

Maryland Situation Update on Coronavirus Disease 2019 (COVID-19)

Maryland Department of Health

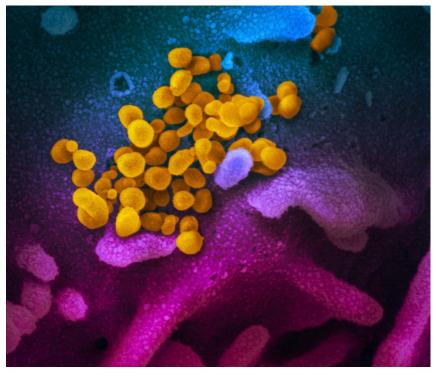
Infectious Disease Epidemiology and Outbreak Response Bureau

April 15, 2021

Call Agenda

- COVID-19 Epi Summary
- Johnson & Johnson Vaccine Updates-Dr. Monique Duwell
- Congregate Care, Bridging Team, and Vaccine Updates- Dr. Melissa Welch
- A Fungus Among Us: *C. auris* in MD
- Lab Web Portal Training (Part 1)- Liore Klein
- FAQs
- Q&A

Picture Courtesy of NIAID-RML

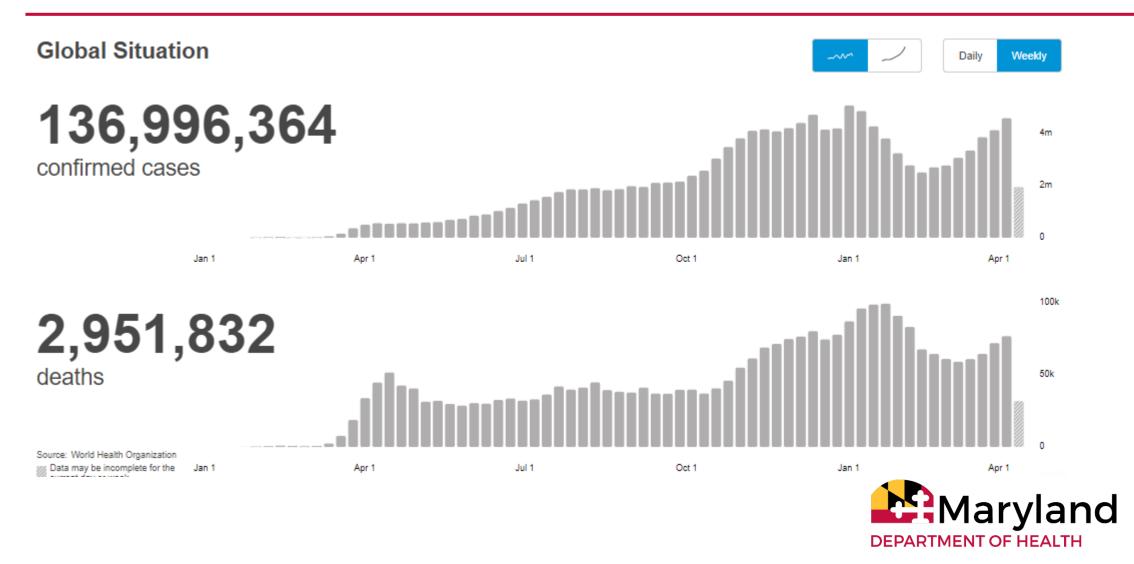




COVID-19 Epi Summary



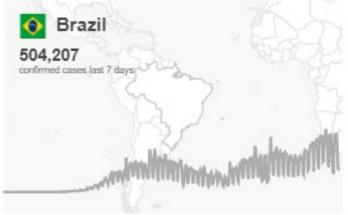
Worldwide: COVID-19



Worldwide: COVID-19

New cases reported in the past 7 days













U.S.: COVID-19

TOTAL CASES

31,158,087

+76,120 New Cases

CASES IN LAST 7 DAYS

489,675

TOTAL DEATHS

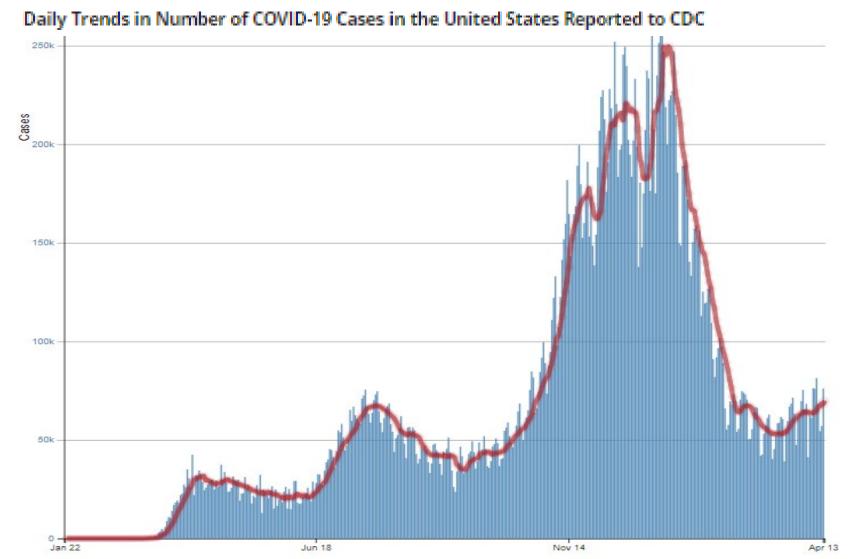
560,576

+769 New Deaths

CDC | Updated: Apr 14 2021 12:43PM

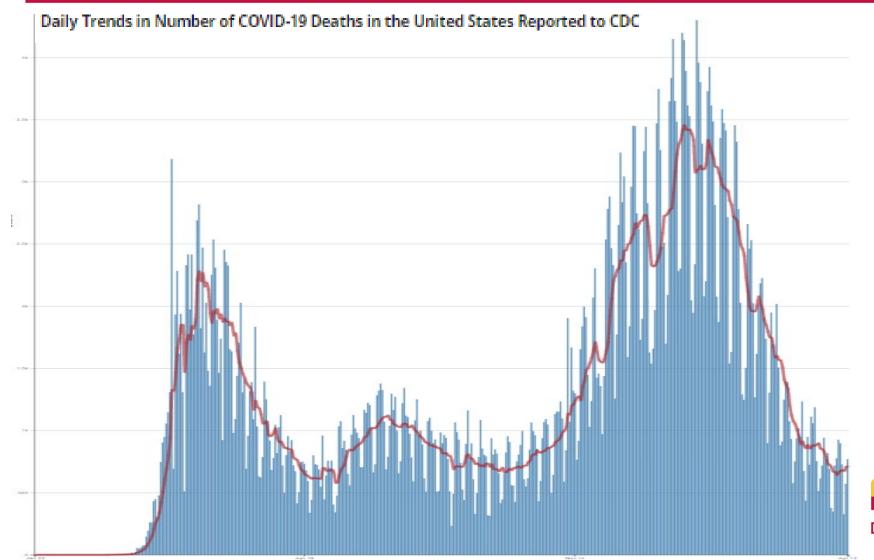


Daily US Trends in COVID-19 Cases





Daily US Trends in COVID-19 Cases

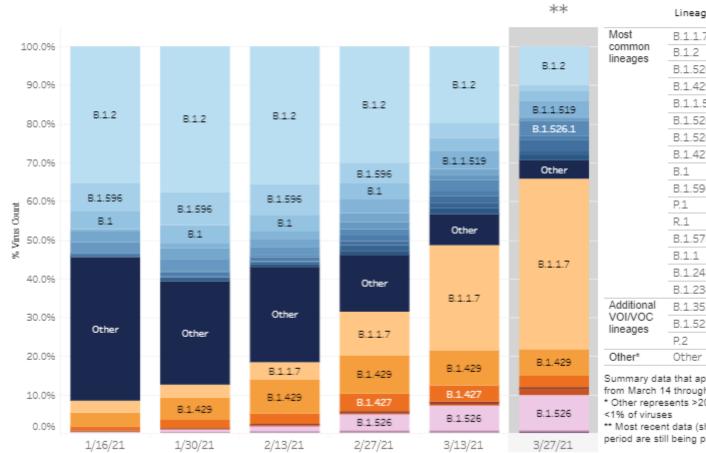




US: SARS-CoV-2 Variants

SARS-CoV-2 Variants Circulating in the United States

SARS-CoV-2 Variants Circulating in the United States, January 3 - March 27 2021



	Lineage	% Total	95%CI	Type	
Most common lineages	B.1.1.7	44.196	41.2-47.196	VOC	
	B.1.2	10.096	8.9-11.296		
	B.1.526	9.2%	7.2-11.796	VOI	
	B.1.429	6.9%	5.1-9.4%	VOC	
	B.1.1.519	4.196	3.4-5.0%		
	B.1.526.1	3.9%	3.3-4.7%		
	B.1.526.2	2.9%	2.3-3.8%		
	B.1.427	2.9%	2.2-3.9%	VOC	
	B.1	2.496	2.0-3.0%		
	B.1.596	1.796	1.3-2.1%		
	P.1	1.496	1.0-1.896	VOC	
	R.1	1.296	0.8-1.6%		
	B.1.575	1.196	0.9-1.5%		
	B.1.1	0.9%	0.6-1.5%		
	B.1.243	0.696	0.4-1.096		
	B.1.234	0.5%	0.3-0.7%		
Additional VOI/VOC lineages	B.1.351	0.796	0.5-1.0%	VOC	
	B.1.525	0.5%	0.3-0.796	VOI	
	P.2	0.3%	0.2-0.4%	VOI	
Other*	Other	4.7%	4.1-5.496		

Summary data that appear in the table include specimen collection dates from March 14 through March 27, 2021.

^{**} Most recent data (shaded) are subject to change as samples from that period are still being processed.



^{*} Other represents >200 additional lineages, which are each circulating at <1% of viruses

Confirmed Cases

431,795

24hr Change: +1,444

Persons Tested Negative

3,253,203

24hr Change: +6,555

Testing Volume

9,219,235

24hr Change: +33,064

Testing % Positive

5.78%

24hr Change: 0.09

Confirmed Deaths

8,326

24hr Change: +19

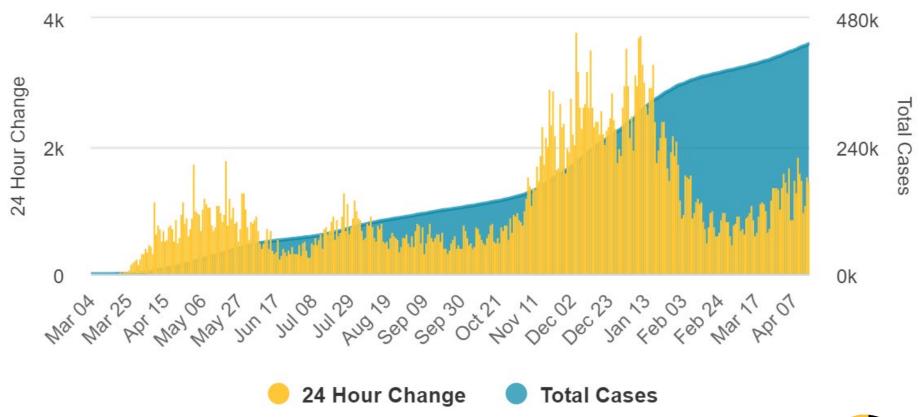
Currently Hospitalized

1,244

24hr Change: 8



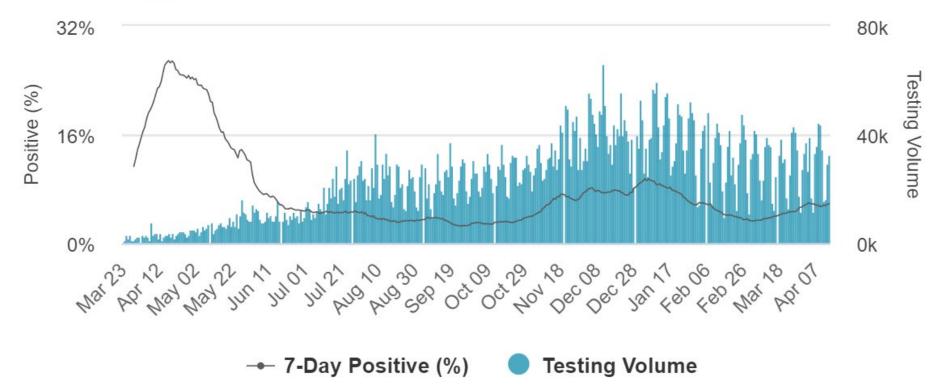
Confirmed Cases, Total over Time





Testing Volume, Tests per Day and Percent Positive Rate (7-Day Avg)

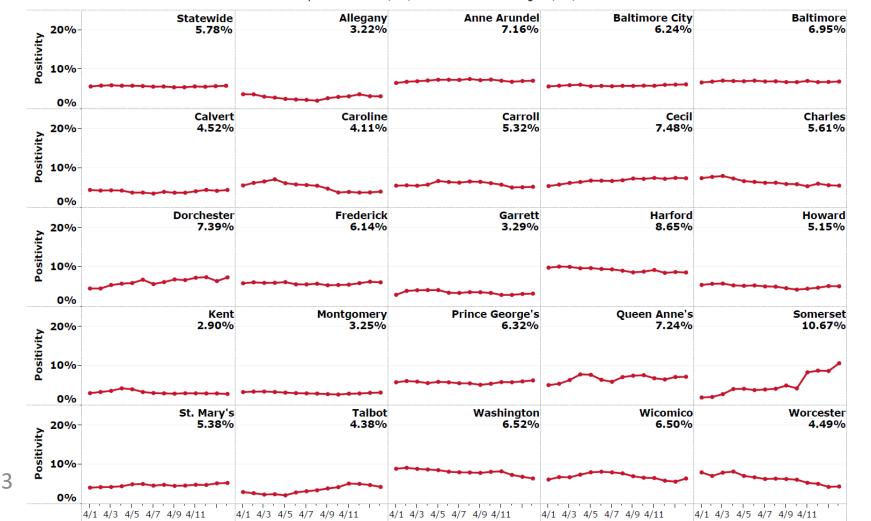
- Methodology





7-Day Avg. Percent Positivity by County - Last Two Weeks

Data reported as of 4/15/2021 for data through 4/14/2021



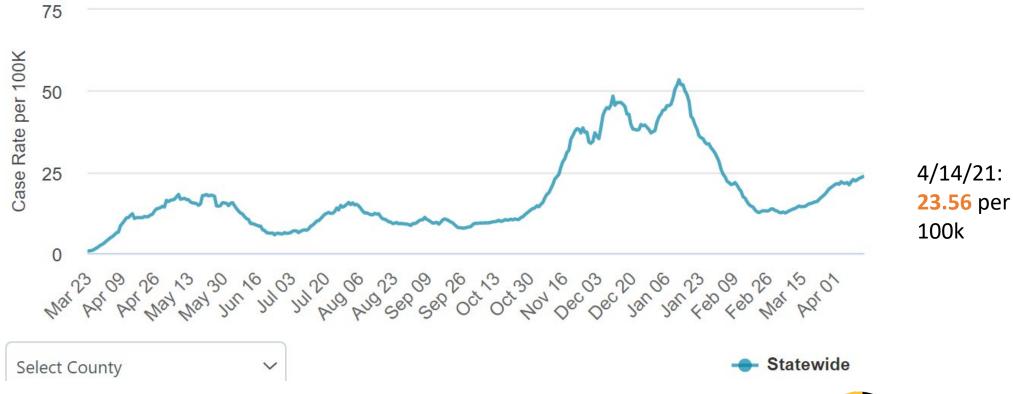
As of 4/14

Statewide: 5.78%

16 jurisdictions above 5%

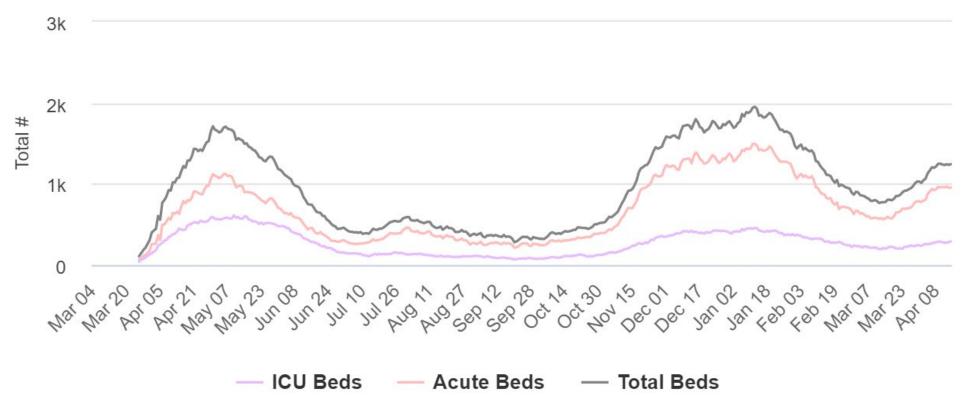


7 Day Moving Average Case Rate per 100K by Jurisdiction - Full Screen View





ICU and Acute Hospital Beds for COVID-19, Currently in Use





US: COVID-19 Vaccinations

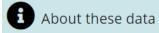
Total Vaccine Doses

Delivered 250,998,265

Administered 194,791,836

Learn more about the distribution of vaccines.

People Vaccinated	At Least One Dose	Fully Vaccinated
Total	123,917,385	76,681,252
% of Total Population	37.3%	23.1%
Population ≥ 18 Years of Age	122,950,014	76,465,698
% of Population ≥ 18 Years of Age	47.6%	29.6%
Population ≥ 65 Years of Age	43,533,422	34,455,460
% of Population ≥ 65 Years of Age	79.6%	63%



CDC | Data as of: Apr 14 2021 6:00am ET | Posted: Apr 14 2021 12:43PM ET



Federal Pharmacy Partnership for Long-Term Care Program Data

Total Number of Doses Administered in Long-Term Care Facilities

7,770,764

Number of People with at least One Dose in Long-Term Care Facilities

4,850,594

Number of People Fully Vaccinated in Long-Term Care Facilities

2,862,075

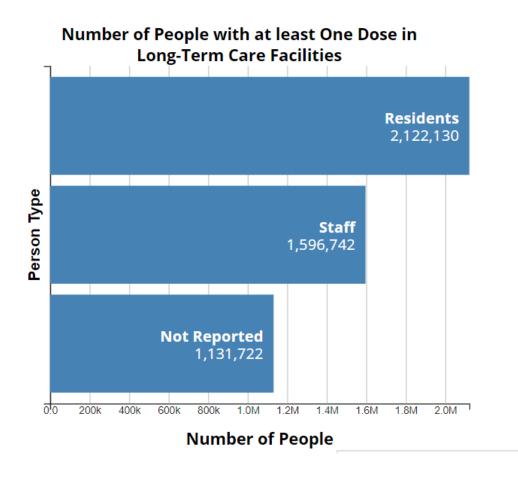
CDC | Data as of: Apr 14 2021 6:00am ET | Posted: Apr 14 2021 12:43PM ET

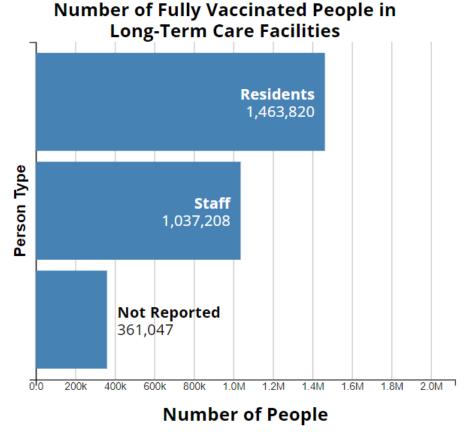


About these data



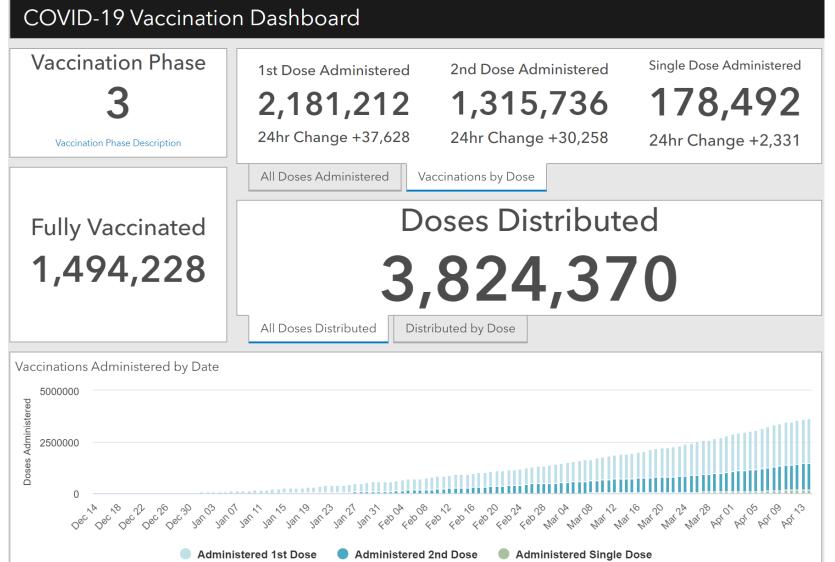
Federal Pharmacy Partnership for Long-Term Care Program Data







Maryland Vaccine Dashboard

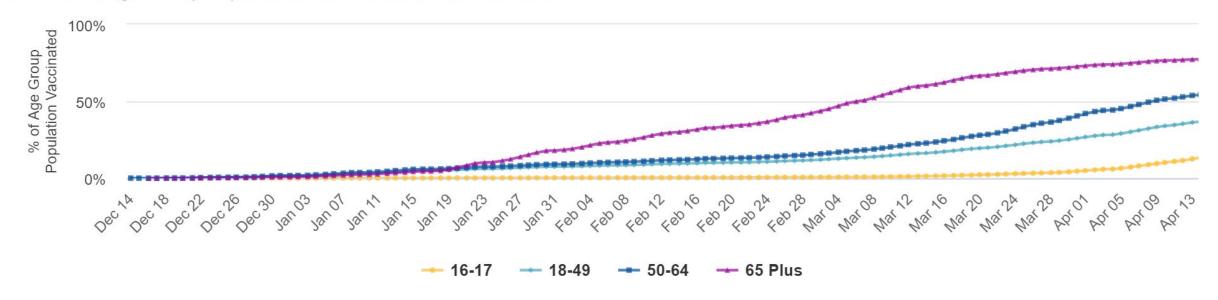


https://coronavirus.maryland.gov/#Vaccine Updated 4/15/21



Maryland Vaccine Dashboard

Percent of Age Group Population - Received at Least One Dose





Maryland Influenza Epi Update

- Influenza-like illness (ILI) activity in Maryland was minimal.
- Maryland sentinel clinical laboratories tested 2,957 specimens for flu and 56 (1.9%) tested positive. Of those, 23 (41%) were influenza Type A and 33 (59%) were influenza Type B.
- The Maryland Public Health Laboratory tested 14 specimens for influenza and 0 tested positive.
- 0 influenza-associated hospitalization was reported.
- 1 influenza-associated deaths were reported.



Joint CDC and FDA Update

Monique Duwell, MD, MPH Chief, Center for Infectious Disease Surveillance and Outbreak Response



Cases of Cerebral Venous Sinus Thrombosis with Thrombocytopenia after Receipt of the Johnson & Johnson COVID-19 Vaccine





Distributed via the CDC Health Alert Network April 13, 2021, 1:00 PM ET CDCHAN-00442



- The CDC and FDA are reviewing data involving six U.S. cases of a rare type of blood clot in individuals after receiving the J&J COVID-19 vaccine that were reported to the Vaccine Adverse Event Reporting System (VAERS).
- In these cases, a cerebral venous sinus thrombosis (CVST) was seen in combination with thrombocytopenia. All six cases occurred among women aged 18–48 years. The interval from vaccine receipt to symptom onset ranged from 6–13 days. One patient died.
- The pathogenesis of these rare and unusual adverse events after vaccination may be associated with platelet-activating antibodies against platelet factor-4 (PF4), a type of protein.

- Providers should maintain a high index of suspension for symptoms that might represent serious thrombotic events or thrombocytopenia in patients who have recently received the J&J COVID-19 vaccine.
- When these specific types of blood clots are observed following J&J COVID-19 vaccination, treatment is different from the treatment that might typically be administered for blood clots.
- Usually, the anticoagulant drug called heparin is used to treat blood clots. In this setting, the use of heparin may be harmful, and alternative treatments need to be given.
- CDC and FDA are recommending a pause in the use of the J&J COVID-19 vaccine out of an abundance of caution.



- To date, VAERS has received no reports of CVST with thrombocytopenia among persons who received either of the two mRNA-based COVID-19 vaccines.
- These reports following the J&J COVID-19 vaccine are similar to reports of thrombotic events with thrombocytopenia after receipt of the AstraZeneca COVID-19 vaccine in Europe. Both vaccines contain replication-incompetent adenoviral vectors that encode the spike glycoprotein of SARS-CoV-2.



For the Public

- If you have received the J&J COVID-19 vaccine and develop severe headache, abdominal pain, leg pain, or shortness of breath within three weeks after vaccination, contact your healthcare provider, or seek medical care.
- Report adverse events following receipt of any COVID-19 vaccine to VAERS.
- If you are scheduled to receive the J&J vaccine, please contact your healthcare provider, vaccination location, or clinic to learn about additional vaccine availability.

MDH Clinician Letter (April 13, 2021)

- Maryland Department of Health directs all Maryland COVID-19 vaccine providers to pause the administration of Johnson & Johnson COVID-19 vaccines.
- Providers should mark any Janssen/J & J vaccine in their inventory "Do not use. Awaiting guidance," and continue to maintain the cold chain for all supplies of Johnson & Johnson vaccines in a manner that prevents wastage.



MDH Clinician Letter (April 13, 2021)

Preliminary CDC recommendations:

- 1. Pause the use of the J&J COVID-19 vaccine until the ACIP is able to further review these CVST cases in the context of thrombocytopenia and assess their potential significance.
- 2. Maintain a high index of suspicion for symptoms that might represent serious thrombotic events or thrombocytopenia in patients who have recently received the J&J COVID-19 vaccine, including severe headache, backache, new neurologic symptoms, severe abdominal pain, shortness of breath, leg swelling, petechiae (tiny red spots on the skin), or new or easy bruising. Obtain platelet counts and screen for evidence of immune thrombotic thrombocytopenia.
- 3. In patients with a thrombotic event and thrombocytopenia after the J&J COVID-19 vaccine, evaluate initially with a screening PF4 enzyme-linked immunosorbent (ELISA) assay as would be performed for autoimmune heparin-induced thrombocytopenia (HIT). Consultation with a hematologist is strongly recommended.
- 4. Do not treat patients with thrombotic events and thrombocytopenia following receipt of J&J COVID-19 vaccine with heparin, unless HIT testing is negative.
- 5. If HIT testing is positive or unable to be performed in patients with thrombotic events and thrombocytopenia following receipt of J&J COVID-19 vaccine, non-heparin anticoagulants and high-dose intravenous immune globulin should be strongly considered.
- 6. Report adverse events to VAERS (https://vaers.hhs.gov/reportevent.html), including serious and lifethreatening adverse events and deaths in patients following receipt of COVID-19 vaccines as required under the Emergency Use Authorizations for COVID-19 vaccines.



The Maryland Department of Health will provide more information on this situation when it becomes available.

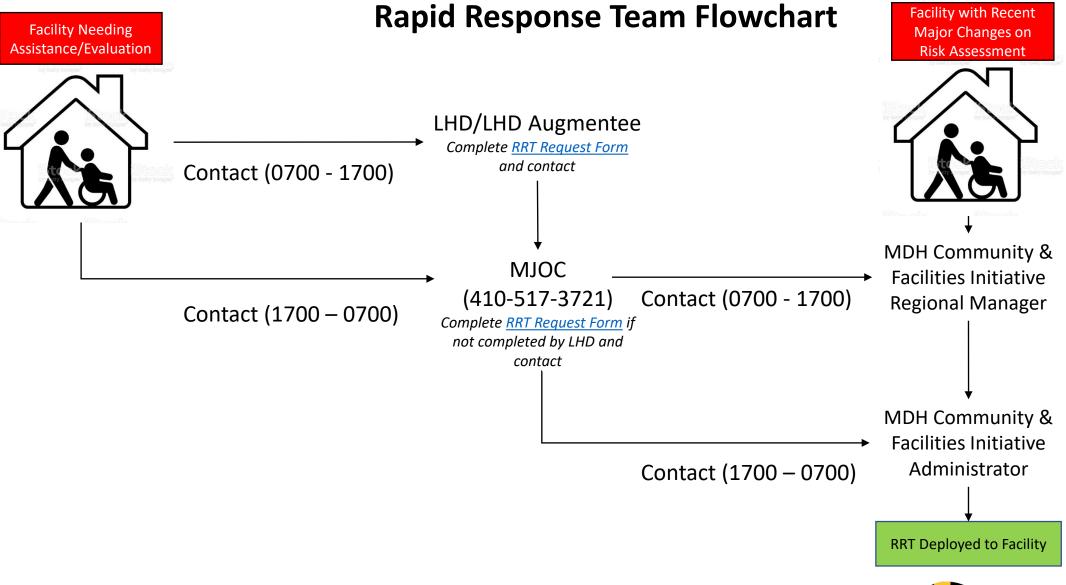




Maryland Department of Health Congregate Care Team Bridging Team & TAT Vaccine Clinic Update

Melissa Welch, DNP, FNP-BC

April 15, 2021





Bridge Team Request Step -by Step

- Please provide as much detail as possible in the form.
- If difficulty arises using this form, please reach out your local health department (0700-1700) or the MJOC (1700-0700, 410-517-3721).
- Before requesting supplemental staffing ("bridging"), ensure the facility has completed the following:
 - 1) Contacted their routine staffing agency.
 - 2) Contacted any sister facilities and corporate support, to include HFAM, LifeSpan, and LeadingAge
 - 3) Contacted non-affiliated local facilities and assigned hospital.
 - 4) Contact Qualivis (Chesapeake Registry) at 866-796-6235,
 - 410-796-6235, or covidstaffing@mhaonline.org



MDH Orders – 2021-03-09-02

"AMENDED DIRECTIVE AND ORDER REGARDING VARIOUS HEALTHCARE MATTERS"

- "12. Nursing Home and Hospital Mutual Aid in Nursing Home Outbreak Situations
- A. When an outbreak occurs in a nursing home, a nursing home shall coordinate with its designated hospital to ensure adequate staffing support from the hospital, including direct clinical care, and infection control technical assistance where appropriate to ensure adequate continued care and infection control; such support may include the provision of a certified infection control (CIC) professional to the nursing home. When contacted, a hospital shall render all assistance possible.
 - B. All nursing homes shall establish at least one mutual aid arrangement with another nursing home facility to ensure continuity of operations, to include ensuring adequate staffing support."



MDH TAT Vaccine Clinics

- 4/13/21: All SNFs scheduled for J & J Vaccine Clinics were contacted pursuant to FDA/CDC and MDH Recommendations by 10:00 a.m. and cancelled.
- 4/13/21: All SNF J & J Vaccine Clinics were converted to Pfizer and shifted to the week of 4/26/21
- Weeks of 4/12/221 and 4/19/21: TAT is administering 2nd Dose Pfizer vaccines to SNFs as needed
- Total 1st Dose vaccines needed at SNFs and currently on schedule as of 4/15/21:
- 2nd Dose Pfizer Vaccine clinics will start 3rd week in May



A Fungus Among Us: C. auris in MD

Elisabeth Vaeth, MPH Antibiotic Resistance Epidemiology Program Administrator Jamie Rubin, MS RN CIC Infection Prevention and Control Senior Specialist



Questions Answered Today:

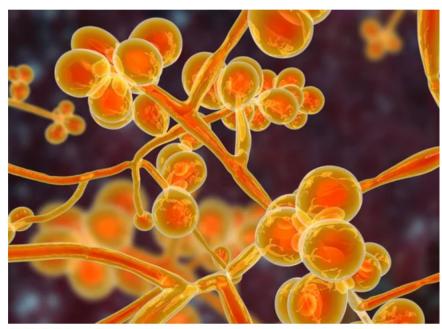
- 1. What is *Candida auris (C. auris)* and why are we concerned about it?
- 2. How will we know if we have a case?
- 3. What will MDH request of us during an investigation?
- 4. What can we do to prevent further spread and how can MDH help?



What is Candida auris (C. auris)?

C. auris is a drug-resistant yeast

- Lives on the skin (colonization)
- Can cause clinical infection in 5-10% of those colonized
- CDC <u>estimates</u> 30-60% mortality after clinical infection



Credit: Getty Images



Who is at risk for *C. auris* colonization or infection?

Patient-level risk factors:

- Poor overall health status/high acuity
 - Frequent hospitalizations and/or residence in skilled nursing facilities
- Weakened immune system (i.e., cancer)
- Diabetes
- Use of antibiotics
- Lines/tubes
- Chronic wounds



Risk Factors for *C. auris* acquisition

Facility-level risk factors:

- Infection control lapses
 - Poor compliance with PPE and/or hand hygiene
 - Improper wound care practices
 - COVID-related practice changes
 - PPE shortages
- Ineffective environmental cleaning
 - High-touch surfaces and shared equipment
 - Requires frequent cleaning with effective agent

Why are we concerned about *C. auris*?

Multi-drug Resistant

- Almost always
 resistant to
 common
 antifungals (end
 with "-azole"
- Some C. auris is resistant to many -or even allantifungals

Difficult to Identify

- Specialized laboratory equipment required
- Frequently misidentified
- May result in ineffective treatment

Contaminates Healthcare Environments

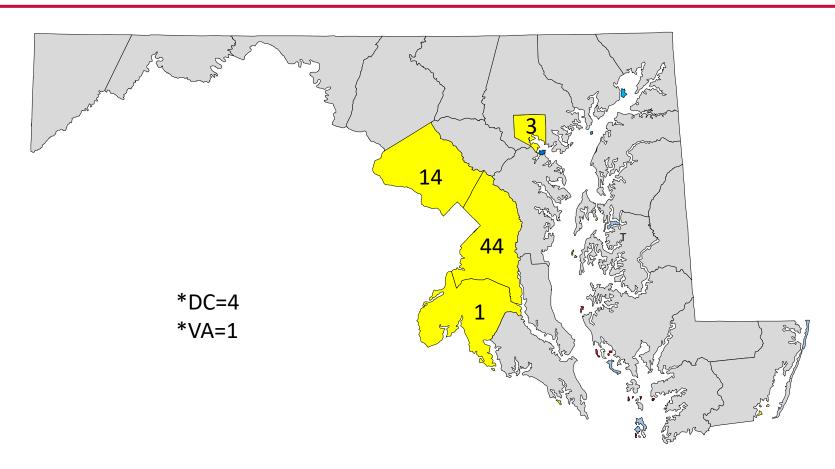
- Can persist on surfaces for a long time by forming a biofilm
- Requires special cleaning agents (e.g., bleach)

Causes Outbreaks in Healthcare Settings

- Ventilator units, ICUs, and other high acuity units
 - Frequent healthcare transfers increases risk of exposure

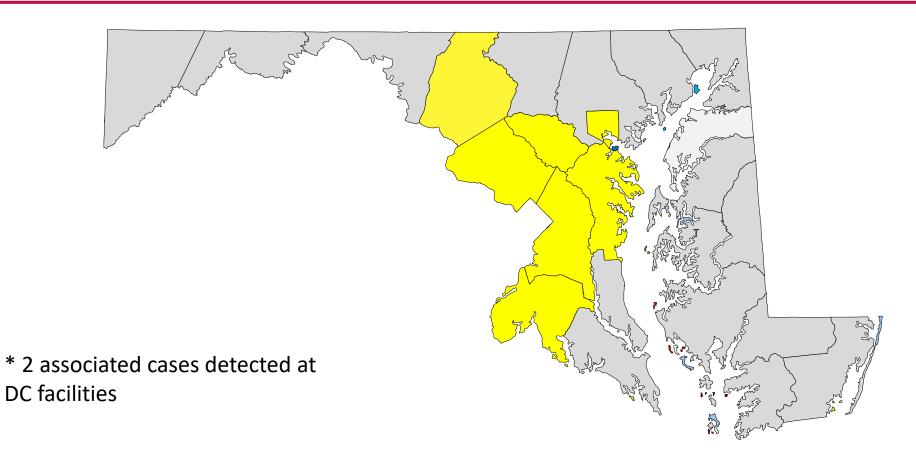


C. auris cases by County of Detection





Maryland counties with hospitals that have treated known *C. auris* cases





How can we prevent an outbreak in our facility?

Two key points:

- 1. Strong infection prevention & control measures
 - Environmental cleaning
 - Equipment disinfection
 - Proper use of personal protective equipment (PPE)
 - Hand hygiene
- 2. Rapid and accurate identification of new cases



How will we know if we have a case?

Clinical or Colonization Screening Specimens:

- Sometimes your lab will be able to identify *C. auris* in a clinical specimen (ask your lab if they can do this or if they send it out to a lab who does) OR
- Maryland Public Health Laboratory (MDPHL) will identify or confirm it
- MDH then notifies IP/DON

Known Positive or Close Contact of a Recent Case:

- Ideally, the transferring facility will tell you so the resident can be placed on TBP*
- MDH epidemiology team receives alerts through CRISP when a confirmed positive or close contact is admitted/readmitted to a high-risk facility.
- MDH then notifies IP/DON



What does the initial call include?

- Confirmation of admission
- Recommendations for initial infection prevention and control measures
 - May include:
 - Contact Precautions (CP) or Enhanced Barrier Precautions* (EBP)
 - Enhanced environmental and shared equipment cleaning measures
 - Review of personal protective equipment (PPE) practices
 - Hand hygiene monitoring
- Information Gathering



What information may MDH request to aid the public health investigation?

- Patient Detail (in addition to what is available via CRISP):
 - History and Physical and/or Infectious Disease consult note
 - Unit and bed trace
 - Isolation details
 - Risk factors for *C. auris* colonization (invasive devices, wound care, DM)
 - Surgical or diagnostic procedures
- Assessment of IP practices on the relevant unit(s)
- Resident screening
- List of close contacts



When will we be asked to screen residents?

- Is there a risk of transmission to other residents?
 - Was the positive resident not on TBP?
 - Are there IP or MDH concerns about practices on the unit like extended use of PPE due to COVID-19?
 - Is this a specialized unit with a high-risk population?
- If yes→
 - Screen roommates
 - Point Prevalence Screening (PPS) of overlapping patients
 - PPS of entire unit



What does patient screening involve?

Prior to screening day:

- IP and MDH teams identify residents for screening and arrange a date to collect specimens
- MDH ships collection kits to facility (free of charge)
 - Includes educational materials
- MDH can provide template letters for residents and families
 - Note: verbal assent but not written consent is required for colonization screening



What does patient screening involve?

On Screening Day:

- IP (or MDH) orders tests in the Lab Web Portal and prints lab slips
- Facility staff collects skin swabs
 - Collection site: Bilateral axilla/groin (one swab per resident)
- Facility staff label specimens with patient name and DOB and places lab slip in the bag with each specimen
- MDH staff can be onsite to assist with logistics on screening day if needed
- Specimens are sent to MDPHL (via lab courier or shipped via FedEx at no cost to the facility)



Axilla/Groin Swab collection

- BD Eswabs (same as used for COVID testing)
- Single composite swab of 4 body sites: bilateral axillae and bilateral groin folds
- Tips for success:
 - Do NOT discard liquid in tube
 - Ensure the cap is on securely
 - Label each tube with name and DOB
 - Place the correct lab slip in each specimen bag
- Missing these key steps will result in specimen rejection and recollection





How are swabs tested?

- *C. auris* testing occurs in two parts:
 - Swab-based PCR (can occur as soon as swab is received)
 - Culture-based PCR (occurs after 5 days of culture in broth)
- Final *positive* results are issued after either a positive swab-based PCR OR a positive culture-based PCR. TAT ranges from 2 days to 1 week after receipt.
- Final *negative* results are issued only after **both** negative swab- and culture-based PCR. TAT is approximately 1 week from receipt.



How do we get results?







Lab reports are available through the lab web portal (same system used for order entry)

Final reports available in 7 days.

MDH will also notify the facility by phone if a new positive is identified



What happens next?

- The MDH and facility teams will meet by phone to review the results of the colonization screening and discuss next steps.
 - Expanded screening, repeat screening, or no further action may be recommended based on the investigation.
- MDH or the facility may also request an on-site IP assessment of the MDRO prevention program.
 - A written report with successes and priority recommendations for any identified gaps will be provided to the facility to aid in prevention.

How can MDH help us prevent future cases?

- MDH is here- along with your local health department contacts- to provide resources, answer questions, assist you through outbreak investigations, and provide IP and epidemiology support as needed.
- Phone and email consultation encouraged: mdh.ipcovid@maryland.gov

Thank you for your partnership!



References and Further Information

- CDC Fact Sheet for Infection Preventionists: <u>https://www.cdc.gov/fungal/candida-auris/fact-sheets/cdc-message-infection-experts.html</u>
- EPA Products with *C. auris* claim: https://www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants#candida-auris
- CDC Fact Sheets for Providers, Patients, and Laboratories: https://www.cdc.gov/fungal/candida-auris/fact-sheets/index.html
- CDC Treatment and Management of Infections and Colonization: https://www.cdc.gov/fungal/candida-auris/c-auris-treatment.html



Lab Web Portal 2.0 Training for LTC (Part 1)

Liore Klein, MSPH Sr. Epidemiologist Lab-Epidemiology Coordinator, ARLN Program



FAQs



FAQ #1: Do we still need to place vaccinated new admissions on our Observation unit for 14 days?

• Yes. We will let you know if and when that changes.



FAQ #2: Must we exclude HCP after an exposure if they are fully vaccinated?

- No, if the HCP remains asymptomatic and is not immunocompromised. However, you may consider a period of quarantine and/or testing for HCP with high-risk exposures.
- Post-vaccine infections can occur, especially after prolonged close contact (i.e., household contacts).
- Some facilities have chosen to exclude household contacts regardless of vaccination status to protect their residents and staff.
- What does your policy say?



FAQ #3: Is used PPE from the COVID-19 unit considered biohazard waste?

No, unless the PPE is saturated with blood or body fluids.
 Otherwise, dispose of PPE according to routine procedures.

https://www.cdc.gov/coronavirus/2019-ncov/hcp/faq.html#Waste-Management



Questions?

MDH.IPCOVID@maryland.gov

