

Anne Arundel County Department of Health COVID-19 Mitigation and Response Plan

July 2022



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Introduction

As we pass the two year mark of responding to the COVID-19 pandemic, the Anne Arundel County Department of Health (DOH) looks to a future where we can continue to help the community respond appropriately and nimbly to changes in the pandemic. With this mitigation and response plan, we want to ensure that the staffing capacity and tools are in place to respond to periods of low and high transmission. Key to our success is building health equity into all interventions and providing equitable access for all residents.

Our ability to plan and prepare for ongoing COVID-19 mitigation and response is better than ever before. While the future will include surges and new variants, we have a knowledge base and range of tools to slow spread and treat the virus. These tools include vaccines, masks, tests, disease surveillance and oral therapeutics. The tools used to fight the pandemic and the science they are based on are constantly evolving and becoming more effective. This plan and our response will also evolve with the science to provide the most up to date and effective public health interventions.

We will follow the data and enact targeted and timely strategies to protect the health of county residents. The DOH will be using the Centers for Disease Control and Prevention (CDC)'s [Community Levels](#) dashboard which describes the “impact of COVID-19 illness on health and healthcare systems” to guide the intensity of our mitigation interventions.

This plan will highlight the following key areas:

1. Measuring effectiveness and preparedness
2. Key indicators for decreasing or increasing mitigation strategies
3. Plans for use of mitigation tools including:
 - a. Disease Surveillance
 - b. Vaccinations
 - c. Testing
 - d. Mask Use
 - e. Health Care PPE Distribution
 - f. Health Equity Interventions
 - g. Communication Methods
 - h. Treatment
 - i. Data Reporting

Measuring Effectiveness

Mitigation Area	Metric of Preparedness
Disease Surveillance	Collaborate with the two county hospitals to monitor COVID-19 admission and capacity rates. Continue to work with the Maryland Department of Health to assess COVID-19 data, impacts and trends over weeks, months and years.
Testing	Capacity to conduct 1,300 PCR tests per week by DOH. Maintaining a stockpile of 200,000 at-home rapid test kits for distribution.
Vaccinations	Capacity to administer at least 2,800 vaccines per week by DOH. Additional capacity provided by pharmacies and medical providers.
Masks	Maintain a stockpile of 1.5 million KN95 masks and 50,000 pediatric surgical masks.
Treatment	Ensure that lifesaving pharmaceuticals are accessible to everyone in our county.
Equity	Continued partnership and deployment of health ambassadors in communities at with or at risk of health disparities. Continued partnerships for vaccination clinics, mask distribution and at-home test kit distribution. Ensure that data is stratified to identify vulnerable populations and health disparities.
Communication	Focus on educating residents about prevention, staying up to date on vaccinations, masking when necessary, having at-home test kits, and treatment.

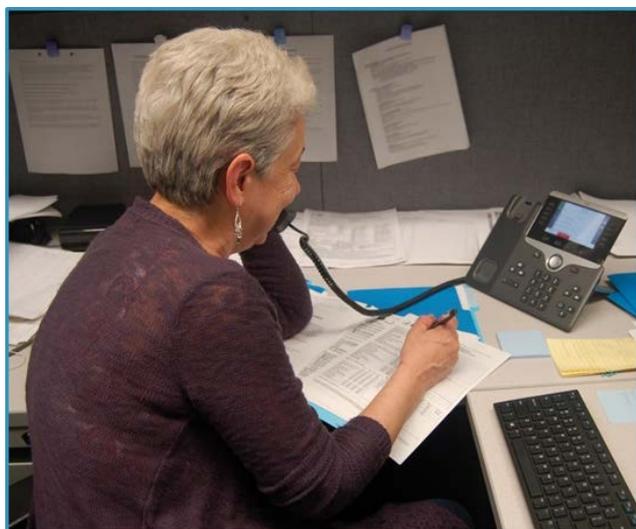
Critical Indicators

Measure	Measure Definition
Case Rate	Leading indicator for spread of COVID-19. Strength of this as a leading indicator of severity and transmission has decreased due to widespread availability of at-home tests.
Hospitalizations	Severity of COVID-19 burden on the community.
Hospital Capacity	Ability of the health care system to manage COVID-19 burden.
Vaccination Rate	Susceptibility of population to severe effects of COVID-19.

Disease Surveillance

Disease surveillance is a cornerstone of public health. Tools like contact tracing and outbreak response were our first line of defense against the spread of COVID-19 before testing, vaccinations and treatment became widely available. These instruments of public health were critical in educating the public about isolation and quarantine measures and ensuring that those in isolation and quarantine had the resources needed to remain compliant so the chain of infection could be broken. Anne Arundel County was recognized as a leader in the state for our contact tracing model and quickly transitioned from our core epidemiology staff to a large team of contact tracers. The team included 15-17 staff members during the week, evening and weekend to meet the needs of the county.

During the early phases of the pandemic, March 2020 through March 2021, the DOH was a primary county and was contacting an average of 123 new cases daily. At this time the number of people gathering at work, school, retail stores and entertainment venues were limited. A large part of the early contact tracing initiative included education on isolation and quarantine and case managing positive cases and their household contacts. In March 2021, the DOH went from being a primary county, contacting every positive case within 24 hours, to a



secondary county, contacting cases that the Maryland Department of Health (MDH) was not able to contact, vulnerable populations and individuals living in congregate settings.

As the pandemic progressed, increased social interaction and additional tools to slow the spread of COVID-19 changed the effectiveness and necessity of large scale contact tracing. Starting April 2022, contact tracing shifted to a more targeted approach focusing on high-risk individuals and settings. All positive cases receive COVID-19 guidance and connection to resources, including information about therapeutics, electronically through the MDH contact tracing program. Priority populations include individuals aged 65 years and older, those with a comorbidity and individuals living in a high-risk setting (e.g., nursing homes, assisted living, group homes). These populations have an increased likelihood of getting severely sick leading to hospitalization and death. Close contacts are no longer elicited and positive cases are encouraged to notify contacts themselves.

Contact Tracing Systems

The DOH will maintain a contact tracing team of four individuals to monitor the MDH COVIDLink contact notification system for outbreaks, manage phone call follow ups for release from quarantine letters and help with contact tracing in the event of a surge. The team will maintain equipment and stay up to date on system processes and protocols in the event that there is a surge.

Effective April 5, 2022, the MDH has automated their contact tracing system. Anne Arundel County will remain a secondary county and will no longer receive positive cases to interview. MDH will refocus efforts to:

- Reduce outbound calls
- Complete live interviews for high priority cases or possible outbreaks only
- Streamline the initial interview
 - Possible exposure source will no longer be collected
 - Household/known exposures will be combined into a high risk exposure category and no longer elicit all close contacts
- Discontinue broad contact elicitation
- Critical and high priority (65 and over, and any age with a comorbidity flag) will receive:
 - MD COVID Alert text
 - Therapeutics text
 - The National Opinion Research Center (NORC) will make three call attempts. A web survey link will be sent if unable to reach by phone and the case will be closed after three attempts.
- Medium and low priority (everyone else) will receive:
 - MD COVID Alert text
 - Web survey text
 - Web survey queue with 48 hours to complete, then close if no response

Contact Tracing in Anne Arundel County Public Schools (AACPS)

For the 2021-2022 school year, School Health maintained a contact tracing team.

Staff of the School Health contact tracing team did the following:

- Monitor AACPS student and staff COVID-19 positive cases
- Enter COVID-19 positive student cases into the AACPS student management system which generates isolation communication to parents/guardians and updates the AACPS COVID-19 public dashboard
- Identify and monitor classroom and schoolwide outbreaks
- Monitor statistics and trends and alert School Health leadership and AACPS partners
- Remain up to date on current MDH and CDC school guidance
- Assist school-based School Health staff in interpreting and providing guidance and education to school staff, parents and students
- Collaborate with AACPS contact tracing point of contact
- Work with the DOH Epidemiology/Disease Surveillance in managing outbreaks in the school setting



In preparing for the future, contact tracing tools and staffing models will be scaled to efficiently and effectively respond to periods of low and high transmission, as well as changes in MDH or CDC school guidance.

Outbreak Management

Staff in the Epidemiology/Disease Surveillance program will continue to manage COVID-19 outbreaks in high risk settings (e.g., schools, day cares, congregate living facilities) by working collaboratively with the facilities and the MDH. The Epi team will:

- Remain up to date on all outbreak definitions released from the MDH as well as isolation and quarantine guidance.
 - Monitor for trends in cases and share with DOH leadership.
 - Stay up to date on all guidance and provide education and guidance regarding infection control protocols to local government agencies, congregate living facilities, businesses, schools, public and private camps, sports facilities, sports leagues, detention centers, daycares and the public as needed.
- This team will continue to stay aware of how COVID-19 is spreading and monitor for evolving variants.

Wastewater Surveillance

The DOH is partnering with the Department of Public Works to conduct wastewater testing at seven water treatment plants in the county. Wastewater testing is able to detect COVID-19 levels in the community independent of whether individuals test themselves or not, or whether at-home test results are reported. Wastewater testing is emerging as a way to accurately measure trends in the burden of COVID-19 in a community. Early detection is key to proactive disease surveillance and response.

Vaccinations



Anne Arundel County is top three amongst counties for vaccination rates in Maryland. Vaccines are readily available to all residents 6 months and older. The DOH has administered over 200,000 vaccines and other providers have administered over 860,000 vaccines to date. Residents have a variety of vaccine providers in the county to meet their needs. Vaccines are available at DOH sites, most pharmacies and medical provider offices. The DOH will use a variety of vaccination site models to ensure that we can meet the public demand for vaccines while providing equitable access.

Semi-Permanent Site Vaccine Clinics

DOH semi-permanent vaccine sites include Anne Arundel Community College (AACC), Baymeadow Drive, Glen Burnie Health Center, Lula Scott Community Center, Parole Health Center and Pip Moyer Recreation Center.



Low Transmission Capacity

Some semi-permanent sites are not best suited for equitable distribution to more vulnerable communities. During periods of low transmission, 50% of vaccinations administered by the DOH will take place at these sites and 50% at community-based sites.



Rising or High Transmission Capacity

During periods of high demand such as high transmission levels and new vaccination recommendations, the DOH will be prepared to offer up to 5,800 vaccines weekly. During these periods, 80% of vaccines will be available through permanent sites and 20% through community sites. AACC, Baymeadow Drive and Pip Moyer are best suited for a large throughput of residents.

Community-Based Vaccine Clinics

In partnership with community organizations, these clinics allow for better engagement and access for minority and low-income communities. The DOH has partnered with 195 different businesses, faith organizations and community organizations to vaccinate throughout the county. The number of these clinics hosted weekly vary based on demand and partner interest.



Low Transmission Capacity

During periods of low and medium transmission, 50% of vaccinations will be provided at community sites. 14 community sites could be conducted weekly, including Saturdays.



Rising or High Transmission Capacity

During periods of high demand, high transmission or new vaccination recommendations, 80% of vaccines will be available through permanent sites and 20% through community sites. Nine community sites could be conducted weekly.

Homebound Vaccination

Administered to residents through self-referral through the DOH's phone bank or email bank or the MDH's No Arm Left Behind Initiative. A brief eligibility screening process is conducted via phone when setting up appointments based on the residents availability. If the resident is found to be mobile, an appointment is scheduled at one of our standing clinics. Homebound eligibility is determined based on self-reporting.



Low Transmission Capacity

When demand for homebound immunizations is high and standing and community vaccine demand is low, staffing allows for one to two 2-person teams to be deployed everyday, five days a week. 45 people can be provided COVID-19 vaccine in their homes per week using this model.



Rising or High Transmission Capacity

If the demand for vaccines is high due to approval of a new booster or vaccine, homebound vaccination capacity will be decreased in order to staff standing clinics. Homebound teams can go out one to three times during a week during high transmission based on staff availability.

AACPS Vaccine Clinics

School-based vaccine clinics have been the most attended site for COVID-19 pediatric vaccines. This AACPS partnership will continue with two schools per week for the remainder of the 2021-2022 school year and the 2022-2023 school year. During the summer, one clinic per day can be held at an AACPS school Monday through Thursday. During the school year, two evening clinics per week can be held at an AACPS school.



Vaccine Transfers and Pediatric Partnerships

The DOH will continue to serve as a vaccine hub for distribution to providers offices. Currently, there are 15 practices participating in our vaccine transfer program. DOH will partner with pediatric and family practices to provide vaccine storage and handling education. If practices are unable to store or handle vaccines DOH will have teams available to vaccinate on site at pediatric practices.

Testing



Timely access to testing remains critically important. Our approach to testing has evolved over the course of the pandemic with new testing modalities. Distribution of at-home rapid test kits has allowed the DOH to quickly increase testing capacity and availability for county residents. At-home testing is a low barrier intervention that provides real-time information for self-diagnosis and preventing the spread of COVID-19. PCR testing remains a valuable diagnostic tool and will continue to be offered. The DOH has conducted over 200,000 PCR tests since the beginning of the pandemic, distributed over 150,000 at-home rapid tests and tested nearly 16,000 AACPS students and staff in schools.

PCR Testing

- The DOH will maintain the capacity to conduct 1,300 PCR tests weekly. This testing will be conducted primarily at sites in Glen Burnie (drive-through), Annapolis (walk-up) and Shady Side (walk-up).
- Capacity depends on the MDH's ability to provide free PCR testing to local health departments through partnerships with laboratories who provide free testing supplies and maintain the results system.

At-home Test Kit Distribution

Rapid test kit distribution will continue to be the primary source of testing provided by the DOH.

- Kits will be distributed by the DOH at our health centers, all Anne Arundel County Public Libraries (AACPL), DOH headquarters, in communities by our Health Ambassadors and during various community-based events, including vaccine clinics.
- To promote equitable distribution, the DOH will continuously distribute kits purchased by the county or provided by the state to community organizations, non-profit organizations, government agencies and faith-based organizations. Our goal is to have 5,000 kits available weekly for distribution to partners. The amount of kits will vary based on availability, demand and priority. We have over 120 distribution partners throughout the county.
- AACPS will distribute 100,000 test kits to students and staff for the 2022-2023 school year.
- DOH will maintain a stockpile of 200,000 at-home test kits for distribution during a future surge.
- In order to distribute at-home test kits quickly during a critical surge in cases, the DOH will partner with additional agencies and organizations including but not limited to OEM, Libraries, Fire, and Police for mass distribution.

School-Based Rapid Testing

DOH school health staff will continue to conduct rapid testing for symptomatic students and staff at AACPS. 16,000 rapid test kits will be acquired for the 2022-2023 school year.

Masks

Consistent and correct wearing of masks is effective in lowering the transmission of COVID-19. The DOH masking recommendations will be guided by the CDC's community levels. Case rates, hospitalizations and vaccination rates help us determine the current public safety risk and subsequent masking recommendation. Mask wearing should be allowed in all settings for those who need or want to wear them. High-risk settings like nursing homes and health care facilities may have increased requirements for mask usage.

Early in the pandemic, various types of face coverings were acceptable because access to high quality masks was limited and reserved for frontline health care workers. Availability of high quality masks such as KN95's or N95's has greatly improved throughout the pandemic. As a result, the DOH now recommends wearing a KN95 or N95 over other types of masks to provide the best protection from COVID-19 and its variants. Surgical masks are also an acceptable choice. Cloth masks provide lower levels of protection than KN95, N95 and surgical masks but are effective in lowering transmission risks when other options aren't available. The DOH has distributed 750,000 KN95 masks, 25,000 N95 masks and 175,000 surgical masks to residents. Distributing masks to the community will continue to be a mitigation tool used by the DOH.



Mask Distribution

- DOH will continue to distribute supplies of KN95 masks at Glen Burnie Health Center, Parole Health Center, Health Services Building and all 16 AACPL locations, while supplies last.
- To promote equitable mask distribution the DOH will continuously distribute masks by request to community organizations, non-profit organizations and faith-based organizations. Our goal is to have 50,000 masks available weekly for distribution to partners. The amount of masks provided will vary based on availability, demand and priority. We have 75 distribution partners throughout the county.
- DOH will stockpile 1.5 million KN95 masks and 50,000 pediatric surgical masks for distribution during any future surge.
- In order to distribute masks quickly during a rise in cases or surge, the DOH will partner with the AACPL for increased distribution.

Personal Protective Equipment (PPE)

Wearing PPE is a regular part of health care delivery. Donning gloves, gowns, masks and other protective equipment happens in all health care settings as an infection control intervention. PPE is used to protect health care providers and the patients they are treating. At the beginning of the pandemic, PPE best practices were altered because of limited availability and supply chain delays. The DOH has been procuring and distributing PPE to health care organizations since the beginning of the pandemic and is maintaining a stockpile of critical PPE to distribute to health care providers responding to the pandemic.

PPE Distribution to Health Care Providers

- DOH will continue to provide PPE for tier one facilities: hospitals, long-term care facilities/nursing homes, EMS and dialysis centers.
- The requestor completes the request form, including facility information, items needed, requested quantity, rationale for the request and current inventory.
- Send the completed form to eoc@aacounty.org, or oem@annapolis.gov for facilities within the City of Annapolis.
- DOH warehouse staff will contact the requestor to coordinate delivery.

PPE Supply Levels

- Critical PPE items to be maintained are gloves, gowns, N95 masks, surgical masks, hand sanitizer and medical grade cleaning supplies.
- PPE burn rates are measured weekly and correlated with the case rate.
- DOH will maintain a PAR level of 6 weeks of PPE using the burn rate associated with a case rate of 20.

Health Equity



Anne Arundel County is committed to building health equity through our community engagement efforts. We work to ensure that every community member, regardless of ability, age, cultural background, ethnicity, faith, gender identity and expression, ideology, income, national origin, race or sexual orientation has the opportunity to live their healthiest life. The pandemic highlighted health disparities in various high-risk communities, most notably, the increased positivity rate amongst Black and Hispanic residents and the increased mortality rates for Black residents. Health equity is woven into all of our COVID-19 intervention efforts and requires additional targeted programs designed to eliminate health disparities. The pandemic highlighted health disparities in various high-risk communities. The county and state made equity in vaccination a priority. This is critical because in our county, and across the country, COVID-19 has had disproportionate impacts on specific populations based on race, ethnicity and age.

Contributing factors to these disparities included limited access to testing, increased occupational exposure, language barriers, underlying chronic conditions, crowded living conditions, lack of employment benefits such as paid time off or sick leave, affordable housing and food insecurity. The Office of Health Equity and Racial Justice (HERJ) will continue to host monthly health equity calls with community leaders from racial and ethnic minority groups. Listening sessions are also utilized to understand the barriers to care for black, Hispanic, low income and rural communities.

Community Health Ambassadors

The DOH will continue to fund the Community Health Ambassador program which contracts with community-based organizations to hire individuals from disproportionately affected communities to conduct outreach in their communities. These Community Health Ambassadors address gaps in communication, provide assistance with vaccine registration and address vaccination hesitation. In 2021, ZIP codes where Community Health Ambassadors were present and actively performing outreach saw a 20% increase in COVID-19 vaccination rates, from 46% to 66% compared to non-targeted ZIP codes which had only a 12% increase, from 41% to 53%.



Behavioral Health Provider Meeting Discussions

Monthly behavioral health provider meetings are an opportunity to provide COVID-19 updates and information to behavioral health providers in the county. It also is a forum for assessing barriers to care for residents engaged in inpatient or outpatient behavioral health care and identify solutions to those problems.

Data Stratification

The DOH will continue to stratify data by ZIP code, race, ethnicity and age to identify and address disparities.

Communications

Our communication strategy will focus on educating residents about prevention, staying up to date on vaccinations, masking when necessary, getting at home test kits, and treatment. We will continue to communicate when transmission levels are low that vaccines are safe and effective. We will continue to be transparent and share new information as it becomes available.

The DOH will have a strategy that is easy to understand based on the COVID-19 community level in the county. Up until late February 2022, the CDC based its rankings of a community's risk on the case rate (the community transmission). The [new framework](#) builds on case rate and includes how many people are being admitted to area hospitals for COVID-19 and how much hospital capacity is being used for COVID-19 patients.

COVID-19 Community Level

LOW	<ul style="list-style-type: none">● Consistent communication regarding vaccines and the importance of staying up to date on vaccines● Continue outreach prior to and during winter respiratory virus season so communities understand the importance of voluntary mask use when viruses most commonly circulate.● Encourage having ample masks and test supplies
MODERATE	<ul style="list-style-type: none">● Increase communications online and with media● Share countywide alerts and press releases● Increase communications surrounding testing and vaccine clinics● Investigate and determine if targeted, paid communication is needed● Increase messaging surrounding mask recommendations
HIGH	<ul style="list-style-type: none">● Seek out earned media opportunities● Share daily/weekly updates on social media and aahealth.org● Increase messaging surrounding mask recommendations● Communicate masking recommendations for everyone● Increase communication through the county Share Alerts● Explore other opportunities for mobile/email alerts

Vaccination Campaigns

We will expand messaging on vaccinations and shift to the concept of staying “Up-To-Date” on vaccination, like other vaccines.

Campaigns for Adults

- Consistent messaging on the effectiveness and safety of vaccines.
- Continue to educate about the benefits of boosters and ensure they are available in broad and equitable ways.
- Increase opportunities for Q&A/presentations on the efficacy of vaccines with various organizations (i.e., houses of faith, community organizations, sports leagues).
- Continue social media efforts based on updated guidance, science and data.
- Continue to communicate through selected channels to mitigate vaccination disparities.

Campaigns for Children

- Prepare for vaccine approval for kids under 5 years old – including targeted messaging and ensuring pediatric providers (pediatricians and family practitioners) are prepared to administer these vaccines.
- Seek opportunities around regular, required vaccinations to include COVID-19 vaccines and boosters as part of the conversation.
- Develop a Public Service Announcement featuring area pediatricians from Anne Arundel County encouraging parents to talk to their health care provider about COVID-19 vaccinations. Providers with CCTV can run the PSA in waiting rooms, and it can be used at gas station pumps, targeted social media and streaming apps. It will be in both video and audio form to give flexibility to run it through a service such as Public Service Network and explore places like pharmacies, grocery stores and radio.
- Partner with day care centers, preschools, nursery schools, after school programs, sports leagues and houses of faith. Offer flyers and set up community meetings where parents can ask questions with a representative from the DOH.
- Social media efforts including weekly video messaging (depending on transmission level), Facebook Lives and Town Halls.

PREPARE	Vaccines and treatment will continue to play a central role as we transition to an endemic phase. Communicate treatments, share new information. Monitor and update conditions that could lead to future surges.
RESOND	DOH implements rapid response to a surge. The public may be advised to increase masking, testing and social distancing.
ENGAGE	Increased communication to the public regarding possible new risks.
PROJECT	Identify, reach out and assist populations impacted by the surge.

CivicReady Alert

- Promote *Text to Share*, the countywide notification for smartphones, to alert individuals if there is new information regarding COVID-19.
 - Should Anne Arundel County enter a new COVID-19 community level, there will be notifications to the public through platforms such as press/media releases, conferences, social media and website communications.
 - Using metrics and local community context to understand where we are and putting effective public health strategies in place when they are needed.
-

Treatment

Treatment access and availability treatment are critical to preventing severe consequences of COVID-19 including death and hospitalization. Intravenous and oral treatment is available for people at increased risk of severe illness or death. Availability of oral medication introduces a treatment modality that most people are familiar and comfortable with. The DOH will focus on educating residents on treatment options, creating referral pathways for marginalized communities to treatment providers and creating targeted awareness campaigns for people at high-risk of serious illness. Of note, there are currently no treatment options for people 11 years and younger.

Data

Early in the pandemic, public-facing dashboards, internal dashboards and internal COVID-19 reports were updated daily. As the county transitions to an endemic response, reporting will shift to a weekly schedule.

Public Facing Data Reports

- COVID-19 Vaccine Distribution Data (not currently being updated)
 - Vaccines administered to Anne Arundel County residents
 - Vaccines given by the Anne Arundel County DOH
- Daily Anne Arundel County COVID-19 Data
 - Cases
 - Daily new cases
 - Cumulative cases (race/ethnicity and age breakdown not currently being updated)
 - Case rate
 - Deaths
 - Daily
 - Cumulative (race/ethnicity and age breakdown)
 - Cases and hospitalizations by vaccination status (not currently being updated)
- COVID-19 cases by ZIP code
- Weekly Key COVID-19 Indicators and Insights
 - Hospital census change from last week to this week
 - Cases and deaths change from last week to this week
 - Hospital occupancy change from last week to this week (not currently being updated)
 - Health Equity (not currently being updated)

Internal Data Reports

- Daily Dashboard
 - Case rate
 - New cases by day
 - Total residents vaccinated
 - Vaccines given by the Anne Arundel County DOH
 - Deaths
 - Percent positivity
 - Hospital occupancy (AAMC and BWMC)
 - COVID-19 hospital census (AAMC and BWMC)
- Weekly Vaccination Report
 - Percent of population vaccinated by age group
 - Percent of population vaccinated by race/ethnicity
 - Vaccines administered by the Anne Arundel County DOH by week and dose
 - Vaccines administered by Anne Arundel County DOH by week and race/ethnicity
 - Boosters administered to Anne Arundel County residents by week
 - Vaccination status by ZIP code of residence

