

## **WEB MATERIAL**

### **Incidence of Stomach, Liver, and Colorectal Cancers by Geography and Social Vulnerability Among American Indian and Alaska Native Populations, 2010–2019**

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**Web Table 1.** Incidence Rates of Stomach Cancers in Non-Hispanic American Indian and Alaska Native and Non-Hispanic White Populations by Social Vulnerability Index<sup>a</sup> Category, Region, and Sex, 2010–2019, Purchased/Referred Care Delivery Area, United States

Sex and Region	Count	Rate (95% CI)	NH-AI/AN		Count	Rate (95% CI)	NHW	
			SVI Tertile:Ref RR (95% CI)	AI/AN:White RR			SVI Tertile:Ref RR (95% CI)	AI/AN:White RR
<b>Male</b>								
Northern Plains	Low	36	13.8 (9.1 - 19.7)	Referent	1,687	6.2 (5.9 - 6.5)	Referent	2.22 <sup>d</sup> (1.47 - 3.19)
	Moderate	27	8.3 (5.3 - 12.4)	0.60 (0.34 - 1.09)	1,391	7.3 (6.9 - 7.7)	1.17 <sup>c</sup> (1.09 - 1.26)	1.14 (0.72 - 1.72)
	High	46	13.6 (9.6 - 18.5)	0.99 (0.60 - 1.66)	272	7.4 (6.5 - 8.4)	1.20 <sup>c</sup> (1.05 - 1.37)	1.83 <sup>d</sup> (1.27 - 2.56)
	All Counties <sup>b</sup>	109	12.0 (9.6 - 14.8)		3,350	6.7 (6.5 - 6.9)		1.79 <sup>d</sup> (1.43 - 2.21)
Alaska	Low	13	22.4 (10.5 - 40.4)	Referent	63	6.9 (5.1 - 9.0)	Referent	3.26 <sup>d</sup> (1.45 - 6.36)
	Moderate	29	18.9 (12.2 - 27.6)	0.84 (0.40 - 1.98)	91	6.3 (5.0 - 7.9)	0.92 (0.64 - 1.34)	2.99 <sup>d</sup> (1.83 - 4.71)
	High	77	45.8 (35.4 - 58.1)	2.04 <sup>c</sup> (1.07 - 4.52)	~	~	~	~
	All Counties <sup>b</sup>	119	30.9 (25.1 - 37.5)		154	6.4 (5.4 - 7.6)		4.82 <sup>d</sup> (3.67 - 6.29)
Southern Plains	Low	11	4.8 (2.4 - 9.0)	Referent	216	6.0 (5.2 - 6.9)	Referent	0.81 (0.40 - 1.54)
	Moderate	58	14.2 (10.4 - 18.7)	2.92 <sup>c</sup> (1.44 - 6.21)	549	6.5 (6.0 - 7.1)	1.09 (0.93 - 1.29)	2.16 <sup>d</sup> (1.57 - 2.89)
	High	70	10.4 (8.0 - 13.3)	2.15 <sup>c</sup> (1.08 - 4.52)	435	6.8 (6.2 - 7.5)	1.13 (0.96 - 1.35)	1.53 <sup>d</sup> (1.15 - 2.00)
	All Counties <sup>b</sup>	139	11.0 (9.1 - 13.2)		1,200	6.5 (6.2 - 6.9)		1.69 <sup>d</sup> (1.39 - 2.04)
Pacific Coast	Low	24	9.5 (5.7 - 14.7)	Referent	1,931	7.0 (6.7 - 7.3)	Referent	1.36 (0.81 - 2.12)
	Moderate	43	10.8 (7.5 - 15.0)	1.14 (0.63 - 2.10)	2,435	6.9 (6.7 - 7.2)	1.00 (0.94 - 1.06)	1.55 <sup>d</sup> (1.07 - 2.16)
	High	40	6.3 (4.4 - 8.7)	0.66 (0.37 - 1.23)	2,678	7.3 (7.0 - 7.6)	1.05 (0.99 - 1.12)	0.86 (0.60 - 1.19)
	All Counties <sup>b</sup>	107	8.3 (6.7 - 10.2)		7,044	7.1 (6.9 - 7.3)		1.17 (0.94 - 1.44)
East	Low	~	~	~	2,791	8.4 (8.1 - 8.7)	Referent	~
	Moderate	19	7.3 (4.3 - 11.6)	~	4,724	8.4 (8.1 - 8.6)	0.99 (0.95 - 1.04)	0.87 (0.51 - 1.39)
	High	24	14.9 (9.2 - 22.7)	~	1,366	8.1 (7.6 - 8.5)	0.96 (0.90 - 1.03)	1.84 <sup>d</sup> (1.13 - 2.83)
	All Counties <sup>b</sup>	43	8.8 (6.3 - 11.9)		8,881	8.3 (8.1 - 8.5)		1.06 (0.76 - 1.43)
Southwest	Low	3	~	~	140	4.8 (4.1 - 5.7)	Referent	~
	Moderate	44	11.3 (7.9 - 15.6)	~	1,387	6.0 (5.7 - 6.3)	1.24 <sup>c</sup> (1.04 - 1.49)	1.88 <sup>d</sup> (1.31 - 2.61)
	High	216	18.8 (16.3 - 21.6)	~	748	5.8 (5.4 - 6.3)	1.21 <sup>c</sup> (1.00 - 1.47)	3.22 <sup>d</sup> (2.73 - 3.78)
	All Counties <sup>b</sup>	263	17.3 (15.1 - 19.6)		2,275	5.8 (5.6 - 6.1)		2.95 <sup>d</sup> (2.57 - 3.38)

**Female**

Northern Plains

Low	24	6.8 (4.2 - 10.3)	Referent	798	2.6 (2.4 - 2.8)	Referent	2.59 <sup>d</sup> (1.60 - 3.95)
Moderate	23	6.6 (4.1 - 10.0)	0.97 (0.51 - 1.84)	669	3.1 (2.8 - 3.3)	1.17 <sup>c</sup> (1.05 - 1.30)	2.15 <sup>d</sup> (1.32 - 3.29)
High	22	5.3 (3.2 - 8.1)	0.77 (0.40 - 1.48)	135	3.3 (2.7 - 3.9)	1.25 <sup>c</sup> (1.03 - 1.52)	1.60 (0.94 - 2.56)
All Counties <sup>b</sup>	69	6.2 (4.7 - 7.9)		1,602	2.8 (2.7 - 3.0)		2.16 <sup>d</sup> (1.65 - 2.78)

Alaska

Low	12	14.1 (7.1 - 24.8)	Referent	30	3.2 (2.1 - 4.7)	Referent	4.41 <sup>d</sup> (1.99 - 9.03)
Moderate	28	14.2 (9.3 - 20.7)	1.01 (0.49 - 2.24)	40	2.8 (2.0 - 3.9)	0.89 (0.52 - 1.52)	5.00 <sup>d</sup> (2.89 - 8.49)
High	29	17.6 (11.6 - 25.5)	1.25 (0.61 - 2.76)	~	~	~	~
All Counties <sup>b</sup>	69	15.6 (12.0 - 19.8)		70	3.1 (2.4 - 3.9)		5.04 <sup>d</sup> (3.52 - 7.19)

Southern Plains

Low	11	5.2 (2.5 - 9.4)	Referent	104	2.5 (2.0 - 3.0)	Referent	2.10 (0.99 - 3.98)
Moderate	42	7.2 (5.1 - 9.8)	1.39 (0.69 - 3.09)	294	2.9 (2.6 - 3.2)	1.17 (0.93 - 1.49)	2.50 <sup>d</sup> (1.74 - 3.49)
High	58	6.6 (5.0 - 8.6)	1.28 (0.65 - 2.78)	222	3.2 (2.8 - 3.7)	1.31 <sup>c</sup> (1.02 - 1.69)	2.05 <sup>d</sup> (1.49 - 2.77)
All Counties <sup>b</sup>	111	6.7 (5.4 - 8.0)		620	2.9 (2.7 - 3.2)		2.28 <sup>d</sup> (1.84 - 2.81)

Pacific Coast

Low	15	5.3 (2.8 - 9.0)	Referent	944	3.0 (2.8 - 3.2)	Referent	1.79 (0.95 - 3.05)
Moderate	24	4.8 (3.0 - 7.2)	0.90 (0.44 - 1.93)	1,259	3.2 (3.0 - 3.4)	1.07 (0.98 - 1.17)	1.50 (0.93 - 2.28)
High	41	5.5 (3.9 - 7.5)	1.03 (0.54 - 2.11)	1,291	3.1 (3.0 - 3.3)	1.06 (0.97 - 1.16)	1.75 <sup>d</sup> (1.23 - 2.42)
All Counties <sup>b</sup>	80	5.2 (4.1 - 6.6)		3,494	3.1 (3.0 - 3.2)		1.68 <sup>d</sup> (1.32 - 2.12)

East

Low	6	5.1 (1.8 - 11.4)	Referent	1,562	3.9 (3.7 - 4.1)	Referent	1.31 (0.46 - 2.92)
Moderate	25	8.6 (5.5 - 12.8)	1.68 (0.66 - 5.19)	2,676	4.0 (3.8 - 4.1)	1.02 (0.95 - 1.09)	2.16 <sup>d</sup> (1.38 - 3.23)
High	12	5.9 (3.0 - 10.5)	1.15 (0.39 - 3.90)	709	3.6 (3.3 - 3.9)	0.92 (0.84 - 1.01)	1.64 (0.82 - 2.95)
All Counties <sup>b</sup>	43	7.0 (5.0 - 9.4)		4,947	3.9 (3.8 - 4.0)		1.78 <sup>d</sup> (1.28 - 2.42)

Southwest

Low	~	~	~	69	2.2 (1.7 - 2.8)	Referent	~
Moderate	40	7.2 (5.0 - 9.9)	~	726	2.8 (2.6 - 3.0)	1.27 (0.99 - 1.67)	2.58 <sup>d</sup> (1.78 - 3.62)
High	154	10.0 (8.5 - 11.7)	~	331	2.4 (2.2 - 2.8)	1.12 (0.86 - 1.49)	4.09 <sup>d</sup> (3.32 - 5.00)
All Counties <sup>b</sup>	194	9.3 (8.1 - 10.8)		1,126	2.6 (2.5 - 2.8)		3.55 <sup>d</sup> (3.02 - 4.15)

Abbreviations: CI, confidence interval; NH-AI/AN, non-Hispanic American Indian and Alaska Native; NHW, non-Hispanic White; SVI, social vulnerability index; RR, rate ratio.

<sup>a</sup> The Centers for Disease Control and Prevention/2018 Social Vulnerability Index was categorized into tertiles as the following: low social vulnerability (0–0.3481); moderate social vulnerability (0.3482–0.7074); high social vulnerability (0.7075–1).

<sup>b</sup> Represents rates in all 2018 purchased/referred care delivery area counties with an overall SVI 2018 score. Total number of purchased/referred care delivery area counties for these years of data = 651. Total used for analysis = 648. Counts only include cells that have not been suppressed.

<sup>c</sup> Rate is significantly different than “Low” category within each race group.

<sup>d</sup> Rate is significantly different than the White population for that SVI group.

~ Indicates that counts less than 6 are suppressed—total counts only include unsuppressed cells.

**Web Table 2.** Incidence Rates of Colorectal Cancers in Non-Hispanic American Indian and Alaska Native and Non-Hispanic White Populations by Social Vulnerability Index<sup>a</sup> Category, Region, and Sex, 2010–2019, Purchased/Referred Care Delivery Area, United States

Sex and Region	Counties by SVI Tertile	NH-AI/AN			NHW			AI/AN:White RR
		Count	Rate (95% CI)	SVI Tertile:Ref RR (95% CI)	Count	Rate (95% CI)	SVI Tertile:Ref RR (95% CI)	
<b>Male</b>								
Northern Plains	Low	176	57.7 (48.6 - 67.9)	Referent	9,168	34.6 (33.8 - 35.3)	Referent	1.67 <sup>d</sup> (1.41 - 1.97)
	Moderate	201	70.2 (59.5 - 82.2)	1.22 (0.96 - 1.54)	7,807	41.9 (41.0 - 42.9)	1.21 <sup>c</sup> (1.18 - 1.25)	1.68 <sup>d</sup> (1.42 - 1.96)
	High	212	62.5 (53.6 - 72.3)	1.08 (0.86 - 1.36)	1,450	40.8 (38.7 - 43.0)	1.18 <sup>c</sup> (1.11 - 1.25)	1.53 <sup>d</sup> (1.30 - 1.79)
	All Counties <sup>b</sup>	589	63.3 (57.7 - 69.2)		18,425	37.8 (37.3 - 38.4)		1.67 <sup>d</sup> (1.52 - 1.83)
Alaska	Low	63	80.6 (60.8 - 104.8)	Referent	395	40.7 (36.3 - 45.4)	Referent	1.98 <sup>d</sup> (1.46 - 2.64)
	Moderate	134	88.8 (73.2 - 106.6)	1.10 (0.79 - 1.55)	570	39.2 (35.8 - 42.9)	0.97 (0.84 - 1.12)	2.26 <sup>d</sup> (1.83 - 2.78)
	High	194	119.9 (102.2 - 139.7)	1.49 <sup>c</sup> (1.09 - 2.05)	24	26.7 (14.2 - 46.0)	0.66 (0.35 - 1.15)	4.48 <sup>d</sup> (2.53 - 8.62)
	All Counties <sup>b</sup>	391	101.2 (90.5 - 112.7)		989	39.4 (36.8 - 42.3)		2.57 <sup>d</sup> (2.25 - 2.92)
Southern Plains	Low	119	79.8 (63.1 - 99.2)	Referent	1,374	38.1 (36.1 - 40.3)	Referent	2.09 <sup>d</sup> (1.64 - 2.62)
	Moderate	376	80.7 (72.0 - 90.1)	1.01 (0.79 - 1.31)	3,665	44.5 (43.1 - 46.1)	1.17 <sup>c</sup> (1.10 - 1.25)	1.81 <sup>d</sup> (1.61 - 2.03)
	High	539	70.9 (64.7 - 77.5)	0.89 (0.70 - 1.14)	2,987	48.0 (46.2 - 49.8)	1.26 <sup>c</sup> (1.18 - 1.34)	1.48 <sup>d</sup> (1.34 - 1.63)
	All Counties <sup>b</sup>	1,034	74.5 (69.7 - 79.6)		8,026	44.4 (43.4 - 45.4)		1.68 <sup>d</sup> (1.56 - 1.80)
Pacific Coast	Low	142	58.5 (48.3 - 70.1)	Referent	10,511	38.5 (37.8 - 39.3)	Referent	1.52 <sup>d</sup> (1.25 - 1.82)
	Moderate	225	50.6 (43.7 - 58.3)	0.87 (0.68 - 1.10)	13,441	39.1 (38.4 - 39.8)	1.02 (0.99 - 1.04)	1.29 <sup>d</sup> (1.12 - 1.49)
	High	288	46.3 (40.8 - 52.3)	0.79 <sup>c</sup> (0.63 - 1.00)	15,251	42.8 (42.1 - 43.5)	1.11 <sup>c</sup> (1.08 - 1.14)	1.08 (0.95 - 1.23)
	All Counties <sup>b</sup>	655	50.0 (46.0 - 54.3)		39,203	40.3 (39.9 - 40.7)		1.24 <sup>d</sup> (1.14 - 1.35)
East	Low	27	22.4 (14.6 - 33.2)	Referent	14,103	43.9 (43.2 - 44.7)	Referent	0.51 <sup>d</sup> (0.33 - 0.76)
	Moderate	110	40.0 (32.4 - 48.8)	1.78 <sup>c</sup> (1.13 - 2.88)	22,735	41.4 (40.8 - 41.9)	0.94 <sup>c</sup> (0.92 - 0.96)	0.97 (0.78 - 1.18)
	High	73	43.6 (33.5 - 55.6)	1.94 <sup>c</sup> (1.20 - 3.21)	8,083	48.3 (47.2 - 49.4)	1.10 <sup>c</sup> (1.07 - 1.13)	0.90 (0.69 - 1.15)
	All Counties <sup>b</sup>	210	37.3 (32.1 - 43.0)		44,921	43.2 (42.8 - 43.6)		0.86 <sup>d</sup> (0.74 - 1.00)
Southwest	Low	12	53.9 (26.2 - 96.0)	Referent	988	33.2 (31.1 - 35.4)	Referent	1.62 (0.79 - 2.90)

	Moderate	207	50.3 (43.0 - 58.4)	0.93 (0.51 - 1.95)	8,121	36.3 (35.5 - 37.1)	1.09 <sup>c</sup> (1.02 - 1.17)	1.39 <sup>d</sup> (1.18 - 1.61)
	High	497	37.7 (34.3 - 41.4)	0.70 (0.39 - 1.45)	4,664	38.3 (37.1 - 39.5)	1.15 <sup>c</sup> (1.07 - 1.24)	0.99 (0.89 - 1.09)
	All Counties <sup>b</sup>	716	40.7 (37.6 - 44.0)		13,773	36.7 (36.1 - 37.3)		1.11 <sup>d</sup> (1.02 - 1.20)
<b>Female</b>								
Northern Plains								
	Low	156	44.9 (37.8 - 52.9)	Referent	8,396	27.8 (27.2 - 28.4)	Referent	1.62 <sup>d</sup> (1.36 - 1.91)
	Moderate	170	45.8 (38.8 - 53.5)	1.02 (0.81 - 1.29)	6,977	32.4 (31.6 - 33.2)	1.17 <sup>c</sup> (1.13 - 1.20)	1.41 <sup>d</sup> (1.20 - 1.66)
	High	182	42.7 (36.4 - 49.7)	0.95 (0.76 - 1.20)	1,319	32.7 (30.9 - 34.7)	1.18 <sup>c</sup> (1.11 - 1.25)	1.30 <sup>d</sup> (1.10 - 1.54)
	All Counties <sup>b</sup>	508	44.3 (40.3 - 48.5)		16,692	29.9 (29.5 - 30.4)		1.48 <sup>d</sup> (1.35 - 1.62)
Alaska								
	Low	63	74.2 (56.2 - 95.8)	Referent	270	30.1 (26.4 - 34.2)	Referent	2.47 <sup>d</sup> (1.81 - 3.29)
	Moderate	147	81.8 (68.5 - 96.7)	1.10 (0.81 - 1.53)	477	34.5 (31.3 - 37.9)	1.15 (0.98 - 1.35)	2.37 <sup>d</sup> (1.94 - 2.88)
	High	204	128.5 (111.0 - 147.8)	1.73 <sup>c</sup> (1.29 - 2.37)	10	18.9 (7.3 - 40.0)	0.63 (0.24 - 1.35)	6.78 <sup>d</sup> (3.16 - 17.77)
	All Counties <sup>b</sup>	414	98.0 (88.4 - 108.2)		757	32.6 (30.2 - 35.1)		3.01 <sup>d</sup> (2.65 - 3.41)
Southern Plains								
	Low	93	46.1 (36.8 - 56.9)	Referent	1,172	28.2 (26.6 - 29.9)	Referent	1.64 <sup>d</sup> (1.30 - 2.04)
	Moderate	334	59.3 (52.9 - 66.3)	1.29 <sup>c</sup> (1.01 - 1.66)	3,448	34.6 (33.4 - 35.8)	1.23 <sup>c</sup> (1.15 - 1.32)	1.72 <sup>d</sup> (1.52 - 1.93)
	High	497	55.7 (50.8 - 60.9)	1.21 (0.96 - 1.54)	2,396	34.3 (32.9 - 35.8)	1.22 <sup>c</sup> (1.13 - 1.31)	1.62 <sup>d</sup> (1.47 - 1.79)
	All Counties <sup>b</sup>	924	55.7 (52.0 - 59.5)		7,016	33.2 (32.4 - 34.1)		1.68 <sup>d</sup> (1.56 - 1.80)
Pacific Coast								
	Low	138	47.9 (39.8 - 57.2)	Referent	9,675	31.2 (30.5 - 31.8)	Referent	1.54 <sup>d</sup> (1.28 - 1.84)
	Moderate	228	46.5 (40.4 - 53.2)	0.97 (0.77 - 1.22)	12,255	31.2 (30.6 - 31.7)	1.00 (0.97 - 1.03)	1.49 <sup>d</sup> (1.30 - 1.71)
	High	302	41.7 (37.0 - 46.9)	0.87 (0.70 - 1.09)	13,477	33.2 (32.6 - 33.8)	1.07 <sup>c</sup> (1.04 - 1.10)	1.26 <sup>d</sup> (1.11 - 1.41)
	All Counties <sup>b</sup>	668	44.4 (41.0 - 48.1)		35,407	31.9 (31.6 - 32.3)		1.39 <sup>d</sup> (1.28 - 1.51)
East								
	Low	31	23.9 (16.1 - 34.3)	Referent	13,412	33.8 (33.2 - 34.4)	Referent	0.71 (0.48 - 1.01)
	Moderate	101	31.6 (25.6 - 38.7)	1.33 (0.87 - 2.07)	21,356	32.3 (31.8 - 32.7)	0.96 <sup>c</sup> (0.93 - 0.98)	0.98 (0.79 - 1.20)
	High	86	41.5 (32.9 - 51.6)	1.74 <sup>c</sup> (1.12 - 2.74)	6,894	35.8 (34.9 - 36.7)	1.06 <sup>c</sup> (1.03 - 1.09)	1.16 (0.92 - 1.44)
	All Counties <sup>b</sup>	218	33.3 (28.9 - 38.2)		41,662	33.3 (33.0 - 33.7)		1.00 (0.87 - 1.15)
Southwest								
	Low	10	34.5 (15.5 - 65.5)	Referent	851	26.3 (24.5 - 28.1)	Referent	1.31 (0.59 - 2.51)
	Moderate	197	36.7 (31.4 - 42.5)	1.06 (0.55 - 2.40)	7,314	28.6 (27.9 - 29.3)	1.09 <sup>c</sup> (1.01 - 1.17)	1.28 <sup>d</sup> (1.10 - 1.49)
	High	426	26.4 (23.9 - 29.1)	0.77 (0.40 - 1.71)	3,818	29.6 (28.6 - 30.7)	1.13 <sup>c</sup> (1.04 - 1.22)	0.89 <sup>d</sup> (0.80 - 0.99)
	All Counties <sup>b</sup>	633	28.8 (26.5 - 31.2)		11,983	28.7 (28.2 - 29.3)		1.00 (0.92 - 1.09)

Abbreviations: CI, confidence interval; NH-AI/AN, non-Hispanic American Indian and Alaska Native; NHW, non-Hispanic White; SVI, social vulnerability index; RR, rate ratio.

<sup>a</sup>The Centers for Disease Control and Prevention/2018 Social Vulnerability Index was categorized into tertiles as the following: low social vulnerability (0–0.3481); moderate social vulnerability (0.3482–0.7074); high social vulnerability (0.7075–1).

<sup>b</sup>Represents rates in all 2018 purchased/referred care delivery area counties with an overall SVI 2018 score. Total number of purchased/referred care delivery area counties for these years of data = 651. Total used for analysis = 648. Counts only include cells that have not been suppressed.

<sup>c</sup>Rate is significantly different than “Low” category within each race group.

<sup>d</sup>Rate is significantly different than the White population for that SVI group.

~ Indicates that counts less than 6 are suppressed—total counts only include unsuppressed cells.

**Web Table 3.** Incidence Rates of Liver Cancers in Non-Hispanic American Indian and Alaska Native and Non-Hispanic White Populations by Social Vulnerability Index<sup>a</sup> Category, Region, and Sex, 2010–2019, Purchased/Referred Care Delivery Area, United States

Sex and Region	Counties by SVI Tertile	NH-AI/AN			NHW			AI/AN:White RR
		Count	Rate (95% CI)	SVI Tertile:Ref RR (95% CI)	Count	Rate (95% CI)	SVI Tertile:Ref RR (95% CI)	
<b>Male</b>								
<b>Northern Plains</b>								
	Low	70	22.3 (16.7 - 29.0)	Referent	1,953	6.8 (6.5 - 7.1)	Referent	3.28 <sup>d</sup> (2.45 - 4.28)
	Moderate	81	26.9 (20.5 - 34.4)	1.21 (0.82 - 1.77)	1,712	8.3 (7.9 - 8.7)	1.22 <sup>c</sup> (1.14 - 1.31)	3.23 <sup>d</sup> (2.45 - 4.16)
	High	78	22.5 (17.4 - 28.5)	1.01 (0.70 - 1.47)	338	8.8 (7.8 - 9.8)	1.29 <sup>c</sup> (1.14 - 1.46)	2.56 <sup>d</sup> (1.93 - 3.33)
	All Counties <sup>b</sup>	229	23.7 (20.4 - 27.4)		4,003	7.5 (7.3 - 7.8)		3.16 <sup>d</sup> (2.71 - 3.66)
<b>Alaska</b>								
	Low	14	17.5 (9.1 - 30.4)	Referent	114	8.9 (7.2 - 10.9)	Referent	1.96 (0.98 - 3.57)
	Moderate	51	32.7 (23.6 - 43.8)	1.87 (0.97 - 3.86)	210	12.4 (10.6 - 14.3)	1.39 <sup>c</sup> (1.08 - 1.80)	2.64 <sup>d</sup> (1.85 - 3.69)
	High	28	17.2 (10.8 - 25.7)	0.98 (0.47 - 2.14)	8	5.2 (2.2 - 14.2)	0.58 (0.24 - 1.65)	3.31 <sup>d</sup> (1.05 - 8.70)
	All Counties <sup>b</sup>	93	23.0 (18.1 - 28.7)		332	10.8 (9.6 - 12.2)		2.12 <sup>d</sup> (1.62 - 2.73)
<b>Southern Plains</b>								
	Low	43	19.7 (14.1 - 26.9)	Referent	342	8.5 (7.6 - 9.5)	Referent	2.31 <sup>d</sup> (1.63 - 3.23)
	Moderate	145	26.6 (22.2 - 31.6)	1.35 (0.94 - 1.97)	945	10.5 (9.8 - 11.2)	1.23 <sup>c</sup> (1.08 - 1.40)	2.55 <sup>d</sup> (2.10 - 3.07)
	High	212	25.6 (22.1 - 29.4)	1.30 (0.92 - 1.87)	753	11.3 (10.5 - 12.2)	1.33 <sup>c</sup> (1.16 - 1.52)	2.27 <sup>d</sup> (1.92 - 2.66)
	All Counties <sup>b</sup>	400	25.3 (22.7 - 28.0)		2,040	10.3 (9.9 - 10.8)		2.45 <sup>d</sup> (2.18 - 2.74)
<b>Pacific Coast</b>								
	Low	113	34.4 (28.1 - 41.9)	Referent	3,305	10.7 (10.3 - 11.1)	Referent	3.23 <sup>d</sup> (2.62 - 3.94)
	Moderate	176	33.2 (28.2 - 38.9)	0.97 (0.75 - 1.25)	4,575	11.8 (11.5 - 12.2)	1.11 <sup>c</sup> (1.06 - 1.16)	2.81 <sup>d</sup> (2.38 - 3.31)
	High	212	29.8 (25.7 - 34.3)	0.87 (0.68 - 1.11)	4,654	11.8 (11.5 - 12.2)	1.11 <sup>c</sup> (1.06 - 1.16)	2.52 <sup>d</sup> (2.17 - 2.92)
	All Counties <sup>b</sup>	501	31.9 (29.0 - 35.0)		12,534	11.5 (11.3 - 11.7)		2.78 <sup>d</sup> (2.52 - 3.06)
<b>East</b>								
	Low	13	8.8 (4.7 - 15.6)	Referent	3,832	10.9 (10.5 - 11.2)	Referent	0.81 (0.43 - 1.44)
	Moderate	52	17.3 (12.6 - 23.1)	1.96 <sup>c</sup> (1.00 - 3.99)	6,586	11.1 (10.8 - 11.3)	1.02 (0.98 - 1.06)	1.56 <sup>d</sup> (1.14 - 2.09)



Low	6	4.1 (1.5 - 9.4)	Referent	1,352	3.3 (3.2 - 3.5)	Referent	1.22 (0.44 - 2.83)
Moderate	22	7.1 (4.4 - 10.9)	1.74 (0.64 - 5.42)	2,320	3.4 (3.3 - 3.6)	1.03 (0.96 - 1.10)	2.08 <sup>d</sup> (1.28 - 3.20)
High	19	9.1 (5.4 - 14.5)	2.24 (0.80 - 7.09)	799	4.0 (3.7 - 4.3)	1.19 <sup>c</sup> (1.09 - 1.30)	2.30 <sup>d</sup> (1.35 - 3.69)
All Counties <sup>b</sup>	47	7.1 (5.1 - 9.5)		4,471	3.5 (3.4 - 3.6)		2.03 <sup>d</sup> (1.47 - 2.73)
<b>Southwest</b>							
Low	~	~	~	84	2.5 (1.9 - 3.0)	Referent	~
Moderate	74	15.3 (11.9 - 19.5)	~	865	3.2 (3.0 - 3.5)	1.32 <sup>c</sup> (1.05 - 1.68)	4.75 <sup>d</sup> (3.63 - 6.09)
High	171	10.5 (9.0 - 12.3)	~	532	4.0 (3.6 - 4.3)	1.62 <sup>c</sup> (1.27 - 2.07)	2.66 <sup>d</sup> (2.21 - 3.18)
All Counties <sup>b</sup>	245	11.7 (10.2 - 13.2)		1,481	3.4 (3.2 - 3.6)		3.46 <sup>d</sup> (3.00 - 3.97)

Abbreviations: CI, confidence interval; NH-AI/AN, non-Hispanic American Indian and Alaska Native; NHW, non-Hispanic White; SVI, social vulnerability index; RR, rate ratio.

<sup>a</sup>The Centers for Disease Control and Prevention/2018 Social Vulnerability Index was categorized into tertiles as the following: low social vulnerability (0–0.3481); moderate social vulnerability (0.3482–0.7074); high social vulnerability (0.7075–1).

<sup>b</sup>Represents rates in all 2018 purchased/referred care delivery area counties with an overall SVI 2018 score. Total number of purchased/referred care delivery area counties for these years of data = 651. Total used for analysis = 648. Counts only include cells that have not been suppressed.

<sup>c</sup>Rate is significantly different than “Low” category within each race group.

<sup>d</sup>Rate is significantly different than the White population for that SVI group.

~ Indicates that counts less than 6 are suppressed—total counts only include unsuppressed cells.