

COVID-19 Statistical Review

Today's Analysis: Data from December 09, 2020

On Wednesday, cases and deaths were up by the same amount as on Tuesday, an encouraging sign – no acceleration. However, there are two anomalies in the data. Pennsylvania on 2 Nov. increased its reported test count by 2 million (Exhibit 5). That radical change has distorted the corrected case.. It didn't fall by as much on 2 December, nor has it increased by as much since. Also, Colorado more than doubled its daily deaths record Wednesday (Exhibit 5 bottom). That also is highly unlikely, probably understating deaths the last week, but significantly overstating them Wednesday. We will know more tomorrow.

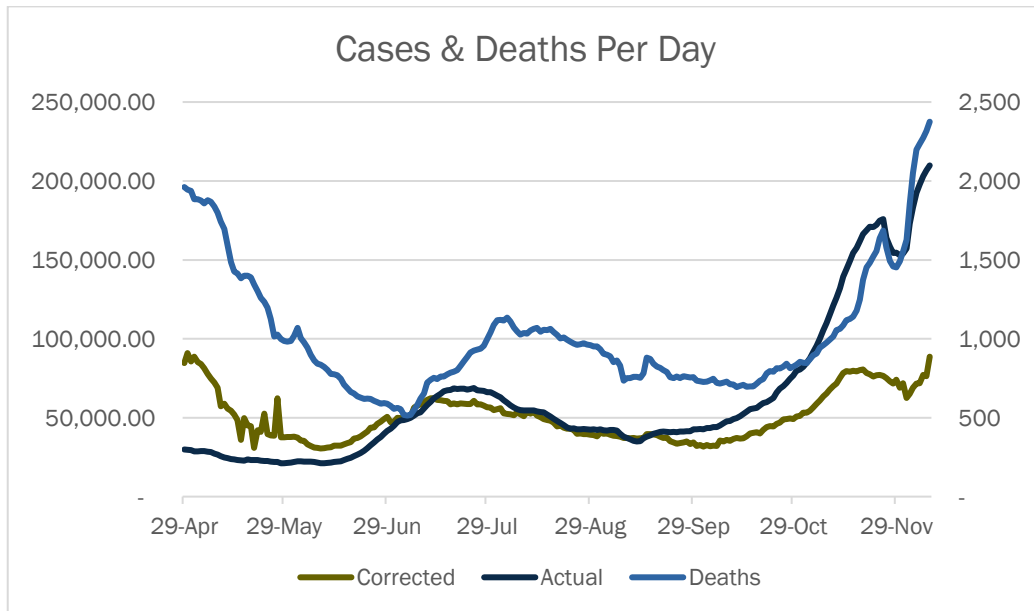
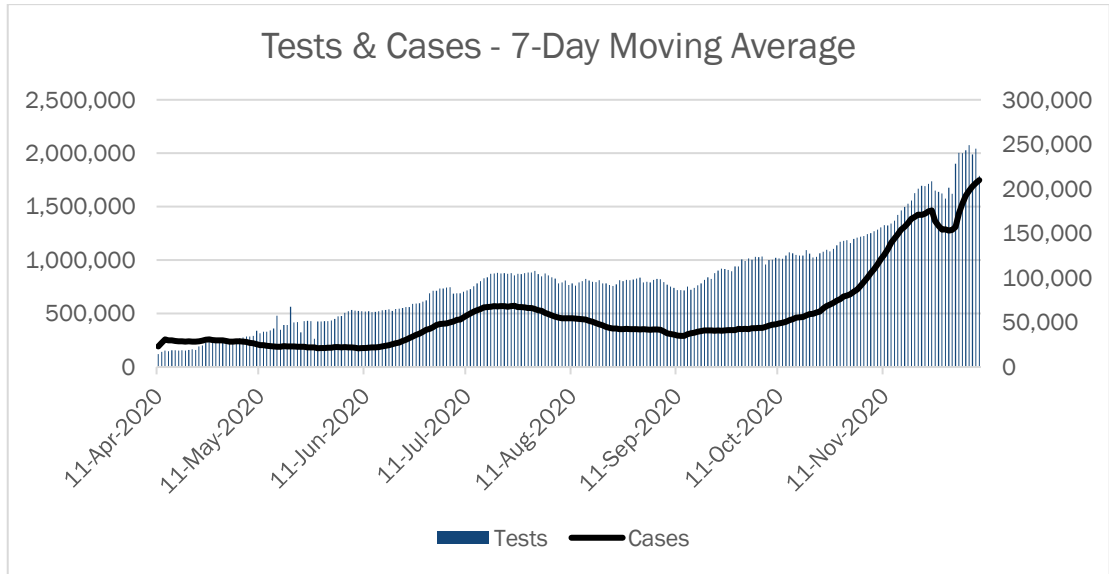
A perspective death statistics: A death is labeled 'Covid' if evidence of the virus is found in, or is suspected to be in, a person's system at the time of death. Whatever the degree of Covid causation, that death is recorded as a Covid death. Consider that currently, about 10% of people tested are found to have such evidence in their systems. Since most people being tested now are symptom-free, one can reasonably assume that the tests are a usable sample of the population and that 10% of us harbor some evidence of the virus.

Now let's apply that insight to the peak of the fall-winter flu season when about 60,000 Americans die per week from all causes. It follows that, if those 60,000 unfortunates are typical, 10% will have some evidence of the virus in them. That translates to 6,000 'Covid' deaths per week or 857 per day. That is the number before one adds in any special effects for the Covid or any other factor. We also know from the statistics that 50% or more of people with the Covid virus have no symptoms, and that another 30% have mild symptoms, like my neighbor next door just coming out of his quarantine. That fact suggests that well over half of those 857 'Covid' fatalities had little or no Covid contribution to their deaths. How can a person with no Covid symptoms die from it? This is not to say that there is no surge in Covid deaths. The current daily average is 2,375, well above that 857 'automatic Covid deaths'. I am merely reminding us that the reported Covid death numbers are likely to over-estimate the true Covid death toll.

Another way to look at the death stats is to observe 'excess' deaths, those over the normal deaths for any week of the year, as with the 60,000 normal deaths cited above. The latest estimate of excess deaths for this week is about 2,440, quite close to the 2,375 Covid average quoted above. Does that close fit confirm the 2,375 or suggest that it should be slightly higher? I think not for this reason. Research has identified significant negative effects from the social and economic hardships associated with the isolation resulting from official and private Covid fears. Those results include deaths from stress, isolation, and forgone medical procedures. The most aggressive of those studies postulates 'excess' deaths from the cultural/governmental reactions to the virus to be larger than the death count from the virus itself. While the debate over such research will go on for years, those findings tell us that some significant proportion of the excess deaths reported in 2020 will be from those societal reactions, not the bug itself. Again the Covid deaths number appear overstated. It follows that limiting such societal reactions may have as big a contribution to reducing excess deaths as the long-awaited vaccine. Indeed our governors are showing, at least, some awareness of this option in their far more limited lockdowns orders regarding this surge in cases, even though this surge is worse in many respects than the original surge with its strict lockdowns. Maybe another week or two of bad news will overcome such rationality, but so far, so good.

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Exhibit 1



Source: Worldometer.com, [Transport Futures](http://TransportFutures.net)

Exhibit 2.

Country	Status	Cases	Deaths	Death Rate	Pop per case	Pop per death	Daly Max Cases	New Cases Latest Day	Daily Max Deaths	Latest Day	Change In New Case Count Latest Day	Change In New Case Count From Week Before	Change in New Death Count Latest Day	Change in New Death Count From Week Ago
China	Recovery	86,661	4,634	5.3%	16,667	333,333	127	15	9	-	3	-	0	0
S. Korea	Recovery	39,432	556	1.4%	1,300	90,909	585	686	9	4	101	175	1	4
Italy	Falling	1,770,149	61,739	3.5%	34	978	40,902	12,756	919	499	(2,086)	(7,953)	-135	-185
Iran	Rising	1,072,620	51,212	4.8%	79	1,650	13,843	10,223	480	295	(800)	(3,398)	-28	-67
Germany	Rising	1,242,253	20,704	1.7%	68	4,049	23,676	23,928	622	543	5,609	3,757	-79	90
France	Falling	2,324,216	56,648	2.4%	28	1,153	86,852	14,595	1,495	296	882	531	-195	-14
UK	Falling	1,766,819	62,566	3.5%	39	1,088	33,470	16,578	980	533	4,296	408	-83	-115
Norway	Falling	39,525	361	0.9%	138	15,152	717	362	16	-	(98)	(16)	-2	-17
Netherlands	Rising	576,965	9,841	1.7%	30	1,742	11,119	6,528	234	66	382	1,607	-5	0
Sweden	Rising	304,793	7,296	2.4%	33	1,389	3,180	-	185	19	(11,759)	7,061	-7	-4
USA	Rising	15,820,042	296,698	1.9%	21	1,119	101,461	225,441	2,913	3,243	17,320	22,690	330	428
Spain	Falling	1,725,473	47,019	2.7%	27	995	25,595	4,886	961	186	4,886	(4,445)	186	-87
Switzerland	Falling	363,654	5,710	1.6%	24	1,520	21,926	5,086	167	117	824	300	19	12
Belgium	Falling	594,572	17,507	2.9%	20	663	23,921	1,957	496	121	1,098	90	55	-20
Denmark	Falling	97,357	904	0.9%	60	6,410	1,427	2,558	22	3	408	972	-4	-3
Austria	Falling	311,002	4,056	1.3%	29	2,227	9,586	2,932	105	54	555	(1,040)	-51	-67
Canada	Falling	435,330	12,983	3.0%	87	2,915	7,861	6,295	222	116	314	(12)	26	2
Ireland	Falling	74,900	2,102	2.8%	-	2,358	1,515	218	220	5	4	(50)	4	0
Portugal	Falling	332,073	5,192	1.6%	31	1,961	7,497	4,097	81	70	1,192	713	-11	2
Australia	Recovery	27,993	908	3.2%	916	28,571	651	6	59	-	(9)	(5)	0	0
Brazil	Rising	6,730,118	179,032	2.7%	32	1,190	47,850	54,203	1,554	848	6,353	6,079	52	179
Malaysia	Recovery	76,265	393	0.5%	427	83,333	2,188	959	8	5	(53)	108	1	3
Mexico	Falling	1,193,255	110,874	9.3%	109	1,168	9,556	11,006	1,092	800	4,607	2,187	443	-25
Singapore	Recovery	58,291	29	0.0%	101	200,000	1,426	6	2	-	(6)	4	0	0
North America	Rising	17,448,627	420,555	2.4%	29	1,187	220,501	242,742	3,360	4,159	22,241	24,865	799	405
Western Europe	Falling	11,523,751	301,645	2.6%	35	1,334	208,662	96,481	4,450	2,512	6,193	1,935	(308)	(408)
Other	Falling	40,241,723	852,621	2.1%	171	8,060	301,757	304,265	10,324	5,589	30,666	(15,313)	55	(48)
World	Rising	69,214,101	1,574,821	2.3%	113	4,950	659,511	643,488	12,260	#####	59,100	11,487	546	(51)

Source: Worldometer.com, Transport Futures

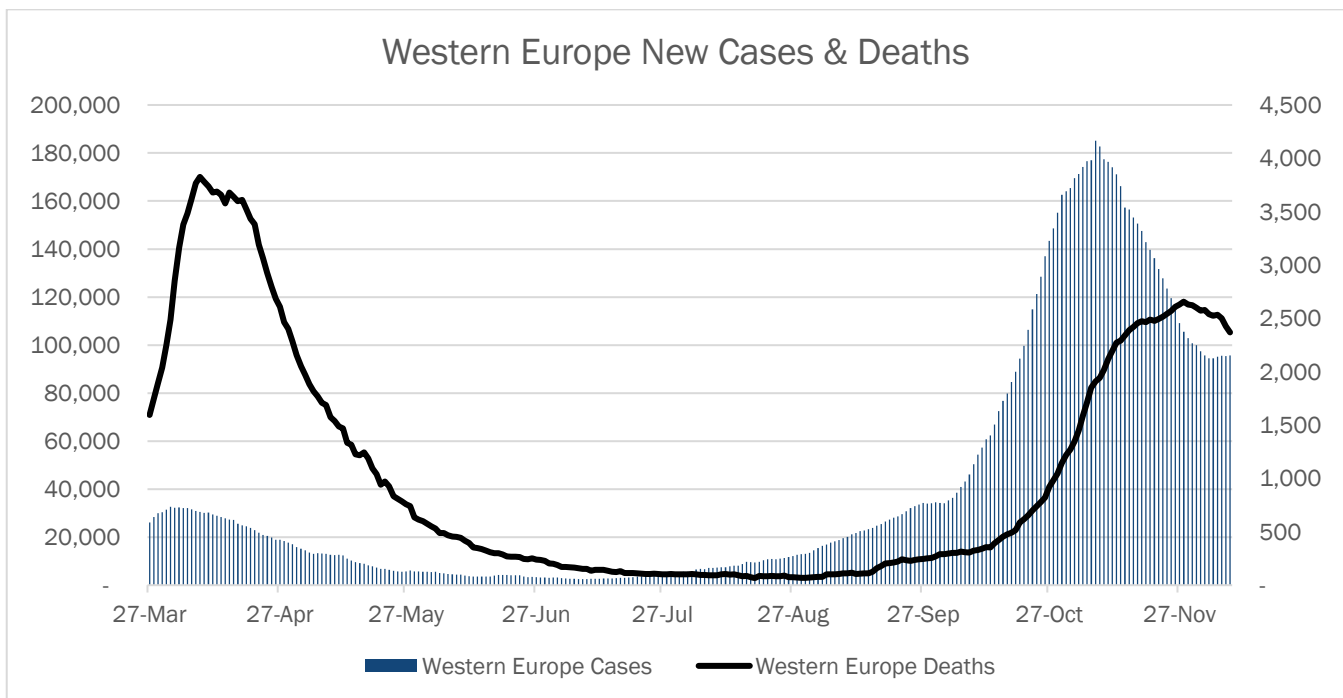
Exhibit 3..

	Hot Spot Group	Total Cases	Max New Cases/Day Since 21 April	New Cases Latest Day	Change in New Cases/Day	Change In Cases/Day Since Week Ago	Change In Cases/Day Since Max	Total Deaths	Max New Deaths/Day Since 21 April	New Deaths Latest Day	Change In New Deaths/Day	Change In Deaths/Day Since Week Ago	Change In Deaths/Day Since Max	Cases/M	Deaths/ Million	Population
USA Total	All	15,820,042	86,293	225,441	17,320	22,014	161%	296,698	2,804	3,243	330	412	16%	47,794	896	331,004,361
Hot-Spot Group 1	1	2,641,762	45,315	42,424	3,464	4,547	-6%	95,870	1,830	652	113	131	-64%	53,867	1,331	2,096,906
Hot-Spot Group 2	2	6,364,362	90,285	90,674	4,026	17,369	0%	102,563	1,063	932	115	121	-12%	20,932	793	4,218,066
Hot-Spot Group 3	3	3,744,708	63,150	46,942	(3,473)	(2,257)	-26%	59,818	965	744	(221)	(40)	-23%	58,537	817	3,017,747
Hot-Spot Group 4	4	3,069,210	52,356	45,401	13,303	2,355	-13%	38,447	915	915	323	200	0%	65,024	610	1,787,063
New York	1	772,399	10,868	10,604	882	1,221	-2%	35,235	764	57	(34)	(17)	-93%	39,705	1,811	19,453,968
New Jersey	1	392,136	7,126	5,469	215	754	-23%	17,669	458	111	24	54	-76%	44,149	1,989	8,882,395
Massachusetts	1	269,412	6,675	5,965	1,843	938	-11%	11,166	252	90	49	44	-64%	39,088	1,620	6,892,405
Pennsylvania	1	451,154	12,089	8,626	(1,492)	(28)	-29%	11,878	294	256	82	69	-13%	35,241	928	12,801,381
Louisiana	1	258,914	5,326	4,352	1,926	757	-18%	6,684	126	32	(13)	(14)	-75%	55,695	1,438	4,648,783
Connecticut	1	140,548	8,129	2,290	(124)	(382)	-72%	5,285	125	43	25	(8)	-66%	39,421	1,482	3,565,242
Maryland	1	222,653	3,792	2,692	60	472	-29%	4,962	77	46	(5)	4	-40%	36,828	821	6,045,713
Rhode Island	1	68,299	1,717	1,232	(17)	133	-28%	1,484	27	14	(8)	3	-48%	64,472	1,401	1,059,367
District Of Columbia	1	23,854	392	265	(5)	108	-32%	704	19	3	3	(2)	-84%	33,800	998	705,739
Delaware	1	42,393	942	929	176	574	-1%	803	69	-	(10)	(2)	-100%	43,535	825	973,792
California	2	1,454,614	31,845	32,161	6,161	13,897	1%	20,462	212	201	(11)	81	-5%	36,814	518	39,511,060
Florida	2	1,083,362	15,300	9,592	1,607	(402)	-37%	19,465	276	75	(45)	(20)	-73%	50,441	906	21,477,832
Texas	2	1,396,552	19,758	15,192	541	(4,003)	-23%	23,821	322	287	88	75	-11%	48,164	822	28,995,746
Georgia	2	517,779	6,376	5,512	(65)	(222)	-14%	9,921	122	48	26	(4)	-61%	48,767	934	10,617,138
Tennessee	2	422,962	8,213	8,213	2,194	4,114	0%	5,171	100	62	(38)	12	-38%	61,935	757	6,829,015
North Carolina	2	410,527	6,459	6,495	1,825	2,296	1%	5,661	82	56	11	(26)	-32%	39,142	540	10,487,897
Alabama	2	280,187	4,436	3,522	(914)	(406)	-21%	3,985	81	43	(7)	(30)	-47%	57,144	813	4,903,192
Arizona	2	382,601	6,799	4,444	(7,870)	604	-35%	7,081	172	108	85	56	-37%	52,564	973	7,278,621
Nevada	2	176,334	3,194	3,053	359	924	-4%	2,384	48	25	(15)	(10)	-48%	57,248	774	3,080,195
South Carolina	2	239,444	3,222	2,490	188	567	-23%	4,612	80	27	21	(13)	-66%	46,506	896	5,148,707

Source: Worldometer.com, Transport Futures

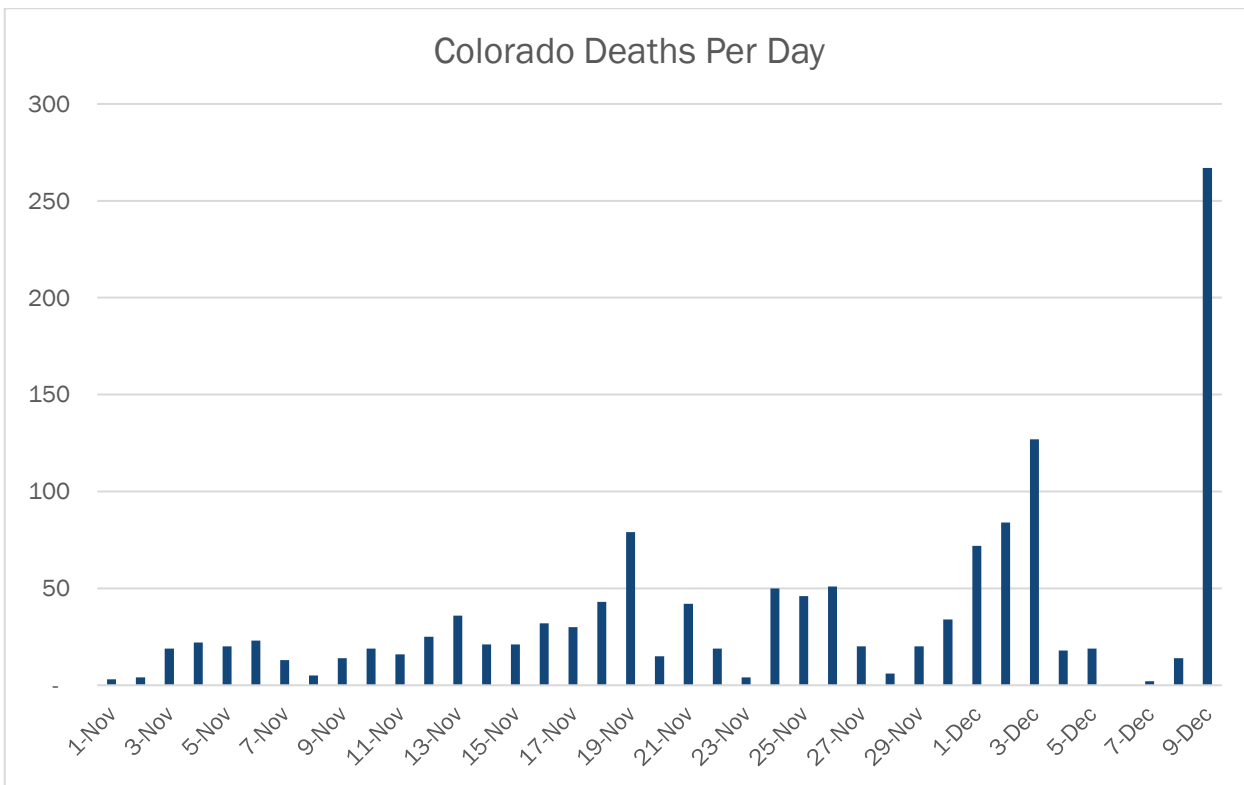
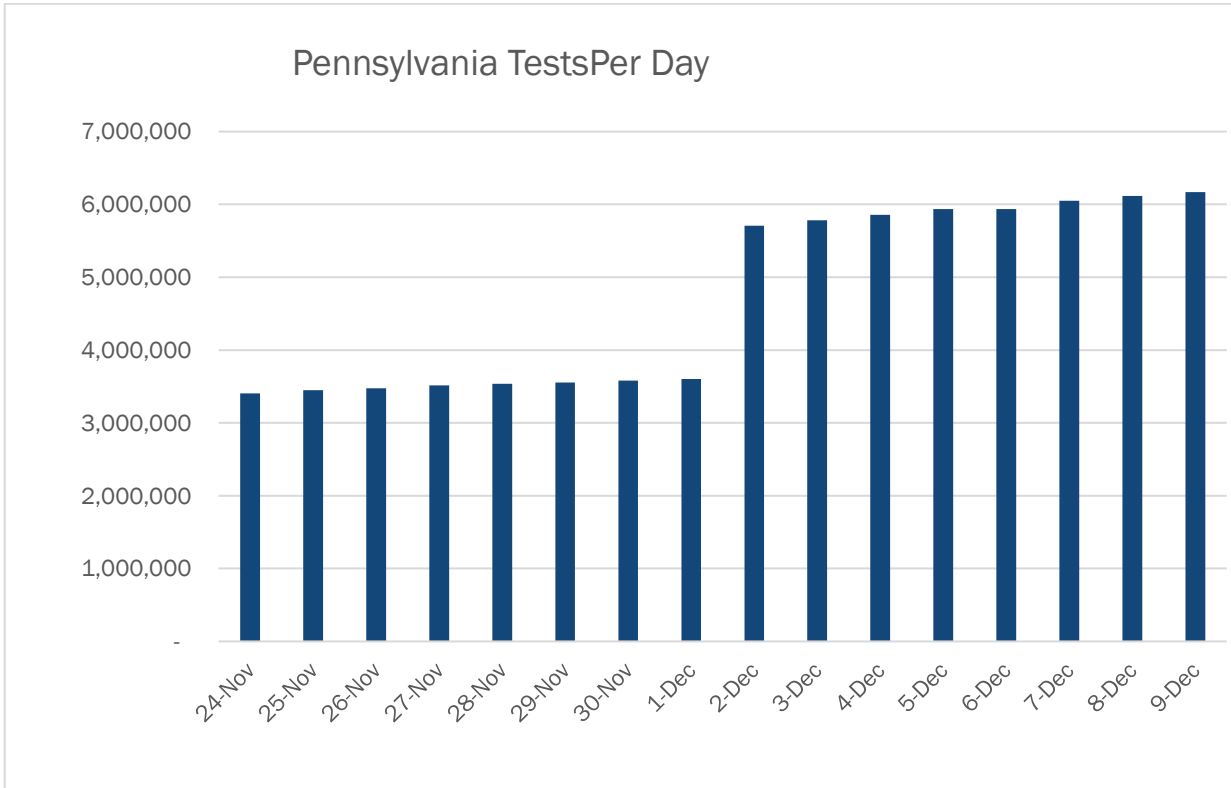
Exhibit 4.

	Hot Spot Group	Total Cases	Max New Cases/Day Since 21 April	New Cases Latest Day	Change in New Cases/Day	Change In Cases/Day Since Week Ago	Change In Cases/Day Since Max	Total Deaths	Max New Deaths/Day Since 21 April	New Deaths Latest Day	Change In New Deaths/Day	Change In Deaths/Day Since Week Ago	Change In Deaths/Day Since Max	Cases/M	Deaths/ Million	Population
Ohio	3	520,112	12,720	10,094	(2,626)	2,259	-21%	7,189	138	80	(7)	(43)	-42%	44,495	615	11,689,615
Washington	3	196,902	6,615	2,532	(802)	(283)	-62%	3,040	53	43	14	(11)	-19%	25,857	399	7,615,063
Mississippi	3	170,672	2,746	2,746	1,014	289	0%	4,041	58	24	(32)	9	-59%	57,347	1,358	2,976,189
Illinois	3	812,430	15,415	8,256	346	(1,501)	-46%	14,613	235	229	61	(37)	-3%	64,113	1,153	12,671,873
Michigan	3	448,418	10,140	5,342	(1,334)	(2,091)	-47%	10,706	232	81	(122)	(2)	-65%	44,901	1,072	9,987,209
Missouri	3	351,613	6,539	3,157	(1,719)	200	-52%	4,759	132	63	(69)	(7)	-52%	57,290	775	6,137,553
Wisconsin	3	422,065	7,989	3,619	(495)	(158)	-55%	3,887	92	81	13	(1)	-12%	72,489	668	5,822,701
Utah	3	222,545	4,588	2,574	241	(1,430)	-44%	995	26	23	-	7	-12%	69,416	310	3,205,934
Arkansas	3	176,652	2,827	2,327	44	115	-18%	2,786	40	34	(5)	24	-15%	58,537	923	3,017,747
Other	3	423,299	8,980	6,295	1,858	343	-30%	7,802	186	86	(74)	21	-54%	47,794	896	8,241,190
Indiana	4	398,417	8,460	5,754	369	(843)	-32%	6,506	126	96	(30)	(13)	-24%	59,181	966	6,732,546
Colorado	4	272,346	6,439	3,757	(214)	(105)	-42%	3,639	267	267	253	183	0%	47,293	632	5,758,981
Virginia	4	267,128	4,398	4,398	538	1,981	0%	4,281	52	21	(31)	1	-60%	31,296	502	8,535,562
Iowa	4	249,313	5,451	2,486	967	(872)	-54%	3,021	102	102	(94)	84	0%	79,020	958	3,155,131
Kentucky	4	209,136	4,127	3,468	392	(129)	-16%	2,118	37	16	(4)	(21)	-57%	46,811	474	4,467,477
Oklahoma	4	222,993	4,827	2,307	10	(552)	-52%	1,945	26	23	12	(31)	-12%	56,354	492	3,956,946
Minnesota	4	363,719	8,946	4,516	1,465	(649)	-50%	4,168	101	82	60	5	-19%	64,493	739	5,639,743
Kansas	4	182,049	7,002	5,516	4,980	1,201	-21%	1,941	119	85	85	(34)	-29%	62,489	666	2,913,351
New Mexico	4	112,950	3,665	1,748	1,748	204	-52%	1,823	44	34	34	(6)	-23%	53,867	869	2,096,906
Oregon	4	88,287	1,806	1,205	(89)	(301)	-33%	1,110	30	30	(5)	13	0%	20,932	263	4,218,066
Idaho	4	116,203	2,298	2,298	286	869	0%	1,103	35	29	10	(2)	-17%	65,024	617	1,787,063
South Dakota	4	88,023	2,020	985	447	(306)	-51%	1,147	54	36	35	(11)	-33%	99,499	1,297	884,627
Nebraska	4	142,603	3,440	-	-	-	-100%	1,277	31	-	-	-	-100%	73,719	660	1,934,391
New Hampshire	4	27,592	1,045	969	162	403	-7%	570	19	4	4	(5)	-79%	20,293	419	1,359,843
West Virginia	4	58,462	1,425	1,402	470	315	-2%	901	31	31	2	11	0%	32,621	503	1,792,229
Maine	4	14,454	2,456	405	131	173	-84%	246	20	7	(5)	3	-65%	10,753	183	1,344,330
Vermont	4	5,285	181	105	5	4	-42%	86	4	1	(3)	(1)	-75%	8,470	138	624,007
North Dakota	4	86,149	2,270	2,221	1,635	1,741	-2%	1,080	37	16	(14)	4	-57%	113,047	1,417	762,045
Hawaii	4	18,741	354	80	27	4	-77%	266	11	4	4	4	-64%	13,236	188	1,415,828
Wyoming	4	37,885	1,260	410	(80)	(322)	-67%	299	27	19	19	19	-30%	65,459	517	578,769
Montana	4	70,133	1,642	787	32	(348)	-52%	771	37	8	(13)	(7)	-78%	65,620	721	1,068,733
Alaska	4	37,342	1,453	584	22	(113)	-60%	149	13	4	4	4	-69%	51,045	204	731,588



Source: Worldometer.com, Transport Futures

Exhibit 5.



Source: Worldometer.com, [Transport Futures](http://TransportFutures.net)

