Butler County General Health District's 97th COVID-19 Update (01/01/2021)
Confirmed and Probable COVID-19 Cases Reported to Butler County*
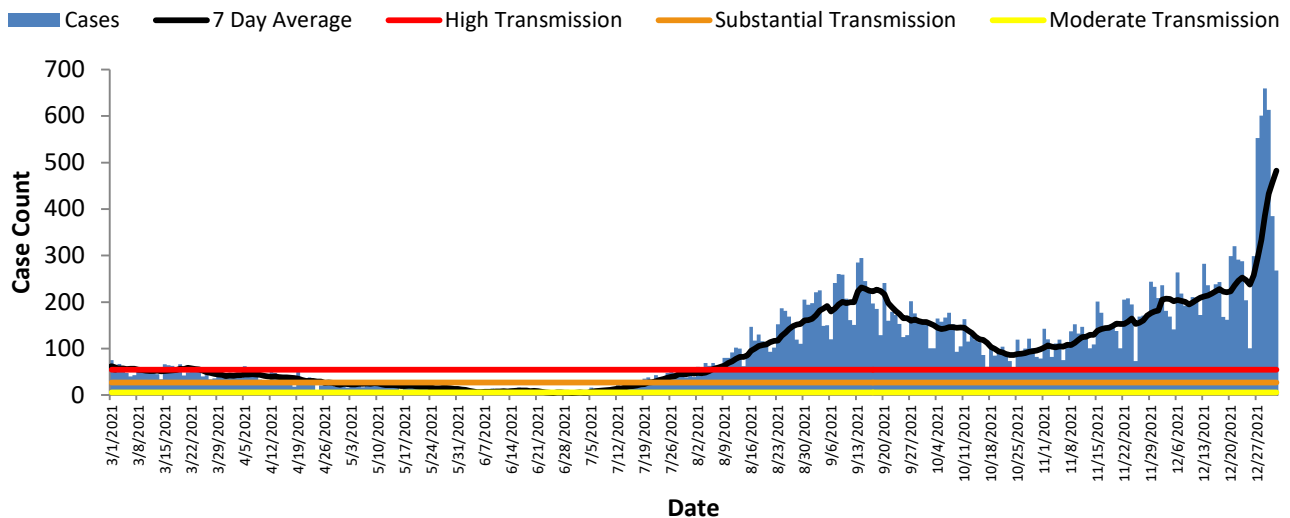### Butler County Residents, 2020-21

Total # of Cases (01/01):	**66,581***
ODH verified Deaths (01/01):	**897****
Hospitalizations (01/01):	**2,690**
First Case Reported:	3/11/2020
Last Case Reported (so far):	01/01/2022
Confirmed Cases:	**53,689**
Probable Cases:	**12,892**
Age Range:	**<1-103**
Median Age:	**37**
Mean Age:	39.1
Incidence (thru 01/01):	17,378.0 per 100,000
Prevalence (thru 01/01):	**17.4% of BC population**
7-Day Positivity Rate (01/06):	**28.9#% of tests performed in BC**

Table 1: CDC Indicators		
Indicator	**Butler County New Cases over 7 days**	**Status Level According to CDC**
Incidence per 100,000 population	**881.7 per 100,000**	**High Spread (over 100 per 100,000)**
Positivity Rate	28.85% of tests performed in Butler County	High Positivity (over 10.0% of tests)

This report has transitioned from using the target indicators that Governor DeWine and the Ohio Department of Health had previously set to the CDC's Community Transmission Indicators. The CDC has its own data tracker that is accessible at https://covid.cdc.gov/covid-data-tracker/#datatracker-home, which gives a good picture of how the nation as a whole is doing. They also have county tracking information, but as CDC mentions, local reports will be more up-to-date and should be considered more definitive.

Cases were already at high levels and they doubled over the last report week. In this week 5 of the highest days of reports on record through the whole pandemic were reported. The positivity rate is 28.9% meaning that over 1 in 4 of tests taken came back positive for COVID-19. Nearly 1% of the county tested positive this report week alone. This is the highest week of transmission of COVID-19 in Butler County on record and almost the highest positivity on record. ODH, BCGHD, and local medical offices are reporting delays of reports due to the high volumes.

Figure 1. Cases by Date of Event Since March 1, 2021

All figures show reported cases of COVID-19 in Butler County as of 0800 EST 01/06/2021. **Due to delays in reporting, the numbers of confirmed and probable cases on all figures are subject to change between reports and** confirmed and probable case counts are likely to increase. *This should not be assumed to be the total disease burden of COVID-19 in Butler County only those that have been laboratory confirmed OR meet ODH probable case criteria AND reported to Public Health.
*Data is provisional – only confirmed or probable COVID-19 cases are included in counts. Report reflects time period since the introduction of SARS-CoV-2 into humans, measured in days. Data accessed from the Ohio Disease Reporting System (ODRS) on 01/06/2021 at 0800 EST.
Deaths are now reconciled to the Ohio Department of Health's available data to avoid discrepancies between the state and local numbers. ODH's protocol has changed to avoid reconciliation errors and now only includes those deaths that have been reconciled with Vital statistics and may not match what has been reported to the CDC which are provisional numbers. **This is a lagging indicator and will be multiple weeks behind.
Vaccination numbers were collected 1200 EST 01/06/2021 from ODH COVID-19 Dashboard and the Innovate Ohio Platform. Vaccinations are considered started on the day an individual receives first dose of a COVID-19 vaccine. Vaccinations are considered completed on the day an individual receives the final recommended dose of a vaccine.
#Gathered from CDC's Data Tracker of Butler County 01/06/2021 0800 EST accessible at https://covid.cdc.gov/covid-data-tracker/#county-view
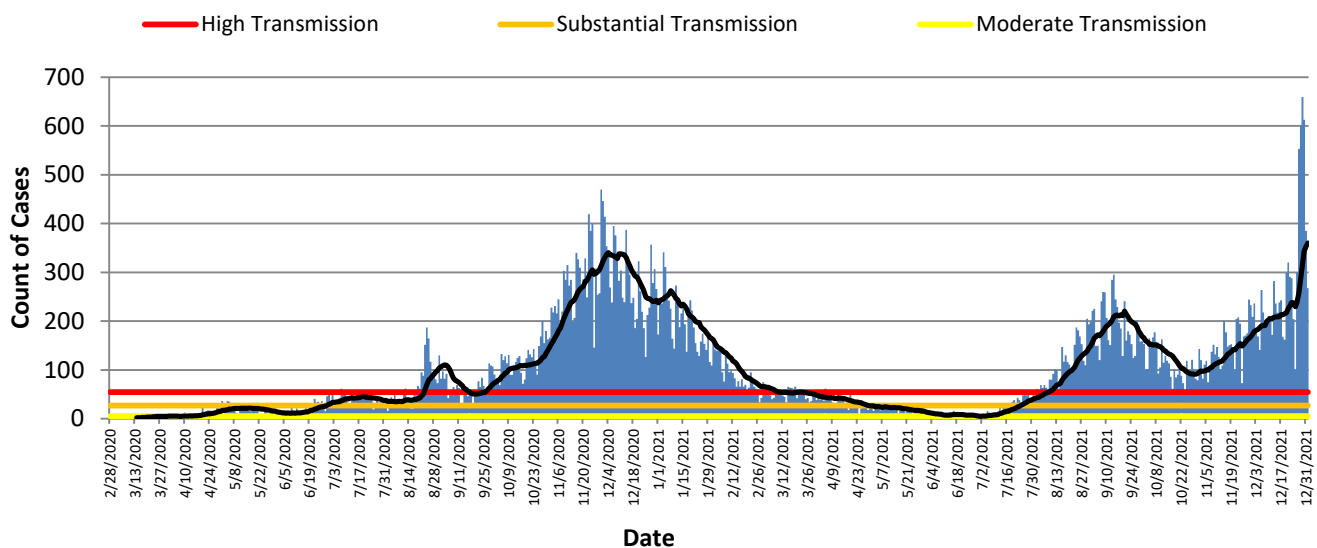1

Table 2: Total Reported* Cases by ZIP Code		New Cases (12/26-01/01)	Change in cases from previous 7 days (12/19-12/25)	Transmission	% of Cases
ZIP Code	Number of Cases				
45011	11908	668	320 (92.0%)	High	17.9%
45044	9450	498	218 (77.9%)	High	14.2%
45013	9023	462	244 (111.9%)	High	13.6%
45069	8324	486	206(73.6%)	High	12.5%
45014	8092	487	274 (128.6%)	High	12.2%
45056	4662	117	48 (69.6%)	High	7.0%
45042	4566	203	100 (97.1%)	High	6.9%
45067	2809	113	64 (130.6%)	High	4.2%
45050	1982	76	36 (90.0%)	High	3.0%
45015	1874	108	56 (107.7%)	High	2.8%
45241	929	55	33 (150.0%)		1.4%
45053	530	20	15(300.0%)	High	0.8%
45005	412	26	8(44.4%)		0.6%
45064	263	14	5(180.0%)		0.4%
45246	119	14	4 (250.0%)		0.2%
45062	100	3	3 (NA%)		0.2%
Cases lacking zip code information or from zip codes with too few cases	1,538	10		-	2.3%
Butler County (inclusive)	66,581	3378	1713 (102.9%)	High	100%

Zip-codes that have transmissions not rated have most of their populations outside of Butler County. Zip-codes with too few cases have been removed for privacy concerns.

New Cases are determined by "Date of Event" which is when the case was ill/test was collected. CDC determines new cases by "Date of Report".

Table 2 shows the zip-code level data that is new for this week. **All zip-codes** have rates of disease that once again meet the CDC's definition of a **community of high transmission**. Almost all zip-codes are seeing record levels of transmission. Since individuals are rarely constrained by the relatively small borders of a zip-code in their day-to-day lives, these transmission indicators are for information only. For practical guidance, follow the county level indicators.

Figure 2. Reported Cases of COVID-19 by Date of Event 2020-2021*

All figures show reported cases of COVID-19 in Butler County as of 0800 EST 01/06/2021. Due to delays in reporting, the numbers of confirmed and probable cases on all figures are subject to change between reports and confirmed and probable case counts are likely to increase. *This should not be assumed to be the total disease burden of COVID-19 in Butler County only those that have been laboratory confirmed OR meet ODH probable case criteria AND reported to Public Health.
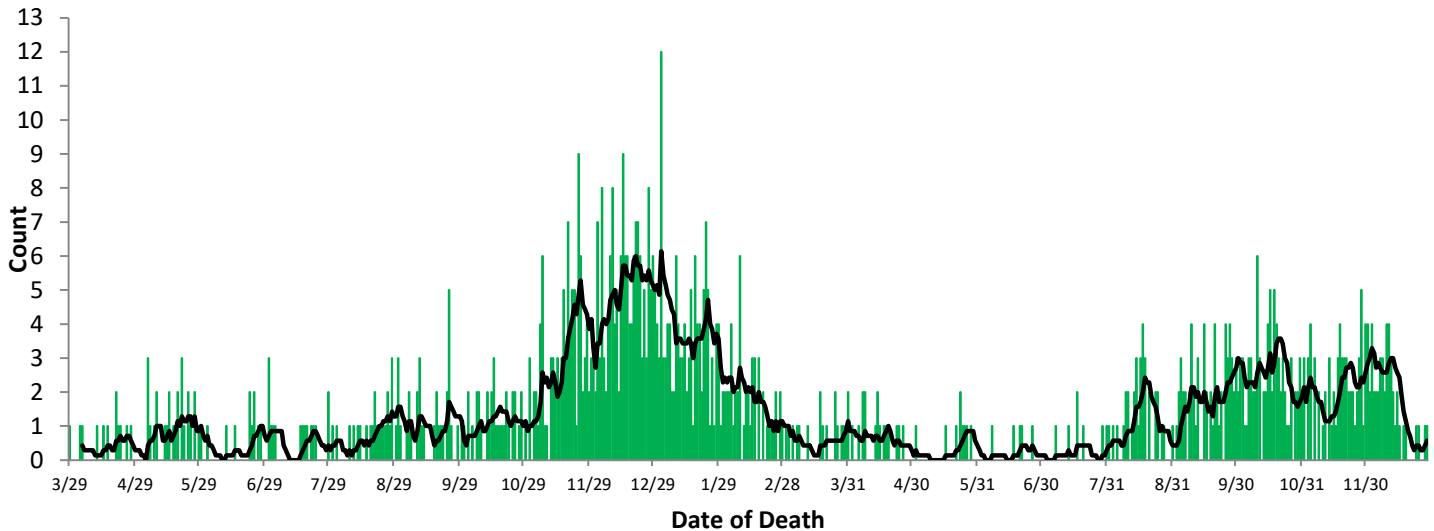*Data is provisional – only confirmed or probable COVID-19 cases are included in counts. Report reflects time period since the introduction of SARS-CoV-2 into humans, measured in days. Data accessed from the Ohio Disease Reporting System (ODRS) on 01/06/2021 at 0800 EST.
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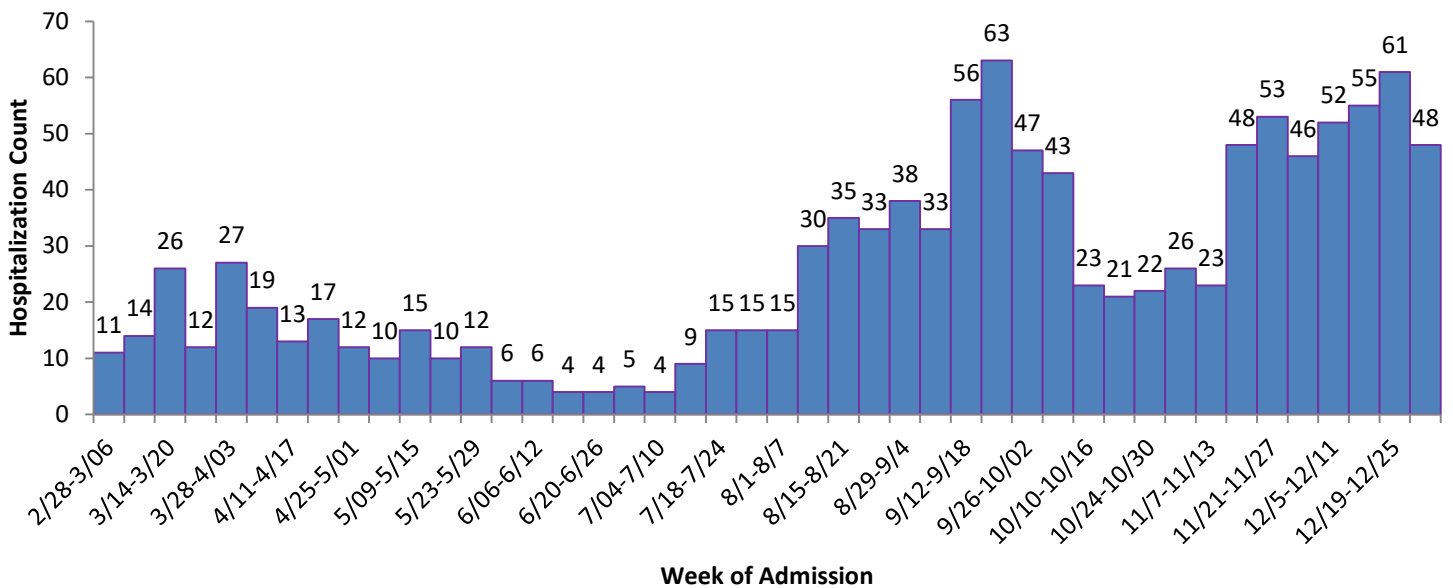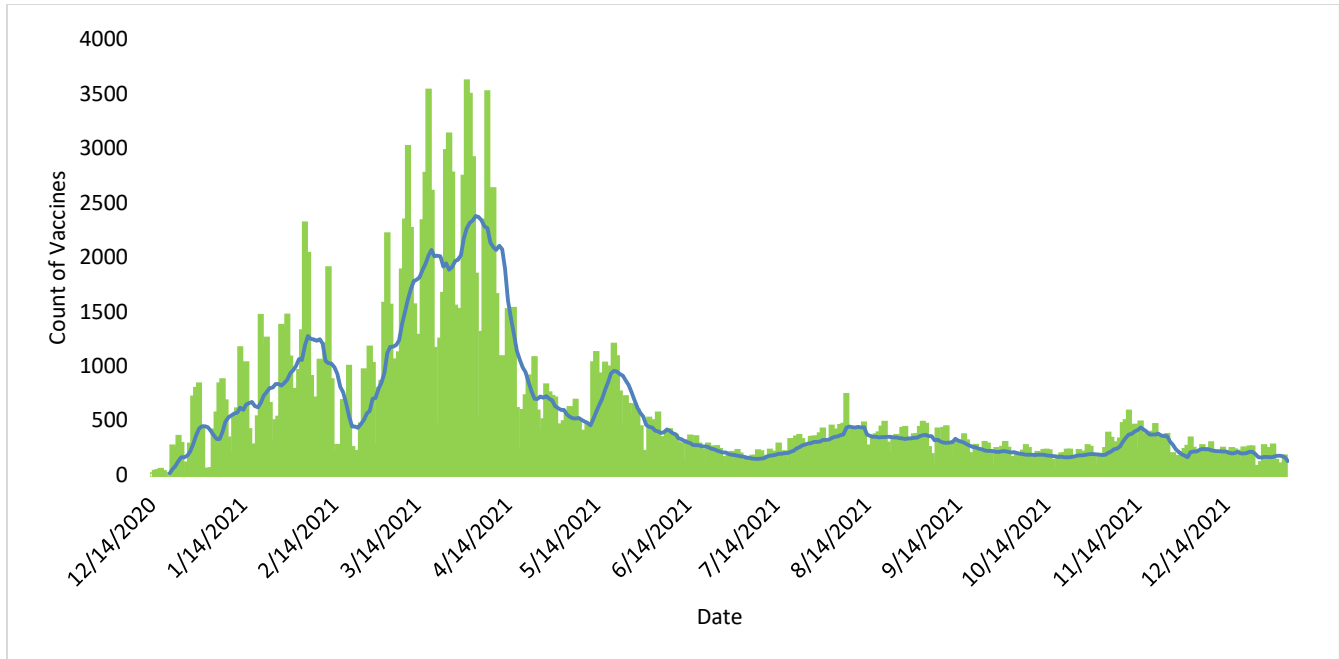#Gathered from CDC's Data Tracker of Butler County 01/06/2021 0800 EST accessible at https://covid.cdc.gov/covid-data-tracker/#county-view
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Figure 3. Confirmed COVID-19 Deaths by date of death, 2020-21**

Figures 3 and 4 show severe case outcomes. These are both lagging indicators since it typically takes time for a case to succumb to COVID and well over a month for a COVID-19 death to be verified. Deaths will take about 4-6 weeks to begin to register for last week. Hospitalized case reports are coming in to BCGHD and these are most likely undercounts due to lags in getting reported cases entered in to the Ohio Disease Reporting System. We are also not likely going to see the rise in hospitalizations for another week or two and then further delays for reporting logistics.

Figure 4. COVID-19 Hospitalizations of Butler County Residents by Week since the first week of March 2021

Figure 5 shows vaccines started in Butler County by their date of administration. Table 3 shows the counts of new immunizations over the last two week period as well as total estimates by age group.

Figure 5. Vaccines Administered by Date in Butler County, 2020-2021

After an initial surge in vaccine demand seen in late winter and through the spring, demand dramatically dropped off. However, beginning in late July, coinciding with the oncoming school year and rise in cases associated with the Delta variant, there was a slight, but steady increase followed by gradual decline that has continued. A new increase has occurred as 5-11 year olds have become eligible and a decline as those who are most likely to get vaccinated have already done so.

Table 3. Vaccination Statistics by Age Group for Butler County Residents						
Age Group (Years)	Estimated Count of Population # (%)	Count of People Vaccinated (%) as of 12/21/2021	Count of People Vaccinated (%) as of 1/4/2022	Count of People Vaccinated During the last two weeks	Percent Change from 12/21-1/4	Estimated Count of People Unvaccinated
5-11	33,689 (9%)	6,252 (18.6%)	6,929 (20.6%)	677	10.8%	26760
12-14	15,069 (4%)	6,187 (41.1%)	6,299 (41.8%)	112	1.8%	8770
15-17	15,838 (4%)	7,481 (47.2%)	7,572 (47.8%)	91	1.2%	8266
18-20	20,735 (5%)	9,113 (43.9%)	9,305 (44.9%)	192	2.1%	11430
21-24	23,864 (6%)	12,247 (51.3%)	12,474 (52.3%)	227	1.9%	11390
25-34	48,008 (13%)	25,672 (53.5%)	26,102 (54.4%)	430	1.7%	21906
35-44	45,659 (12%)	30,340 (66.4%)	30,714 (67.3%)	374	1.2%	14945
45-54	46,344 (12%)	31,506 (68.0%)	31,850 (68.7%)	344	1.1%	14494
55-64	48,369 (13%)	37,428 (77.4%)	37,821 (78.2%)	393	1.1%	10548
65-74	36,132 (9%)	31,290 (86.6%)	31,478 (87.1%)	188	0.6%	4654
75-84	17,318 (5%)	15,454 (89.2%)	15,524 (89.6%)	70	0.5%	1794
85+	6,788 (2%)	6,241 (91.9%)	6,265 (92.3%)	24	0.4%	523

#Population estimates from the Ohio Hospital Association and are from December 2020.
Does not include Booster doses

Table 4. Cases Under Age of 17 by Zip –Code 08/01-01/01		
Zip Code	Cases since August 1st	Cases per 100,000 past week
45011	1135	444.3
45069	735	483.4
45044	891	469.5
45014	587	552.1
45013	701	473.7
45050	182	302.0
45042	350	497.8
45056	204	501.2
45015	170	281.5
45241	75	-
45067	262	266.3
45053	34	No cases reported
45246	19	-

^Cases are below threshold to release. Population estimates from Ohio Hospital Association 2019

Table 4 shows cases that are ages 17 or younger by zip-code. The importance of this table is to demonstrate that though numbers remain small on an absolute level, relative to the population size it has actually been very high spread since the start of school. Were we to classify ages by zip-code in the same manner of the CDC's definition, all of Butler County would be considered "high" transmission for school-age students. It is true that children are less likely to develop severe illness, but they are not immune and they can spread it to others. **There have been pediatric hospitalizations of COVID-19 in Butler County**. Since the beginning of the pandemic, **pediatric hospitalizations of COVID-19 have doubled the 5-year average of pediatric hospitalizations of influenza in Butler County**. That figure is not including children hospitalized with MIS-C associated with COVID-19, just those with acute COVID-19 infection.

The best ways to prevent your child from contracting COVID-19 and risking severe outcomes is to get your child vaccinated as soon as they are old enough, and to follow precautions such as wearing masks indoors- especially for those who are too young or cannot otherwise get the COVID-19 vaccination. Table 5 shows the vaccination rates among zip-codes by eligible populations.

Table 5. Percent of the Eligible Population Vaccinated by Zip Code (at least one Dose)				
Zip Code	% of the Total Population Vaccinated	% of the Eligible Population Vaccinated	% of 12-17 Year Old Vaccinated	% of 5-11 Year Olds Vaccinated
45011	55%	59%	48%	20%
45013	54%	58%	39%	13%
45014	64%	68%	53%	18%
45015	46%	50%	34%	7%
45042	52%	54%	35%	10%
45044	55%	60%	49%	18%
45050	63%	67%	54%	23%
45053	56%	58%	43%	10%
45056	45%	46%	44%	35%
45064	45%	47%	24%	9%
45067	42%	45%	34%	8%
45069	73%	77%	65%	39%