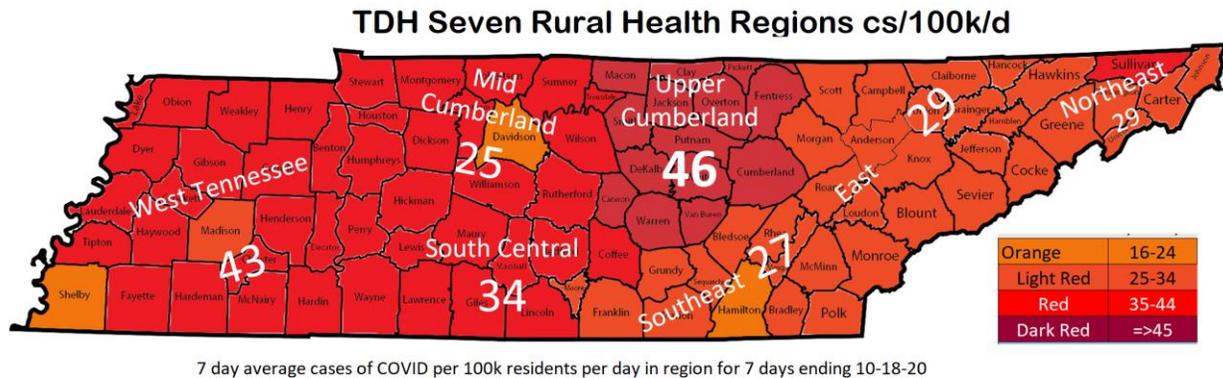


Analysis of UCR COVID-19 data for week ending October 17, 2020  
James C. Gray MD

The Tennessee Department of Health (TDH) divides the state into thirteen health regions. Six are in counties which have a metropolitan city which manages the metro-county health department. The other 89 county health departments are managed by the TDH from seven rural regional offices.



Governor Lee has recommended everyone wear a face cover when in public. He has asked county mayors to issue a requirement to wear face coverings when determined to be in the interest of the public welfare. Currently Covid-19 is spreading more rapidly in the 14-county Upper Cumberland Development District than in any of the thirteen health regions recognized by the TDH. For the last 7 days (L7d) ending 10/18/20 the incidence was 46 cs/100k/d and 12% of tests performed were positive.

Region	POPULATION	TestP7d	TestL7d	(+)Prev7days	(+)Last7days	%(+)-Prev7d	%(+)-Last7d	cs/100k/d P7d	cs/100k/d L7d
Upper Cumberland	360352	9194	9400	1123	1158	12%	12%	45	46
West Tennessee	526393	13067	10470	1549	1594	12%	15%	42	43
Johnson Cty-Sullivan	158344	2852	2550	318	418	11%	17%	29	38
South Central	413649	9409	8105	1051	1041	11%	13%	36	36
Jackson-Madison	97981	2144	1400	214	231	8%	10%	31	34
<b>89 Non-Metro PHD</b>	<b>4103364</b>	<b>89679</b>	<b>79103</b>	<b>8823</b>	<b>9068</b>	10%	11%	31	32
East	776281	15916	14321	1465	1569	9%	11%	27	29
Northeast	353857	8222	7523	806	725	10%	10%	33	29
<b>All 95 TN Counties</b>	<b>6829116</b>	<b>174312</b>	<b>143374</b>	<b>13068</b>	<b>13439</b>	7%	9%	27	28
Southeast	338969	7042	6573	638	651	9%	10%	27	27
Knoxville-Knox	470307	10080	7685	899	817	9%	11%	27	25
Mid-Cumberland	1333863	26829	22711	2191	2330	8%	10%	23	25
<b>6 Metro PHD</b>	<b>2725752</b>	<b>84633</b>	<b>64271</b>	<b>4245</b>	<b>4371</b>	5%	7%	22	23
Nashville-Davidson	694150	37606	25587	1109	1131	3%	5%	23	23
Chattanooga-Hamilton	367804	10218	6911	583	500	6%	7%	23	19
Memphis-Shelby	937166	21733	20138	1122	1274	6%	7%	17	19

7 Rural Regions Blue  
6 Metro Regions Green

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The incidence of new cases/100k/d for the 7 days ending 10/17/20 for the 14-county Upper Cumberland Region (UCR) was 46 cs/100k/d in a population of 360k.

Abbreviated column names and descriptions are in the following order

POP. Population

TestP7d Tests Previous 7 days (10-4 through 10-11)

TestL7d Tests Last 7 days (10-11 through 10-18)

NewPrev7d (+) tests in Previous 7 days (10-4 through 10-11)

NewLast7d (+) tests in Last 7 days (10-11 through 10-18)

%(+)\Prev7d Percent of tests (+) in Previous 7 days (10-4 through 10-11)

%(+)\Last7d Percent of tests (+) in Last 7 days (10-11 through 10-18)

P7d Cs/100k/d No of (+) cases per 100,000 residents per day in Previous 7 days (10-4 through 10-11)

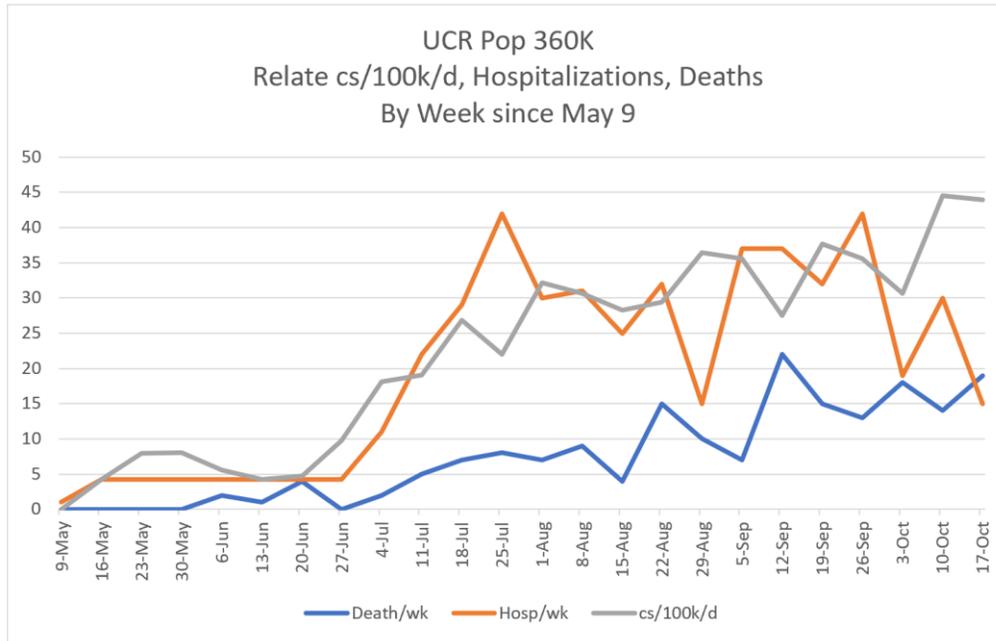
L7d Cs/100k/d No of (+) cases per 100,000 residents per day in Last 7 days (10-4 through 10-18)

COUNTY	POP.	TestP7d	TestL7d	NewPrev7d	NewLast7d	%(+)\Prev7d	%(+)\Last7d	P7d Cs/100k/d	L7d Cs/100k/d
Pickett	5021	108	278	61	34	41%	12%	174	97
Clay	7622	265	185	54	49	17%	21%	101	92
Overton	22241	498	577	143	128	23%	17%	92	82
Fentress	18512	414	765	109	84	24%	13%	84	65
Putnam	80243	2192	2629	240	318	11%	11%	43	57
Macon	24597	489	538	68	80	14%	14%	39	46
Smith	20161	442	389	68	65	19%	21%	48	46
<b>UC Region</b>	<b>360352</b>	<b>9194</b>	<b>9400</b>	<b>1123</b>	<b>1158</b>	<b>12%</b>	<b>12%</b>	<b>45</b>	<b>46</b>
Warren	41283	890	979	79	127	9%	14%	27	44
White	27348	1007	755	76	84	9%	12%	40	44
Jackson	11774	177	221	26	30	16%	12%	32	36
Dekalb	20490	485	477	35	39	8%	10%	24	27
Van Buren	5854	136	252	10	11	7%	6%	24	27
Cannon	14689	311	203	38	26	12%	9%	37	25
Cumberland	60517	1780	1152	116	83	8%	8%	27	20

## Analysis of UCR COVID-19 data for week ending October 17, 2020

James C. Gray MD

The rise in hospitalizations abruptly stopped correlating with the rise in cases in mid-July. Seven of the 14 counties in the UCR do not have a hospital with ICU capable of treating COVID-19 patients. Currently reported deaths are rising and reported hospitalizations are falling. It is difficult to accept the state data as accurate.

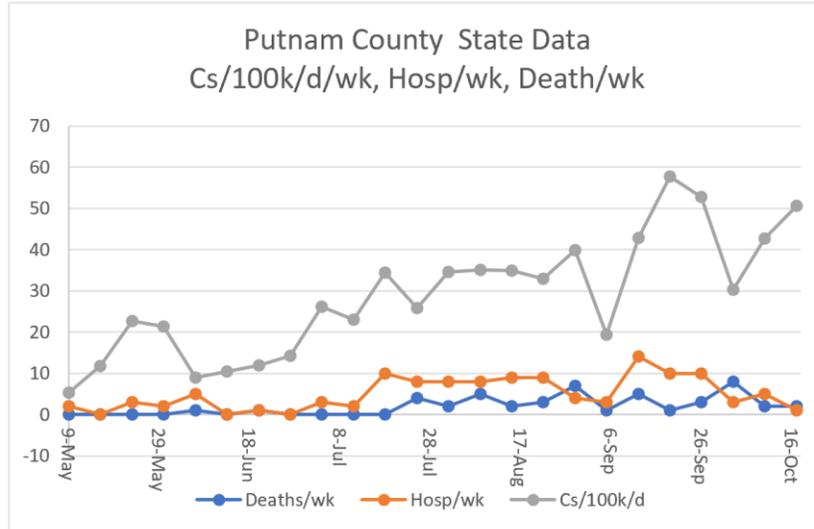


Data Table:

Date	Death/wk	Hosp/wk	cs/100k/d	Death:Hosp
9-May	0	1	0	0%
16-May	0	4	4	0%
23-May	0	4	8	0%
30-May	0	4	8	0%
6-Jun	2	4	6	47%
13-Jun	1	4	4	23%
20-Jun	4	4	5	93%
27-Jun	0	4	10	0%
4-Jul	2	11	18	18%
11-Jul	5	22	19	23%
18-Jul	7	29	27	24%
25-Jul	8	42	22	19%
1-Aug	7	30	32	23%
8-Aug	9	31	31	29%
15-Aug	4	25	28	16%
22-Aug	15	32	29	47%
29-Aug	10	15	36	67%
5-Sep	7	37	36	19%
12-Sep	22	37	28	59%
19-Sep	15	32	38	47%
26-Sep	13	42	36	31%
3-Oct	18	19	31	95%
10-Oct	14	30	45	47%
17-Oct	19	15	44	127%
Totals	182	480		38%

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According to the Putnam County COVID-19 Community Dashboard queried on 10/20/20 there are currently 64 patients hospitalized at Cookeville's regional hospital (CRMC) with 33 being Putnam residents. 12 patients are in ICU and 7 are on the ventilator. The local reporting is not supported by an analysis of the state data. This suggest that data from CRMC is not getting back to the state.



Data Table:

Date	Deaths/wk	Hosp/wk	Cs/100k/d	Death:Hosp
2-May	0	0	0	0
9-May	0	2	5	0%
16-May	0	0	12	0%
23-May	0	3	23	0%
30-May	0	2	21	0%
6-Jun	1	5	9	20%
13-Jun	0	0	11	0%
20-Jun	1	1	12	100%
27-Jun	0	0	14	0%
4-Jul	0	3	26	0%
11-Jul	0	2	23	0%
18-Jul	0	10	34	0%
25-Jul	4	8	26	50%
1-Aug	2	8	35	25%
8-Aug	5	8	35	63%
15-Aug	2	9	35	22%
22-Aug	3	9	33	33%
29-Aug	7	4	40	175%
5-Sep	1	3	19	33%
12-Sep	5	14	43	36%
19-Sep	1	10	58	10%
26-Sep	3	10	53	30%
3-Oct	8	3	30	267%
10-Oct	2	5	43	40%
17-Oct	2	1	51	200%
	47	120		39%

## Summary of my Concerns from this review

FACT: On July 16, the Trump Administration mandated that hospitals sidestep the Centers for Disease Control and Prevention and send critical information about COVID-19 hospitalizations and equipment to a different federal database.

- Examination of TDH data strongly suggests that there has been delayed and incomplete reporting of Covid-19 related hospitalizations and outcomes in the entire State since mid-July.
- Data reviewed here suggests that the Upper Cumberland Region is more seriously affected by COVID-19 than outcome data reported to the State and forwarded to our mayors would suggest. This interpretation is supported by anecdotal reports given to me from physicians on the frontlines at regional hospitals in Cookeville and Livingston. This is further verified by the hospitalizations reported by Cookeville Regional Medical Center to local news outlets and the Putnam County online dashboard.
- It has been established that the virus can be controlled when EVERYONE in a community wears a face covering in public and when around friends and when visiting family they do not live with.
- IF MAYORS ARE WAITING UNTIL CASES ARE A SERIOUS THREAT TO PUBLIC HEALTH BEFORE ISSUING A MASK REQUIREMENT, THAT TIME HAS ARRIVED.

According to the Associated Press, [the White House quietly told Tennessee early last week (Oct 11) that “a statewide mask mandate must be implemented” to curb the spread of COVID-19].

Whether or not the mayors in Tennessee’s most affected rural region get together and follow the advice of the White House and state and national public health authorities, please be very careful over the holidays when with friends and loved ones who are at high risk of morbidity or death from Covid-19.

It does not have to be this way. Masks save lives and livelihoods. Wear them to protect yourself and others. Wear them to support the efforts of our businesses, schools, and workplaces. Wear them to keep our market places safe and fight absenteeism and illness. Wear them to keep our economy open.

James C. Gray MD  
Secretary, Upper Cumberland Medical Society