

# COVID-19 Statistical Review

*Today's Analysis: Data from September 28, 2020*

*On Monday, cases were up WOW and deaths down. Tests also set a new high, helping explain the rise in positive tests (i.e. 'cases').*

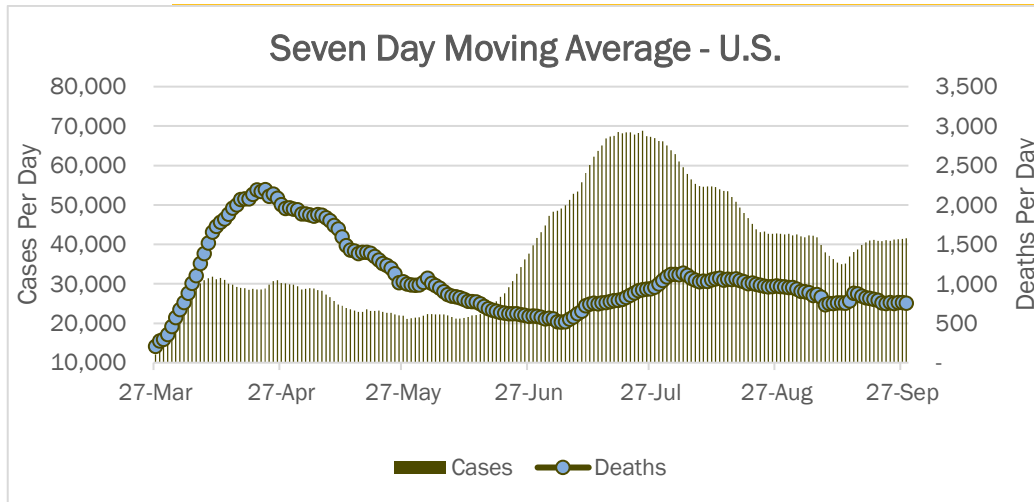
*Note the new chart in Exhibit 3 showing the relationship between 'case' reports and 'serious illness' reports. Unlike the case reports, which merely tell us how many people test positive, the serious illness reports tell us about serious health effects, something to be concerned about. The chart shows that we are at the same level of serious health effects that we had in early April when the contagion was largely limited to a few hard-hit states in the Northeast. Since then, the volume of daily cases has increased almost four times with only a modest uptick in serious health effect that has since receded. Such evidence is why it is wise to dismiss the media hysteria over increased 'cases'. Those increases have no relationship to increased health effects. Two days ago, my golf buddy reported that a coach and player from his grandson's baseball team had tested positive. At the current rates for the entire population, those two people have a .55% chance of becoming really sick, obviously less than that given their youth and overall health.*

*This anecdote illustrates how the world has changed – for the worse, I think. In normal times neither infection would have been discovered unless the person was unlucky enough to fall in that .55%. Even then, the patient would have been treated without restrictions on the people around them. Perhaps some others would have gotten sick. We all know the flu gets around and accept that risk as we accept the chance of being injured in a car crash. I hit a deer a month ago and easily could have been injured in the incident. Still, I am driving as I always have.*

*What to make of the severity of this particular flu season? It is probably worse than normal. For the already ill, this season is a clear threat. However, such people are always at risk from flu attacks. For the rest of us, the chance of getting really sick has perhaps doubled from .0275% to .055%, still of low probability. In the same way, the chance of us being injured in a car crash increases when it is raining. Do we stop driving? I usually slow down some, but I take the risk, knowing that the odds of a crash are still low. To extend this analogy, we are treating the COVID like driving after a severe ice storm where people limit their driving to essentials. Early on, there were fears of such a storm, but after several weeks the statistics confirmed heavy rain instead. Yet our institutions and media continue to forecast ice on the highways. Or maybe they are like the old lady up the street who no longer drives at night or in the rain. Except, they insist that all of us adopt the same risk aversion of that frail senior citizen.*

Noel Perry, Principal  
717-673-2998  
[transportguy@earthlink.net](mailto:transportguy@earthlink.net)

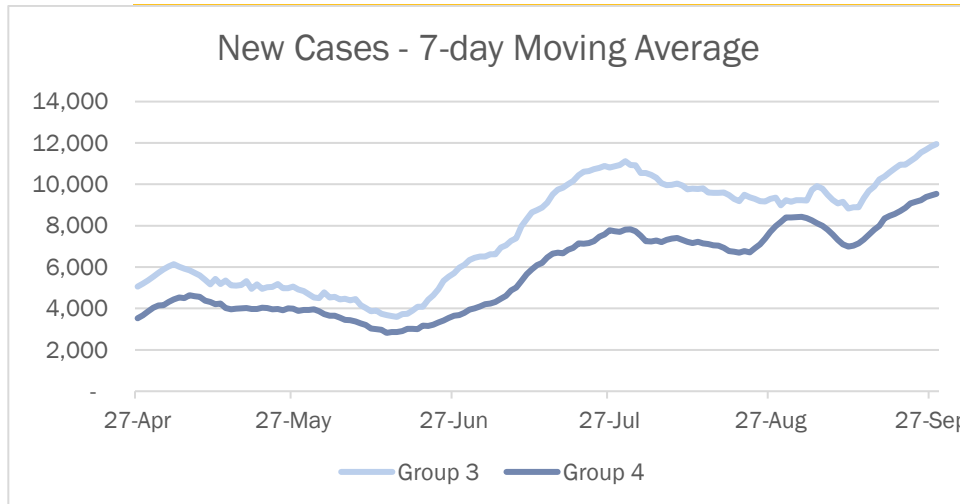
**Exhibit 1**



Country	Status	Cases	Deaths	Death Rate	Pop per case	Pop per death	Daily Max Cases	New Cases Latest Day	Daily Max Deaths	New 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	85,372	4,634	5.4%	16,949	333,333	6,000	21	150	-	7	9	0	0
S. Korea	Recovery	23,661	406	1.7%	2,169	125,000	851	50	9	5	(45)	(20)	3	3
Italy	Recovery	311,364	35,851	11.5%	194	1,686	6,557	1,494	919	16	(272)	144	-1	-1
Iran	Rising	449,960	25,779	5.7%	187	3,268	3,521	3,512	235	190	150	171	-5	13
Germany	Recovery	288,618	9,545	3.3%	291	8,772	6,933	2,280	333	11	967	206	9	0
France	Recovery?	542,639	31,808	5.9%	120	2,053	14,412	4,070	1,809	81	(7,053)	(1,228)	54	28
UK	Recovery	439,013	42,001	9.6%	155	1,618	8,681	4,044	980	13	(1,649)	(324)	-4	2
Norway	Recovery	13,788	274	2.0%	394	20,000	399	90	16	4	19	(18)	4	4
Netherlands	Recovery?	114,540	6,380	5.6%	150	2,688	2,713	2,914	234	6	(81)	697	-2	4
Sweden	Recovery?	90,923	5,880	6.5%	111	1,721	2,214	-	185	-	-	-	0	0
USA	Falling	7,361,611	209,808	2.9%	45	1,580	61,690	37,418	2,804	355	3,636	1,046	72	-33
Spain	Recovery	748,266	31,411	4.2%	62	1,488	11,291	2,425	961	59	2,425	(532)	59	3
Switzerland	Recovery	52,646	2,065	3.9%	165	4,202	1,321	782	75	1	782	(313)	1	-4
Belgium	Recovery?	114,179	9,980	8.7%	102	1,163	2,454	1,376	496	6	(451)	(171)	1	2
Denmark	Recovery?	27,072	649	2.4%	214	8,929	453	435	22	-	11	17	-1	-2
Austria	Recovery	43,432	790	1.8%	208	11,364	1,321	556	30	3	(106)	(7)	3	2
Canada	Recovery	155,301	9,278	6.0%	244	4,082	1,920	2,176	222	10	722	410	4	-1
Ireland	Recovery	35,377	1,802	5.1%	-	2,747	1,515	387	220	-	(43)	199	0	0
Portugal	Recovery	74,029	1,957	2.6%	138	5,208	1,516	425	37	4	(240)	(198)	-5	-4
Australia	Recovery	27,044	875	3.2%	945	29,412	534	4	41	3	(20)	(10)	1	1
Brazil	Recovery?	4,748,327	142,161	3.0%	45	1,497	70,869	16,018	1,554	385	1,824	564	50	-70
Malaysia	Recovery	11,034	134	1.2%	2,941	250,000	235	115	8	-	(35)	58	-1	0
Mexico	Falling	730,317	76,430	10.5%	177	1,692	8,458	3,886	60	187	(1,637)	344	-212	-48
Singapore	Recovery	57,715	27	0.0%	102	200,000	1,426	15	2	-	-	(15)	0	0
North America	Inflection	8,247,229	295,516	3.6%	60	1,687	86,966	43,480	2,974	552	2,671	1,800	(129)	(82)
Western Europe	Recovery	2,895,886	180,393	6.2%	139	2,230	35,453	21,278	4,450	204	(5,691)	(1,528)	118	34
Other	Falling	22,399,762	530,212	2.4%	307	12,963	220,687	164,952	3,155	3,073	(19,185)	(1,415)	(33)	(256)
World	Falling	33,542,877	1,006,121	3.0%	232	7,746	306,439	229,710	7,960	3,829	(22,205)	(1,143)	(44)	(304)

Source: Worldometer.com, Transport Futures

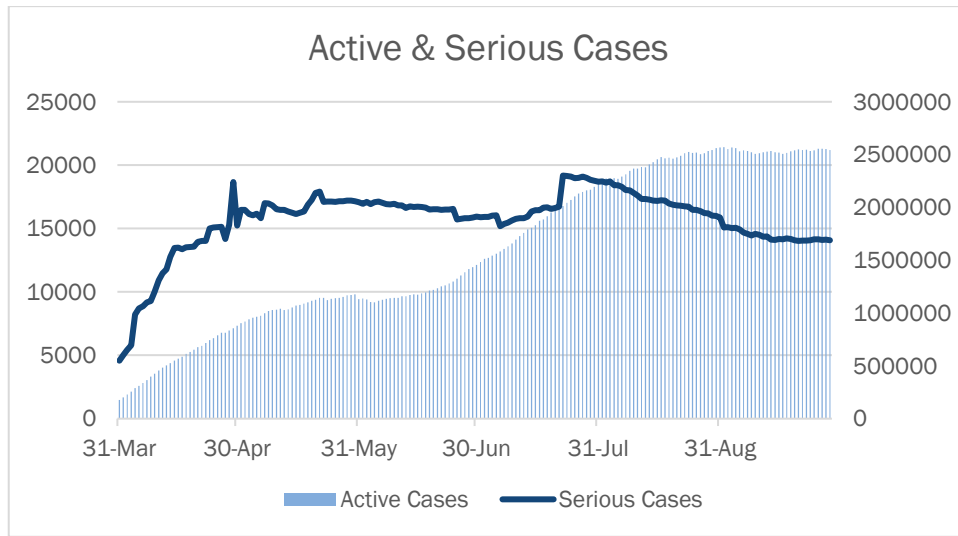
**Exhibit 2**



	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	7,361,611	78,009	37,418	3,636	1,026	-52%	209,808	2,804	355	79	(33)	-87%	22,240	634	331,004,361
Hot-Spot Group 1	1	1,397,748	21,922	4,691	241	861	-79%	83,347	1,830	54	(2)	(14)	-97%	20,861	1,122	67,002,431
Hot-Spot Group 2	2	3,605,124	50,036	12,156	66	(1,058)	-76%	71,448	1,063	149	41	(11)	-86%	27,388	538	131,632,800
Hot-Spot Group 3	3	1,369,249	15,444	12,041	2,978	760	-22%	35,819	477	93	27	(4)	-81%	20,418	486	67,059,786
Rest of States	4	989,490	11,535	8,530	351	483	-26%	19,194	272	59	13	(4)	-78%	13,909	250	71,140,342
New York	1	490,860	10,868	996	102	264	-91%	33,229	764	14	5	6	-98%	25,232	1,708	19,453,968
New Jersey	1	207,977	4,160	727	88	279	-83%	16,225	458	4	4	3	-99%	23,415	1,827	8,882,395
Massachusetts	1	131,072	4,946	430	(162)	174	-91%	9,415	252	11	(2)	4	-96%	19,017	1,366	6,892,405
Pennsylvania	1	161,644	3,096	875	43	69	-72%	8,189	294	1	(2)	(19)	-100%	12,626	640	12,801,381
Louisiana	1	165,091	3,840	240	(683)	(3)	-94%	5,480	126	15	(6)	6	-88%	35,513	1,179	4,648,783
Connecticut	1	57,147	2,109	560	560	63	-73%	4,503	125	2	2	(1)	-98%	16,029	1,263	3,565,242
Maryland	1	123,880	1,730	477	46	65	-72%	3,938	77	3	(7)	(1)	-96%	20,491	651	6,045,713
Rhode Island	1	24,424	443	243	243	(69)	-45%	1,110	27	3	3	(6)	-89%	23,055	1,048	1,059,367
District Of Columbia	1	15,264	335	14	(21)	(9)	-96%	624	19	-	-	(1)	-100%	21,628	884	705,739
Delaware	1	20,389	458	129	25	28	-72%	634	69	1	1	(5)	-99%	20,938	651	973,792
California	2	813,257	12,137	3,166	653	(1,072)	-74%	15,641	197	34	13	(19)	-83%	20,582	396	39,511,060
Florida	2	701,302	15,300	738	(1,144)	(947)	-95%	14,043	276	10	-	(11)	-96%	32,653	654	21,477,832
Texas	2	777,165	12,235	4,085	2,724	1,372	-67%	15,923	322	62	27	14	-81%	26,803	549	28,995,746
Georgia	2	315,281	4,813	596	(216)	(588)	-88%	6,961	122	15	(17)	13	-88%	29,695	656	10,617,138
Tennessee	2	193,732	3,140	737	(1,367)	(158)	-77%	2,389	42	12	9	(3)	-71%	28,368	350	6,829,015
North Carolina	2	208,248	2,588	868	(422)	68	-66%	3,445	63	4	3	-	-94%	19,856	328	10,487,897
Alabama	2	152,983	2,452	662	(68)	(156)	-73%	2,501	47	-	-	(2)	-100%	31,201	510	4,903,192
Arizona	2	217,510	4,877	273	(138)	40	-94%	5,623	172	1	1	(1)	-99%	29,883	773	7,278,621
Nevada	2	79,191	1,447	463	90	231	-68%	1,585	38	-	(3)	-	-100%	25,710	515	3,080,195
South Carolina	2	146,455	2,374	568	(46)	152	-76%	3,337	80	11	8	(2)	-86%	28,445	648	5,148,707

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
Ohio	3	152,022	1,720	934	(23)	133	-46%	4,768	138	4	(7)	(2)	-97%	13,005	408	11,689,615
Washington	3	89,429	1,209	800	507	69	-34%	2,103	32	3	3	(15)	-91%	11,744	276	7,615,063
Mississippi	3	97,049	1,775	190	8	(2)	-89%	2,921	58	2	(6)	2	-97%	32,609	981	2,976,189
Illinois	3	292,128	5,594	1,709	105	232	-69%	8,858	191	13	-	6	-93%	23,053	699	12,671,873
Michigan	3	135,702	1,426	1,329	1,329	(246)	-7%	7,051	232	7	7	(5)	-97%	13,588	706	9,987,209
Missouri	3	127,452	2,233	924	(275)	(590)	-59%	2,178	39	14	13	(12)	-64%	20,766	355	6,137,553
Wisconsin	3	117,588	2,504	1,726	(491)	455	-31%	1,283	20	2	2	-	-90%	20,196	220	5,822,701
Utah	3	71,442	1,411	827	(241)	205	-41%	453	10	-	(5)	(1)	-100%	22,284	141	3,205,934
Arkansas	3	82,049	1,107	807	320	166	-27%	1,329	23	21	(2)	5	-9%	27,188	440	3,017,747
Other	3	204,388	4,588	2,795	1,739	338	-39%	4,875	186	27	22	18	-85%	22,240	634	8,241,190
Indiana	4	118,322	1,660	872	(29)	350	-47%	3,591	119	11	8	5	-91%	17,575	533	6,732,546
Colorado	4	69,490	994	411	(158)	(131)	-59%	2,044	122	3	2	(1)	-98%	12,067	355	5,758,981
Virginia	4	146,593	2,015	449	(287)	(178)	-78%	3,172	45	13	(2)	7	-71%	17,174	372	8,535,562
Iowa	4	87,001	2,574	461	(492)	(130)	-82%	1,321	21	6	3	(4)	-71%	27,575	419	3,155,131
Kentucky	4	66,939	1,152	448	(7)	73	-61%	1,162	17	5	2	4	-71%	14,983	260	4,467,477
Oklahoma	4	85,194	1,714	861	38	(240)	-50%	1,007	21	1	(1)	(1)	-95%	21,530	254	3,956,946
Minnesota	4	97,638	1,177	904	(171)	(21)	-23%	2,067	39	7	3	3	-82%	17,313	367	5,639,743
Kansas	4	59,380	1,410	1,571	1,571	161	11%	640	26	1	1	(3)	-96%	20,382	220	2,913,351
New Mexico	4	28,985	460	141	(11)	37	-69%	873	12	3	3	1	-75%	13,823	416	2,096,906
Oregon	4	32,994	449	174	(65)	(20)	-61%	547	14	-	(1)	(3)	-100%	7,823	130	4,218,066
Idaho	4	40,923	727	422	217	12	-42%	460	14	-	-	(4)	-100%	22,900	257	1,787,063
South Dakota	4	21,738	623	197	(211)	24	-68%	218	8	-	-	-	-100%	24,572	246	884,627
Nebraska	4	44,578	641	515	48	210	-20%	472	21	2	1	(8)	-90%	23,045	244	1,934,391
New Hampshire	4	8,208	164	36	(15)	31	-78%	439	19	-	-	-	-100%	6,037	323	1,359,843
West Virginia	4	15,512	262	164	(26)	47	-37%	337	11	3	1	1	-73%	8,656	188	1,792,229
Maine	4	5,300	76	12	(16)	(15)	-84%	140	5	-	-	(1)	-100%	3,943	104	1,344,330
Vermont	4	1,745	17	3	-	(1)	-82%	58	3	-	-	-	-100%	2,797	93	624,007
North Dakota	4	20,983	507	259	(85)	(27)	-49%	234	9	3	(1)	2	-67%	27,535	307	762,045
Hawaii	4	12,203	354	87	(11)	31	-75%	132	7	-	(1)	-	-100%	8,619	93	1,415,828
Wyoming	4	5,754	136	121	(47)	48	-11%	50	4	-	-	-	-100%	9,942	86	578,769
Montana	4	12,413	343	306	106	176	-11%	174	10	1	(1)	(2)	-90%	11,614	163	1,068,733
Alaska	4	7,597	125	116	2	46	-7%	56	5	-	(4)	-	-100%	10,385	77	731,588