

**Prevalence of Alzheimer's Disease and
Related Dementias Among California Medi-
Cal Beneficiaries Age 30 and Older, as of
March 2021**

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Overview and Key Findings:

- This workbook presents the counts and percentage of Medi-Cal beneficiaries age 30 and older who had been diagnosed with Alzheimer's disease and related dementias as of March 31, 2021.
- The data includes both Medi-Cal only beneficiaries, and Medicare and Medi-Cal dually eligible beneficiaries in Original Medicare (Fee-for-Service (FFS)). Diagnosis data for dually eligible beneficiaries enrolled in any type of Medicare Advantage is not currently available to the Department of Health Care Services, and therefore that population is not included in this workbook. Approximately 43% of dually eligible beneficiaries were in any type of Medicare Advantage in 2021.
- For dually eligible beneficiaries age 65 and older in Medicare FFS in California, statewide prevalence of Alzheimer's disease and related dementias was 18.1% in March 2021.
- Prevalence among Medi-Cal only beneficiaries age 65 and older was significantly lower (6.8%) compared to dually eligible beneficiaries (18.1%), likely due to Medi-Cal only beneficiaries age 65 and older predominantly receiving restricted-scope Medi-Cal due to immigration status, and lack of diagnosis codes reported for that population. Prevalence information based on Medi-Cal data may change for that group as the full-scope Medi-Cal expansion for age 50 and older is implemented.
- For dually eligible beneficiaries, there was wide variation in prevalence by county, with lowest prevalence in northern rural counties (5.9 – 7.3%), and highest prevalence in Los Angeles (20.2%) and Orange (19.8%) counties.
- For dually eligible beneficiaries across all ages, statewide prevalence by race/ethnicity was highest among White beneficiaries (17.6%). Prevalence among Black beneficiaries was 12.5%, but DHCS notes that figure is not consistent with federal analysis of chronic condition prevalence among Medicare beneficiaries.
- Prevalence among In-Home Supportive Services (IHSS) recipients age 65 and older was 28.2%, with wide variation by race/ethnicity, and by county.
- Prevalence among Medi-Cal beneficiaries age 65 and older with a Skilled Nursing Facility (SNF) stay was 70.1%.
- For comparison, in 2018, based on the Centers for Medicare & Medicaid Services (CMS) Chronic Conditions Warehouse (CCW) data, prevalence among California dually eligible beneficiaries age 65 and older (20.7%) was more than twice as high as prevalence among California Medicare-only beneficiaries age 65 and older (8.7%).
- In 2018, based on CMS CCW data, prevalence among Medicare beneficiaries in California was lower than prevalence among Medicare beneficiaries nationally.

Important Note on Prevalence by Race and Ethnicity, and Health Equity Considerations:

Data from this report indicates that across all racial and ethnic groups, White Californians with Medi-Cal have the highest prevalence of an Alzheimer's disease or related dementias diagnosis. However, according to CMS CCW data for 2018, among all Medicare beneficiaries (Medicare only and dually eligible), Black Medicare beneficiaries age 65 and older in California had the highest prevalence (15.4%) among any racial or ethnic group. This difference between data sources suggests further analysis is needed, and the results of this workbook should be considered as just one of several data sources for prevalence information.

Furthermore, [a recent report from the National Institute on Aging](#) notes, "Black participants in Alzheimer's disease research studies were 35% less likely to be diagnosed with Alzheimer's and related dementias than White participants, despite national statistics that indicate that Black Americans are overall about twice as likely to develop dementias than Whites." They further note, "investigators are not yet clear on the reasons behind these findings but suspect they can be explained in part by a referral bias or differences in diagnostic thresholds applied by providers. They see this study as further evidence for addressing racial disparities in Alzheimer's disease and related dementias treatment, especially to avoid delayed diagnoses that could have major adverse consequences for patients and their families."

Data Release Notes and Limitations:

- The presence of these diagnoses was determined by applying the CMS CCW method to Medi-Cal managed care and Fee-for-Service (FFS), and Medicare FFS claims data in the Department of Health Care Services (DHCS) internal Data Warehouse.
- Results are presented for four Medi-Cal subgroups: (1) dual-eligible population, which are enrolled in both Medi-Cal and Original Medicare (FFS); (2) Medi-Cal only beneficiaries, not enrolled in Medicare; (3) IHSS recipients, either dually eligible in Medicare FFS or Medi-Cal only; and (4) Medi-Cal beneficiaries with an SNF stay, either dually eligible in Medicare FFS or Medi-Cal only.
- Dually eligible beneficiaries enrolled in any type of Medicare Advantage are excluded from this report because DHCS does not have the encounter data from most Medicare Advantage plans that would be needed to identify individuals with Alzheimer's disease and related dementias. For purposes of this report, Medicare Advantage includes traditional Medicare Advantage plans, any Special Needs Plans, Cal MediConnect, and Program of All-Inclusive Care for the Elderly (PACE). An estimated 43% of dually eligible beneficiaries were in some type of Medicare Advantage in 2021.
- Results include a breakout of beneficiaries classified as IHSS recipients if a valid claim was submitted for IHSS during the first three months of 2021.

- Based on a beneficiary's individual enrollment status as of March 31, 2021, beneficiaries were categorized as a Medi-Cal only enrollee or dually eligible.
- Beneficiaries were excluded if they were enrolled in Medi-Cal for fewer than 33 of the preceding 36 months.
- This analysis is contingent upon accurate coding of Alzheimer's disease and related dementias, and data may be inaccurate if provider coding was not done accurately. In addition, the diagnosis of Alzheimer's disease requires screening and diagnosis—disparities in rates of screening and diagnosis may affect the reported Alzheimer's rates in this analysis and may underestimate the true prevalence of Alzheimer's disease in certain populations.
- Relevant datasets for future consideration:
 - Alzheimer's disease and related dementias prevalence data is available via a California Department of Public Health (CDPH) report¹. The CDPH report contains statewide estimations and projections of prevalence using Census data from Department of Finance for 2019 and beyond.
 - Dual-eligible beneficiary enrollment data by county is available on the California Health and Human Services (CalHHS) Open Data portal². Note, due to differences in data query methodology related to length of enrollment, direct comparison to other datasets is cautioned.

¹ [Alzheimer's Disease and Related Dementias Estimates for 2019](#)

² [Medi-Cal Certified Eligible by County and Dual Status](#)

**Dually Eligible Beneficiaries in Medicare FFS w/ Alzheimer's / Dementia by Age
(Table 1)**

Age	With Alzheimer's / Dementia	Total Dual Beneficiaries Age 30 and older in Medicare FFS	Prevalence
Age 30 and older	122,007	805,456	15.1%
Ages 30-64	11,456	196,056	5.8%
Age 65 and Older	110,551	609,400	18.1%

Dually Eligible Beneficiaries age 30 and older in Medicare FFS w/ Alzheimer's / Dementia by Race and Ethnicity (Table 2)

Race/Ethnicity	With Alzheimer's / Dementia	Total Dual Beneficiaries Age 30 and older in Medicare FFS	Prevalence
All Race/Ethnicity	122,007	805,456	15.1%
White	42,845	240,617	17.8%
Hispanic	26,450	200,047	13.2%
Black	7,880	61,645	12.8%
Asian	23,168	137,812	16.8%
Native Hawaiian / Other PI	4,598	27,304	16.8%
American Indian / Alaska Native	326	3,668	8.9%
Other	5,493	50,289	10.9%
Unknown	11,247	84,074	13.4%

**Dually Eligible Beneficiaries age 30 and older in Medicare FFS with Alzheimer's /
Dementia by County (Table 3)**

County	With Alzheimer's / Dementia	Total Dual Beneficiaries Age 30 and older in Medicare FFS	Prevalence
All Counties	122,007	805,456	15.1%
Alameda	5,507	40,960	13.4%
Alpine	XX	XX	XX
Amador	82	789	10.4%
Butte	745	8,038	9.3%
Calaveras	108	1,161	9.3%
Colusa	93	792	11.7%
Contra Costa	2,465	20,310	12.1%
Del Norte	101	1,377	7.3%
El Dorado	286	3,057	9.4%
Fresno	3,258	25,194	12.9%
Glenn	117	1,255	9.3%
Humboldt	374	5,331	7.0%
Imperial	1,543	9,603	16.1%
Inyo	50	523	9.6%
Kern	2,203	19,625	11.2%
Kings	443	3,354	13.2%
Lake	284	3,987	7.1%
Lassen	54	843	6.4%
Los Angeles	49,458	244,666	20.2%
Madera	406	3,605	11.3%
Marin	463	3,590	12.9%
Mariposa	51	549	9.3%
Mendocino	290	3,691	7.9%
Merced	876	8,613	10.2%

County	With Alzheimer's / Dementia	Total Dual Beneficiaries Age 30 and older in Medicare FFS	Prevalence
Modoc	51	398	12.8%
Mono	XX	XX	XX
Monterey	1,304	10,664	12.2%
Napa	323	2,748	11.8%
Nevada	229	2,344	9.8%
Orange	9,121	46,058	19.8%
Placer	624	4,657	13.4%
Plumas	63	802	7.9%
Riverside	3,570	27,562	13.0%
Sacramento	5,092	34,615	14.7%
San Benito	145	1,138	12.7%
San Bernardino	3,646	28,914	12.6%
San Diego	6,199	41,363	15.0%
San Francisco	4,510	33,308	13.5%
San Joaquin	1,850	16,745	11.0%
San Luis Obispo	452	5,041	9.0%
San Mateo	682	5,261	13.0%
Santa Barbara	909	10,190	8.9%
Santa Clara	4,015	28,634	14.0%
Santa Cruz	660	6,972	9.5%
Shasta	630	7,233	8.7%
Sierra	17	141	12.1%
Siskiyou	135	2,295	5.9%
Solano	881	8,743	10.1%
Sonoma	962	9,030	10.7%
Stanislaus	1,596	13,898	11.5%
Sutter	431	3,828	11.3%

County	With Alzheimer's / Dementia	Total Dual Beneficiaries Age 30 and older in Medicare FFS	Prevalence
Tehama	205	2,677	7.7%
Trinity	44	617	7.1%
Tulare	1,589	14,268	11.1%
Tuolumne	148	1685	8.8%
Ventura	1925	14559	13.2%
Yolo	482	4,407	10.9%
Yuba	231	2782	8.3%
Unknown	14	789	1.8%

**Medi-Cal Only Beneficiaries age 30 and older w/ Alzheimer's / Dementia by Age
(Table 4)**

Age	With Alzheimer's / Dementia	Total Medi-Cal only Age 30 and older	Prevalence
Age 30 and Older	30,482	2,755,194	1.1%
Ages 30-64	20,492	2,608,093	0.8%
Age 65 and Older	9,990	147,101	6.8%

**Medi-Cal Only Beneficiaries age 30 and older w/ Alzheimer's / Dementia by Race
and Ethnicity (Table 5)**

Race/Ethnicity	With Alzheimer's / Dementia	Total Medi-Cal only Age 30 and older	Prevalence
All Race/Ethnicity	30,482	2,755,194	1.1%
White	8,485	672,168	1.3%
Hispanic	9,502	1,035,810	0.9%
Black	3,167	263,001	1.2%
Asian	3,551	300,987	1.2%
Native Hawaiian / Other PI	711	50,704	1.4%

Race/Ethnicity	With Alzheimer's / Dementia	Total Medi-Cal only Age 30 and older	Prevalence
American Indian / Alaska Native	171	14,800	1.2%
Other	2,644	271,611	1.0%
Unknown	2,251	146,113	1.5%

Medi-Cal Only Beneficiaries age 30 and older with Alzheimer's and Related Dementias by County (Table 6)

County	With Alzheimer's / Dementia	Total Medi-Cal Only Age 30 and older	Prevalence
All Counties	30,482	2,755,194	1.1%
Alameda	1,304	95,208	1.4%
Alpine	XX	XX	XX
Amador	28	2,049	1.4%
Butte	125	20,008	0.6%
Calaveras	22	3,448	0.6%
Colusa	XX	XX	XX
Contra Costa	701	61,412	1.1%
Del Norte	23	3,132	0.7%
El Dorado	121	9,039	1.3%
Fresno	984	109,469	0.9%
Glenn	19	2,374	0.8%
Humboldt	99	16,104	0.6%
Imperial	163	21,077	0.8%
Inyo	XX	XX	XX
Kern	654	86,595	0.8%

County	With Alzheimer's / Dementia	Total Medi-Cal Only Age 30 and older	Prevalence
Kings	98	12,616	0.8%
Lake	47	8,477	0.6%
Lassen	XX	XX	XX
Los Angeles	8,667	792,105	1.1%
Madera	105	13,542	0.8%
Marin	133	8,721	1.5%
Mariposa	XX	XX	XX
Mendocino	79	10,000	0.8%
Merced	348	26,289	1.3%
Modoc	XX	XX	XX
Mono	XX	XX	XX
Monterey	302	29,453	1.0%
Napa	64	5,956	1.1%
Nevada	50	6,831	0.7%
Orange	2,552	170,147	1.5%
Placer	193	13,676	1.4%
Plumas	XX	XX	XX
Riverside	1,638	177,811	0.9%
Sacramento	2,298	125,339	1.8%
San Benito	28	3,401	0.8%
San Bernardino	2,003	188,811	1.1%
San Diego	2,436	186,128	1.3%
San Francisco	703	52,156	1.3%
San Joaquin	520	61,740	0.8%
San Luis Obispo	81	11,854	0.7%
San Mateo	354	23,448	1.5%
Santa Barbara	131	24,434	0.5%

County	With Alzheimer's / Dementia	Total Medi-Cal Only Age 30 and older	Prevalence
Santa Clara	986	76,674	1.3%
Santa Cruz	178	16,898	1.1%
Shasta	106	15,199	0.7%
Sierra	XX	XX	XX
Siskiyou	36	4,989	0.7%
Solano	312	25,939	1.2%
Sonoma	262	25,158	1.0%
Stanislaus	404	53,902	0.7%
Sutter	77	8,893	0.9%
Tehama	43	5,655	0.8%
Trinity	XX	XX	XX
Tulare	380	52,541	0.7%
Tuolumne	36	3,374	1.1%
Ventura	323	41,995	0.8%
Yolo	146	12,024	1.2%
Yuba	43	7,617	0.6%
Unknown	26	10,267	0.3%

Medi-Cal Beneficiaries Age 30 and older Receiving IHSS, with Alzheimer's and Related Dementias by Age (Table 7)

Note: Includes dually eligible beneficiaries in Medicare FFS and Medi-Cal only beneficiaries, but not dually eligible beneficiaries in any type of Medicare Advantage.

Age	With Alzheimer's / Dementia	Medi-Cal Beneficiaries Age 30 and Older Receiving IHSS	Prevalence
Age 30 and older	72,967	370,190	19.7%

Ages 30-64	7,458	137,995	5.4%
Age 65 and Older	65,509	232,195	28.2%

Medi-Cal Beneficiaries Age 30 and older Receiving IHSS, with Alzheimer's and Related Dementias by Race and Ethnicity (Table 8)

Note: Includes dually eligible beneficiaries in Medicare FFS and Medi-Cal only beneficiaries, but not dually eligible beneficiaries in any type of Medicare Advantage.

Race/Ethnicity	With Alzheimer's / Dementia	Medi-Cal Beneficiaries Age 30 and Older Receiving IHSS	Prevalence
All Race/Ethnicity	72,967	370,190	19.7%
White	26,844	126,518	21.2%
Hispanic	16,957	87,016	19.5%
Black	5,009	54,984	9.1%
Asian	18,385	74,997	24.5%
Native Hawaiian / Other PI	2,057	9,644	21.3%
American Indian / Alaska Native	205	1,837	11.2%
Other	1,815	9,878	18.4%
Unknown	1,695	5,316	31.9%

Medi-Cal Beneficiaries Age 30 and Older Receiving IHSS, with Alzheimer's and Related Dementias by County (Table 9)

Note: Includes dually eligible beneficiaries in Medicare FFS and Medi-Cal only beneficiaries, but not dually eligible beneficiaries in any type of Medicare Advantage.

County	With Alzheimer's / Dementia	Medi-Cal Beneficiaries Age 30 and Older Receiving IHSS	Prevalence
All Counties	72,967	370,190	19.7%
Alameda	3,254	17,544	18.5%
Alpine	XX	XX	XX
Amador	37	229	16.2%
Butte	282	2,625	10.7%

County	With Alzheimer's / Dementia	Medi-Cal Beneficiaries Age 30 and Older Receiving IHSS	Prevalence
Calaveras	53	330	16.1%
Colusa	39	198	19.7%
Contra Costa	1,319	7,148	18.5%
Del Norte	26	264	9.8%
El Dorado	122	745	16.4%
Fresno	2,010	13,385	15.0%
Glenn	68	367	18.5%
Humboldt	148	1,411	10.5%
Imperial	1,034	4,321	23.9%
Inyo	18	96	18.8%
Kern	934	5,421	17.2%
Kings	277	1,754	15.8%
Lake	162	1,622	10.0%
Lassen	13	142	9.2%
Los Angeles	32,860	147,220	22.3%
Madera	233	1,489	15.6%
Marin	197	1,194	16.5%
Mariposa	17	158	10.8%
Mendocino	147	1,187	12.4%
Merced	474	2,616	18.1%
Modoc	21	101	20.8%
Mono	XX	XX	XX
Monterey	768	3,750	20.5%
Napa	137	717	19.1%
Nevada	71	485	14.6%
Orange	5,083	18,045	28.2%
Placer	311	1,717	18.1%

County	With Alzheimer's / Dementia	Medi-Cal Beneficiaries Age 30 and Older Receiving IHSS	Prevalence
Plumas	29	273	10.6%
Riverside	2,239	15,326	14.6%
Sacramento	3,343	18,309	18.3%
San Benito	81	427	19.0%
San Bernardino	2,318	15,721	14.7%
San Diego	2,987	15,558	19.2%
San Francisco	3,178	17,060	18.6%
San Joaquin	703	4,449	15.8%
San Luis Obispo	175	1,226	14.3%
San Mateo	327	1,550	21.1%
Santa Barbara	384	2,628	14.6%
Santa Clara	2,652	13,567	19.5%
Santa Cruz	287	1,969	14.6%
Shasta	272	2,314	11.8%
Sierra	XX	XX	XX
Siskiyou	53	376	14.1%
Solano	478	2,940	16.3%
Sonoma	451	3,351	13.5%
Stanislaus	741	4,718	15.7%
Sutter	182	978	18.6%
Tehama	88	773	11.4%
Trinity	17	153	11.1%
Tulare	563	3,283	17.1%
Tuolumne	27	301	9.0%
Ventura	881	4,125	21.4%
Yolo	296	1,761	16.8%
Yuba	92	678	13.6%

County	With Alzheimer's / Dementia	Medi-Cal Beneficiaries Age 30 and Older Receiving IHSS	Prevalence
Unknown	XX	XX	XX

Medi-Cal Beneficiaries Age 30 and Older with a Skilled Nursing Facility (SNF) Stay, w/ Alzheimer's / Dementia by Age (Table 10)

Note: Includes dually eligible beneficiaries in Medicare FFS and Medi-Cal only beneficiaries, but not dually eligible beneficiaries in any type of Medicare Advantage.

Age	With Alzheimer's / Dementia	Medi-Cal Beneficiaries Age 30 and Older w/ SNF Stay	Prevalence
Age 30 and older	28,147	49,620	56.7%
Ages 30-64	4,958	16,539	30.0%
65 and Older	23,189	33,081	70.1%

Medi-Cal Beneficiaries Age 30 and Older w/ an SNF Stay, w/ Alzheimer's / Dementia by Race/Ethnicity (Table 11)

Note: Includes dually eligible beneficiaries in Medicare FFS and Medi-Cal only beneficiaries, but not dually eligible beneficiaries in any type of Medicare Advantage.

Race/Ethnicity	With Alzheimer's / Dementia	Medi-Cal Beneficiaries Age 30 and Older w/SNF Stay	Prevalence
All Race/Ethnicity	28,147	49,620	56.7%
White	10,507	19,387	54.2%
Hispanic	4,756	8,779	54.2%
Black	2,796	5,242	53.3%
Asian	1,977	2,946	67.1%
Native Hawaiian / Other PI	1,184	1,662	71.2%
American Indian / Alaska Native	75	182	41.2%

Race/Ethnicity	With Alzheimer's / Dementia	Medi-Cal Beneficiaries Age 30 and Older w/SNF Stay	Prevalence
Other	2,102	3,709	56.7%
Unknown	4,750	7,713	61.6%

Medi-Cal Beneficiaries Age 30 and Older w/ an SNF Stay, w/ Alzheimer's / Dementia by County (Table 12)

Note: Includes dually eligible beneficiaries in Medicare FFS and Medi-Cal only beneficiaries, but not dually eligible beneficiaries in any type of Medicare Advantage.

Counties	With Alzheimer's / Dementia	Medi-Cal Beneficiaries Age 30 and Older w/SNF Stay	Prevalence
All Counties	28,147	49,620	56.7%
Alameda	1,441	2,383	60.5%
Alpine	XX	XX	XX
Amador	27	47	57.4%
Butte	278	445	62.5%
Calaveras	33	45	73.3%
Colusa	27	34	79.4%
Contra Costa	656	1,212	54.1%
Del Norte	24	51	47.1%
El Dorado	73	129	56.6%
Fresno	606	1,284	47.2%
Glenn	33	55	60.0%
Humboldt	108	203	53.2%
Imperial	130	225	57.8%
Inyo	19	31	61.3%
Kern	553	984	56.2%
Kings	65	127	51.2%
Lake	82	164	50.0%

Counties	With Alzheimer's / Dementia	Medi-Cal Beneficiaries Age 30 and Older w/SNF Stay	Prevalence
Lassen	24	36	66.7%
Los Angeles	10,490	16,760	62.6%
Madera	93	200	46.5%
Marin	188	348	54.0%
Mariposa	21	29	72.4%
Mendocino	80	163	49.1%
Merced	200	375	53.3%
Modoc	26	34	76.5%
Mono	XX	XX	XX
Monterey	280	469	59.7%
Napa	95	192	49.5%
Nevada	94	144	65.3%
Orange	1,778	3,229	55.1%
Placer	170	287	59.2%
Plumas	17	21	81.0%
Riverside	957	2,007	47.7%
Sacramento	904	1,550	58.3%
San Benito	35	62	56.5%
San Bernardino	963	2,268	42.5%
San Diego	1,925	3,558	54.1%
San Francisco	1,045	1,584	66.0%
San Joaquin	512	1,129	45.3%
San Luis Obispo	127	279	45.5%
San Mateo	237	475	49.9%
Santa Barbara	231	469	49.3%
Santa Clara	841	1,597	52.7%
Santa Cruz	176	312	56.4%

Counties	With Alzheimer's / Dementia	Medi-Cal Beneficiaries Age 30 and Older w/SNF Stay	Prevalence
Shasta	223	400	55.8%
Sierra	XX	XX	XX
Siskiyou	20	35	57.1%
Solano	216	442	48.9%
Sonoma	323	627	51.5%
Stanislaus	412	757	54.4%
Sutter	106	175	60.6%
Tehama	49	81	60.5%
Trinity	11	17	64.7%
Tulare	386	752	51.3%
Tuolumne	77	120	64.2%
Ventura	454	835	54.4%
Yolo	141	255	55.3%
Yuba	47	91	51.6%
Unknown	XX	XX	XX