



Table S1. Trends of state-level sepsis-related mortality, overall, 2010-2019.

State	2010		2019		APC ^{c,d} (95% CI)	p value ^d
	Deaths	AAMR ^a (95% CI) ^b	Deaths	AAMR (95% CI)		
Alabama	3043	58.8 (56.7 - 60.9)	3920	63.3 (61.3 - 65.3)	+1.5 (+1.0 to +2.0)	<0.0001
Alaska	179	37.4 (31.4 - 43.4)	290	45.9 (40.4 - 51.5)	+2.1 (+0.8 to +3.4)	0.0017
Arizona	2669	39.2 (37.7 - 40.7)	2409	26.2 (25.1 - 27.3)	-2.7 (-5.4 to 0.0)	0.0488
Arkansas	1760	54.0 (51.5 - 56.6)	2624	68.4 (65.8 - 71.1)	+3.1 (+2.2 to +3.9)	<0.0001
California	17437	48.4 (47.7 - 49.1)	21919	48.7 (48.0 - 49.4)	+0.6 (+0.1 to +1.1)	0.0245
Colorado	1499	32.5 (30.9 - 34.2)	2430	39.1 (37.5 - 40.7)	+3.4 (+2.3 to +4.6)	<0.0001
Connecticut	2130	48.7 (46.6 - 50.8)	2564	51.7 (49.6 - 53.7)	+0.8 (+0.2 to +1.3)	0.0038
Delaware	504	49.6 (45.2 - 53.9)	535	40.5 (37.0 - 44.0)	0.0 (-2.4 to +2.4)	0.9723
District of Columbia	484	84.4 (76.8 - 92.0)	478	68.9 (62.6 - 75.2)	-2.0 (-3.7 to -0.3)	0.0206
Florida	9059	36.2 (35.4 - 37.0)	13667	42.2 (41.5 - 43.0)	+2.3 (+1.8 to +2.8)	<0.0001
Georgia	5113	60.4 (58.7 - 62.1)	6781	59.5 (58.0 - 60.9)	+0.4 (-0.1 to +0.8)	0.0936
Hawaii	587	36.1 (33.1 - 39.0)	563	29.3 (26.8 - 31.8)	-1.6 (-2.7 to -0.4)	0.0077
Idaho	479	30.3 (27.6 - 33.1)	807	39.0 (36.3 - 41.7)	+2.5 (+1.6 to +3.4)	<0.0001
Illinois	7162	53.1 (51.9 - 54.3)	7888	50.4 (49.3 - 51.5)	-0.2 (-0.7 to +0.4)	0.5667
Indiana	3319	47.9 (46.2 - 49.5)	4801	59.3 (57.6 - 61.0)	+2.4 (+1.8 to +3.0)	<0.0001
Iowa	1211	31.8 (30.0 - 33.6)	1817	43.3 (41.2 - 45.3)	+4.2 (+3.2 to +5.1)	<0.0001
Kansas	1191	37.6 (35.4 - 39.7)	1891	51.9 (49.5 - 54.3)	+4.3 (+3.2 to +5.4)	<0.0001
Kentucky	2963	63.9 (61.6 - 66.2)	4575	83.2 (80.8 - 85.7)	+4.2 (+3.0 to +5.4)	<0.0001
Louisiana	2895	64.3 (61.9 - 66.7)	3286	59.9 (57.9 - 62.0)	+0.2 (-0.6 to +0.9)	0.6750
Maine	625	36.8 (33.8 - 39.7)	437	22.5 (20.3 - 24.7)	-2.6 (-5.3 to +0.3)	0.0752
Maryland	3310	55.7 (53.8 - 57.6)	3618	49.4 (47.8 - 51.1)	-1.2 (-1.9 to -0.6)	0.0002
Massachusetts	3405	44.3 (42.8 - 45.8)	4177	46.2 (44.7 - 47.6)	+1.3 (+0.4 to +2.2)	0.0063
Michigan	5548	49.4 (48.1 - 50.7)	6368	48.7 (47.5 - 49.9)	-0.1 (-0.6 to +0.3)	0.5210
Minnesota	1584	27.2 (25.9 - 28.6)	2466	35.2 (33.7 - 36.6)	+3.6 (+2.7 to +4.4)	<0.0001
Mississippi	1980	65.6 (62.6 - 68.5)	2708	76.4 (73.5 - 79.4)	+2.4 (+1.2 to +3.5)	<0.0001
Missouri	2989	44.1 (42.5 - 45.7)	3701	46.7 (45.2 - 48.2)	+0.8 (0.0 to +1.5)	0.0426
Montana	352	30.0 (26.8 - 33.2)	589	41.3 (37.9 - 44.8)	+4.9 (+3.5 to +6.2)	<0.0001
Nebraska	634	30.6 (28.2 - 33.0)	1035	43.7 (40.9 - 46.4)	+5.1 (+4.2 to +6.1)	<0.0001
Nevada	1419	56.4 (53.4 - 59.4)	1821	50.9 (48.5 - 53.2)	+0.4 (-1.0 to +1.8)	0.5795
New Hampshire	528	36.0 (32.9 - 39.2)	748	40.5 (37.5 - 43.4)	+1.5 (+0.6 to +2.5)	0.0018
New Jersey	6314	63.2 (61.6 - 64.7)	6546	57.1 (55.7 - 58.5)	-0.8 (-1.2 to -0.5)	<0.0001
New Mexico	970	45.0 (42.1 - 47.8)	1311	50.2 (47.4 - 53.0)	+1.4 (+0.7 to +2.0)	0.0001
New York	9833	44.8 (43.9 - 45.7)	10821	42.4 (41.6 - 43.2)	-0.5 (-1.5 to +0.6)	0.3915
North Carolina	5468	55.7 (54.2 - 57.2)	6659	52.2 (50.9 - 53.4)	+0.1 (-0.8 to +1.0)	0.8218
North Dakota	273	32.6 (28.7 - 36.6)	442	47.6 (43.1 - 52.2)	+3.7 (+2.4 to +5.1)	<0.0001
Ohio	6770	50.7 (49.5 - 51.9)	7490	49.2 (48.1 - 50.3)	+0.1 (-0.5 to +0.7)	0.7288
Oklahoma	2398	59.6 (57.2 - 62.0)	3403	72.2 (69.8 - 74.7)	+3.2 (+2.3 to +4.0)	<0.0001
Oregon	1374	30.9 (29.3 - 32.6)	1844	34.0 (32.4 - 35.5)	+1.8 (+0.8 to +2.8)	0.0005
Pennsylvania	7889	48.6 (47.6 - 49.7)	8724	48.3 (47.3 - 49.3)	+0.4 (-0.1 to +1.0)	0.1259
Rhode Island	729	55.5 (51.4 - 59.6)	631	43.5 (40.0 - 46.9)	-2.7 (-3.9 to -1.5)	<0.0001
South Carolina	2969	60.3 (58.1 - 62.5)	4193	64.0 (62.0 - 66.0)	+1.6 (+0.6 to +2.6)	0.0019
South Dakota	296	29.9 (26.4 - 33.4)	634	56.4 (51.8 - 60.9)	+6.8 (+5.5 to +8.1)	<0.0001
Tennessee	3887	57.4 (55.6 - 59.2)	5341	63.8 (62.1 - 65.6)	+2.0 (+1.4 to +2.5)	<0.0001
Texas	13037	60.2 (59.2 - 61.3)	17091	59.6 (58.7 - 60.5)	+0.7 (-0.1 to +1.6)	0.1042
Utah	654	31.0 (28.6 - 33.5)	1136	41.1 (38.6 - 43.5)	+3.0 (+1.5 to +4.5)	0.0001
Vermont	254	34.0 (29.8 - 38.3)	272	30.4 (26.7 - 34.1)	-1.8 (-3.3 to -0.3)	0.0165
Virginia	4313	54.3 (52.7 - 56.0)	4624	45.4 (44.1 - 46.8)	-1.3 (-2.4 to -0.2)	0.0243
Washington	2787	40.1 (38.6 - 41.6)	4020	45.3 (43.9 - 46.7)	+1.7 (+1.0 to +2.4)	<0.0001
West Virginia	1421	61.2 (57.9 - 64.4)	2055	80.8 (77.1 - 84.4)	+3.6 (+3.0 to +4.2)	<0.0001
Wisconsin	2090	32.0 (30.6 - 33.4)	3064	40.4 (38.9 - 41.8)	+3.6 (+2.6 to +4.6)	<0.0001
Wyoming	199	34.2 (29.4 - 39.0)	264	37.6 (33.0 - 42.3)	+4.3 (+1.8 to +6.9)	0.0007

a AAMR: age-adjusted mortality rates, expressed per 100,000 population; b 95% CI: 95% confidence interval; cAPC: Annual Percent Change; d Boldfaced entries represent statistically significant trends.

Table S2. Trends of state-level sepsis-related mortality among Black individuals, 2010-2019.

State	2010		2019		APC ^{c,d} (95% CI)	p value ^d
	Deaths	AAMR ^a (95% CI) ^b	Deaths	AAMR (95% CI)		
Alabama	871	83.5 (77.8-89.2)	1077	80.1 (75.2 - 85.0)	+0.4 (-0.5 to +1.4)	0.3604

Arizona	100	55.5 (43.7-67.4)	99	32.7 (26.3 - 40.3)	-4.1 (-7.4 to -0.6)	0.0209
Arkansas	297	84.0 (74.1-93.8)	443	102.0 (92.1 - 111.9)	+2.8 (+1.7 to +3.9)	<0.0001
California	1589	76.6 (72.7-80.4)	1965	72.9 (69.6 - 76.2)	-0.1 (-0.7 to +0.6)	0.8781
Colorado	68	49.9 (38.1-64.2)	125	60.7 (49.5 - 71.9)	+2.9 (+1.0 to +4.9)	0.0023
Connecticut	184	64.7 (55.0-74.4)	237	61.6 (53.6 - 69.6)	-0.1 (-1.6 to +1.6)	0.9803
Delaware	91	57.1 (45.5-70.8)	128	55.9 (45.9 - 65.8)	+0.8 (-2.1 to +3.8)	0.5902
District of Columbia	418	116.8 (105.5-128.1)	412	104.0 (93.7 - 114.2)	-1.2 (-3.3 to +0.9)	0.2747
Florida	1322	58.3 (55.1-61.6)	1932	56.8 (54.2 - 59.4)	+0.6 (-0.4 to +1.5)	0.2368
Georgia	1775	90.3 (85.8 - 94.7)	2243	75.6 (72.3 - 78.9)	-1.3 (-2.0 to -0.6)	0.0005
Illinois	1534	98.6 (93.5 - 103.6)	1478	76.5 (72.5 - 80.5)	-2.5 (-3.4 to -1.7)	<0.0001
Indiana	349	77.8 (69.4 - 86.3)	414	74.0 (66.6 - 81.3)	-0.2 (-1.1 to +0.7)	0.6799
Iowa	27	56.7 (36.0 - 85.1)	39	58.8 (40.4 - 82.5)	+1.3 (-1.6 to +4.4)	0.3814
Kansas	71	59.0 (45.7 - 74.9)	120	78.6 (64.1 - 93.2)	+3.3 (+1.2 to +5.4)	0.0016
Kentucky	237	90.8 (78.9 - 102.8)	316	91.4 (80.9 - 101.8)	+1.8 (+0.1 to +3.7)	0.0410
Louisiana	1014	91.3 (85.5 - 97.1)	1170	80.9 (76.1 - 85.7)	-0.8 (-1.4 to -0.2)	0.0086
Maryland	1165	87.4 (82.2 - 92.6)	1272	66.8 (63.0 - 70.5)	-2.3 (-3.3 to -1.3)	<0.0001
Massachusetts	165	47.4 (39.9 - 54.9)	231	43.4 (37.6 - 49.1)	-0.1 (-1.5 to +1.4)	0.9514
Michigan	1187	98.9 (93.1 - 104.6)	1219	84.5 (79.7 - 89.4)	-2.0 (-2.8 to -1.2)	<0.0001
Minnesota	43	31.9 (22.0 - 44.9)	98	45.9 (36.3 - 57.3)	+2.5 (+0.7 to +4.3)	0.0068
Mississippi	790	96.2 (89.3 - 103.1)	1005	97.0 (90.8 - 103.2)	+0.9 (-0.2 to +2.1)	0.1237
Missouri	411	76.4 (68.9 - 84.0)	490	70.4 (64.0 - 76.8)	+0.1 (-1.1 to +1.2)	0.9384
Nebraska	27	53.5 (34.3 - 79.6)	35	49.2 (33.7 - 69.5)	+0.2 (+3.6 to +4.1)	0.9129
Nevada	124	73.3 (59.4 - 87.3)	177	62.9 (53.3 - 72.6)	-0.3 (-1.9 to +1.2)	0.6632
New Jersey	1076	105.6 (99.1 - 112.1)	1094	81.5 (76.6 - 86.4)	-2.4 (-3.2 to -1.7)	<0.0001
New Mexico	22	47.7 (29.5-72.8)	20	40.3 (24.3 - 62.9)	+2.9 (-7.7 to +14.7)	0.6061
New York	1390	47.8 (45.2 - 50.3)	1832	48.7 (46.4 - 50.9)	+0.3 (-1.3 to +1.9)	0.7323
North Carolina	1334	79.4 (75.0 - 83.8)	1611	68.9 (65.4 - 72.4)	-1.1 (-2.0 to -0.3)	0.0094
Ohio	1014	82.8 (77.6 - 88.0)	949	62.4 (58.3 - 66.4)	-2.5 (-3.2 to -1.8)	<0.0001
Oklahoma	186	89.8 (76.4 - 103.3)	219	80.1 (69.1 - 91.2)	+0.8 (-1.1 to +2.8)	0.4054
Oregon	24	52.6 (32.6 - 80.4)	37	49.2 (33.9 - 69.1)	-1.7 (-4.8 to +1.3)	0.2620
Pennsylvania	969	79.9 (74.8 - 85.0)	1035	70.2 (65.9 - 74.6)	-1.3 (-2.2 to -0.5)	0.0014
Rhode Island	27	52.2 (33.5 - 77.7)	25	34.7 (22.0 - 52.1)	-6.4 (-10.3 to -2.3)	0.0023
South Carolina	1004	92.5 (86.6 - 98.4)	1305	90.7 (85.7 - 95.8)	+0.5 (-0.1 to +1.1)	0.1239
Tennessee	657	83.6 (76.9 - 90.3)	902	87.4 (81.4 - 93.3)	+1.0 (+0.4 to +1.8)	0.0031
Texas	1871	89.9 (85.6 - 94.2)	2394	80.1 (76.7 - 83.4)	-0.3 (-1.4 to +0.8)	0.6183
Virginia	1007	78.0 (73.1 - 83.0)	1072	61.9 (58.1 - 65.7)	-2.1 (-3.3 to -1.0)	0.0003
Washington	96	61.8 (49.1 - 76.8)	151	61.9 (51.2 - 72.6)	+1.5 (-1.3 to +4.4)	0.3053
West Virginia	43	67.6 (48.5 - 91.7)	66	90.0 (69.0 - 115.4)	+2.1 (-0.6 to +4.8)	0.1253
Wisconsin	147	69.0 (57.0 - 81.1)	185	62.9 (53.3 - 72.4)	+0.1 (-1.9 to +2.1)	0.9492

a AAMR: age-adjusted mortality rates, expressed per 100,000 population; b 95% CI: 95% confidence interval; c APC: Annual Percent Change; d Boldfaced entries represent statistically significant trends.

Table S3. Trends of state-level sepsis-related mortality among Hispanic individuals, 2010-2019.

State	2010		2019		APC ^{c,d} (95% CI)	p value ^d
	Deaths	AAMR ^a (95% CI) ^b	Deaths	AAMR (95% CI)		
Arizona	381	42.9 (38.2 - 47.6)	420	27.3 (24.6 - 30.0)	-2.3 (-5.4 to +0.9)	0.1622
Arkansas	21	39.3 (21.5-65.9)	29	32.3 (20.2 - 48.9)	-0.4 (-6.1 to +5.6)	0.8853
California	3632	52.5 (50.7 - 54.3)	5313	50.7 (49.2 - 52.1)	+0.1 (-0.5 to +0.6)	0.8657
Colorado	204	39.7 (33.9 - 45.6)	352	44.8 (39.9 - 49.8)	+2.8 (+1.0 to +4.6)	0.0021
Connecticut	110	52.2 (41.3 - 63.0)	160	45.9 (38.4 - 53.4)	+0.7 (-0.8 to +2.3)	0.3584
Florida	1143	33.2 (31.3 - 35.1)	1905	33.7 (32.2 - 35.2)	+0.6 (-0.2 to +1.3)	0.1406
Georgia	56	24.3 (17.1 - 33.6)	142	31.2 (25.4 - 37.0)	+5.5 (+0.9 to +10.3)	0.0196
Idaho	23	35.0 (20.4-56.0)	42	42.6 (29.7 - 59.3)	+3.4 (-2.6 to +9.7)	0.2744
Illinois	380	47.9 (42.5 - 53.3)	523	40.2 (36.6 - 43.9)	-3.1 (-4.3 to -1.9)	<0.0001
Indiana	60	49.1 (36.3 - 64.9)	95	44.1 (35.0 - 54.7)	+0.3 (-2.6 to +3.3)	0.8536
Kansas	37	37.8 (25.7 - 53.6)	72	42.8 (32.9 - 54.8)	+1.1 (-2.8 to +5.2)	0.5776
Louisiana	28	27.4 (17.8 - 40.5)	40	23.1 (16.3 - 31.7)	+2.1 (-0.9 to +5.2)	0.1770
Maryland	49	21.9 (15.2 - 30.6)	90	28.5 (22.4 - 35.8)	+0.7 (-1.6 to +3.1)	0.5469
Massachusetts	94	32.9 (25.8 - 41.4)	177	36.6 (30.9 - 42.3)	+1.5 (-0.6 to +3.6)	0.1741
Michigan	92	48.5 (38.3 - 60.5)	118	39.3 (31.8 - 46.7)	-0.7 (-2.1 to +0.8)	0.3523
Minnesota	22	32.1 (18.0 - 53.0)	38	32.7 (22.1 - 46.7)	-2.9 (-7.0 to +1.5)	0.1942
Missouri	28	25.8 (16.5-38.4)	35	21.9 (14.8 - 31.2)	+0.1 (-5.2 to +5.5)	0.9941

Nebraska	27	43.1 (26.7-65.9)	38	39.3 (26.5 - 56.0)	-2.4 (-7.4 to +2.8)	0.3526
Nevada	124	43.7 (34.6 - 52.7)	182	35.9 (30.3 - 41.5)	-1.5 (-3.0 to +0.1)	0.0548
New Jersey	520	67.4 (61.2 - 73.5)	656	49.9 (46.0 - 53.9)	-2.4 (-3.3 to -1.5)	<0.0001
New Mexico	349	48.5 (43.3 - 53.7)	460	46.9 (42.5 - 51.2)	+0.8 (-0.2 to +1.8)	0.1149
New York	794	38.1 (35.4 - 40.9)	1103	35.6 (33.5 - 37.7)	-3.7 (-6.0 to -1.3)	0.4393
North Carolina	47	25.1 (16.9 - 35.8)	95	24.5 (19.2 - 30.9)	+2.5 (-0.2 to +5.2)	0.0663
Ohio	57	39.6 (29.4 - 52.1)	78	30.2 (23.5 - 38.2)	-2.3 (-4.1 to -0.5)	0.0113
Oklahoma	33	33.5 (21.9 - 49.1)	99	57.3 (45.5 - 71.2)	+5.7 (+3.1 to +8.5)	<0.0001
Oregon	36	27.4 (18.0 - 39.8)	66	26.5 (19.9 - 34.7)	+3.1 (+0.5 to +5.7)	0.0181
Pennsylvania	153	50.0 (41.2 - 58.8)	198	36.8 (31.4 - 42.3)	-0.8 (-2.8 to +1.2)	0.4253
Rhode Island	25	48.4 (29.2 - 75.6)	32	31.7 (21.1 - 45.8)	-5.1 (-9.1 to -1.0)	0.0164
South Carolina	21	25.5 (13.6 - 43.6)	41	28.0 (19.2 - 39.3)	+1.2 (-2.9 to +5.6)	0.5676
Tennessee	21	26.4 (14.4 - 44.2)	54	31.1 (22.4 - 42.0)	+0.7 (-1.7 to +3.1)	0.5720
Texas	3373	70.8 (68.3 - 73.4)	4833	65.3 (63.3 - 67.2)	-0.2 (-0.8 to +0.3)	0.4489
Utah	30	27.7 (17.6 - 41.6)	79	35.8 (27.5 - 45.8)	+3.9 (-0.6 to +8.6)	0.0920
Virginia	60	36.4 (26.9 - 48.3)	93	23.2 (18.2 - 29.1)	-1.8 (-4.4 to -0.8)	0.1734
Washington	73	27.0 (19.8 - 36.0)	159	40.6 (33.5 - 47.6)	+4.3 (+2.0 to +6.7)	0.0002
Wisconsin	35	32.7 (21.2 - 48.3)	63	32.9 (24.6 - 43.2)	+1.5 (-1.2 to +4.3)	0.2731

a AAMR: age-adjusted mortality rates, expressed per 100,000 population; b 95% CI: 95% confidence interval; c APC: Annual Percent Change; d Boldfaced entries represent statistically significant trends.

Table S4. Trends of state-level sepsis-related mortality among Asian individuals, 2010-2019.

State	2010		2019		APC ^{c,d} (95% CI)	p value ^d
	Deaths	AAMR ^a (95% CI) ^b	Deaths	AAMR (95% CI)		
Arizona	28	20.5 (13.1 - 30.5)	53	19.6 (14.5 - 25.8)	-1.9 (-5.0 to +1.4)	0.2527
California	1843	38.6 (36.8 - 40.3)	2662	34.2 (32.9 - 35.6)	-0.6 (-1.2 to -0.1)	0.0176
Colorado	23	26.1 (16.1 - 39.8)	41	22.4 (16.0 - 30.7)	+1.1 (-2.2 to +4.4)	0.5252
Connecticut	21	36.7 (21.4 - 58.8)	35	25.9 (17.7 - 36.6)	-3.6 (-6.7 to -0.4)	0.0262
Florida	87	23.0 (18.1 - 29.0)	166	22.8 (19.3 - 26.3)	+1.6 (-0.2 to +3.7)	0.0767
Georgia	54	35.1 (25.2 - 47.6)	117	32.2 (26.0 - 38.4)	+0.5 (-1.4 to +2.4)	0.6043
Hawaii	442	37.5 (33.9 - 41.0)	438	32.4 (29.2 - 35.6)	-1.6 (-3.0 to -0.2)	0.0231
Illinois	134	35.2 (28.9 - 41.5)	166	23.4 (19.8 - 27.0)	-3.9 (-5.6 to -2.2)	<0.0001
Indiana	26	39.9 (24.4-61.6)	27	28.7 (18.2 - 43.1)	-4.9 (-9.6 to +0.1)	0.0543
Louisiana	27	52.7 (33.4-79.1)	26	37.7 (24.4 - 55.6)	-5.0 (-10.8 to +1.1)	0.1074
Maryland	77	33.2 (25.8 - 42.1)	129	30.5 (25.2 - 35.8)	-1.3 (-3.2 to +0.7)	0.1949
Massachusetts	60	29.9 (22.5 - 38.9)	90	24.1 (19.3 - 29.7)	-1.8 (-4.2 to +1.0)	0.2058
Michigan	34	25.4 (16.9 - 36.6)	66	25.4 (19.5 - 32.6)	-0.9 (-3.6 to +1.8)	0.5005
Minnesota	37	38.6 (26.4 - 54.5)	58	36.8 (27.5 - 48.1)	+4.9 (+0.8 to +9.1)	0.0181
Missouri	20	35.4 (20.6-56.7)	23	21.1 (13.1 - 32.3)	-5.2 (-9.7 to -0.5)	0.0308
Nevada	71	38.3 (29.2 - 49.4)	136	38.5 (31.8 - 45.1)	+0.2 (-2.0 to +2.4)	0.8498
New Jersey	160	39.7 (33.0 - 46.5)	312	37.8 (33.5 - 42.0)	-0.7 (-1.9 to +0.5)	0.2615
New York	217	20.8 (17.9 - 23.6)	423	23.3 (21.1 - 25.6)	-3.7 (-6.0 to -1.3)	0.8798
North Carolina	26	24.1 (14.7 - 37.3)	49	21.7 (15.7 - 29.1)	-1.3 (-3.9 to +1.3)	0.3101
Ohio	33	31.2 (20.8 - 45.1)	57	27.7 (20.8 - 36.1)	-2.6 (-5.1 to -0.1)	0.0424
Oklahoma	21	37.3 (22.1-58.9)	27	34.9 (22.1 - 52.4)	+1.0 (-9.2 to +12.4)	0.8506
Oregon	25	22.8 (14.5 - 34.2)	55	27.6 (20.6 - 36.2)	+2.4 (-0.6 to +5.5)	0.1176
Pennsylvania	76	41.4 (31.8 - 53.0)	86	23.5 (18.7 - 29.2)	-3.8 (-6.5 to -1.1)	0.0068
Texas	188	36.2 (30.4 - 42.0)	454	39.7 (35.9 - 43.5)	+0.7 (-0.4 to +1.8)	0.2284
Utah	23	43.2 (26.4-66.8)	29	32.4 (21.2 - 47.5)	-2.4 (-6.3 to +1.4)	0.2113
Virginia	84	37.0 (28.7 - 46.9)	117	22.8 (18.6 - 27.1)	-3.8 (-5.7 to -1.8)	0.0002
Washington	142	36.8 (30.5 - 43.1)	240	33.0 (28.8 - 37.3)	+0.9 (-1.3 to +3.2)	0.4256
Wisconsin	25	43.3 (26.8 - 66.2)	29	27.1 (17.6 - 40.0)	-4.6 (-8.4 to -0.6)	0.0250

a AAMR: age-adjusted mortality rates, expressed per 100,000 population; b 95% CI: 95% confidence interval; c APC: Annual Percent Change; d Boldfaced entries represent statistically significant trends.

Table S5. Trends of state-level sepsis-related mortality among Native American individuals, 2010-2019.

State	2010		2019		APC ^c ,d(95% CI)	p value ^d
	Deaths	AAMR ^a (95% CI) ^b	Deaths	AAMR (95% CI)		
Alaska	45	64.2 (45.5 - 88.2)	82	91.1 (71.3 - 114.7)	+2.0 (-0.5 to +4.5)	0.1232
Arizona	210	98.5 (84.2 - 112.7)	226	73.0 (63.1 - 83.0)	-2.4 (-4.5 to -0.2)	0.0376

California	114	27.7 (22.2 - 33.2)	196	35.0 (29.9 - 40.2)	+1.4 (-0.50 to +3.3)	0.1389
Michigan	29	54.7 (35.0 - 81.4)	39	47.4 (33.0 - 65.9)	-1.7 (-4.8 to +1.4)	0.2684
Minnesota	25	68.3 (40.5 - 107.9)	45	76.6 (54.2 - 105.2)	+5.8 (+1.8 to +10.0)	0.0039
Montana	27	61.6 (38.1 - 94.1)	71	130.3 (100.1 - 166.6)	+9.8 (+6.2 to +13.5)	<0.0001
New Mexico	105	73.2 (58.5 - 87.9)	182	91.2 (77.6 - 104.7)	+1.7 (-0.6 to +4.0)	0.1393
New York	25	19.9 (12.3 - 30.4)	20	11.0 (6.6 - 17.2)	-3.6 (-7.2 to +0.2)	0.0623
North Carolina	65	74.0 (55.8 - 96.3)	74	51.9 (40.2 - 65.9)	-1.3 (-4.5 to +2.0)	0.4505
North Dakota	24	126.4 (74.9 - 199.7)	33	112.5 (73.5 - 164.9)	-0.4 (-3.3 to +2.5)	0.7705
Oklahoma	206	85.6 (73.3 - 98.0)	311	94.8 (83.8 - 105.8)	+1.9 (-0.1 to +3.8)	0.0503
Oregon	23	45.6 (27.0-72.1)	21	32.6 (19.6 - 50.9)	-2.2 (-6.6 to +2.4)	0.3451
South Dakota	46	111.5 (78.9 - 153.0)	78	153.7 (119.6 - 194.6)	+3.4 (+1.0 to +5.8)	0.0048
Texas	22	13.3 (7.8-21.3)	20	9.1 (5.4 - 14.4)	-1.0 (-6.6 to +5.0)	0.7376
Washington	78	90.4 (68.8 - 116.7)	96	79.1 (62.5 - 98.7)	+0.5 (-1.9 to +3.0)	0.6918
Wisconsin	28	78.7 (48.7 - 120.3)	43	75.9 (54.0 - 103.8)	+1.6 (-2.5 to +5.8)	0.4546

a AAMR: age-adjusted mortality rates, expressed per 100,000 population; b 95% CI: 95% confidence interval; c APC: Annual Percent Change; d Boldfaced entries represent statistically significant trends

Table S6. Trends of state-level sepsis-related mortality among White individuals, 2010-2019.

State	2010		2019		APC ^{c,d} (95% CI)	p value ^d
	Deaths	AAMR ^a (95% CI) ^b	Deaths	AAMR (95% CI)		
Alabama	2161	52.9 (50.7 - 55.2)	2810	59.2 (57.0 - 61.5)	+1.9 (+1.3 to +2.4)	<0.0001
Alaska	121	32.6 (26.3 - 39.0)	186	39.8 (33.8 - 45.7)	+2.8 (+1.1 to +4.5)	0.0014
Arizona	2331	36.9 (35.4 - 38.4)	2031	24.2 (23.2 - 25.3)	-2.8 (-5.6 to -0.1)	0.0489
Arkansas	1455	50.7 (48.0 - 53.3)	2154	64.3 (61.5 - 67.1)	+2.1 (+0.9 to +3.2)	0.0003
California	13891	48.5 (47.6 - 49.3)	17096	50.3 (49.5 - 51.1)	+0.9 (+0.4 to +1.5)	0.0013
Colorado	1401	32.4 (30.6 - 34.1)	2233	38.8 (37.2 - 40.4)	+3.5 (+2.3 to +4.7)	<0.0001
Connecticut	1922	47.8 (45.6 - 50.0)	2289	51.6 (49.4 - 53.8)	+0.9 (+0.3 to +1.5)	0.0018
Delaware	409	48.0 (43.3 - 52.7)	403	37.4 (33.7 - 41.2)	-0.3 (-3.0 to +2.4)	0.8174
District of Columbia	64	30.9 (23.6 - 39.7)	61	23.2 (17.7 - 30.0)	-2.5 (-4.8 to -0.1)	0.0373
Florida	7636	34.0 (33.2 - 34.8)	11546	40.9 (40.1 - 41.7)	+2.6 (+2.1 to +3.1)	<0.0001
Georgia	3281	52.3 (50.5 - 54.1)	4413	55.0 (53.3 - 56.6)	+1.0 (+0.6 to +1.4)	<0.0001
Hawaii	139	32.4 (26.9 - 37.9)	116	21.5 (17.5 - 25.6)	-1.1 (-3.4 to +1.3)	0.3718
Idaho	456	29.4 (26.7 - 32.2)	782	38.9 (36.2 - 41.7)	+2.7 (+1.8 to +3.6)	<0.0001
Illinois	5490	47.6 (46.4 - 48.9)	6238	48.1 (46.9 - 49.3)	+0.6 (-0.1 to +1.1)	0.0547
Indiana	2954	46.0 (44.4 - 47.7)	4358	59.0 (57.2 - 60.8)	+2.8 (+2.1 to +3.4)	<0.0001
Iowa	1171	31.3 (29.5 - 33.1)	1757	43.1 (41.0 - 45.2)	+4.2 (+3.3 to +5.2)	<0.0001
Kansas	1089	36.4 (34.2 - 38.6)	1725	50.5 (48.1 - 53.0)	+4.4 (+3.2 to +5.6)	<0.0001
Kentucky	2723	62.8 (60.4 - 65.2)	4236	83.4 (80.8 - 85.9)	+4.4 (+3.2 to +5.6)	<0.0001
Louisiana	1857	55.6 (60.4 - 65.2)	2078	52.6 (50.3 - 54.9)	+0.6 (-0.4 to +1.5)	0.2485
Maine	621	36.9 (34.0 - 39.9)	427	22.6 (20.3 - 24.8)	-2.5 (-5.3 to +0.2)	0.0735
Maryland	2067	47.3 (45.2 - 49.3)	2214	44.6 (42.7 - 46.5)	-0.9 (-1.5 to -0.2)	0.0112
Massachusetts	3177	44.6 (43.0 - 46.2)	3854	47.7 (46.1 - 49.2)	+1.5 (+0.6 to +2.4)	0.0007
Michigan	4298	43.6 (42.3 - 44.9)	5044	44.5 (43.2 - 45.7)	+0.3 (-0.2 to +0.8)	0.2392
Minnesota	1479	26.6 (25.2 - 27.9)	2265	34.3 (32.9 - 35.8)	+3.4 (+2.6 to +4.3)	<0.0001
Mississippi	1181	54.2 (51.0 - 57.3)	1686	68.2 (64.9 - 71.5)	+3.0 (+1.8 to +4.3)	<0.0001
Missouri	2552	41.4 (39.8 - 43.0)	3177	44.8 (43.2 - 46.4)	+0.9 (+0.1 to +1.8)	0.0380
Montana	324	28.6 (25.4 - 31.8)	513	37.2 (33.9 - 40.6)	+4.3 (+2.8 to +5.7)	<0.0001
Nebraska	590	29.5 (27.1 - 32.0)	978	43.3 (40.6 - 46.1)	+5.5 (+4.6 to +6.5)	<0.0001
Nevada	1212	56.7 (53.5 - 60.0)	1493	51.6 (48.9 - 54.2)	+0.6 (-0.9 to +2.1)	0.4222
New Hampshire	524	36.3 (33.2 - 39.5)	736	41.0 (37.9 - 44.0)	+1.6 (+0.6 to +2.6)	0.0019
New Jersey	5075	59.6 (57.9 - 61.2)	5134	55.4 (53.8 - 57.0)	-0.5 (-0.9 to -0.2)	0.0055
New Mexico	841	43.0 (40.1 - 46.0)	1097	47.0 (44.1 - 49.9)	+1.2 (+0.4 to +1.9)	0.0033
New York	8201	45.7 (44.7 - 46.7)	8546	43.1 (42.1 - 44.0)	-0.4 (-1.4 to +0.6)	0.3887
North Carolina	4043	50.9 (49.3 - 52.5)	4925	48.9 (47.5 - 50.3)	+0.5 (-0.5 to +1.4)	0.3386
North Dakota	248	30.1 (26.3 - 33.9)	405	45.1 (40.6 - 49.6)	+4.2 (+2.7 to +5.6)	<0.0001
Ohio	5719	47.7 (46.4 - 48.9)	6477	48.2 (47.0 - 49.4)	+0.5 (-0.1 to +1.2)	0.0986
Oklahoma	1997	56.3 (53.8 - 58.8)	2846	70.1 (67.5 - 72.7)	+3.5 (+2.6 to +4.4)	<0.0001
Oregon	1310	30.9 (29.2 - 32.6)	1731	34.0 (32.4 - 35.7)	+1.9 (+0.8 to +3.0)	0.0007
Pennsylvania	6840	46.0 (44.9 - 47.1)	7594	46.9 (45.8 - 48.0)	+0.7 (+0.2 to +1.3)	0.0110
Rhode Island	693	55.6 (51.4 - 59.9)	594	44.1 (40.5 - 47.8)	-2.5 (-3.6 to -1.4)	<0.0001
South Carolina	1951	51.7 (49.4 - 54.0)	2864	57.2 (55.0 - 59.3)	+2.1 (+0.9 to +3.3)	0.0006
South Dakota	247	25.5 (22.2 - 28.7)	550	50.5 (46.1 - 54.8)	+7.4 (+5.9 to +9.0)	<0.0001
Tennessee	3212	54.3 (52.4 - 56.2)	4417	61.5 (59.6 - 63.3)	+2.2 (+1.6 to +2.8)	<0.0001

Texas	10959	58.2 (57.1 - 59.3)	14223	58.7 (57.7 - 59.7)	+0.9 (+0.1 to +1.8)	0.0305
Utah	624	30.9 (28.4 - 33.3)	1074	40.9 (38.4 - 43.3)	+3.1 (+1.6 to +4.6)	0.0001
Vermont	251	34.0 (29.7 - 38.3)	269	30.5 (26.8 - 34.3)	-1.8 (-3.3 to -0.3)	0.0202
Virginia	3218	50.6 (48.8 - 52.4)	3431	43.6 (42.1 - 45.1)	-0.9 (-2.0 to +0.2)	0.1196
Washington	2471	39.2 (37.6 - 40.7)	3533	45.3 (43.8 - 46.8)	+1.8 (+1.1 to +2.5)	<0.0001
West Virginia	1376	61.2 (57.9 - 64.4)	1980	81.0 (77.3 - 84.7)	+3.7 (+3.0 to +4.3)	<0.0001
Wisconsin	1890	30.2 (28.9 - 31.6)	2807	39.1 (37.6 - 40.6)	+3.8 (+2.8 to +4.8)	<0.0001
Wyoming	190	33.3 (28.5 - 38.1)	247	36.4 (31.7 - 41.0)	+4.4 (+1.8 to +7.0)	0.0009

a AAMR: age-adjusted mortality rates, expressed per 100,000 population; d Boldfaced entries represent statistically significant trends

Table S7. Changes in age-adjusted sepsis-related mortality rates nationally and across states in 2010 vs 2019.

Group	Year	AAMR ^a				p value ^d
		National mean	State-level median (IQR) ^b	State-level range	Difference in mortality ^c	
Black						0.0032
	2010	79.5	77.8 (57.4-89.9)	31.9-116.8	84.9	
	2019	73.0	69.6 (57.8-80.5)	32.7 -104.0	71.3	
Hispanic						0.1518
	2010	48.9	37.8 (27.5-48.3)	21.9-70.8	48.9	
	2019	45.2	35.8 (30.4-42.8)	21.9-65.3	43.4	
Asian						0.0004
	2010	34.3	36.5 (28.0-38.6)	20.5-52.7	32.2	
	2019	30.9	27.7 (23.4-33.6)	19.6-39.7	20.1	
Native American						0.8564
	2010	51.2	70.8 (50.2-88.0)	13.3-126.4	113.1	
	2019	65.5	76.3 (41.2-93.0)	9.1-153.7	144.6	
White						0.0031
	2010	45.5	44.6 (32.5-51.5)	25.5-62.8	37.3	
	2019	48.0	45.1 (39.3-52.4)	21.5-83.4	61.9	

a AAMR: age-adjusted mortality rate, expressed per 100,000 population; b IQR: interquartile range; c Difference in age-adjusted mortality rate between states with the highest and lowest mortality rate within race and ethnicity groups, as presented in the state-level range column; d p values of comparisons of across-state age-adjusted mortality rate within race and ethnicity groups between 2010 and 2019.

Table S8. Changes in differences of within-state age-adjusted sepsis-related mortality rates between racial and ethnic minority groups and White individuals, nationally and across states in 2010 vs 2019.

Group	Year	Difference in AAMR ^{a, b, c} between racial and ethnic minorities vs Whites				p value ^f
		National mean	State-level median (IQR) ^d	State-level range	Difference in mortality gaps ^e	
Blacks						<0.0001
	2010	+34.0	+28.3 (+18.1 to +35.5)	-3.4 to +85.9	89.3	
	2019	+25.0	+19.3 (+10.7 to +25.6)	-9.4 to +80.8	90.2	
Hispanics						0.0003
	2010	+3.4	-0.8 (-12.8 to +5.4)	-28.2 to +14.2	70.6	
	2019	-2.8	-7.7 (-17.5 to -4.8)	-32.0 to +6.6	38.6	
Asians						0.0023
	2010	-11.2	-11.8 (-17.7 to -5.3)	-26.8 to +13.1	39.9	
	2019	-17.1	-18.6 (-23.1 to -12.7)	-35.2 to +10.9	46.1	
Native Americans						0.4037
	2010	+5.7	+30.9 (+12.9 to +49.9)	-44.9 to +96.3	141.2	
	2019	+17.5	+35.3 (+0.8 to +50.1)	-49.6 to +96.5	146.1	

a AAMR: age-adjusted mortality rate, expressed per 100,000 population; b Positive AAMR numbers represent higher age-adjusted sepsis-related mortality rates among a race and ethnic minority group than among White individuals in a given state; c Negative AAMR numbers represent lower age-adjusted sepsis-related mortality rates among a race and ethnic minority group than among White individuals in a given state; d IQR: interquartile range; e Difference in the gap in age-adjusted mortality rate between a racial and ethnic minority group and White individuals, between states with the highest and lowest values, as presented in the state-level range column; f p values of comparisons of differences in within-state age-adjusted mortality rates between each race and ethnic minority group and White individuals between 2010 and 2019.

Table S9. Individual state data of differences in within-state age-adjusted sepsis-related mortality rates - Black vs White individuals, 2010 vs 2019.

State	Difference in AAMR ^{a, b, c} between Black vs White individuals	
	Year	
	2010	2019
Alabama	+30.6	+20.9
Arizona	+18.6	+8.5
Arkansas	+33.3	+37.7
California	+28.1	+22.6
Colorado	+17.5	+21.9
Connecticut	+16.4	+10.0
Delaware	+9.1	+18.5
District of Columbia	+85.9	+80.8
Florida	+24.3	+15.9
Georgia	+38.0	+20.6
Illinois	+51.0	+28.4
Indiana	+31.8	+15.0
Iowa	+25.4	+15.7
Kansas	+22.6	+28.1
Kentucky	+28.0	+8.0
Louisiana	+35.7	+28.3
Maryland	+40.1	+22.2
Massachusetts	+2.8	-4.3
Michigan	+55.3	+40.0
Minnesota	+5.3	+11.6
Mississippi	+42.0	+28.8
Missouri	+35.0	+25.6
Nebraska	+24.0	+5.9
Nevada	+16.6	+11.3
New Jersey	+46.0	+26.1
New Mexico	+4.7	-6.7
New York	+2.1	+5.6
North Carolina	+28.5	+20.0
Ohio	+35.1	+14.2
Oklahoma	+33.5	+10.0
Oregon	+21.7	+15.2
Pennsylvania	+33.9	+23.3
Rhode Island	-3.4	-9.4
South Carolina	+40.8	+33.5
Tennessee	+29.3	+25.9
Texas	+31.7	+21.4
Virginia	+27.4	+18.3
Washington	+22.6	+16.6
West Virginia	+6.4	+9.0
Wisconsin	+38.8	+23.8

a AAMR: age-adjusted mortality rate, expressed per 100,000 population; b Positive AAMR numbers represent higher age-adjusted sepsis-related mortality rates among Black individuals than among Whites in a given state; c Negative AAMR numbers represent lower age-adjusted sepsis-related mortality rates among Black individuals than among White individuals in a given state.

Table S10. Individual state data of differences in within-state age-adjusted sepsis-related mortality rates - Hispanic vs White individuals, 2010 vs 2019

State	Difference in AAMR ^{a, b, c} between Hispanic vs White individuals	
	Year	
	2010	2019
Arizona	+6.0	+3.1
Arkansas	-11.4	-32.0
California	+4.0	+0.4
Colorado	+7.3	+6.0
Connecticut	+4.4	-5.7
Florida	-0.8	-7.2
Georgia	-28.0	-23.8

Idaho	+5.6	+3.7
Illinois	+0.3	-7.9
Indiana	+3.1	-14.9
Kansas	+1.4	-7.7
Louisiana	-28.2	-29.5
Maryland	-25.4	-16.1
Massachusetts	-11.7	-11.1
Michigan	+4.9	-5.2
Minnesota	+5.5	-1.6
Missouri	-15.5	-22.9
Nebraska	+13.6	-4.0
Nevada	-13.0	-15.7
New Jersey	+7.8	-5.5
New Mexico	+5.5	-0.1
New York	-7.6	-7.5
North Carolina	-25.8	-24.4
Ohio	-8.1	-18.0
Oklahoma	-22.8	-12.8
Oregon	-3.5	-7.5
Pennsylvania	+4.0	-10.1
Rhode Island	-7.2	-12.4
South Carolina	-26.2	-29.2
Tennessee	-27.9	-30.4
Texas	+12.6	+6.6
Utah	-3.2	-5.1
Virginia	+14.2	-20.4
Washington	-12.2	-4.7
Wisconsin	+2.5	-6.2

a AAMR: age-adjusted mortality rate, expressed per 100,000 population; b Positive AAMR numbers represent higher age-adjusted sepsis-related mortality rates among Hispanic individuals than among White individuals in a given state; c Negative AAMR numbers represent lower age-adjusted sepsis-related mortality rates among Hispanic individuals than among White individuals in a given state.

Table S11. Individual state data of differences in within-state age-adjusted sepsis-related mortality rates - Asian vs White individuals, 2010 vs 2019.

State	Difference in AAMR ^{a, b, c} between Asian vs White individuals	
	Year	
	2010	2019
Arizona	-16.4	-4.6
California	-9.9	-16.1
Colorado	-6.3	-16.4
Connecticut	-11.1	-25.7
Florida	-11.0	-18.1
Georgia	-17.2	-22.8
Hawaii	+5.1	+10.9
Illinois	-12.4	-24.7
Indiana	-6.1	-30.3
Louisiana	-2.9	-14.9
Maryland	-14.1	-14.1
Massachusetts	-14.7	-23.6
Michigan	-18.2	-19.1
Minnesota	+12.0	+2.5
Missouri	-6.0	-23.7
Nevada	-18.4	-13.1
New Jersey	-19.9	-17.6
New York	-24.9	-19.8
North Carolina	-26.8	-27.2
Ohio	-16.5	-20.5
Oklahoma	-19.0	-35.2
Oregon	-8.1	-6.4
Pennsylvania	-4.6	-23.4
Texas	-22.0	-19.0

Utah	+12.3	-8.5
Virginia	-13.6	-20.8
Washington	-2.4	-12.3
Wisconsin	+13.1	-12.0

a AAMR: age-adjusted mortality rate, expressed per 100,000 population; b Positive AAMR numbers represent higher age-adjusted sepsis-related mortality rates among Asian individuals than among White individuals in a given state; c Negative AAMR numbers represent lower age-adjusted sepsis-related mortality rates among Asian individuals than among White individuals in a given state.

Table S12. Individual state data of differences in within-state age-adjusted sepsis-related mortality rates - Native American vs White individuals, 2010 vs 2019

State	Difference in AAMR ^{a, b, c} between Native American vs White individuals	
	2010	2019
Alaska	+31.6	+51.3
Arizona	+61.6	+48.8
California	-20.8	-15.3
Michigan	+11.1	+2.9
Minnesota	+41.7	+42.3
Montana	+33.0	+93.1
New Mexico	+30.2	+44.2
New York	-25.8	-32.1
North Carolina	+23.1	+3.0
North Dakota	+96.3	+67.4
Oklahoma	+29.3	+24.7
Oregon	+14.7	-1.4
South Dakota	+86.0	+96.5
Texas	-44.9	-46.9
Washington	+51.2	+33.8
Wisconsin	+48.5	+36.8

a AAMR: age-adjusted mortality rate, expressed per 100,000 population; b Positive AAMR numbers represent higher age-adjusted sepsis-related mortality rates among Native American individuals than among White individuals in a given state; c Negative AAMR numbers represent lower age-adjusted sepsis-related mortality rates among Native American individuals than among White individuals in a given state.