APPENDIX 1 – THE CATASTROPHIC COST OF UNINSURANCE, ESTIMATED THROUGH FEBRUARY 1, 2021: COVID-19 CASES AND DEATHS CLOSELY TIED TO AMERICA'S HEALTH COVERAGE GAPS

Appendix Table A1. Estimated Impact of Health Insurance Gaps on Total COVID-19 Cases and Deaths, Between January 22, 2020, and February 1, 2021

		Cases		Deaths			
	Total cases	Cases associated with coverage gaps	Percentage of total cases associated with coverage gaps	Total deaths	Deaths associated with health insurance gaps	Percentage of total deaths associated with coverage gaps	
United States	25,934,758	10,868,339	42%	436,578	142,759	33%	
Alabama	460,860	214,683	47%	7,688	2,901	38%	
Alaska	54,213	27,976	52%	262	108	41%	
Arizona	762,145	376,157	49%	13,124	5,240	40%	
Arkansas	293,581	117,080	40%	4,895	1,530	31%	
California	3,342,647	1,242,293	37%	41,402	12,111	29%	
Colorado	397,025	150,157	38%	5,641	1,663	29%	
Connecticut	253,122	71,738	28%	7,111	1,544	22%	
District of Columbia	37,008	6,435	17%	916	121	13%	
Delaware	78,312	23,964	31%	1,101	267	24%	
Florida	1,723,769	998,892	58%	26,685	12,660	47%	
Georgia	879,748	502,402	57%	13,811	6,506	47%	
Hawaii	25,870	5,503	21%	407	67	16%	
Idaho	163,165	80,920	50%	1,735	707	41%	
Illinois	1,128,506	389,813	35%	19,259	5,302	28%	
Indiana	628,391	250,955	40%	9,613	3,048	32%	
Iowa	319,116	82,627	26%	4,906	990	20%	
Kansas	279,008	116,786	42%	3,797	1,260	33%	
Kentucky	364,498	108,705	30%	3,780	880	23%	
Louisiana	401,163	155,550	39%	8,912	2,716	30%	
Maine	39,538	15,913	40%	595	194	33%	
Maryland	355,636	111,401	31%	7,107	1,731	24%	
Massachusetts	497,073	81,396	16%	14,597	1,769	12%	
Michigan	586,831	170,798	29%	15,377	3,479	23%	

Appendix Table A1. Estimated Impact of Health Insurance Gaps on Total COVID-19 Cases and Deaths, Between January 22, 2020, and February 1, 2021

		Cases		Deaths			
	Total cases	Cases associated with coverage gaps	Percentage of total cases associated with coverage gaps	Total deaths	Deaths associated with health insurance gaps	Percentage of total deaths associated with coverage gaps	
Minnesota	462,125	110,706	24%	6,202	1,172	19%	
Mississippi	275,706	147,728	54%	6,056	2,653	44%	
Missouri	439,067	196,043	45%	6,604	2,353	36%	
Montana	94,070	38,915	41%	1,234	431	35%	
Nebraska	189,564	74,917	40%	1,912	619	32%	
Nevada	279,146	138,506	50%	4,278	1,702	40%	
New Hampshire	65,020	20,065	31%	1,055	256	24%	
New Jersey	699,093	261,198	37%	21,513	6,402	30%	
New Mexico	170,895	79,261	46%	3,295	1,243	38%	
New York	1,428,741	402,305	28%	43,474	10,379	24%	
North Carolina	761,301	376,753	49%	9,342	3,769	40%	
North Dakota	97,680	33,487	34%	1,422	390	27%	
Ohio	899,079	299,111	33%	11,230	2,949	26%	
Oklahoma	390,731	228,994	59%	3,564	1,713	48%	
Oregon	143,373	52,764	37%	1,958	571	29%	
Pennsylvania	849,966	254,591	30%	21,651	5,020	23%	
Rhode Island	102,046	23,882	23%	2,083	377	18%	
South Carolina	445,916	218,680	49%	7,283	2,883	40%	
South Dakota	108,315	47,872	44%	1,778	648	36%	
Tennessee	687,751	323,183	47%	9,486	3,593	38%	
Texas	2,412,627	1,565,912	65%	37,245	20,851	56%	
Utah	263,305	109,095	41%	1,169	396	34%	
Vermont	12,074	2,708	22%	175	29	17%	
Virginia	507,640	212,898	42%	6,474	2,167	33%	
Washington	311,899	107,834	35%	4,314	1,146	27%	
West Virginia	121,425	40,925	34%	2,028	530	26%	
Wisconsin	592,921	172,594	29%	6,436	1,483	23%	
Wyoming	52,057	25,270	49%	596	239	40%	

Sources: National Center for Coverage Innovation at Families USA (NCCI) analysis of COVID-19 cumulative case and death rates, by county, Johns Hopkins University,

https://github.com/CSSEGISandData/COVID-19/blob/master/csse_covid_19_data/csse_covid_19_time_series_time_series_covid19_confirmed_US.csv,

https://github.com/CSSEGISandData/COVID-19/blob/master/csse_covid_19_data/csse_covid_19_time_series_time_series_covid19_deaths_US.csv

U.S. Census Bureau, Small Area Health Insurance Estimates using the American Community Survey, 2018, https://www2.census.gov/programs-surveys/sahie/datasets/time-series/estimates-acs/sahie-2018-csv.zip.

Notes: (1) January 22, 2020, is the first date for which COVID-19 information for U.S. cases and deaths is available from Johns Hopkins University. (2) This table shows the estimated impact of health coverage gaps on COVID-19 cases and deaths if the relationships McGlauglin and colleagues observed through August 31, 2020 continued in effect through February 1, 2021. See J. M. McLaughlin, F. Khan, S. Pugh, F. J. Angulo, H. J. Schmidt, R. E. Isturiz, L. Jodar, and D. L. Swerdlow, "County-Level Predictors of COVID-19 Cases and Deaths in the United States: What Happened, and Where Do We Go from Here?" Clin Infect Dis (November 19, 2020:1729, doi: 10.1093/cid/ciaa1729. Epub ahead of print.

Appendix Table A2. Impact of Health Insurance Gaps on Total COVID-19 Cases and Deaths, Between January 22, 2020, and February 1, 2021, by State, Ranked from Highest to Lowest

	Cases		Deaths				
Order	State Cases associated coverage gap		Order	State	Deaths associated with health insurance gaps		
1	Texas	1,565,912	1	Texas	20,851		
2	California	1,242,293	2	Florida	12,660		
3	Florida	998,892	3	California	12,111		
4	Georgia	502,402	4	New York	10,379		
5	New York	402,305	5	Georgia	6,506		
6	Illinois	389,813	6	New Jersey	6,402		
7	North Carolina	376,753	7	Illinois	5,302		
8	Arizona	376,157	8	Arizona	5,240		
9	Tennessee	323,183	9	Pennsylvania	5,020		
10	Ohio	299,111	10	North Carolina	3,769		
11	New Jersey	261,198	11	Tennessee	3,593		
12	Pennsylvania	254,591	12	Michigan	3,479		
13	Indiana	250,955	13	Indiana	3,048		
14	Oklahoma	228,994	14	Ohio	2,949		
15	South Carolina	218,680	15	Alabama	2,901		
16	Alabama	214,683	16	South Carolina	2,883		
17	Virginia	212,898	17	Louisiana	2,716		
18	Missouri	196,043	18	Mississippi	2,653		
19	Wisconsin	172,594	19	Missouri	2,353		
20	Michigan	170,798	20	Virginia	2,167		
21	Louisiana	155,550	21	Massachusetts	1,769		
22	Colorado	150,157	22	Maryland	1,731		

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Cases			Deaths				
Order	State	Cases associated with coverage gaps	Order	State	Deaths associated with health insurance gaps		
23	Mississippi	147,728	23	Oklahoma	1,713		
24	Nevada	138,506	24	Nevada	1,702		
25	Arkansas	117,080	25	Colorado	1,663		
26	Kansas	116,786	26	Connecticut	1,544		
27	Maryland	111,401	27	Arkansas	1,530		
28	Minnesota	110,706	28	Wisconsin	1,483		
29	Utah	109,095	29	Kansas	1,260		
30	Kentucky	108,705	30	New Mexico	1,243		
31	Washington	107,834	31	Minnesota	1,172		
32	Iowa	82,627	32	Washington	1,146		
33	Massachusetts	81,396	33	Iowa	990		
34	Idaho	80,920	34	Kentucky	880		
35	New Mexico	79,261	35	Idaho	707		
36	Nebraska	74,917	36	South Dakota	648		
37	Connecticut	71,738	37	Nebraska	619		
38	Oregon	52,764	38	Oregon	571		
39	South Dakota	47,872	39	West Virginia	530		
40	West Virginia	40,925	40	Montana	431		
41	Montana	38,915	41	Utah	396		
42	North Dakota	33,487	42	North Dakota	390		
43	Alaska	27,976	43	Rhode Island	377		
44	Wyoming	25,270	44	Delaware	267		
45	Delaware	23,964	45	New Hampshire	256		
46	Rhode Island	23,882	46	Wyoming	239		
47	New Hampshire	20,065	47	Maine	194		
48	Maine	15,913	48	District of Columbia	121		
49	District of Columbia	6,435	49	Alaska	108		
50	Hawaii	5,503	50	Hawaii	67		
51	Vermont	2,708	51	Vermont	29		

Appendix Table A3. Percentage of COVID-19 Cases and Deaths Associated with Insurance Gaps from January 22, 2020, through February 1, 2021, by State, Ranked from Highest to Lowest Percentage

	Cases					Deaths				
Order	State	Total cases	Cases associated with coverage gaps	Percentage of total cases associated with coverage gaps	Order	State	Total deaths	Deaths associated with coverage gaps	Percentage of total deaths associated with coverage gaps	
1	Texas	2,412,627	1,565,912	65%	1	Texas	37,245	20,851	56%	
2	Oklahoma	390,731	228,994	59%	2	Oklahoma	3,564	1,713	48%	
3	Florida	1,723,769	998,892	58%	3	Florida	26,685	12,660	47%	
4	Georgia	879,748	502,402	57%	4	Georgia	13,811	6,506	47%	
5	Mississippi	275,706	147,728	54%	5	Mississippi	6,056	2,653	44%	
6	Alaska	54,213	27,976	52%	6	Alaska	262	108	41%	
7	Nevada	279,146	138,506	50%	7	Idaho	1,735	707	41%	
8	Idaho	163,165	80,920	50%	8	North Carolina	9,342	3,769	40%	
9	North Carolina	761,301	376,753	49%	9	Wyoming	596	239	40%	
10	Arizona	762,145	376,157	49%	10	Arizona	13,124	5,240	40%	
11	South Carolina	445,916	218,680	49%	11	Nevada	4,278	1,702	40%	
12	Wyoming	52,057	25,270	49%	12	South Carolina	7,283	2,883	40%	
13	Tennessee	687,751	323,183	47%	13	Tennessee	9,486	3,593	38%	
14	Alabama	460,860	214,683	47%	14	New Mexico	3,295	1,243	38%	
15	New Mexico	170,895	79,261	46%	15	Alabama	7,688	2,901	38%	
16	Missouri	439,067	196,043	45%	16	South Dakota	1,778	648	36%	
17	South Dakota	108,315	47,872	44%	17	Missouri	6,604	2,353	36%	
18	Virginia	507,640	212,898	42%	18	Montana	1,234	431	35%	
19	Kansas	279,008	116,786	42%	19	Utah	1,169	396	34%	
20	Utah	263,305	109,095	41%	20	Virginia	6,474	2,167	33%	
21	Montana	94,070	38,915	41%	21	Kansas	3,797	1,260	33%	
22	Maine	39,538	15,913	40%	22	Maine	595	194	33%	
23	Indiana	628,391	250,955	40%	23	Nebraska	1,912	619	32%	
24	Arkansas	293,581	117,080	40%	24	Indiana	9,613	3,048	32%	
25	Nebraska	189,564	74,917	40%	25	Arkansas	4,895	1,530	31%	
26	Louisiana	401,163	155,550	39%	26	Louisiana	8,912	2,716	30%	

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	Cases					Deaths				
Order	State	Total cases	Cases associated with coverage gaps	Percentage of total cases associated with coverage gaps	Order	State	Total deaths	Deaths associated with coverage gaps	Percentage of total deaths associated with coverage gaps	
27	Colorado	397,025	150,157	38%	27	New Jersey	21,513	6,402	30%	
28	New Jersey	699,093	261,198	37%	28	Colorado	5,641	1,663	29%	
29	California	3,342,647	1,242,293	37%	29	California	41,402	12,111	29%	
30	Oregon	143,373	52,764	37%	30	Oregon	1,958	571	29%	
31	Washington	311,899	107,834	35%	31	Illinois	19,259	5,302	28%	
32	Illinois	1,128,506	389,813	35%	32	North Dakota	1,422	390	27%	
33	North Dakota	97,680	33,487	34%	33	Washington	4,314	1,146	27%	
34	West Virginia	121,425	40,925	34%	34	Ohio	11,230	2,949	26%	
35	Ohio	899,079	299,111	33%	35	West Virginia	2,028	530	26%	
36	Maryland	355,636	111,401	31%	36	Maryland	7,107	1,731	24%	
37	New Hampshire	65,020	20,065	31%	37	New Hampshire	1,055	256	24%	
38	Delaware	78,312	23,964	31%	38	Delaware	1,101	267	24%	
39	Pennsylvania	849,966	254,591	30%	39	New York	43,474	10,379	24%	
40	Kentucky	364,498	108,705	30%	40	Kentucky	3,780	880	23%	
41	Wisconsin	592,921	172,594	29%	41	Pennsylvania	21,651	5,020	23%	
42	Michigan	586,831	170,798	29%	42	Wisconsin	6,436	1,483	23%	
43	Connecticut	253,122	71,738	28%	43	Michigan	15,377	3,479	23%	
44	New York	1,428,741	402,305	28%	44	Connecticut	7,111	1,544	22%	
45	Iowa	319,116	82,627	26%	45	Iowa	4,906	990	20%	
46	Minnesota	462,125	110,706	24%	46	Minnesota	6,202	1,172	19%	
47	Rhode Island	102,046	23,882	23%	47	Rhode Island	2,083	377	18%	
48	Vermont	12,074	2,708	22%	48	Vermont	175	29	17%	
49	Hawaii	25,870	5,503	21%	49	Hawaii	407	67	16%	
50	District of Columbia	37,008	6,435	17%	50	District of Columbia	916	121	13%	
51	Massachusetts	497,073	81,396	16%	51	Massachusetts	14,597	1,769	12%	

Sources and notes: See Appendix Table A1