

2021 Communicable Disease Report

January 1, 2021 - December 31, 2021

Prepared by Miami County Public Health

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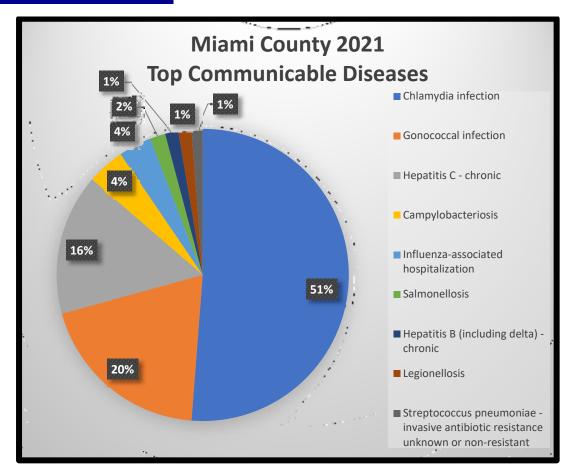
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Reportable Communicable Diseases 2016-2021

•	Miami	Miami	Miami	Miami	Miami	Miami
Reportable Diseases	2016	2017	2018	2019	2020	2021
Campylobacteriosis	13	20	13	10	7	17
Chlamydia	263	246	242	343	222	210
COVID-19	0	0	0	0	7841	11756
CP-CRE	0	0	5	2	1	3
Coccidioidomycosis	0	1	0	2	0	2
Cryptosporidiosis	20	2	2	3	5	0
Cyclosporiasis	0	0	0	0	4	0
E. coli 0157	2	1	2	5	1	1
Giardiasis	5	4	10	2	5	0
Gonococcal infections	39	53	59	92	87	80
Haemophilus influenzae	0	0	0	1	1	0
Hepatitis A	0	0	26	33	1	0
Hepatitis B, acute	3	3	0	4	1	0
Hepatitis B, chronic	11	29	22	27	19	6
Hepatitis B, perinatal	0	1	3	2	0	0
Hepatitis C, acute	1	2	5	3	1	0
Hepatitis C, chronic	127	130	123	77	66	64
Hepatitis C - Perinatal Infection	0	0	0	2	0	1
Influenza Associated Hospitalization	15	82	86	75	78	15
Legionellosis	1	3	3	1	6	6
Lyme Disease	6	6	3	10	3	0
Measles	0	0	0	0	0	0
Meningitis, Bacterial	1	10	12	5	1	1
Meningitis, Viral	4	0	3	2	1	1
Mumps	3	1	3	1	1	0
Mycobacterium, Tuberculosis	0	0	0	0	0	0
Pertussis	19	15	9	14	3	1
Rubella	0	0	0	0	0	0
Salmonellosis	14	40	4	11	8	7
Shigellosis	0	2	1	1	1	2
Spotted Fever Rickettsiosis	0	0	1	2	0	0
Streptococcal A, Invasive	5	8	5	10	6	1
Streptococcal-Group B newborn	0	0	0	2	0	0
Streptococcal, Pneumonia, Invasive	7	17	16	8	7	5
Toxic Shock Syndrome	0	0	1	1	0	0
Varicella	13	17	5	2	5	1
Vibriosis (not cholera)	0	0	0	0	1	0
West Nile Virus	0	0	0	0	0	0
Yersiniosis	0	1	0	1	0	1
Total per Year	572	694	664	754	8383	12181



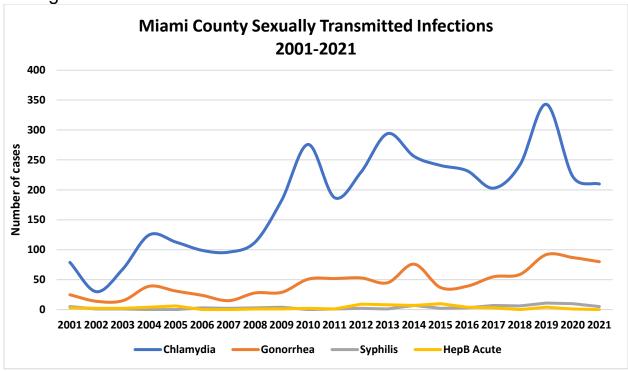
Chlamydia infection made up over half of communicable diseases in Miami County. COVID-19 cases were separated to provide a better breakdown of the top diseases in the county.

2021 Reportable Disease Outbreaks

Class A Reportable Disease	<u>Outbreak</u>				
COVID-19 Pandemic	1				
Class B Reportable Disease Outbreaks					
Norovirus	2				

Sexually Transmitted Infections 2001-2021

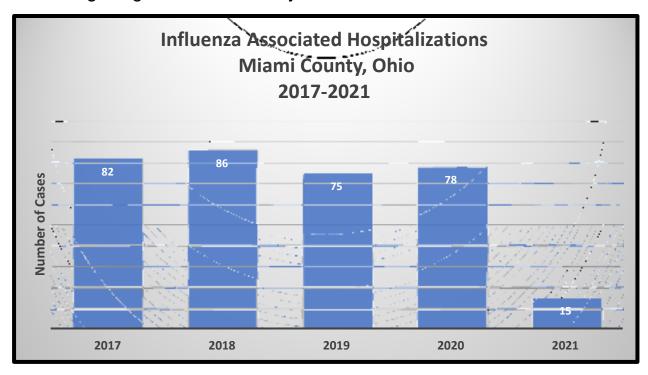
Sexually transmitted infections (STIs) are passed from one person to another through intimate physical contact such as heavy petting and from sexual activity. STIs do not always cause symptoms so it is possible to have an infection and not know it. It is important to get tested if you are having sex. ¹



In 2021, Chlamydia cases continued to drop from the previous year. Gonorrhea also saw a drop in cases this year. Both diseases only saw slight decreases in cases from last year. Syphilis and Hepatitis B Acute cases have stayed the same over the past couple of years.

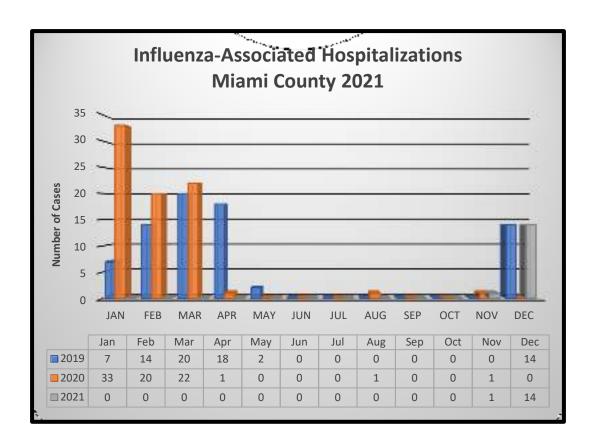
2021 Influenza Year

Influenza (flu) is a contagious respiratory illness caused by influenza viruses. It can cause mild to severe illness. Serious outcomes of flu infection can result in hospitalization or death. Some demographics, such as geriatric people, young children, and people with underlying conditions, are at elevated risk of serious flu complications. The best way to prevent the flu is getting vaccinated each year. ²



Only 15 influenza-associated hospitalizations were recorded in 2021 drastically less from 2020.

Symptoms for influenza include fever, body aches, headache, malaise, non-productive cough, sore throat, and runny nose. The influenza virus is spread by direct person-to-person contact through droplets.²



Influenza-associated hospitalizations cases have drastically declined compared to last year's cases. In contrast to the beginning of the year in 2020, there were no cases reported at the beginning of 2021. This could be attributed to the public health mandates that were placed due to the ongoing COVID-19 pandemic. Fifteen cases were reported this year with 14 of those cases being reported in December.

COVID-19 Pandemic

Coronavirus disease 2019 (COVID-19) is caused by a virus named SARS-CoV-2 identified in Wuhan, China in December 2019. It has been over two years since COVID-19 was first identified and within those two years, scientists have been able to develop vaccines that helps reduces hospitalizations and death.

COVID-19 symptoms are not always the same from person to person. Most people have mild symptoms, but some become severely ill. Those with underlying conditions are at a higher risk for severe illness. Since the beginning of the pandemic there has been over 800,000 COVID-19 related death in the US alone.³

Timeline of COVID-19 in Ohio in 2021

The first known variant appeared in Great Britain in late 2020 named Alpha. The Alpha variant became the dominating variant, and it was more contagious than the original strain. Symptoms of the Alpha variant were like the original strain such as persistent cough, fever, loss of smell and taste. Data showed that Pfizer, Moderna, and Johnson & Johnson were effective in preventing hospitalization and severe disease in Alpha cases.⁴

A new variant was discovered this time in South Africa. The Beta variant was found to be contagious to the original COVID-19 strain. The Beta variant was not a common variant in the US.⁴

In January, Governor DeWine opened eligibility to people 75 and older to receive their vaccine.⁵ COVID-19 eligibility continue to open in phrases throughout the coming months.

In February, eligibility was open to people 65 and older as well as teachers. On the 27th the FDA approved emergency use authorization for Johnson & Johnson (Janssen) COVID-19 vaccine.⁵

Governor DeWine announced that by March 1st most school will transition back to in person learning. On March 11, those 50 and older become

eligible to receive the vaccine. In late March, eligibility for individuals 16 and older to receive only Pfizer BioNTech vaccines was approved by Governor DeWine.⁵ Persons 18 and older became eligible to receive any of the three vaccines approved.

In April, Governor DeWine advised vaccine providers to temporarily pause the use of Johnson and Johnson vaccine. Quarantine rules were change for those who were fully vaccinated. Fully vaccinated individuals no longer had to guarantine if exposed to COVID-19.⁵

On May 13, Governor DeWine opened vaccine eligibility to those ages 12-15 to receive only Pfizer-BioNTech. On May 14, Governor DeWine announced those who are fully vaccinated are not required to wear masks, while the unvaccinated are required to continue wearing masks and social distancing.⁵

On June 17, Governor DeWine announced that the COVID-19 state emergency will be lifted on Friday June 18.⁵

In July, the Delta variant became the dominate strain of COVID-19 in Ohio. The Delta variant was first detected in India earlier in the year. The Delta variant spreads more easy than other variants and can cause more severe illness. Symptoms such as cough, fever, headache, and significant loss of smell and taste. All three vaccines available in the US were effective against severe illness, but the Delta variant was shown to increase the number of breakthrough cases.⁴

In September, daily new COVID-19 cases were at its highest since February. Hospitals saw a significant increase in hospitalized COVID-19 patients since January 2021. In the same month, hospitals reported the highest number of people under 50 years of age hospitalized since the beginning of the pandemic, while 97% of patients of all ages were unvaccinated.⁵

In November, Ohio kids ages 5-11 were eligible to receive Pfizer BioNTech vaccines.⁵ The Centers for Disease Control and Prevention (CDC) granted approval for fully vaccinated Americans, 18 and older, to receive a COVID-19 booster shot. Although, all three vaccines were approved, the CDC recommends Pfizer-BioNTech or Moderna vaccines.³

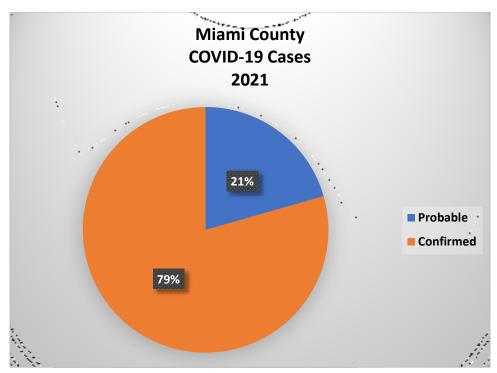
On November 24, 2021, South Africa detected a new COVID-19 variant called Omicron. On Dec 11, 2021, The Ohio Department of Health confirmed 2 cases of Omicron in the state.⁵ The Omicron variant was found to be more transmissible than the Delta variant and presented with symptoms similar to previous variants. The Omicron variant did not cause loss of smell and taste compared to previous variants. The CDC recommended, the best protection against Omicron is getting vaccinated and staying up to date with your vaccine. Booster shots provided stronger protection against Omicron.⁴

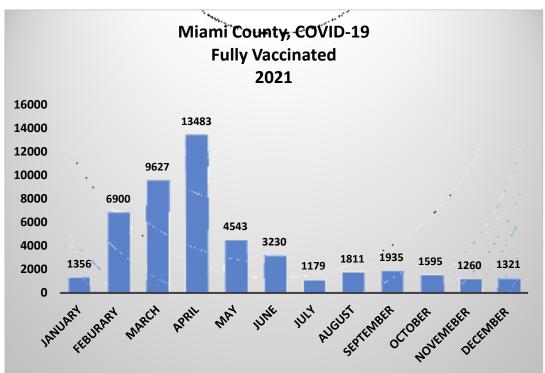
In December, with the increase COVID-19 cases the demand for at-home rapid COVID-19 test skyrocketed. The increase in demands caused shortage of at-home rapid tests. The Ohio Department of Health (ODH) purchased 2 million rapid at-home test in 2021 to pass out to the public.⁵

On December 29, Governor DeWine ordered the Ohio National Guard to support hospitals with the most critical needs throughout Ohio. The Ohio Hospital Association reported 5,356 people were hospitalized with COVID-19. This set an all-time high since the start of the pandemic.⁵

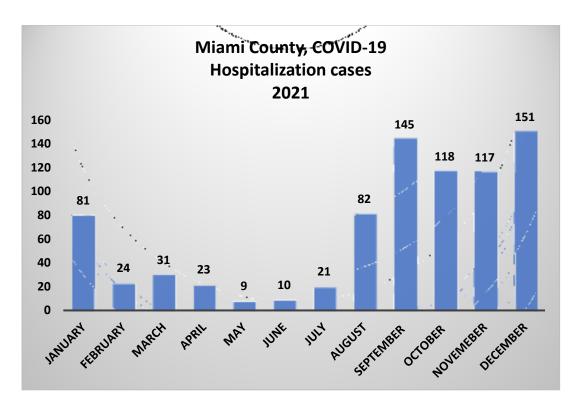
Case Classification:

- Confirmed: Meets laboratory evidence of detection of SARS-CoV-2 RNA
- Probable: Positive rapid test without laboratory confirmation or exposure with a confirmed case of COVID-19

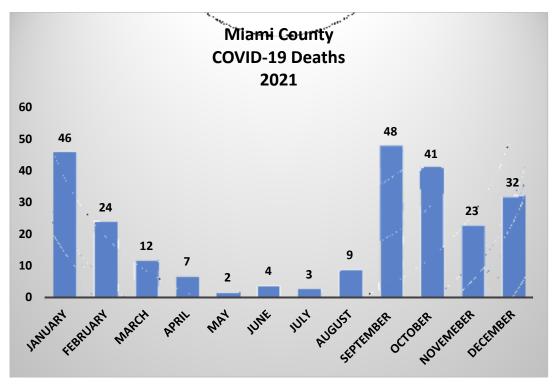




In 2021, 48,240 people in Miami County had completed their vaccination doses.



Miami County recorded 812 related COVID-19 hospitalizations in 2021 compared to 418 hospitalizations in 2020.



Miami County reported 251 deaths attributed to COVID-19 2021 compared to 123 deaths in 2020.

¹Centers for Disease Control and Prevention Should this be on top? https://www.cdc.gov/std/general/default.htm

²Centers for Disease Control and Prevention https://www.cdc.gov/flu/about/index.html

³Center for Disease Control and Prevention https://www.cdc.gov/coronavirus/2019-ncov/cdcresponse/about-COVID-19.html

⁴Yale Medicine

https://www.yalemedicine.org/news/covid-19-variants-of-concern-omicron

⁵Ohio Department of Health https://odh.ohio.gov/media-center/ODH-News-Releases