

MOVAC – WV Excess Death County Level Analysis

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MOVAC Contributor: Sean P. Keefe

The West Virginia DHHR releases an annual report on vital statistics. This report details births, deaths, population, and marriages/divorces among other data. We have been reporting on the excess death phenomenon that appears to have begun with Covid and continued through 2021 and 2022. In our previous analyses, we have used the published vital statistics reports or detailed data gathered from County Clerk Joe Gonzales from Wood County for the years 2011 - 2020. For 2021 & 2022 data, we have relied on CDC Weekly Provisional Death data since West Virginia had yet to publish the vital statistics report for either of those years.

[MOVAC – Assassinations & Democide](#) – July 2024

[Democide Ignored](#) – January 2024

[Excess Deaths in 2021 & 2022 – Who Cares?](#) – March 2023

[Excess Deaths Continue in Wood County WV](#) – October 2023

[MOVAC – November 2023 Excess Death Analysis – Wood County WV](#) – February 2024

[MOVAC – Why Are We Ignoring Excess Death?](#) – April 2024

[MOVAC – Ohio Excess Death Mirrors West Virginia](#) – July 2024

At the end of June 2024, the DHHR made available online their 2021 Vital Statistics Report dated January 2024.

[WV DHHR Vital Statistics 2011 – 2021](#)

In the analysis below, we will look at the county data at a high level and identify concerning trends and/or patterns. The first thing you will notice when looking at the 2021 report is that the length of the report in 2021 has been drastically reduced. In all years through 2020, the report was about 150 pages long. In 2021, the report is only 49 pages. Why, right after a pandemic, do we need LESS data? Many of the supporting tables showing county level details were removed. However, we contacted DHHR and they provided a separate spreadsheet with detailed county level data that includes age-ranged data. Cause of Death data (ICD-10) was not included in the report or in the data subsequently provided. We will continue to attempt to gather cause of death data for comparison to prior years. For this analysis, we will focus on county totals.

A separate report for each county in the state is available on our [West Virginia Excess Deaths by County](#) website.

WV County Level Death Analysis

The first thing we notice looking at the statewide data is that although 2020 and 2021 had the highest death totals in our analysis, the 2021 increase is even more alarming than the pandemic year of 2020. In the table below each year’s percent change is calculated comparing the current year to the prior year. There is no value in comparing 2021 to 2020 since we already have an alarming rise in 2020 due to the pandemic. Instead, we compare 2021 to the pre-pandemic year of 2019. The assumption is that the pandemic affected the old and immunocompromised. One would assume that having elevated death from the pandemic and the introduction of a vaccine, death in 2021 should begin to return to historical levels. As you can see in the table below, this did not happen:

Year	Total WV Death	Percent Change
2011	21,870	
2012	21,651	-1.00%
2013	21,846	0.90%
2014	22,164	1.46%
2015	22,643	2.16%
2016	22,721	0.34%
2017	23,290	2.50%
2018	23,462	0.74%
2019	23,291	-0.73%
2020	26,108	12.09%
2021	29,402	26.24%

Data source - https://dhhr.wv.gov/HSC/SS/Vital_Statistics/Pages/Vital_Statistics.aspx

Not only did death in West Virginia rise again in 2021, but the increase in death was more than twice the increase experienced in 2020 when comparing both years to the 2019 pre-pandemic level. In addition, the increase in death for 2020 is almost 5 times larger than any increase in the prior 9 years and the increase in 2021 (over 2019) is more than 10 times larger than any other increase experienced.

One may be inclined to blame this increase on Covid, but the Covid data reported by DHHR accounts for just over half of these increases.

Year	Total Increase in Death	Covid Deaths	Non-Covid Excess Death
2020	2,817	1,480	1,337
2021	6,111	3,585	2,526

Covid Death Data Source – WV Vital Statistics Summary Totals West Virginia Resident Deaths
([2020 page 42](#), [2021 page 15](#))

Without even getting to the county level data, it is obvious something happened in 2020 over and above Covid which caused alarming levels of excess death. Then, having already had our elderly community devastated by the pandemic, 2021 saw an even more alarming level of increase in West Virginia death.

In the table below, we have listed all fifty-five counties in West Virginia and the death experienced in each county from 2011 through 2021.

West Virginia Death by County

County	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Barbour	178	208	197	203	198	192	182	199	200	252	272
Berkeley	881	888	918	992	984	1,050	1,051	1,102	1,097	1,372	1,535
Boone	333	280	311	352	342	299	338	326	327	353	403
Braxton	166	194	174	186	177	179	178	198	180	172	210
Brooke	355	315	284	342	342	391	291	307	334	398	434
Cabell	1,167	1,056	1,234	1,280	1,228	1,267	1,359	1,338	1,308	1,381	1,604
Calhoun	95	103	93	85	95	79	98	109	95	106	128
Clay	102	111	113	112	109	123	118	136	124	142	154
Doddridge	81	83	78	90	86	85	83	77	68	91	95
Fayette	608	638	648	672	649	660	650	626	656	694	810
Gilmer	73	83	82	67	84	90	81	92	89	98	92
Grant	141	126	131	135	136	133	120	146	167	173	182
Greenbrier	530	466	443	457	496	478	500	503	557	555	646
Hampshire	254	250	271	238	279	254	289	246	292	312	346
Hancock	387	415	382	425	394	403	466	443	425	540	538
Hardy	144	129	128	158	169	170	137	170	147	207	201
Harrison	928	830	859	843	848	851	881	868	921	866	1,103
Jackson	315	343	328	341	364	348	393	384	345	397	459
Jefferson	416	447	395	477	444	488	540	500	496	614	601
Kanawha	2,388	2,398	2,489	2,433	2,523	2,520	2,598	2,678	2,513	2,948	3,124
Lewis	202	235	210	229	241	233	247	251	232	268	352
Lincoln	286	243	258	260	259	276	277	311	319	323	388
Logan	550	513	541	515	572	539	572	555	548	603	720
McDowell	381	396	369	305	348	337	294	372	317	366	426
Marion	642	653	628	648	714	708	705	743	711	739	883
Marshall	407	432	414	411	403	432	411	398	412	462	527
Mason	325	303	337	359	366	343	346	374	390	398	493
Mercer	946	907	914	900	887	846	950	892	880	1,042	1,169
Mineral	319	293	338	279	344	339	332	340	329	404	433
Mingo	371	348	368	402	333	340	371	346	380	411	495
Monongalia	649	652	663	656	709	729	723	732	706	818	850
Monroe	174	165	182	183	177	160	169	194	185	217	222
Morgan	194	189	226	205	206	242	238	231	229	256	279
Nicholas	341	355	327	311	322	336	358	317	351	354	438
Ohio	581	611	560	580	577	576	557	571	613	693	716
Pendleton	104	103	95	87	93	95	96	98	104	125	113
Pleasants	104	96	72	95	90	94	101	97	103	103	125
Pocahontas	91	106	116	106	107	95	103	107	115	120	136
Preston	336	356	365	351	381	367	395	387	358	439	491
Putnam	510	583	548	578	568	625	631	603	656	695	745
Raleigh	986	1,071	964	968	1,088	1,049	1,029	1,099	1,141	1,220	1,407
Randolph	362	355	389	345	374	366	355	353	383	391	486
Ritchie	122	123	100	132	126	108	133	133	113	137	147
Roane	176	191	199	196	191	216	208	236	193	206	229
Summers	207	171	207	190	207	185	232	183	180	222	261
Taylor	203	179	196	174	214	203	191	208	190	253	270
Tucker	92	88	99	76	85	95	76	98	111	125	116
Tyler	152	116	110	117	114	123	105	117	115	98	144
Upshur	253	262	247	275	256	308	293	254	258	305	351
Wayne	458	464	482	521	524	506	554	534	523	636	722
Webster	131	128	131	114	133	117	129	126	124	119	153
Wetzel	227	223	221	218	210	196	251	235	221	236	322
Wirt	62	50	57	72	66	56	67	64	57	69	87
Wood	1,039	976	1,045	1,097	1,068	1,108	1,094	1,138	1,112	1,205	1,355
Wyoming	345	352	310	321	343	313	344	317	291	379	414
WV - Total	21,870	21,651	21,846	22,164	22,643	22,721	23,290	23,462	23,291	26,108	29,402

The 2021 detailed data suppresses all values between 1 & 4. This means that the age range detail will not reconcile to the total numbers reported. The overall year by year comparisons will be accurate. However, any age range comparisons may be missing some data.

The highlights in yellow indicate the two highest death total years for each county. I find it very alarming that 2021 is one of the two highest death totals for each county over an 11-year

period. It is also alarming that of the fifty-five counties, forty-seven experienced their highest death total in 2021. In forty-one of the fifty-five counties 2020 and 2021 experienced the highest death totals in the 11-year span.

In order to understand this better, the data was compiled by age ranges. The age ranges below Twenty-five are not included in our detailed analyses. In 2021, the DHHR Vital Statistics report no longer included the detailed data by age and county. When we received the detailed spreadsheet from DHHR that contains the age-ranged and county detail, any value less than 5 was omitted from the detail. This change impacted these younger age ranges the most since fewer deaths occur. For our analysis, we focused on seven age ranges:

- 25-34
- 35-44
- 45-54
- 55-64
- 65-74
- 75-84
- 85+

In the following table, you can see the total death for each age range. within each age range column, we have highlighted each value where a new record was set. For example, in the 25-34 age range 2012, 2016, 2017, and 2020 all set new records.

West Virginia Excess Death Analysis 2011 - 2021

								Calculated
Year	25-34	35-44	45-54	55-64	65-74	75-84	85+	Total
2011	430	746	1,679	2,959	3,990	5,767	5,881	21,870
2012	439	691	1,591	3,026	4,057	5,584	5,850	21,651
2013	425	667	1,597	3,053	4,363	5,413	5,914	21,846
2014	388	709	1,557	3,161	4,467	5,480	5,979	22,164
2015	413	708	1,562	3,279	4,560	5,549	6,173	22,643
2016	478	809	1,585	3,303	4,656	5,448	6,021	22,721
2017	540	836	1,539	3,391	4,909	5,653	6,029	23,290
2018	511	770	1,540	3,380	5,002	5,824	6,055	23,462
2019	518	811	1,434	3,328	4,985	5,903	5,949	23,291
2020	620	1,010	1,680	3,629	5,755	6,612	6,417	26,108
2021	528	1,123	1,986	4,391	6,906	7,104	6,698	29,068

The first alarming thing to notice is that of the seven age ranges 2020 saw a record set in all seven. 2021 set records in six of the seven (on top of an already record-setting pandemic year). Why would a pandemic, that we know affected the elderly and infirmed more than the young and healthy, cause record-setting death in every age category?

Prior to 2020, the years with the most age-range records set were 2016 and 2017 where records were set in the 25-34, 35-44, 55-64, and 65-74 age categories.

We know Covid is not the cause because only a little over half of these excess deaths were reported as Covid in the DHHR Vital Statistics reports. For emphasis, the same table from page two is shared below:

Year	Total Increase in Death	Covid Deaths	Non-Covid Excess Death
2020	2,817	1,480	1,337
2021	6,111	3,585	2,526

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Below, are separate tables for each of the age ranges at the statewide level. As you look at your specific county report, you can use the tables below to understand how your county experienced excess death compared to the state as a whole.

For each age range, the record is in **bold red** and boxed while the second highest death total in the 11-year span is also in a box. Please note, the only age range that did not set a record in 2020 that was surpassed in 2021 was the 25-34 age range where the record was set in 2020 and the second highest death total occurred in 2017.

Age Range 25-34		
Year	Total Death	Percent
2011	430	
2012	439	2.09%
2013	425	-3.19%
2014	388	-8.71%
2015	413	6.44%
2016	478	15.74%
2017	540	12.97%
2018	511	-5.37%
2019	518	1.37%
2020	620	14.81%
2021 *	528	-14.84%

Age Range 35-44		
Year	Total Death	Percent
2011	746	
2012	691	-7.37%
2013	667	-3.47%
2014	709	6.30%
2015	708	-0.14%
2016	809	14.27%
2017	836	3.34%
2018	770	-7.89%
2019	811	5.32%
2020	1010	24.54%
2021 *	1123	11.19%

Age Range 45-54		
Year	Total Death	Percent Change
2011	1679	
2012	1591	-5.24%
2013	1597	0.38%
2014	1557	-2.50%
2015	1562	0.32%
2016	1585	1.47%
2017	1539	-2.90%
2018	1540	0.06%
2019	1434	-6.88%
2020	1680	17.15%
2021 *	1986	18.21%

Age Range 55-64		
Year	Total Death	Percent Change
2011	2959	
2012	3026	2.26%
2013	3053	0.89%
2014	3161	3.54%
2015	3279	3.73%
2016	3303	0.73%
2017	3391	2.66%
2018	3380	-0.32%
2019	3328	-1.54%
2020	3629	9.04%
2021 *	4391	21.00%

Age Range 65-74		
Year	Total Death	Percent Change
2011	3990	
2012	4057	1.68%
2013	4363	7.54%
2014	4467	2.38%
2015	4560	2.08%
2016	4656	2.11%
2017	4909	5.43%
2018	5002	1.89%
2019	4985	-0.34%
2020	5755	15.45%
2021 *	6,906	20.00%

Age Range 75-84		
Year	Total Death	Percent Change
2011	5767	
2012	5584	-3.17%
2013	5413	-3.06%
2014	5480	1.24%
2015	5549	1.26%
2016	5448	-1.82%
2017	5653	3.76%
2018	5824	3.02%
2019	5903	1.36%
2020	6612	12.01%
2021 *	7,104	7.44%

Age Range 85+		
Year	Total Death	Percent Change
2011	5881	
2012	5850	-0.53%
2013	5914	1.09%
2014	5979	1.10%
2015	6173	3.24%
2016	6021	-2.46%
2017	6029	0.13%
2018	6055	0.43%
2019	5949	-1.75%
2020	6417	7.87%
2021 *	6,698	4.38%

Every project I've ever worked on required an after-action review. It was during this time where we learned lessons from the project just completed. The lessons learned were then documented so that when a similar project occurred in the future, we avoided the potholes encountered in the past.

Where is the after-action review by and of our policy-makers? Is record-setting death two years in a row for the vast majority of the population not worthy of review? Did healthcare professionals apply the most effective therapeutics? Did public health officials follow the most effective policies? Were the rights of citizens protected? Are there mitigating factors that occurred during the pandemic to cause ancillary deaths?

I have not heard this excess death phenomenon spoken about by any politician in the state, nor have I heard this spotlighted in any local or state media. West Virginia lost 1,480 citizens to Covid in 2020. We locked down the state, forced businesses to close, forced children out of schools and when they returned, we forced them to wear face-coverings.

As concerned as we all were with the 12% increase in death in 2020, shouldn't we be getting to the bottom of the 26% increase 2021?

In order to help facilitate investigations into these excess deaths, we have created a separate report for each county highlighting any concerns found.

If these deaths concern you, I encourage you to share these reports with your state leaders.