syndrome with 5q deletion	413	2.3%	0.1	154	1.5%	0.1	259	3.2%	0.1
Therapy-related myelodysplastic syndrome	342	1.9%	0.1	174	1.7%	0.1	168	2.1%	0.1
Myelodysplastic syndrome, NOS	10,303	56.7%	2.6	5,687	56.4%	3.5	4,616	57.1%	2.0
Chronic Myeloproliferative Disorders (CMD)	10,439	100.0%	2.5	5,285	100.0%	2.9	5,154	100.0%	2.3
Polycythemia vera	3,881	37.2%	0.9	2,257	42.7%	1.2	1,624	31.5%	0.7
Chronic myeloproliferative disease, NOS	1,613	15.5%	0.4	811	15.3%	0.5	802	15.6%	0.4
Myelosclerosis with myeloid metaplasia	1,112	10.7%	0.3	673	12.7%	0.4	439	8.5%	0.2
Essential thrombocythemia	3,646	34.9%	0.9	1,430	27.1%	0.8	2,216	43.0%	1.0
Chronic neutrophilic leukemia	21	0.2%	0.0	-	-	-	-	-	-
Hypereosinophilic syndrome	166	1.6%	0.0	100	1.9%	0.1	66	1.3%	0.0
Chronic Myelomonocytic Leukemia (CMML)	1,591	100.0%	0.4	986	100.0%	0.6	605	100.0%	0.3

Source: SEER 18 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, New Jersey and Georgia excluding ATL/RG).

^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 18 SEER Geographic Areas by Age and Race, 2005-2009

Site	Both Sexes		Males		Females	
	Rate	Count	Rate	Count	Rate	Count
Myelodysplastic Syndromes (MDS)						
By age						
Ages <40	0.2	361	0.2	191	0.2	170
Ages 40-49	0.8	482	0.7	223	0.8	259
Ages 50-59	2.5	1,364	2.8	746	2.2	618
Ages 60-69	9.6	3,061	11.6	1,736	7.9	1,325
Ages 70-79	27.9	5,697	37.4	3,329	20.5	2,368
Ages 80+	51.5	7,204	79.0	3,857	36.9	3,347
By race						
All Races	4.5	18,169	6.2	10,082	3.5	8,087
White	4.6	15,383	6.4	8,651	3.5	6,732
Black	3.9	1,354	4.9	641	3.4	713
Asian/Pacific Islander	3.4	1,083	4.7	621	2.5	462
American Indian/Alaska Native ^b	3.0	57	3.5	31	2.6	26
Hispanic ^c	3.3	1,362	3.9	683	2.9	679
Chronic Myeloproliferative Disorders (CMD)						
By age						
Ages <40	0.4	816	0.4	451	0.3	365
Ages 40-49	1.7	1,069	1.8	580	1.5	489
Ages 50-59	3.2	1,705	3.7	967	2.7	738
Ages 60-69	6.7	2,177	7.7	1,176	5.9	1,001
Ages 70-79	12.1	2,474	13.8	1,227	10.8	1,247
Ages 80+	15.7	2,198	18.0	884	14.6	1,314
By race						
All Races	2.5	10,439	2.9	5,285	2.3	5,154
White	2.5	8,432	2.9	4,281	2.3	4,151
Black	2.5	970	2.8	472	2.2	498
Asian/Pacific Islander	1.8	646	2.1	326	1.6	320
American Indian/Alaska Native ^b	1.6	35	2.1	21	-	-
Hispanic ^c	1.7	872	1.9	436	1.6	436
Chronic Myelomonocytic Leukemia (CMML)						
By age						
Ages <40	0.0	24	-	-	-	-
Ages 40-49	0.1	32	0.1	19	-	-
Ages 50-59	0.2	115	0.3	75	0.1	40
Ages 60-69	0.9	301	1.3	201	0.6	100
Ages 70-79	2.6	538	4.0	356	1.6	182
Ages 80+	4.2	581	6.5	320	2.9	261
By race						
All Races	0.4	1,591	0.6	986	0.3	605
White	0.4	1,383	0.6	857	0.3	526
Black	0.3	93	0.4	51	0.2	42
Asian/Pacific Islander	0.3	93	0.5	66	0.1	27
American Indian/Alaska Native ^b	-	-	-	-	-	-
Hispanic ^c	0.3	115	0.4	69	0.2	46

Source: SEER 18 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, New Jersey and Georgia excluding ATL/RG).

^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.