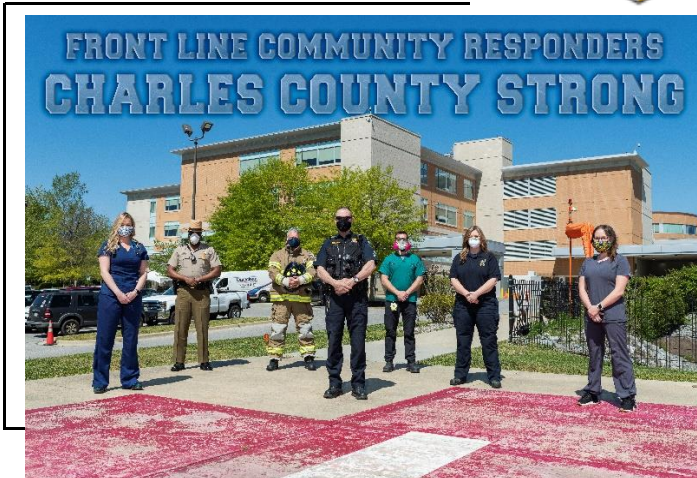


Charles County COVID-19

Incident Action Plan



Operational Period

From To
4/25/20 4/28/20
8:00 - 8:00



INCIDENT OBJECTIVES (ICS 202)

1. Incident Name Charles County COVID-19	2. Operational Period	Date From: 4/25/20	Date To: 4/28/20	Time From: 8:00	Time To: 8:00
3. Objectives					
A. Maximize the safety and overall health and well-being, including mental health of the residents, county employees, and responders, throughout this incident.					
B. Conduct surveillance of COVID-19 cases in collaboration with the health department, hospital, physicians, and other health care providers.					
C. Maintain timely, accurate and uniform communications with residents, employees and first responders as well as partners in the tri-County and National Capital Region and the state of Maryland.					
D. Prepare for and handle the human reaction crisis contingencies in long terms.					
E. Prepare for long term order maintenance.					
F. Prepare for and sustain our communities' hierarchy of needs throughout this incident.					
G. Determine trigger points for Continuity of Operations for all agencies, including government, public safety, schools, hospital, and other critical infrastructure systems.					
H. Ensure all practical steps to "Slow the Spread" of transmission of COVID-19.					
4. Operational Period Command Emphasis					
Use the recommended PPE on all calls, take all the necessary precautions. PPE recommendations need to be followed 100% especially in nursing homes, and areas with groups of non-ambulatory patients.					
General Situational Awareness					
""Problems? Need a friend to talk to? Peer Support Services -240-532-0558-DESpeersupport@charlescountymd.gov "					
5. Site Safety Plan Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Approved Site Safety Plan(s) Located at:					
6. Attachments (check if attached)					
<input checked="" type="checkbox"/> ICS 203	<input type="checkbox"/> ICS 207	<input checked="" type="checkbox"/>	ICS 214		
<input type="checkbox"/> ICS 204	<input checked="" type="checkbox"/> ICS 208	<input type="checkbox"/>	_____		
<input type="checkbox"/> ICS 205	<input type="checkbox"/> Map/Chart	<input type="checkbox"/>	_____		
<input checked="" type="checkbox"/> ICS 205A	<input type="checkbox"/> Weather	<input type="checkbox"/>	_____		
<input type="checkbox"/> ICS 206	<input type="checkbox"/> Forecast/Tides/Currents	<input type="checkbox"/>	_____		
7. Prepared by: Name: <u>Joe Hoffmaster</u> Position/Title: <u>PSC</u> Signature: _____					
8. Approved by Incident Commander: Name: <u>Michelle Lilly</u> Signature: _____					
ICS 202	IAP Page <u>2</u>	Date/Time: <u>April 24, 2020 @15:00</u>			

ORGANIZATION ASSIGNMENT LIST (ICS 203)

1. Incident Name		2. Operational Period	
Charles County COVID-19		Date From: 4/25/20 Date to: 4/28/20 Time From: 8:00 Time to: 8:00	
3. Incident Commander and Staff		7. Operations Section	
UC	Dr. Howard Haft	Chief	
UC	Michelle Lilly	Deputy	
Deputy	Melanie Gardiner		
Deputy	Tony Rose		
Safety Officer	John Filer	a. Branch I	Public Health
Public Information Office	Jennifer Harris Donna Fuqua	Branch Director	Ranston Harvey
Intell Officer	Jason Stoddard	Deputy	Mary Lilly
4. Agency Representative		DSS	
		Liaison Officer	Tom Brown Robbie Jones
Agency	Name	Hospital	Bill Grimes John Filer
Intell officer Deputy	Mike Meiser	Nursing Homes	Tiffany Brown
Lifestyles	Sandy Washington	Health Care Providers	Melanie Gardiner
Public Schools	Mike Meiser	Rehab Centers	Eddie Kratzer
		Assisted Living	Rosalinda Horton
		Funeral Services	Cataria Patterson
		b. Branch II	Public Safety
		Branch Director	Mark Kaufmann Jr.
		Deputy	Scott Herbert D J Mills
		DES EMS	Steve Finch
		Vol EMS	Andrew Spalding Mitchell Lewis
		Vol Fire	Scott Herbert
		Logistics	Scott Herbert
5. Planning Section		c. Branch III	Law Enforcement
Chief	Joe Hoffmaster	Branch Director	Chris Schmidt
Deputy	Bill Smith	Deputy	Cari Baker
Resource Unit		La Plata Police	Chris Becker
Situation Unit	Jen Adams	MD State Police	Thomas Quade
Documentation Unit	Bill Smith	DNR	Catherine Meddelin
Demobilization Unit		MdTA	Brian Lawrence
Human Resources			
Technical Specialists	(name / specialty)	d. Branch IV	Infrastructure
		Branch Director	
		Deputy	
		SMECO	Jennifer Raley
		Grocery	
6. Logistics Section		Propane	
Chief	Nick Ellis	Natural Gas	
Deputy	need to fill		
Support Branch			
Donations	Ed Tucker		
Supply Unit			
Facilities Unit	Nick Ellis	10. Finance Section	
Ground Support Unit		Chief	Jennifer Adams
Service Branch		Deputy	
Service Branch Dir.		Time Unit	
Communications Unit	Jeffrey Clements	Procurement Unit	
Medical Unit		Comp/Claims Unit	
Security Unit		Cost Unit	
Food Unit			
9. Prepared by: Name: Joe Hoffmaster Position/Title: PSC Signature			
ICS 203	IAP Page 3	Date/Time: April 24, 2020 @ 14:00	

ORGANIZATION ASSIGNMENT LIST (ICS 203)

1. Incident Name		2. Operational Period	
Charles County COVID-19		Date From: 4/25/20 Time From: 8:00	Date to: 4/28/20 Time to: 8:00
3. Incident Commander and Staff		7. Operations Section	
UC	Dr. Howard Haft	Chief	
UC	Michelle Lilly	Deputy	
Deputy	Melanie Gardiner		
Deputy	Tony Rose		
Safety Officer	John Filer	a. Branch V	Governance
Public Information Officer	Jennifer Harris Donna Fuqua		
Intell Officer	Jason Stoddard		
4. Agency Representative		Charles County Govern.	Michele Lilly
Agency	Name	Town of LaPlata	Chris Becker
Intell officer Deputy	Mike Meiser	Town of Indian Head	Ryan Hicks
Lifestyles	Sandy Washington		
CC Public Schools	Michael Meiser		
		b. Branch VI	Business
		Branch Director	Darre'll Brown
		Deputy	Marcia Keeth
		Economic Development	Darre'll Brown
		Chamber of Commerce	Bonnie Grady
5. Planning Section		c. Group	Peer Support
Chief	Joe Hoffmaster	Group Supervisor	Courtney Shannon
Deputy	Bill Smith	Deputy	Pam Gannt
Resource Unit			Debbie Gianinni
Situation Unit	Jen Adams		
Documentation Unit	Bill Smith		
Demobilization Unit			
Human Resources			
Technical Specialists (name / specialty)		d. Branch VIII	
		Branch Director	
		Deputy	
6. Logistics Section			
Chief	Nick Ellis		
Deputy	need to fill	e. Branch IX	
Support Branch			
Donations	Ed Tucker		
Supply Unit			
Facilities Unit	Nick Ellis	10. Finance Section	
Ground Support Unit		Chief	Jen Adams
Service Branch		Deputy	need to fill
Service Branch Dir.		Time Unit	
Communications Unit	Jeffrey Clements	Procurement Unit	
Medical Unit		Comp/Claims Unit	
Security Unit		Cost Unit	
Food Unit			
9. Prepared by: Name: Joe Hoffmaster		Position/Title: PSC Signature	
ICS 203	IAP Page 4	Date/Time: April 24, 2020 @ 14:00	

COMMUNICATIONS LIST (ICS 205A)

1. Incident Name Charles County COVID-19		2. Operational Period:		Date From: 4/25/20	Date to: 4/28/2020
				Time From: 8:00	Time to: 8:00
3. Basic Local Communications Information:					
Name - Last	Name-First	Representing	Email	Phone	
Adams	Jennifer	DES FSC	AdamsJen@Charlescountymd.gov		
Baker	Cari	CCSO	bakerce@ccso.us		
Becker	Chris	La Plata Police	cbecker@townoflaplata.org		
Brown	Darrell	Business Director Econ Dev	Brownd@charlescountymd.gov		
Cress	Lauri	Charles Regional Medical Center	lauri.cress@umm.edu		
Ellis	Nick	DES- Logistics	DESLogistics@charlescountymd.gov		
Filer	John	DES- Liaison	FilerJ@charlescountymd.gov		
Finch	Stephen	DES	FinchS@charlescountymd.gov		
Fuqua	Donna	PIO	Fuquad@CharlesCountyMD.gov		
Harris	Jennifer	PIO	HarrisJ@CharlesCountyMD.gov		
Hoffmaster	Joe	Planning Section	DESPlanning@charlescountymd.gov		
Kaufmann	Mark Jr	PS Branch Dir. Vol Fire Chief	HoffmasJ@CharlesCountyMD.gov		
Konschak	Matt	NSWC IHD	markeng1trk@hotmail.com		
Lilly	Michelle	CCDES Director, Unified Command	matthew.konschak@navy.mil		
Lilly	Mary	C C Dept. of Health	LillyM@charlescountymd.gov		
Lowry	Susan	MDH	Mary.Lilly@maryland.gov		
Mills	D.J.	Vol Fire- Special Operations Chief	suzan.lowry@maryland.gov		
O'Malley Simpson	Katie	CCBOE PIO	djm31_9@hotmail.com		
Proctor	Destiny	DES	Komalley@ccboe.com		
Quade	Thomas	MSP	proctord@charlescountymd.gov		
Rose	Tony	DES Deputy Director, Unified	Thomas.Quade@maryland.gov		
Russell	Cindy	DSS	RoseT@charlescountymd.gov		
Schmidt	Louis Chris III	CCSO	cindy.russell@maryland.gov		
Seaman	Kevin	CCEMS	schmidtlo@ccso.us		
Smith	Bill	CCVFA/CCAEMS	seamank@chalrescountymd.gov		
Spalding	Andrew	Volunteer EMS Chief	Smithb@ccvfireems.org		
6. Prepared by: Name: _____ Joe Hoffmaster _____ Title: _____ PSC _____ Signature _____					
ICS 205A	IAP Page <u>5</u>	Date/Time: <u>April 24, 2020</u> @ <u>15:00</u>			

COMMUNICATIONS LIST (ICS 205A)

1. Incident Name		2. Operational Period:		Date From:	4/25/20	Date to:	4/28/2020
Charles County COVID-19				Time From:	8:00	Time to:	8:00
3. Basic Local Communications Information:							
Name - Last	Name-First	Representing	Email	Phone			
Stoddard	Jason	Intell	jestoddard@ccboe.com				
Ranston	Harvey	CCDOH	Ranston.harvey@maryland.gov				
Laschatt	Lisa	CCDOH	lisa.laschatt@maryland.gov				
Meiser	Michael	CCPS	mlmeiser@ccboe.com				
EOC- CC		CCEOC	DESEOC@charlescountymd.gov				
Cherry	Lori	LOGS- Deputy	CherryL@charlescountymd.gov				
Herbert	Scott	PS LOGS	sherbert@hvfdeems.org				
Haft	Howard	CCDH	Howard.haft@maryland.gov				
Raley	Jennifer	SMECO	Jennifer.Raley@SMECO.Coop				
Farr	Courtney	SMECO	Courtney.Farr@SMECO.Coop				
Law	Natasha	SMECO	Natsha.Law@SMECO.Coop				
Teleconfernce #			1-872-240-3212				
Tucker	Ed	Donations	DESDonations@Charlescountymd.gov Etucker@Charlescountymd.gov				
Barnes	Raena	DH-Liaison	raena.barnes@maryland.gov				
Wolf	Theresa	PH-DSS	Therese.Wolf@maryland.gov				
Higgins	David	Safety Officer- Assistant	HigginsD@chalrescountymd.gov				
Jones	Robbie	HD-Liaison	JonesRob@Charlescountymd.gov				
Hicks	Ryan	Indian Head	ryan@townofindianhead.org				
Lewis	Mitchell	Volunteer EMS Chief, Assistant	mlewis@WaldorfVFD.com				
Mott	Robert (Bob)	VEIP Manager Document Facil.	capt302a@gmail.com				
Rands	Ray	VEIP Manager	raymond.rands@maryland.gov				
Edge	Bill	CCSO-Safety					
Peer	Support	Peer Support Team	DESPeersupport@charlescountymd.gov				
Courtney	Shannon	Peer Support Team Leader	Shannonc@charlescountymd.gov				

SAFETY MESSAGE/PLAN (ICS 208)

1. Incident Name Charles County COVID-19	2. Operational Period Date From: 4/25/20 Date To: 4/28/20 Time From: 8:00 Time To: 8:00	
3. Safety Message/Expanded Safety Message, Safety Plan, Site Safety Plan:		
"Problems? Need a friend to talk to? Peer Support Sevices- 240-532-0558 - DESpeersupport@charlescountymd.gov "		
1. Total identified PUI's transported as of 4/23: 435 Total # of patients testing positive : 84		
2. PPE stockpiles remain stable with an estimated supply range of 10+ days based on current call volumes.		
3. Revision to EMSOP Special Order 2020-01 Version 4.0 has been completed and disseminated to staff.		
4. As this is a rapidly changing landscape, leaders should review any changes with their personnel each morning.		
5. Speical Order 2020-04 Version 1.0 was released today. New guidelines for personnel at the beginning of their shift, end of their shift and at the station.		
6. Personnel who report having a fever, sore throat, cough or other respiratory related symptoms should stay at home and self-isolate until they are symptom free for a period of 72 hours.		
7. The County's Peer Support Team has been activated and will make weekly wellness checks with our County's first responders.		
8. Please remember that PPE caches are for EVERYONE. We are all in this TOGETHER so there is NO career and volunteer PPE caches.		
9. Under the approval of the EOC and to keep congruent with the CDC and Governor Hogan's reccomendations, Safety has approved the use of simple face masks (commercial or crafted) in the public arena. Per SOP, N95's are to be used for all patient contacts with reuse guidelines in place per the CDC recomendations.		
10. Two videos are posted on You Tube: PPE Best Practices - https://youtu.be/mY4rvyJDxDk and Peer Support Services - https://youtu.be/jZD1EOon7Sw		
Site Safety Plan(s) Located At: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Prepared by: Name: <u>John Filer</u> Title: <u>Safety Officer</u> Signature: _____		
ICS 208	IAP Page _____	Date/Time: <u>April 24, 2020</u> @ <u>14:00</u>

ACTIVITY LOG (ICS 214)

1. Incident Name Charles County COVID-19		2. Operational Period		Date From 4/25/2020	Date To: 4/28/2020
				Time From: 8:00	Time To: 8:00
3. Name:		4. ICS Position		5. Home Agency (and Unit):	
6. Resources Assigned					
Name		ICS Position		Home Agency (and Unit)	
7. Activity Log					
Date/Time		Notable Activities			
8. Prepared by: Name: _____ Position/Title: _____ Signature: _____					
ICS 214, Page 1		Date/Time: _____			

ACTIVITY LOG (ICS 214)

[illegible]



Safety Officer's Report Charles County EOC

04-24-20

John Filer
Chief of EMS and SOD
Charles County Department of
Emergency Services

Today's Safety Message: "Problems? Need a friend to talk to? Peer Support Services 240-532-0558

DESsupport@charlescountymd.gov"

Total number of PUI's transported to date: 435

Total number of patients transported by EMS testing + for COVID: 84

Total number of first responders on self-isolation: 6

Total number of first responders on quarantine: 33

Total number of first responders + for COVID-19: 9

Total number of first responders out for COVID related mental health: 0

Total number of fire stations sanitized: 4

Daily Estimated PPE Burn Rate: 30 sets/day



10425 Audie Lane
La Plata, MD 20646



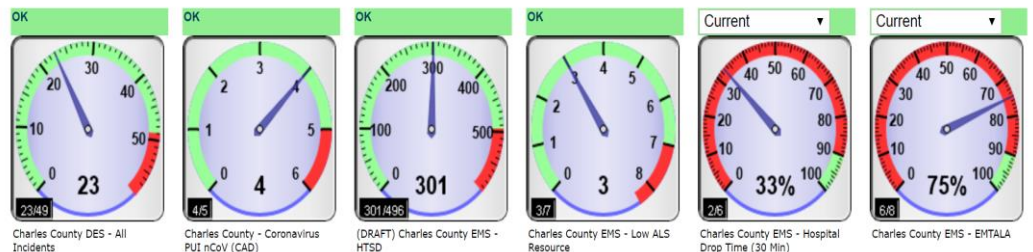
301-399-1143



DESsafety@charlescountymd.gov



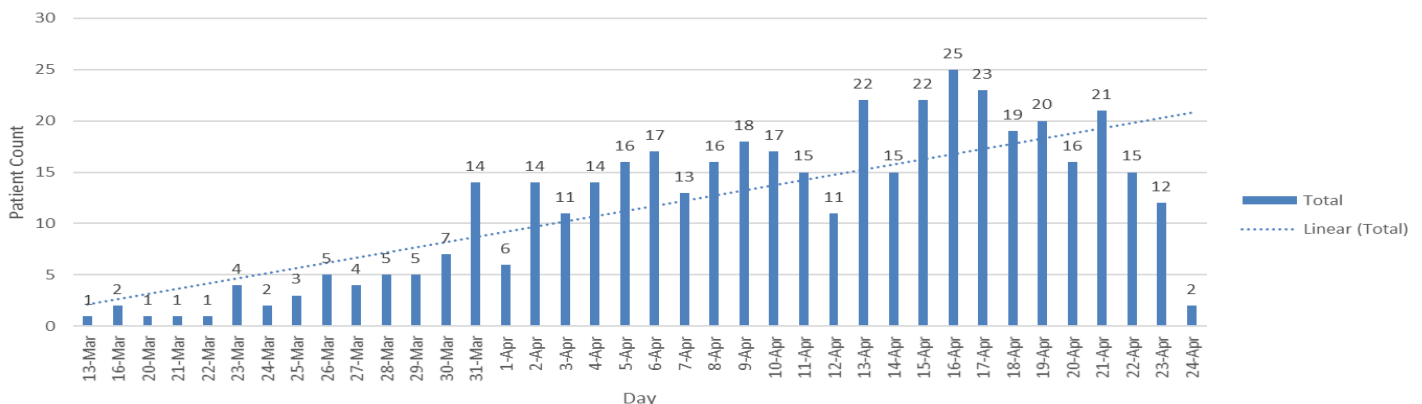
www.charlescountymd.gov



ePCR

Count of Incident Number

PUI Incidents - 03-13-20 thru 04-24-20 @ 1043



Sent to Queue



Problems? Need a friend to talk to?

Peer Support Services

240-532-0558

DESpeersupport@charlescountymd.gov

HOSPITAL BRIEF 4-24-2020

- The trigger point for starting up the tent operations outside of the hospital has not yet been activated. Activation will be determined by both staffing levels and patient census presenting to the ED.
- Hospital Bed Capacity = 166. Census = 85
- Hospital ICU Census = 10
- Hospital ICU is now a dedicated COVID-19 Unit, and 3 East is for ICU overflow.
- Isolation Room Capacity = 12
- Isolation Rooms Occupied = 8
- Confirmed positive cases of COVID-19 patient admissions = 23
 - Of the total 23 COVID-19 positive patients. Four (4) of the patients are located in the ICU. Nineteen (19) are located in the 3 South dedicated COVID-19 unit
- PUI admissions = 8
- Ventilated COVID-19 positive patients = 8
- Ventilators not in use = 12
- COVID-19 related deaths = 23
- CRMC has implemented a policy that requires ALL staff, visitors (which would be very limited), and contractors of any kind to wear a mask while in the hospital at all times.
- The 3 South patient unit at CRMC is dedicated to COVID-19 positive patients only.
- On Wednesday, 4/23/2020, patients transported by EMS as COVID-19 positive = 1.
PUI's = 4

Modeling for COVID-19

Making use of models for response



Outbreaks are emergencies – long ones

- To respond effectively, we have to know:
 - What is the hazard
 - When will it hit
 - Who is impacted
 - How many will be impacted
 - What we can do to mitigate and respond to impacts

What is different about disease outbreaks?

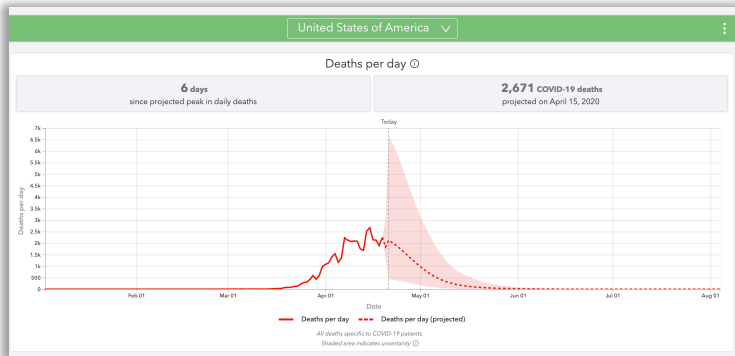
- Our actions *change* the event itself
- Each disease – and strain – moves through the population at different rates and with differing severity
 - Ebola vs COVID19 vs measles
- The way we mitigate impacts – prevent and treat - is specific to the disease

Predictive modeling is key

- Based on the agent and the disease it causes
 - How easily spread?
 - How virulent?
- Based on its interactions with its host
 - How sick do hosts get?
 - How long are they contagious before they get sick?
 - Are there asymptomatic carriers?
 - How severe is the illness and what care will be required?
- Based on the interactions between hosts
 - How close do they live?
 - How much do they interact?
 - How likely are they to change their behavior?

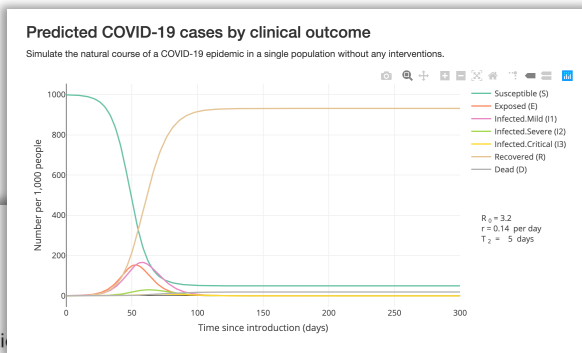
Modeling disease spread and impacts

Non-linear statistical model



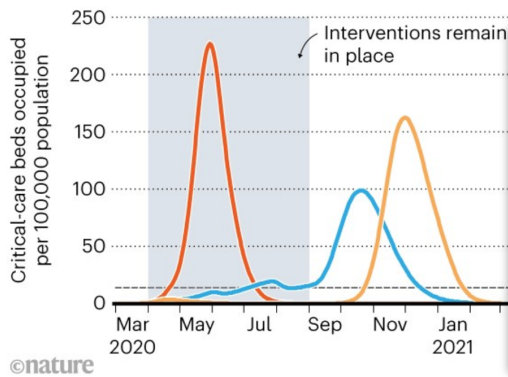
<https://covid19.healthdata.org/united-states-of-america>

Compartmental models (SEIR)



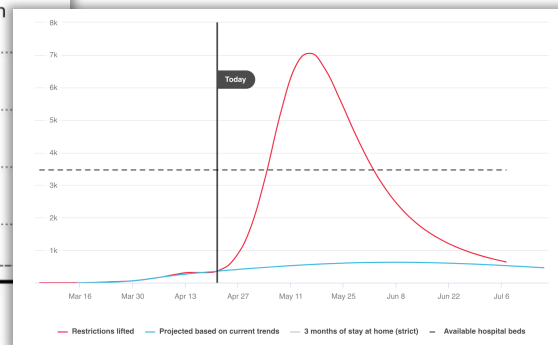
<https://alhill.shinyapps.io/COVID19seir/>

- Estimated critical-care bed capacity
- Do nothing
- Case isolation, household quarantine and general social distancing
- School and university closure, case isolation and general social distancing



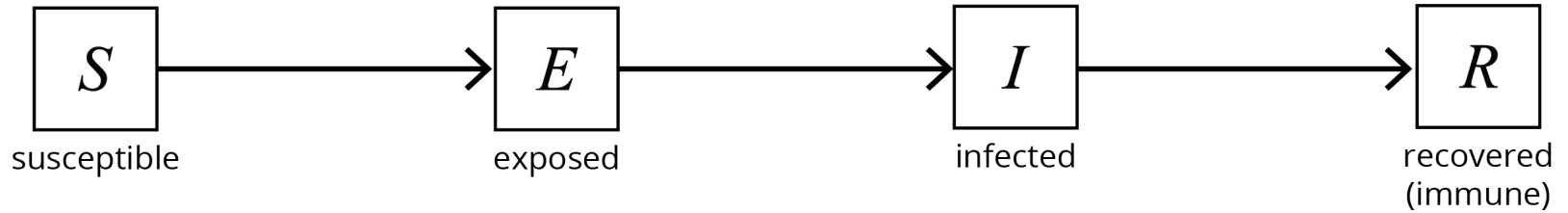
Source: Ref. 1

<https://www.nature.com/articles/d41586-020-01003-6>

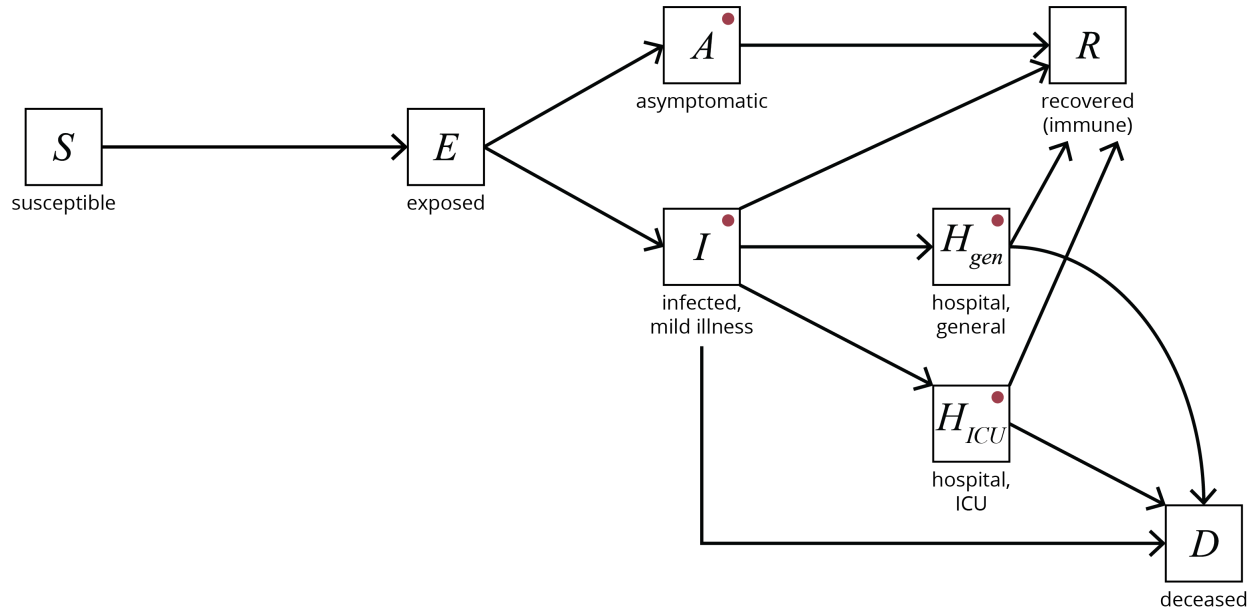


<https://covidactnow.org/>

What is an SEIR model?



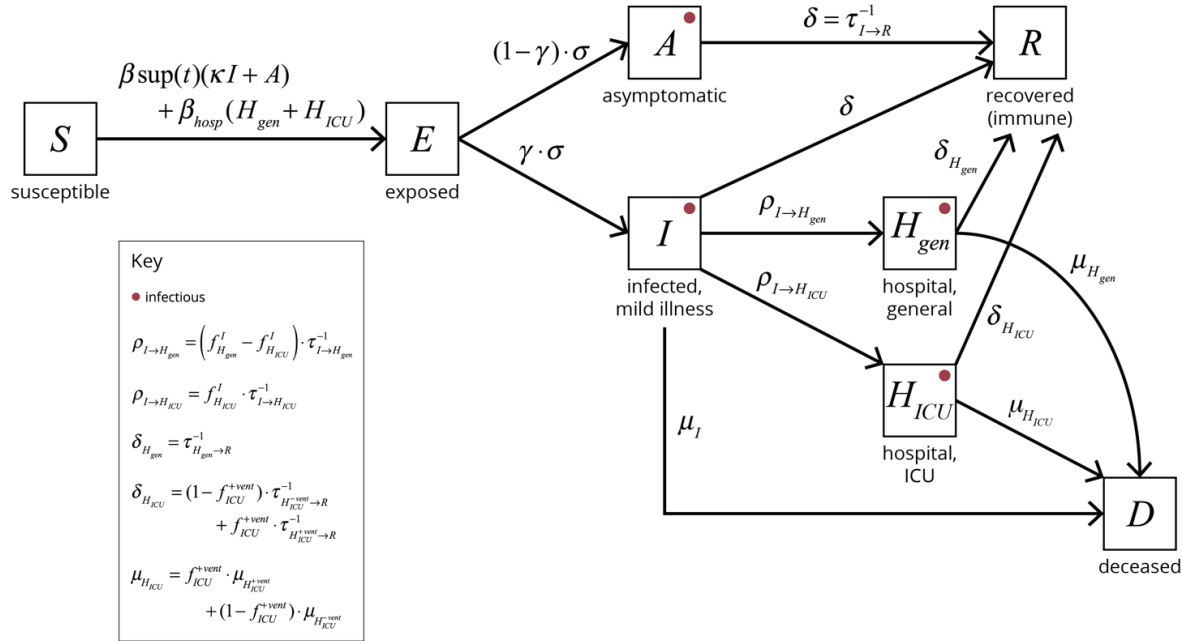
Adding complexity to match the disease



The numbers that feed the math

- How long do they stay sick?
- How long are they contagious?
- How likely are they to be hospitalized?
- How likely are people to die?
- How is that different for different types of people?
- How many other people do they infect and at what stage in the disease?

How quickly do they move through the stages?
How likely are they to end up in each category?



What can we do about it?

- Need to know what works
 - Treatments
 - Ventilators
 - Antivirals
 - Strategies to reduce infection rates
 - Closing schools
 - Stay-at-home orders
 - Wearing masks
 - Vaccines

Who has done what, where, and when?

POLICY LIBRARY

Download all data
download (.xlsx, .API, 2 GB)

Select filters to apply to selected data.

Organizational level	Specific location	Policy category	Policy type	Legal type
Level 2 (country) (1 of 4)	All (x of x)	All (x of x)	All (8 of 8)	All (8 of 8)

Policy issued date	Policy effective start date	Policy anticipated end date	Policy actual end date
4/1/20-4/15/20	select range	select range	select range

Selected Filters

ORG: Level 2 (country)
 LOCATION: EUR
 ISSUED DATE: RAN

Level of government/ Organization level ¹	Country/ Specific location ¹	Policy category ¹	F t
Definition: The level of government that authorized and/or issued the policy/law	Definition: The three-digit ISO code corresponding to the country of the agency which authorized and/or issued the policy/law	Definition: The primary type of public health measure being authorized by the policy or law	D a n h b t
Level 2 (country)	N/A	Enshion and valid	1

INTERNATIONAL MONETARY FUND

ABOUT RESEARCH COUNTRIES CAPACITY DEVELOPMENT NEWS

POLICY RESPONSES TO COVID-19

Related Links



IMF and COVID-19



COVID-19 Emergency Financial Assistance By Region



Notes: How Governments Can Support People And Firms During COVID-19

Policy Tracker

Browse by Country

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | Y | Z

This policy tracker summarizes the key economic responses governments are taking to limit the human and economic impact of the COVID-19 pandemic. The tracker includes 193 economies. Last updated April 17, 2020.

NOTE: The tracker focuses on discretionary actions and might not fully reflect the policies taken by countries in response to COVID-19, such as automatic insurance mechanisms and existing social safety nets which differ across countries in their breadth and scope. The information included is not meant for comparison across members as responses vary depending on the nature of the shock and country-specific circumstances. Adding up the different measures—tax and spending, loans and guarantees, monetary instruments, and foreign exchange operations—might not provide an accurate

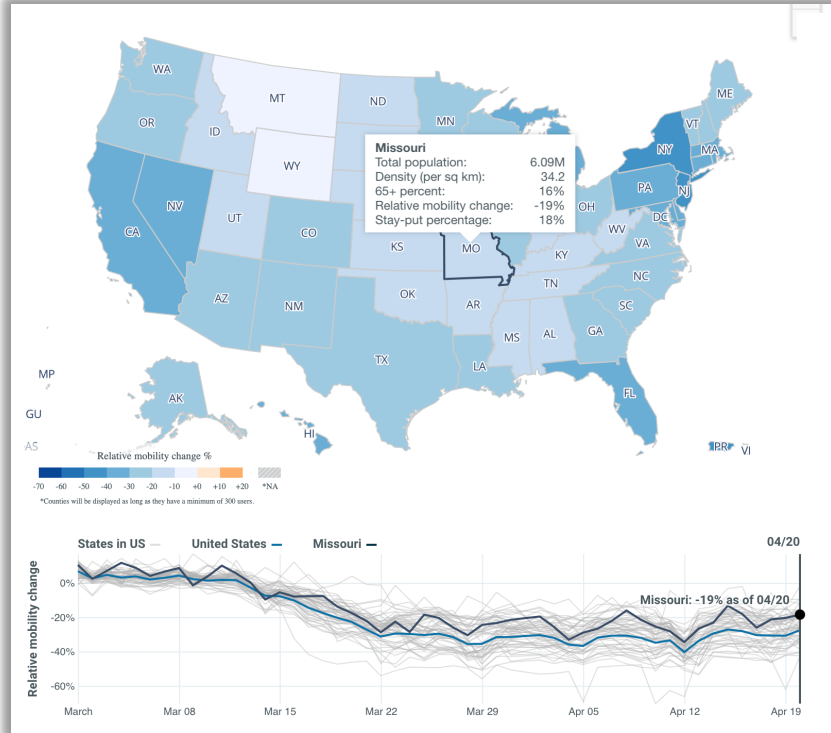
State and Local Covid-19 Response Information

States - Main Info (Tab 1)	States - Additional Info (Tab 2)	Localities - Main Info (Tab 3)	Localities - Additional Info (Tab 4)				
<div>Dashboard provided by MultiState Associates (www.multistate.us)</div> <div>Toggle between different tabs in the upper left hand corner of the screen. The tabs are organized as follows: state-level activity is shown on tabs 1 and 2; local-level activity is shown on tabs 3 and 4.</div>							
State	Link to Health Department's Coronavirus (COVID-19) website	Key Contacts	State of Emergency Doc.	Executive Orders	Session Changes/Capitol Closures	Travel Restrictions / Info	Official Sources (Twitter, etc.)
Alabama	Alabama Department of Public Health - 2019 Novel Coronavirus (COVID-19)	Burnestine Taylor, M.D. - 334-206-5100 Karen Landers, M.D. - 256-383-1231	Fourth Supplemental State of Emergency: Coronavirus (COVID-19)	Governor issues "Stay at Home Order"	Alabama Legislature met briefly March 31; session suspended until April 28	For Those Who Have Recently Traveled Internationally	@ALPublicHealth
Alaska	Alaska COVID-19 Information	Alaska Section of Epidemiology (907) 269-8000	Gov. Dunleavy declares a public health disaster emergency in response to COVID-19 (3/11/20)	COVID-19 Health Mandates	Session suspended after budget passed March 29; reconvene date TBA	Health Mandate 12: Intrastate Travel - Limiting travel between communities to critical infrastructure or critical personal needs	@Alaska_DHSS
Arizona	Arizona COVID-19 Response	Hotline: 211	Gov. Doug Ducey issues Declaration of Emergency (3/11/20 pm)	Shelter in Place thru April 30	Session suspended March 23; reconvene date TBA in late April	Mandatory 14 day self-quarantine for those who recently traveled to NY, NJ, or CT.	@AZDHS
Arkansas	Arkansas Department of Health-COVID-19 Website	1-800-803-7847; after hours emergency number 501-661-2136	Declared Public Health Emergency (EO 20-03)	EO permitting occupancy of commercial lodgings and short-term rentals only for authorized	Special session held March 26-28; regular session convenes April 8; House meeting at Jack T.	Travel Advisory for travelers from NY, NJ, CT, New Orleans and all international	@ADHPHO

<https://www.multistate.us/pages/covid-19-policy-tracker>

<https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>

How well do the policies work?



<https://visualization.covid19mobility.org/>

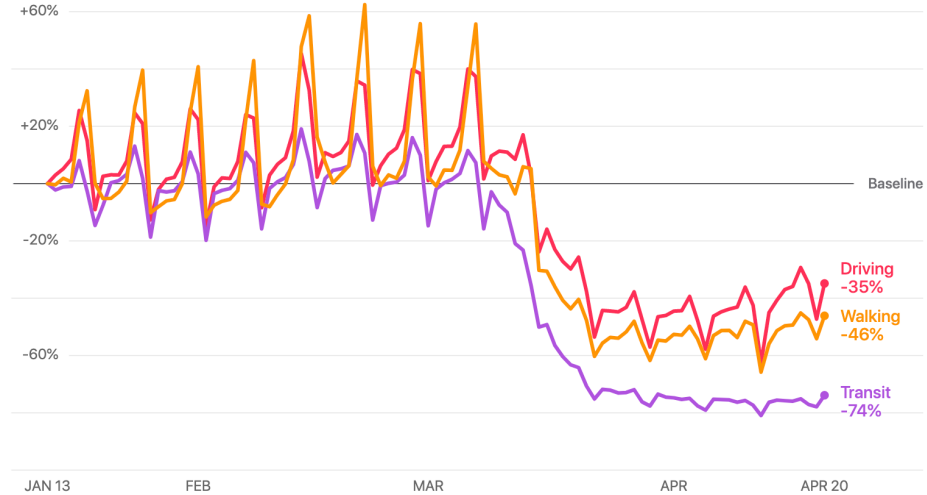
Mobility Trends

Change in routing requests since January 13, 2020



Search Country/Region or City (such as Italy or New York City)

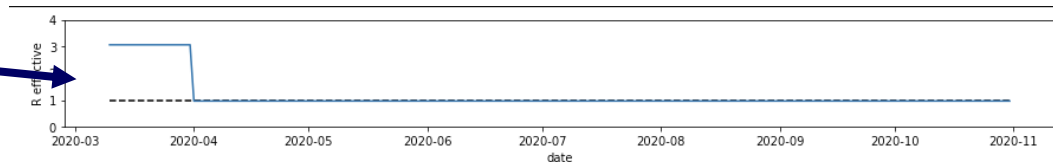
United States



<https://www.apple.com/covid19/mobility>

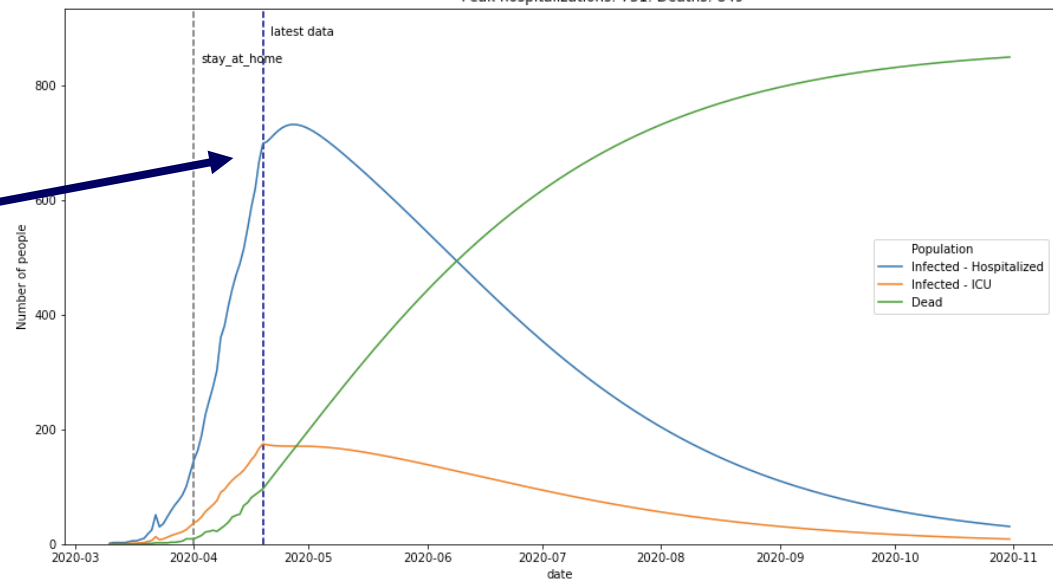
What difference does it make?

If we assume people
stay at home entirely



Peak hospitalizations: 731. Deaths: 849

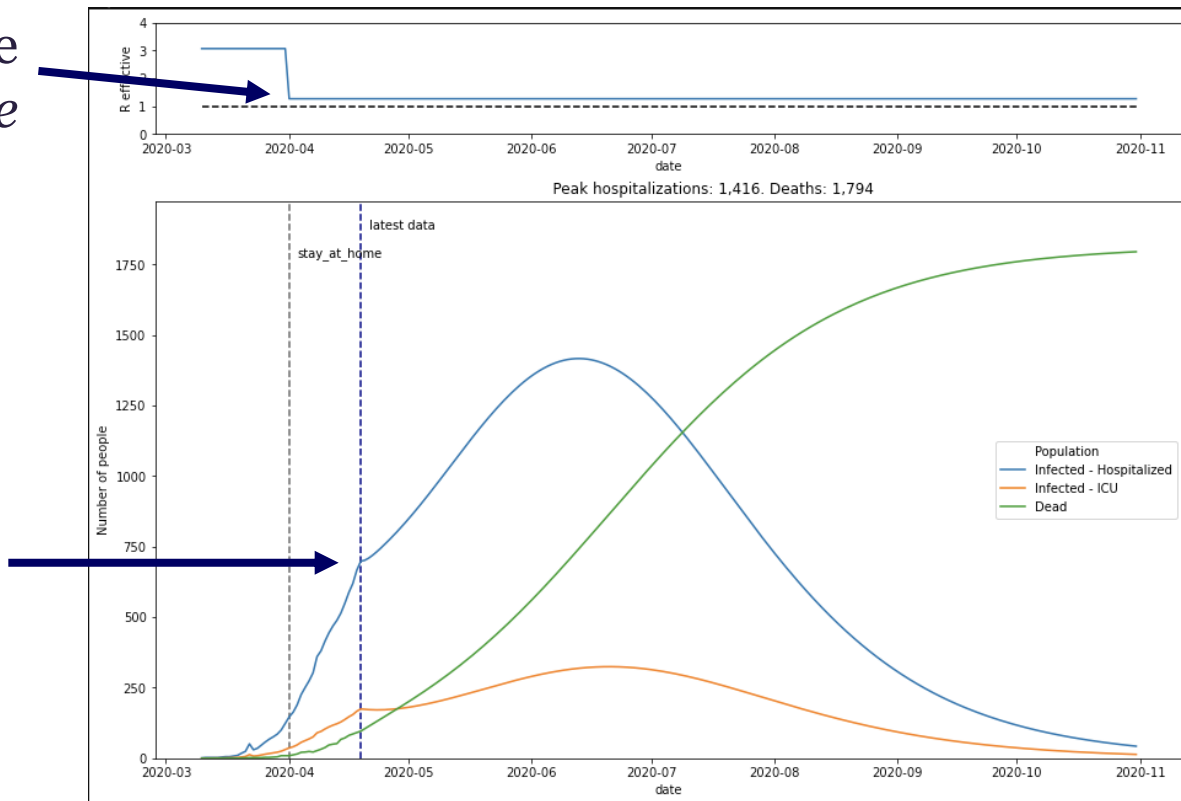
We can get a really
dramatic drop in the
number of people who
get sick, are
hospitalized, or die



What do we have to believe?

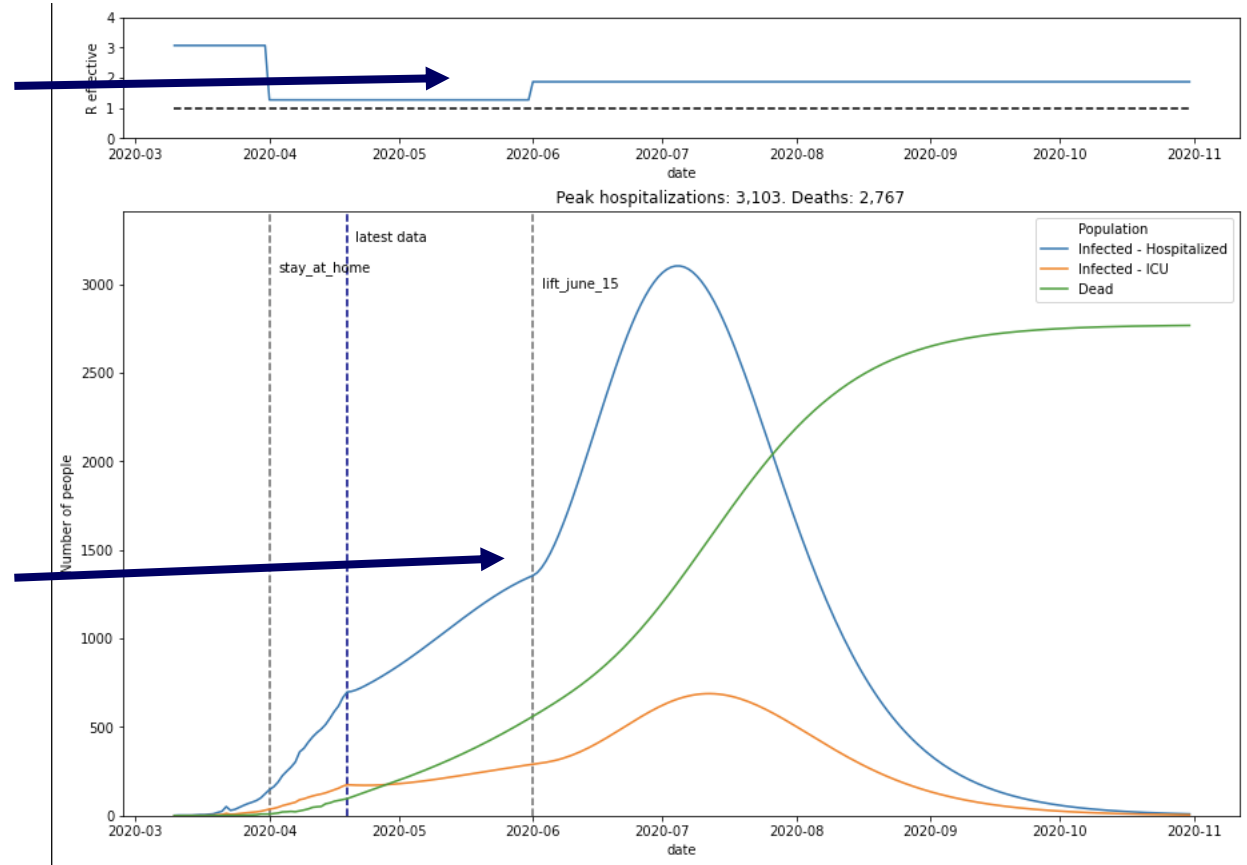
If we assume we
stay at home *some*

It still decreases the
rate of increase a lot,
but it has less of an
impact on total
numbers



What happens when we lift?

If we assume we don't quite go back to normal



We delay the peak, and it's lower than it would have been

Context matters

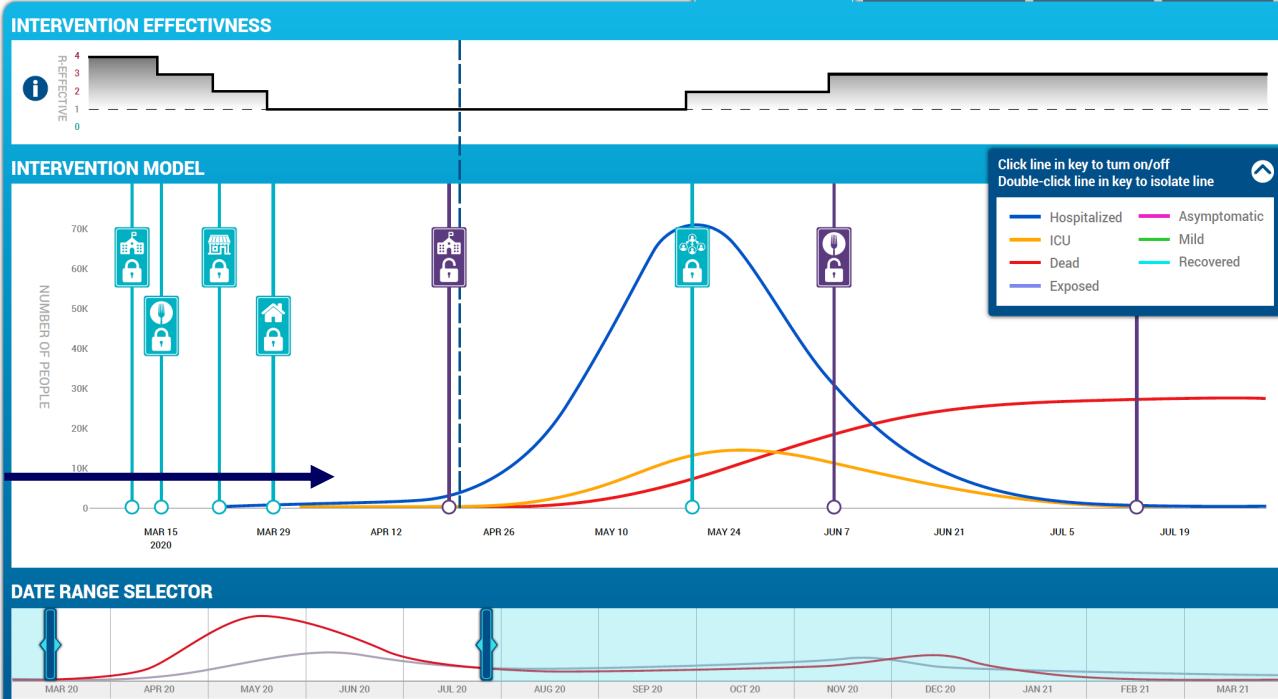
Was the policy followed?

What policies, when?

Did they make a difference?

For how long?

COVID-19 MODEL DASHBOARD



What do we really need to know?

How do we know how many ventilators to order?

- Maybe it is based on the number of ICU patients we think we'll have
- Or maybe it is based on a different calculation
 - ...how many beds
 - ...if those beds are appropriately staffed
 - ...doses of sedatives

Sometimes calculators are just as useful

Calculator		Graphs		Instructions										
Box A		xx/xx/2020	xx/xx/2020	xx/xx/2020	xx/xx/2020	xx/xx/2020	xx/xx/2020	xx/xx/2020	xx/xx/2020	xx/xx/2020	xx/xx/2020	xx/xx/2020	xx/xx/2020	xx/xx/2020
		How Many COVID-19 Patients are Being Treated at Start of the Day? Enter Below.												
Number of Suspected and Confirmed COVID-19 Patients		20	20	28	26	35	36	40	40					
Type of PPE	Size/Brand	How Many Full Boxes Are Remaining at Start of the Day? Enter Below.												
Gowns	Size 1	500	475	400	350									
	Size 2													
	Size 3													
Gloves	small													
	medium													
	large													
	extra large													
Respirators														
Surgical Masks														
Face Shields														
Other	1													
Other	2													
Other	3													
Other	4													
Other	5													

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/burn-calculator.html>

Models matter, but not for everything

- What do you need to know?
- What do you need to believe?
- How much difference will it make?
- How does that change the decisions you make?
- How does it change how you communicate those decisions?

Contact information

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Law Enforcement Branch Briefing

COVID-19 Charles County IMT

April 24th, 2020

Buildings:

Charles County Sheriff's Office: District 1 Lobby is closed for scheduled remodeling. The District 1 clerks have moved the CCDC Annex building in the same parking area and that lobby is open as normal

Maryland State Police: Restricted to public

Maryland Transportation Authority: Closed to Public

La Plata Police Department: Closed to the public

Natural Resources Police: Building Closed

Operations:

Charles County Sheriff's Office: Operations have gone to emergency schedule in accordance with a CCSO level 3 All-Hazards activation. Patrol operational periods are 12 hours from 0700-1900 and 1900-0700. All other operations sections running with normal services being provided from modified locations. Services provided have not been reduced or augmented as of now.

Maryland State Police: Operations as normal

Maryland Transportation Authority: Operations as normal

La Plata Police Department: Operations as normal; Doing screening in and screening out

Natural Resources Police: Operations as normal

Internal COVID-19:

Charles County Sheriff's Office:

- 5 sworn officer quarantined
- 0 officers isolated
- 0 correctional officer quarantined
- 0 correctional officers isolated
- 5 civilian quarantined
- 1 civilians isolated

Maryland State Police: None local

Maryland Transportation Authority: None local

La Plata Police Department: None

Natural Resources Police: None

Crime Stats:

Crime continues to be down in all aspects.

TRU:

Charles County Sheriff's Office: Open and working; triage site for COVID-19 calls for service.

Maryland State Police: Open and working

Maryland Transportation Authority: Open and working

La Plata Police Department: Open and working

Natural Resources Police: Open and working

Call Restrictions:

Charles County Sheriff's Office: None

Maryland State Police: None

Maryland Transportation Authority: None

La Plata Police Department: None

Natural Resources Police: None

Governor's Order Violations since Emergency Orders Issued:

Violation sustained calls for service: 44

Warnings: 41

Charges later: 2

On-scene arrest: 1

Health Department Order Violations (Between 04/16/20 and 04/18/20):

Calls for Service

Founded: 5

Unfounded: 10

Dispositions

Warnings: 5 issued

Items of Note: (Not for redistribution)

- Distribution of relief checks to start; postal inspector is worried about fraud and theft.

- Attacks against 5G towers, based on online conspiracy of a connection between China, the technology, and the spread of COVID-19.

*CHANGES IN RED

Intelligence Briefing 4-24-2020
COVID Charles County

Updated Infection Numbers: As of 1031 hrs.

Total worldwide: 2,736,979 **+87,299 since the 4-23-20 brief.**

Worldwide increase of confirmed cases by 24-hour period over the last 10 days

4-13/14	4-14/15	4-15/16	4-16/17	4-17 to 19	4-19/20	4-20/21	4-21/22	4-22/23	4-23/24
134,855	65,338	80,985	99,539	164,125	74,806	80,717	93,568	54,956	87,299

Total fatalities worldwide: 192,125 **+7,482 since the 4-23-20 brief**

Analysis note: The wild swings in worldwide confirmed case numbers and fatality numbers continue to illustrate the lack of consistent reporting channels. These number should not solely be used to gauge the scope and magnitude of the current situation.

Total confirmed cases in the US: 870,468 **+27,844 since the 4-23-20 brief**

US increase of confirmed cases by 24-hours period over the last 10 days

4-13/14	4-14/15	4-15/16	4-16/17	4-17 to 19	4-19/20	4-20/21	4-21/22	4-22/23	4-23/24
54,634	27,062	38,764	31,493	63,794	24,499	29,134	37,328	16,376	27,844

Analysis note: The US case number increases have remained relatively unchanged for the last 10 days. However, this is likely not an indication of "flattening the curve." As the data is reviewed, keep in mind we are reporting an additional 28 to 33,000 NEW cases each day. We have yet to see any dramatic decreases in diagnoses new cases.

Total fatalities in US: 50,031 **+7,573 since 4-23-2020**

Maryland Numbers: As of 1000 hrs. via <https://coronavirus.maryland.gov/>

Total confirmed cases in State in of MD: 16,616 **+879 since the 4-23-20 brief**

Total tested in the State of MD: 68,100 **+3,737 over 4-23-20**

Percent of those test that test positive: **24.3% -.01 DECREASE. First time since we tracked**

Analysis note: Maryland percentage of positive test is now on par with PA, MA, IL, MI, CA and LA.

Total Fatalities in State of MD: 723 **+43 change since the 4-23-20 brief**

Number of probable deaths: 75 (this is new statistic)

Total **Ever** Hospitalized: 3,618 **Increase of 141 from 4-23-2020**

Persons currently hospitalized. 1425 (new statistic) +25 since 4-23-2020

First Responder Numbers in Charles County: As reported at 1230 4-24-2020

43 Quarantine: means exposed and they can't come to work. No change since last report
7 Self Isolation: means sick or tested positive No change since last reported

Weather:

Sat 64-48 sun, Sunday 64-44 storms, Monday 55-42 cloudy

Local:

Visited several stores this am. Most items that have been hit hard hit are still limited or missing. Paper products were available at one store through 1000 hours.

Analysis note: More meat and poultry plants are closing. The cascading effects will continue to be felt for several weeks until adjustments are made to the supply chain or the factories re-open. Supply chain experts are indicating some stabilization is possible in the come days.

Nursing home and assistant living patients and staff make-up over 38% of the total number of positive cases reported in Charles County.

Maryland Update:

Gov. press conf. at 1500

Article in Baltimore Sun re: MD Health Department stance on releasing case counts:

<https://www.baltimoresun.com/coronavirus/bs-md-nursing-home-denial-20200423-vvstm6zigbb7zmfzg7x3aew7a-story.html>

Gov. announces new contact tracing effort

Laurel Hospital is now open with 135 COVID beds

47,000 plus Maryland residents file for unemployment

Region:

Over 17,226 cases in the NCR as of 0500 4-24-2020,

28,210 cases in Maryland, DC, and Virginia as of 1100 on 4-24-2020.

DC police report 2 attacks using Molotov cocktails on officers (see attached)

Latest IEM modeling predicts peak hospital demand in NCR the Week of May 9th (see attached)

<https://www.mwcog.org/public-safety-and-homeland-security/program-areas/covid-19-predictive-modeling/>

Protests continue in VA

National:

Multiple states have announced efforts to reopen: IL, CO, SC, GA, MT, OH, AR, and MN

Article on where all states stand on re-opening: <https://www.cnn.com/2020/04/15/us/states-reopen-coronavirus-trnd/index.html>

4.4 million more American file for unemployment (over 26 million total)

President suspends portions of the immigration system

DHS bulletin on threats against the energy sector

Local critical infrastructure:

No outages or disruptions are reported or are appear to be likely as of today.

Predications/ Analysis:

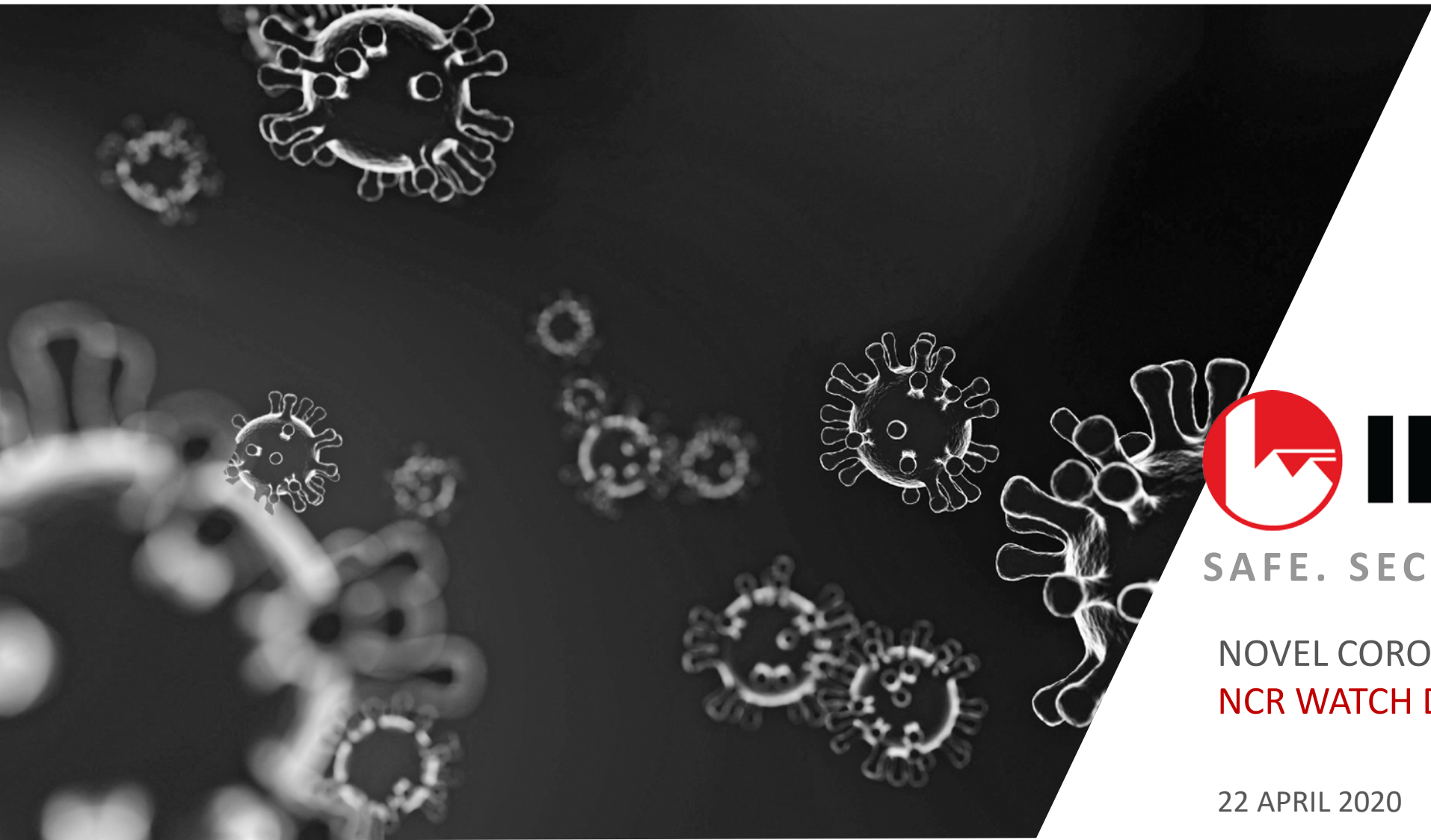
- The length and scope of this situation have exposed large cracks in food supply chains, medical supply chains, fossil fuel industries, and other major portions of everyday life. Local leaders should begin a gap analysis and start the after-action process so they can create and modernize resiliency plans, local stockpiles, and coming up with other forward leaning solutions so when the next disaster occurs they are more self-sufficient and better prepared.
- While we have concentrated our efforts on peer support and helping our responders, a proactive approach to including families of first responders is quickly emerging. The command structure should consider a Family Support liaison or expand the Peer support branch.
- The increased discussions about opening the economy, added with the on-going conversation about health care in-equity and racial disproportionality of infections is causing increased polarization, angry, and hate. Social media is rampant with spirited discussions. It is only a matter of time before we begin to see emotions spill over into the public. The small protest we have witnessed thus far could pale in comparison to what is to come. LE should be reviewing plans, manpower, and boosting intelligence gathering to better prepare for potential situations.
- Protests over the continuing of stay at home orders, and business closures are becoming more prevalent and boisterous. Law enforcement should begin to make plans on how to track these groups and respond to events.
- First responder staffing and exposure issues will likely continue to increase. Priority messaging about PPE, manpower reduction strategies, and outside the box thinking should be continued and solutions expedited.
- FOIA and PIA requests for detailed records on infections in assisted living and nursing homes will increase as investigative reporting on this issue increases.
- Grocery stores could become a hotbed of fear and anxiety due to limiting numbers of patrons, assigning shopping days, mask requirements, and now limited meat supplies.
- As critical case in Charles County remain low (outside of nursing homes and assisted living homes), needs in other local jurisdictions are growing. Resources should be prioritized and plans should be made to share/deploy critical resources, personnel, and/or facility space to meet the needs regionally.
- The longer this crisis continues the more likely we are to experience critical events that may not be related to the COVID crisis (incidents within the incident). Those in leadership positions need to be prepared to step into dual leadership/managerial roles at a moment's notice. This requires taking care of yourself and staying up on the latest tactics, strategies and knowledge.

- Planning for crisis recovery starts as soon as the crisis begins. Monday marks the 8th weeks of this crisis, 6th week of schools being closed. Partners and stakeholders should begin planning for what the return to the “new normal” looks like in their organization. Sharing of these plans will help each organization build more comprehensive processes.
- Over the weekend the US will likely eclipse 500,000 cases and 15,000 deaths. Md numbers will likely pass 5000 and 150 fatalities by Friday. These numbers will cause increased pressure to ratchet up rhetoric re: “stay at home orders” and could result in further sanctions and restrictions.
- As the confirmed case numbers continue to rapidly ascend the likelihood of jurisdictions issuing “travel bans” increases. Law enforcement should begin researching the constitutionality of these potential edicts and have plans in place for implantation and begin to develop a public communication strategy. Standardizing local “travel authorization documentation” should be explored by the lead jurisdiction having authority.
- Due to diverted attention, the international and domestic terrorism threat is rapidly increasing. Responders should be reminded to remain vigilant and of the DHS guidelines for spotting suspicion activities and terrorism indicators.
- As we enter into the reported peak of this situation communication, along with sharing of individual branch capability and capacity is more important now than ever. “We don’t know what we are going to need to know until we need to know it.”
- First responder organizations should begin surveying members for pre-existing conditions and other complicating medical conditions. Responders found to have pre-existing conditions should be placed in limited citizen contact roles.
- A review of the 179 countries that report COVID-19 cases, only two (South Korea and China) have somewhat “flattened the curve” of NEW infections. Both showed flattening roughly 30 to 45 days after the initial spikes. The initial spike in the US began around 3-18-2020.
- Reduced stability in the supply chain along with increased fear and anxiety can be expected with today’s “stay at home order.”
- After 3 weeks of social distancing and schools being closed non-english speaking communities within Charles County are likely feeling further isolated due to a lack of language specific communications. Direct and increased messaging to Spanish speakers is likely necessary.
- As mass transit continues to shrink in availability, plans should be made to ensure those who rely on it for essential supplies and trips have delivery resources.
- LE and EMS screening protocols should include questions about recent travel to NY, NJ, CT, and FL.
- Immediate attention is needed to direct companies and organization on the proper processes and appropriate contact to use (Donation Manager at the EOC) to donate PPE and cleaning materials to essential personnel
- The next 7 days will likely see a stabilization of a majority of the grocery supply chain. However, the potential for disruption moving forward continues to remain high.

- FOIA and PIA request from media and citizens groups will likely begin to increase the longer this event lasts. “New normal” processes need to be established as soon as possible.
- Lack of child care options will likely add to family stress. Additional resources, activity and options are needed.
- JIC staff should substantially amplify community resource communications
- As we enter the 2nd week of social distancing stress, anxiety, and fear will likely increase. Continuous reminders of patience and focusing on kindness will become increasingly important.
- Many stores restock overnight. Seniors and the vulnerable populations should be strongly encouraged to shop during the early morning hours when supplies are likely to be at their highest.
- As testing increased the confirmed cases in MD will increase. This will likely cause additional life restrictions.
- Supply chain issues will continue and likely increase as further life interruptions and travel restrictions are ordered. The possibility of violence increases as stress increases, especially at grocery stores.
- Commanders of responders and essential staff should have robust plans for potential quarantines and updated continuity of operations including plans for diminished manpower. Further, responder organizations should begin reviewing existing integration plans with the National Guard.
- Obtaining medical supplies and PPE will continue to be an issue for the foreseeable future. All services should use the command ordering process so orders can be tracked.
- The community of Charles County is showing increased signs of pulling together and assisting one another. The JIC should continue to encourage civility and increase positive press of good news stories occurring throughout our community.

“The most effective leaders in crises ensure that someone else is managing the present well, while focusing their attention on leading beyond the crisis toward a more promising future”

Respectfully submitted by Jason Stoddard



SAFE. SECURE. RESILIENT.

NOVEL CORONAVIRUS MODELING:
NCR WATCH DESK & MWCOCG

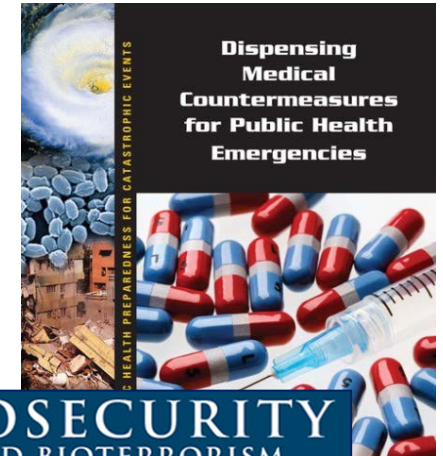
22 APRIL 2020

— AGENDA

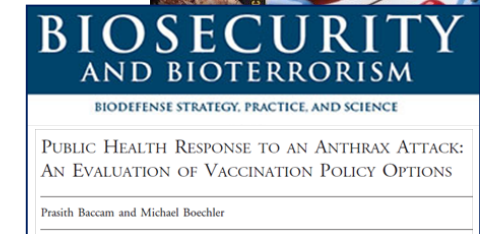
- History of Medical Consequence Modeling
- IEM's modeling philosophy
- IEM's short-term projections (like hurricane modeling)
- New capability: peak hospital demand projection

HISTORY OF MEDICAL CONSEQUENCE MODELING

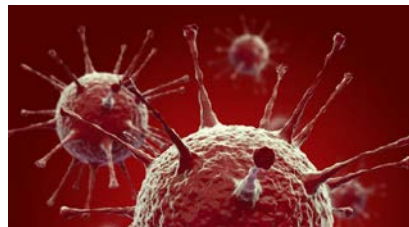
HHS Secretary's Anthrax Modeling
Working Group: 2003



HHS Biomedical Advanced
Research and Development
Authority (BARDA): 2006



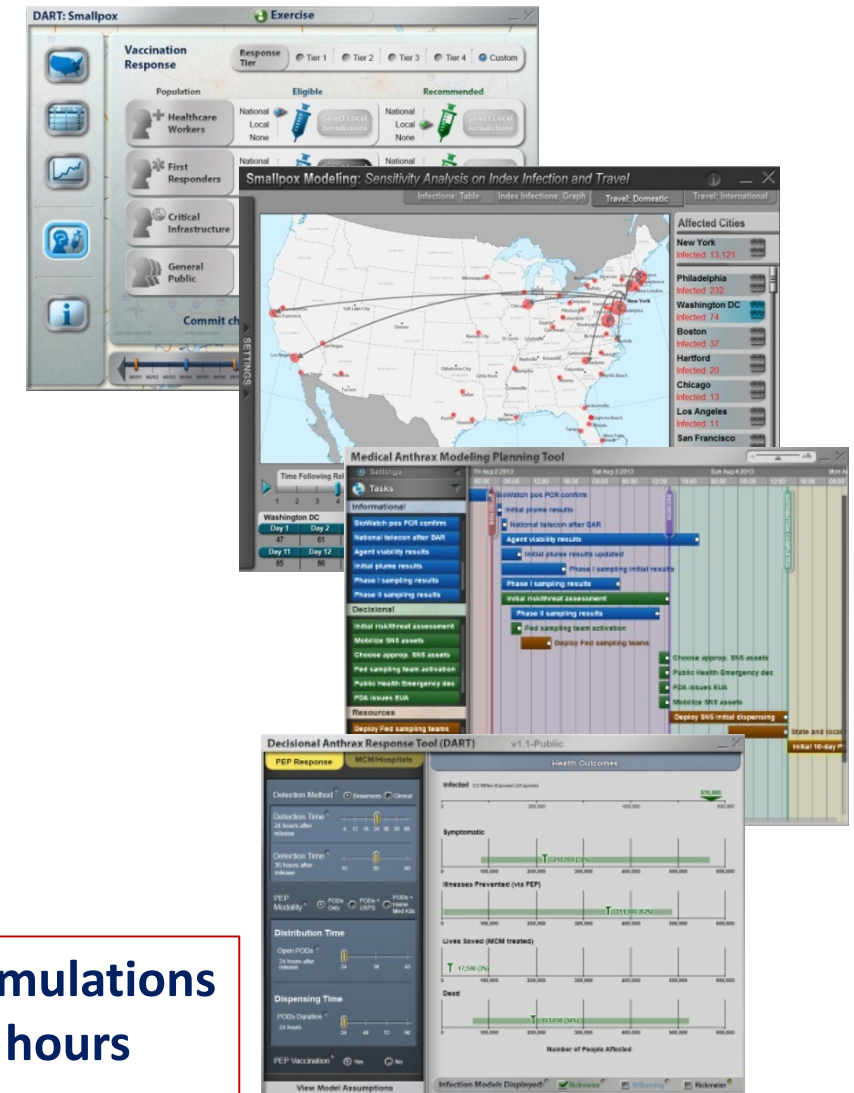
Our modeling work for HHS has
been presented to the Executive
Office of the President (EOP): 2008



Supported HHS with
2009 H1N1 Pandemic

MODELING SUPPORT FOR HHS

- Decision-support visualization tool (who gets vaccines and when, and what are the consequences?)
- Population movement (tracking infected individuals)
- Identifying critical tasks during a response
- Visual exploration of the interplay between response speed and outcomes (DART)
 - Contagious and non-contagious disease spread
 - Consequences of limited medical countermeasures and medical treatment capacity
 - Logistical distribution of medical supplies



15,000 simulations
in 12 hours

MODELING PHILOSOPHY

- Long-range models and forecasts: like trying to project the number of hurricanes in a year
 - 2020 Atlantic hurricane season projections:
 - 16 named storms
 - 8 hurricanes
 - 4 major hurricanes (Category 3-5)
- IEM philosophy: keep it simple, make it actionable
 - Short-term projections (7 days)
 - All 50 U.S. states and territories
 - All U.S. counties with 30 or more confirmed COVID-19 cases as of March 28: 328 counties



— IEM MODELING: SHORT-TERM PROJECTIONS

Use AI model to fit data and project new cases (like a hurricane model)



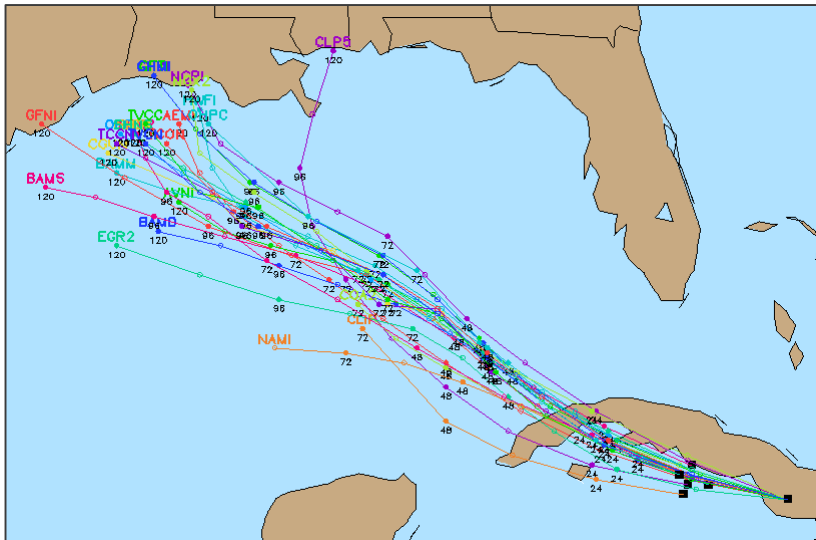
**The AI model finds the best R-value in 3 window:
Early, Recent, Projection**

- We do NOT assume the number of secondary infections caused by a single contagious case (R-value) stays same over time
- We do NOT create complex models with different mitigation strategies – too many unknown modeling assumptions needed
- We use a simple disease model: SEIR-type model with hospitalization, ICU, ventilators
- We use AI to find the best model parameters that fit the actual data (confirmed cases)
 - We run 11 million simulations to find the best model parameters

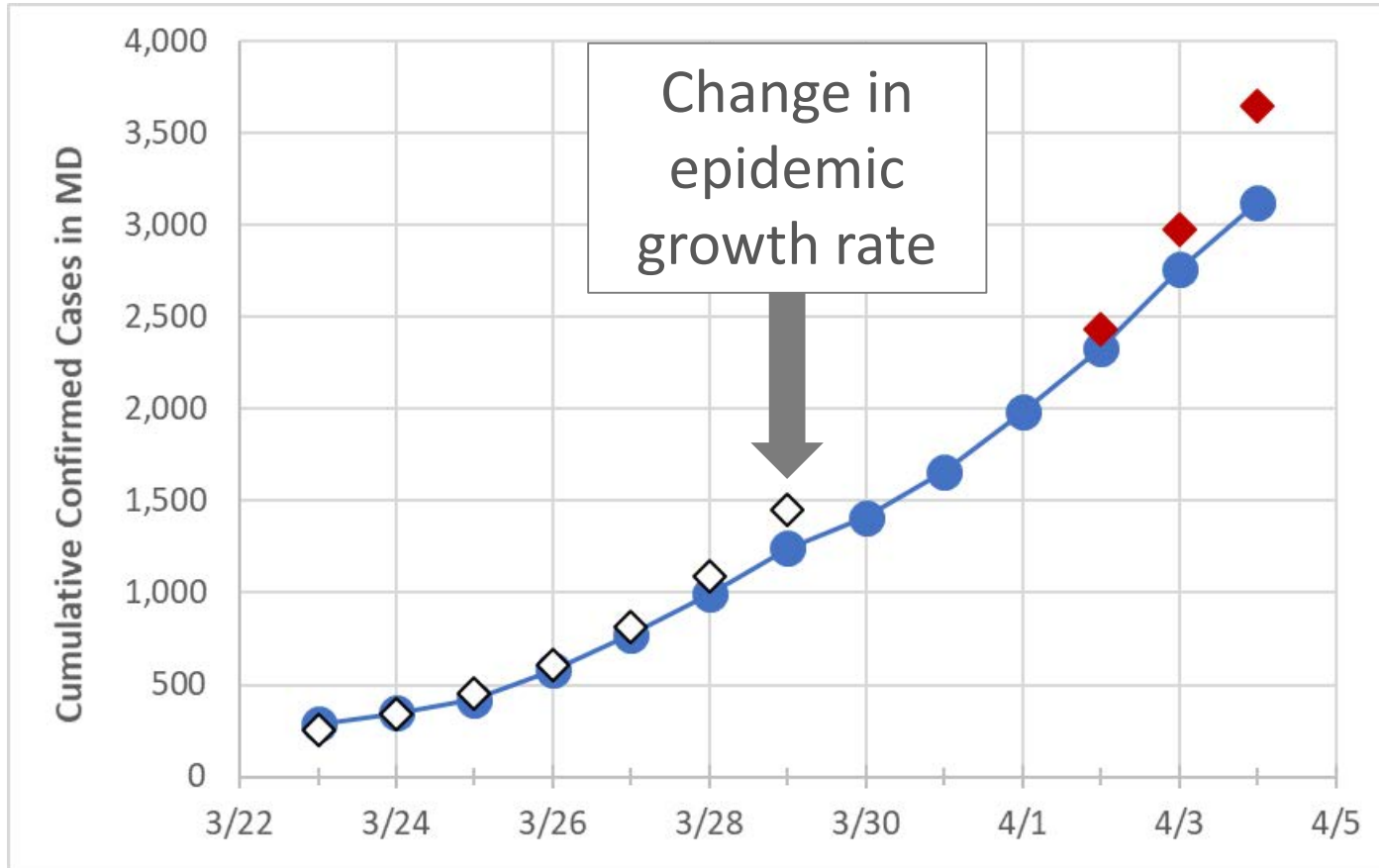
— IEM MODELING: SHORT-TERM PROJECTIONS

Use AI model to fit data and project new cases (like a hurricane model)

- Once we find the best model parameters by fitting the actual data, we project thousands of runs forward to get a cone of future projections



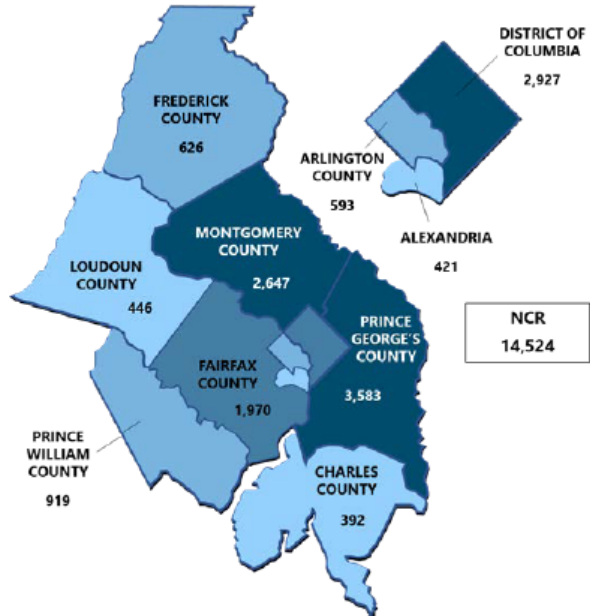
■ IEM MODELING: MARYLAND PROJECTIONS



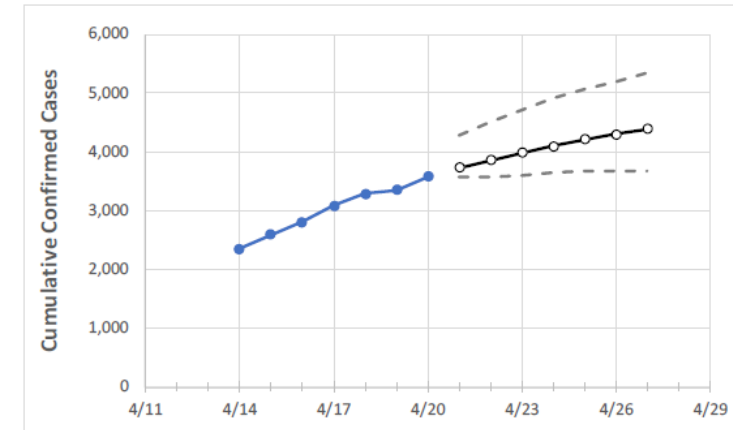
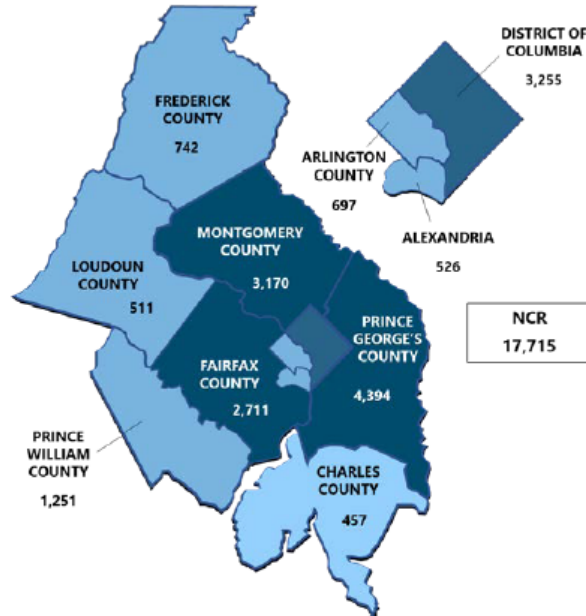
- Actual Data
 - ◇ Projections made 3/22
 - ◆ Projections made 4/1
- On March 19:
 - MD cases spike, 107 COVID-19 cases
 - Governor orders malls closed, restricts public transportation, access to BWI (was this the cause?)
 - On March 30:
 - Governor orders stay-at-home order

IEM MODELING: MWCOG PROJECTIONS

Actual Confirmed Cases: 4/20/20



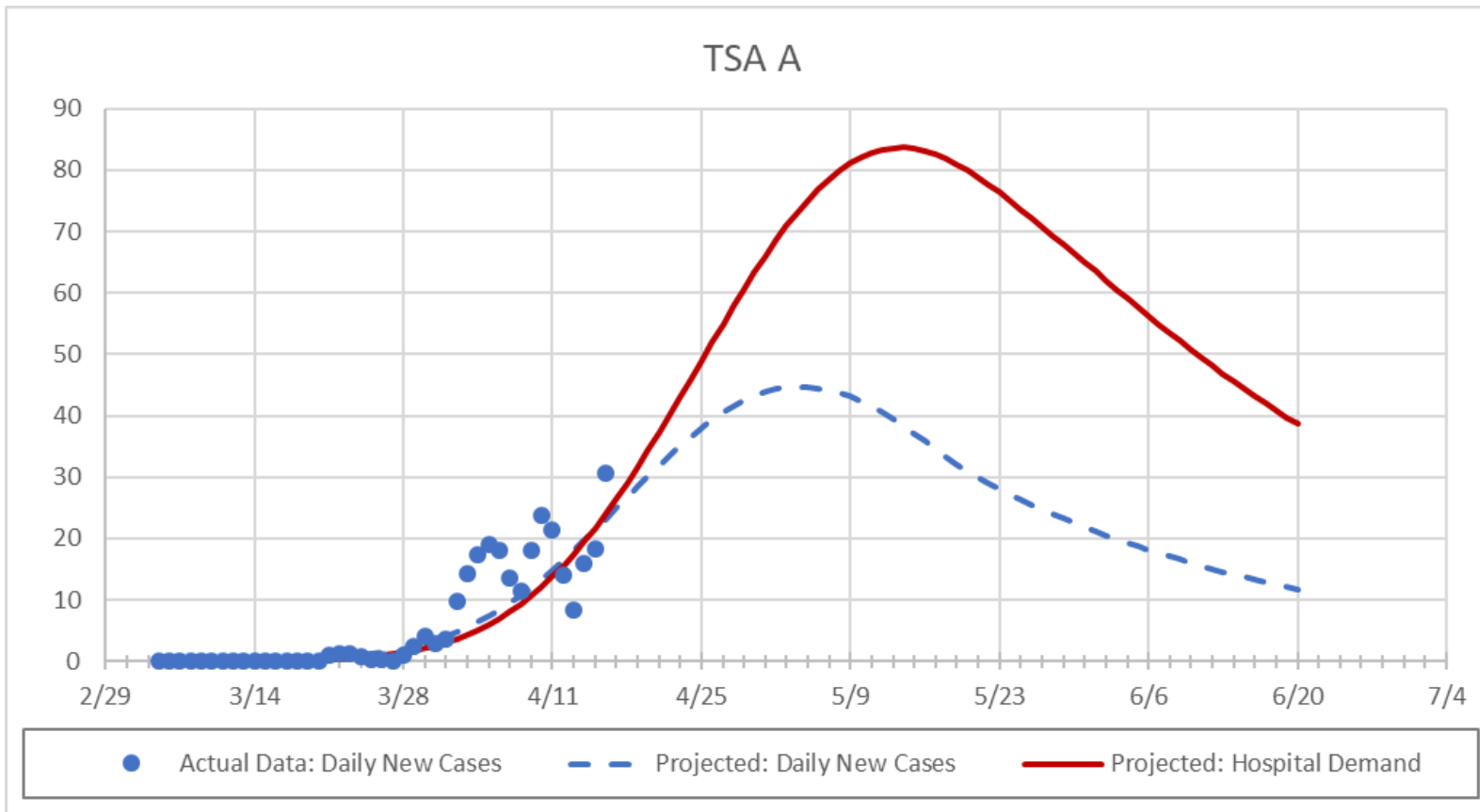
Projected Confirmed Cases: 4/27/20



	Actual Confirmed Cases On:				Projected Cases On: 04/27		
	4/17	4/18	4/19	4/20	Lower Limit	Best Fit	Upper Limit
Prince George's County, MD	3,088	3,291	3,345	3,583	3,683	4,394	5,337

	Actual Confirmed Cases On:				Projected Cases For:						
	4/17	4/18	4/19	4/20	4/21	4/22	4/23	4/24	4/25	4/26	4/27
Washington DC	2,476	2,666	2,793	2,927	2,993	3,052	3,104	3,150	3,190	3,225	3,255
Charles County, MD	337	347	370	392	405	416	426	435	443	450	457
Frederick County, MD	557	557	592	626	648	668	686	702	717	730	742
Montgomery County, MD	2,280	2,404	2,507	2,647	2,739	2,825	2,906	2,980	3,049	3,112	3,170
Prince George's County, MD	3,088	3,291	3,345	3,583	3,726	3,860	3,984	4,100	4,207	4,305	4,394
Arlington County, VA	485	520	575	593	613	631	647	662	675	687	697
Fairfax County, VA	1,478	1,636	1,820	1,970	2,086	2,199	2,310	2,417	2,519	2,618	2,711
Loudoun County, VA	385	413	425	446	459	470	480	489	498	505	511
Prince William County, VA	737	803	860	919	971	1,021	1,071	1,118	1,164	1,209	1,251
Alexandria, VA	321	354	383	421	439	457	473	488	502	515	526
NCR	12,144	12,991	13,670	14,524	15,078	15,599	16,087	16,543	16,965	17,356	17,715

— IEM MODELING: PEAK HOSPITAL PROJECTIONS



Trauma Service Area (TSA) in Texas

- Based on improved algorithms for fitting the change in R-value, not just the current R-value
- Assumptions for hospitalization
 - 20% of confirmed cases require hospitalization
 - 24% of hospitalized cases require ICU care
 - 50% of ICU cases require mechanical ventilator
 - *Can be updated based on jurisdiction-specific data*
- Projected date and demand for
 - hospitalized cases
 - ICU cases
 - Ventilators

— THANK YOU

Sid Baccam, PhD
IEM: Manager of Emerging Technologies
Sid.Baccam@iem.com
443-752-8738



Charles County Volunteer Firemen's Association, Inc.

Post Office Box #21, La Plata, Maryland 20646

April 24th, 2020

Re: Volunteer Fire/EMS Brief

Items Being Worked On:

- Reduction of Force Policy – *Information gathering occurring.*
- Station Health Screening Policy – *Completed*
- PPE Burn Rate / Inventory - *Completed*

Stations/Apparatus:

- No Contaminations issues at any Stations.
- No Apparatus with any contamination issues.
- No Service Deliverability Issues with Apparatus O.O.S.

Personnel - 26 Members across 3 Stations (6 Positive / 5 Negative):

- Fire Station 3 – 1 Member in 14 Day Isolation – Tested Positive 4/16/2020
- Fire / EMS Station 11 - 2 Members -2 Due to Family Members being Quarantined
 - o - 3 Members Due to potential exposure from another patient.
- Fire / EM Station 12 – 20 members due to a Positive Member in the Station (Currently 5 Positive/5 Negative)
- *Providers are slowly making improvement health wise.*

Incidents/Call Volume:

- No Major Incidents to Report related to COVID-19
- Yesterday's EMS Call Volume was average, and Fire Call Volume was average
45 Ems Related Incidents ----- 16 Fire Related Incidents

Other Information:

- Continue to push out information about Social Distancing in the Stations.
- Continue to push out Peer Support Information.

Respectfully Submitted,

Mark A. Kaufmann, Jr
County Fire Chief, Charles County Maryland

Charles County Public Schools Briefing 4-24-2020
COVID Charles County

48-hour Priorities:

- Maintaining instructional continuity
- Expanding and maintaining food service
- Expanding and maintaining WiFi service

Meals:

On Thursday, 4/23/20 CCPS served 4947 meals at the 11 meal distribution sites. This total was down -360 from Wednesday, 4/22/20. Westlake HS, St. Charles HS JP Ryon and JC Parks Elementary are still are the highest distribution sites.

Closure:

Charles County Public Schools (CCPS) now remains closed through May 15. All schools, buildings and centers will remain closed to the public.

Instruction:

Today, Friday, 4/24/20, is the last day for parents and students to request a laptop for their child.

Community Wifi:

All four sites are up and running and seeing use. CCPS in process of 3 other additional WiFi sites.

Misc:

Today seven Career Technology CCPS schoolteachers donated 117 facemasks to the EOC for distribution.

ABC 7 News is reporting School break-ins are up 100 percent in Montgomery County when compared to this time last year, Montgomery County Police Department statistics show. Police data shows 62.5 percent of the 2020 school break-ins have taken place between March 1 and April 16. Authorities believe COVID-19 boredom is a primary culprit for the increase.

Respectfully submitted by Jason Stoddard and Michael Meiser



PUBLIC HEALTH BRANCH BRIEFING COVID-19 PANDEMIC RESPONSE

April 24, 2020

GENERAL REPORTING INFORMATION

INFECTIOUS DISEASE

CASE COUNT—CHARLES COUNTY

As of 4/24/2020, total case count for Charles County is 455.

- *The line list with confirmed case counts for Charles County is continuously updated as lab reports are received from MDH, hospitals, and commercial laboratories.*
- *Contact tracing efforts are continuous with a focus on healthcare workers, EMS, and police.*

CALL CENTER UPDATE

- Operation time: 0800 to 2200.
- The numbers to call remain the same: 301.609.6717 or 301.609.6777
- Volume for new system is approximately 60 call per day.

MEDIA, SOCIAL MEDIA AND WEBSITE

- Currently staffing a disclosure statement with MDH in reference to Baltimore Sun PIA request.

PARTNER/STAKEHOLDER OUTREACH

LTC/AL

- The Long-Term Care and Assisted Living call was held yesterday at 3 p.m. Nurse liaisons conducted the call and provided helpful COVID-related information to the group.

ALL-PARTNER

- The all-partner call was held yesterday at 4 p.m. Nurse liaisons conducted.

EPI SURVEILLANCE PROFILE FOR STATE

Case Investigation, Surveillance, and Infectious Disease Response (D, Blythe)

1) **Latest case counts** – total: 16,616 (68,100 negative)

2) **New cases:** 879

a) **Age distribution:**

- i) under 18 years - 2 %
- ii) in 19-64 age range 74%
- iii) in 65+ age range 24%

b) **Geographic distribution:**

- i) National Capital 53%
- ii) Baltimore Metro area 41%
- iii) Eastern Shore 3%
- iv) Southern 2%
- v) Western 1%

- c) Of cases, 53% female; 47% male
- d) Hospitalizations 141 new; total 3,616
- e) Deaths -- Total 723 (43 in Last 24hrs)
- f) Release from isolation – 1,108

CONFIDENTIAL – (INFORMATION BELOW IS FOR CORE PLANNING GROUP ONLY)

RESOURCE DISTRIBUTION

- Received 1 new order April 23; picking up today
- Nurse liaisons will be also assessing LTC/AL needs and encouraging them to enter proper PPE requests and encourage pick up.
- Thanks to logistics for filling the submitted 213rr. 8 hi-vis suits were received at the VEIP testing site 4/23/2020 for inclement weather events.

VOLUNTEERS

MARYLAND MEDICAL RESERVE CORPS

- 1 responder accepted into unit 04/24/2020

TESTING

VEIP TESTING SITE UPDATE

- Tested to Date as of 4/23/20 (TTD): 455
- VEIP site tested 89/96 appointments that were in CRISP. (1 person turned around due to no dated appointment in CRISP.) (Others not tested due to various reasons such as hospitalization, prior testing, etc.)

EPIDEMIOLOGY AND SURVEILLANCE

Charles County

- As of 4/24 at 900 am, total case count for Charles County was 459 cases.
- There have been 37 confirmed deaths associated with COVID-19 (7%). There is one probable COVID-19 death. Majority of deaths are associated with outbreaks in skilled nursing facilities.
- Average age of confirmed fatalities: 78 years
- Gender breakdown among confirmed fatalities: 67% Female, 33% Male
- Number of negative lab results: 2020
- Positivity Rate: 18.5%
- Recovered and released from isolation: 106
- Partially recovered with improved symptoms: 26
- 109 or 24% required hospitalization
- 284 (61.9%) Female; 175 (37.1%) Male
- 20% Healthcare Workers
- 2% First Responders: EMS, Fire, Law Enforcement
- 33% have underlying health conditions
- Age range of positive COVID-19 cases: 6 months-100 years

Age Distribution for Charles County cases:

- Under 18 years: 1.3%
- 18-64 years: 76.0%
- 65+ years: 22.7%

ESSENCE data for urgent care utilization at Patient First in Waldorf had no data warnings or alerts for Thursday, April 23rd. Patient volume was 20 patients. This is down from the previous day where they saw 45 patients. All were discharged to home for self-care. 8 presented with ILI or COVID-19 like symptoms on Thursday, 4/23. Diagnoses included influenza due to other identified influenza virus with other respiratory manifestation, acute maxillary sinusitis, allergic rhinitis, acute bronchitis, respiratory tuberculosis, acute frontal sinusitis, and shortness of breath. There was 1 case with 2 CDC Classifier tags for Coronavirus and ILI negative influenza and 1 case with a CDC Classifier for Influenza.

Surveillance of EMS call data and alerts

The epidemiologist monitors the Charles County DES First Watch trigger alerts. The number of daily trigger alerts for COVID-19 cases or COVID-19 persons under investigation was 17 on 4/22. Discussions with Robbie Jones from EMS reveal data issues with the alert system. The decrease in COVID-19 PUI alerts does not indicate a decrease in call volume. The epidemiologist has also noticed potential COVID-19 PUI that came as regular trigger alerts. Robbie said that they have to fix each tablet in order to fix the problem and have more accurate data.

Robbie also reports that there are currently 17 EMS personnel on quarantine. Several will be coming back to work next week. They are seeing a decline in the number of personnel who need to go on quarantine.

- 4/18: 18
- 4/19: 23
- 4/20: 19
- 4/21: 21
- 4/22: 17
- 4/23: 12

Racial breakdown: The data is now being captured in the MDH line lists of confirmed cases in REDCap. Data was accessed on 4/24 at 9:00 am. Please be cognizant that data may differ from numbers pulled later in the morning since new positive lab results are being received by the health department and entered into NEDSS throughout the work day. This explains any discrepancies in the total count or denominator being used to calculate each data measure.

Total: 459 cases on 4/24 at 900 am MDH line list assessed through REDCap:

Data on race and ethnicity changes daily as case investigations are completed and more information on demographics is updated in the electronic reporting disease system. Additionally, when there is an influx of new cases in electronic reporting disease system, data on race and ethnicity may not be available immediately for new cases since race information is not typically captured on a lab report and must be obtained during the investigation.

(Case counts with less than 7 cases should not be shared publicly. This data is confidential.)

Race Breakdown

- Asian: 10 (2.2%)
- Black/African American: 220 (47.9%)
- White: 116 (25.3%)
- Other or 2+ races: 19 (4.1%)
- Data not available or Declined to Answer: 94 (20.5%)

Racial breakdown among confirmed fatalities

- 57.6% Non-Hispanic White
- 39.4% Non-Hispanic Black
- 3% Hispanic

Ethnicity Breakdown

- Hispanic 11 (2.4%)
- Non-Hispanic 341 (74.3%)
- Declined to answer 37 (8.0%)
- Data not available 70 (15.3%)

Epidemiologist's note: *Please use caution when drawing any conclusions regarding race or ethnicity. There is still a percentage where race data is not available, and information regarding this missing population cannot be assumed. Additionally, it should be noted that the greatest number of cases (58%) are the Waldorf zip codes of 20601, 20602, and 20603. Over half of the county population lives in those zip codes. Additionally, those zip codes have a very diverse population with minority populations comprising the majority of the zip code level population and with African Americans being the largest racial group in those zip codes.*

Zip Code level data was also analyzed using the MDH line lists of confirmed cases in REDCap. Data was accessed on 4/23 at 10:00 am.

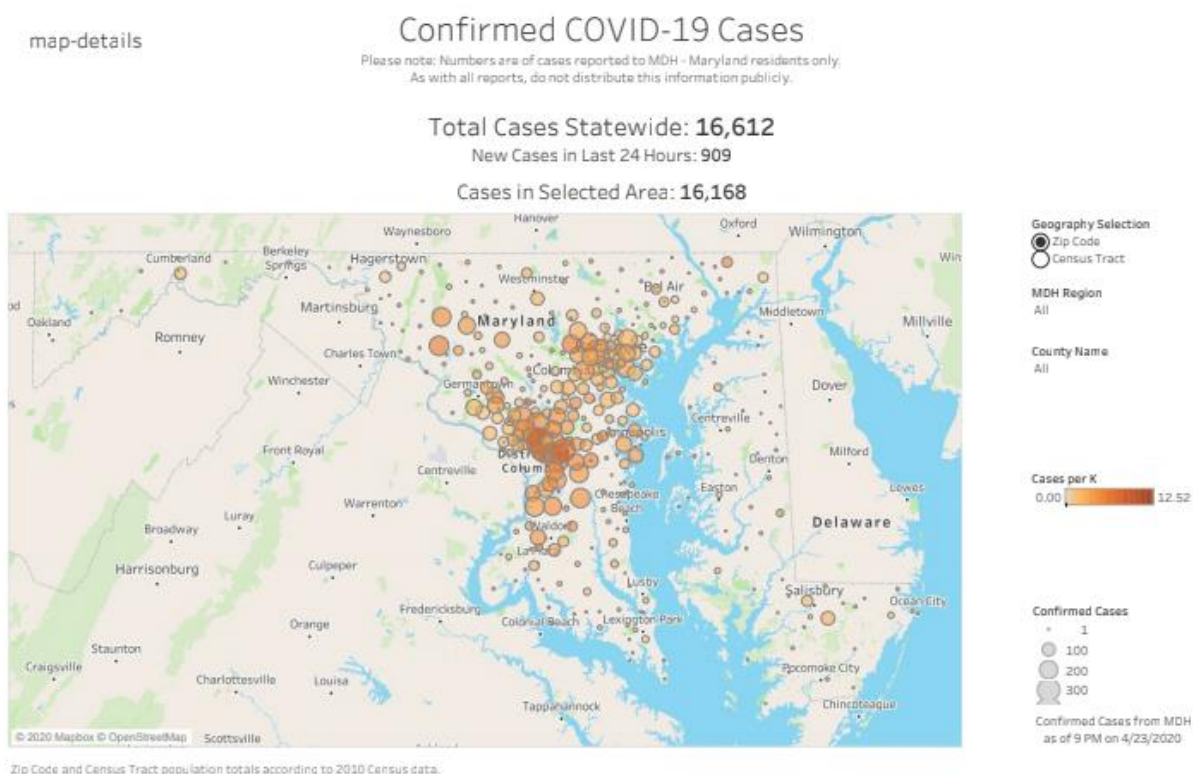
(Zip code level data with counts less than 7 cases cannot be shared publicly and must remain confidential.)

Confirmed cases by zip code:

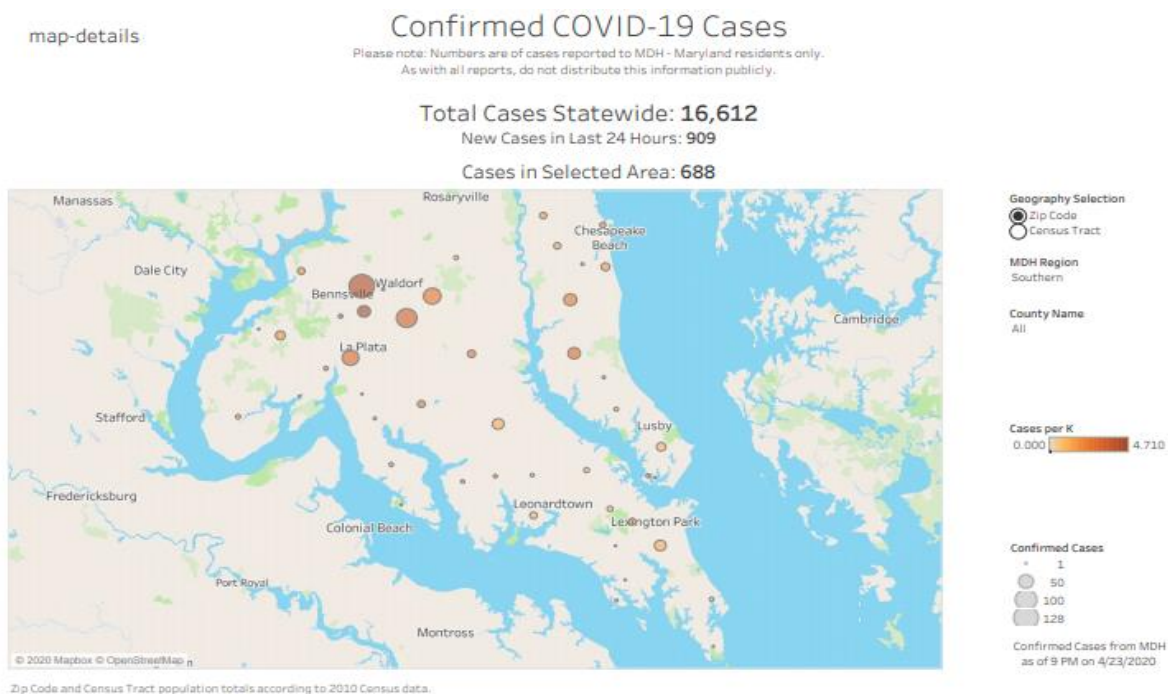
Zip code:	4/23	4/24	Change from 4/23 to 4/24
20601	57	59	+2
20602	81	82	+1
20603	118	120	+2
20604	1	1	0
20607	9	10	+1
20611	1	1	0
20613	15	16	+1
20616	10	11	+1
20622	2	2	0
20632	2	2	0
20637	12	13	+1
20640	16	19	+3
20646	51	56	+5
20658	1	1	0
20662	5	5	0
20664	4	4	0
20675	3	3	0
20677	4	4	0
20693	2	2	0
20695	28	29	+1

ADDITIONAL INFORMATION: *This includes the following:*

- **Heat map of COVID cases in Maryland by zip code** – *provided through the Chesapeake Regional Information System for our Patients (CRISP)*



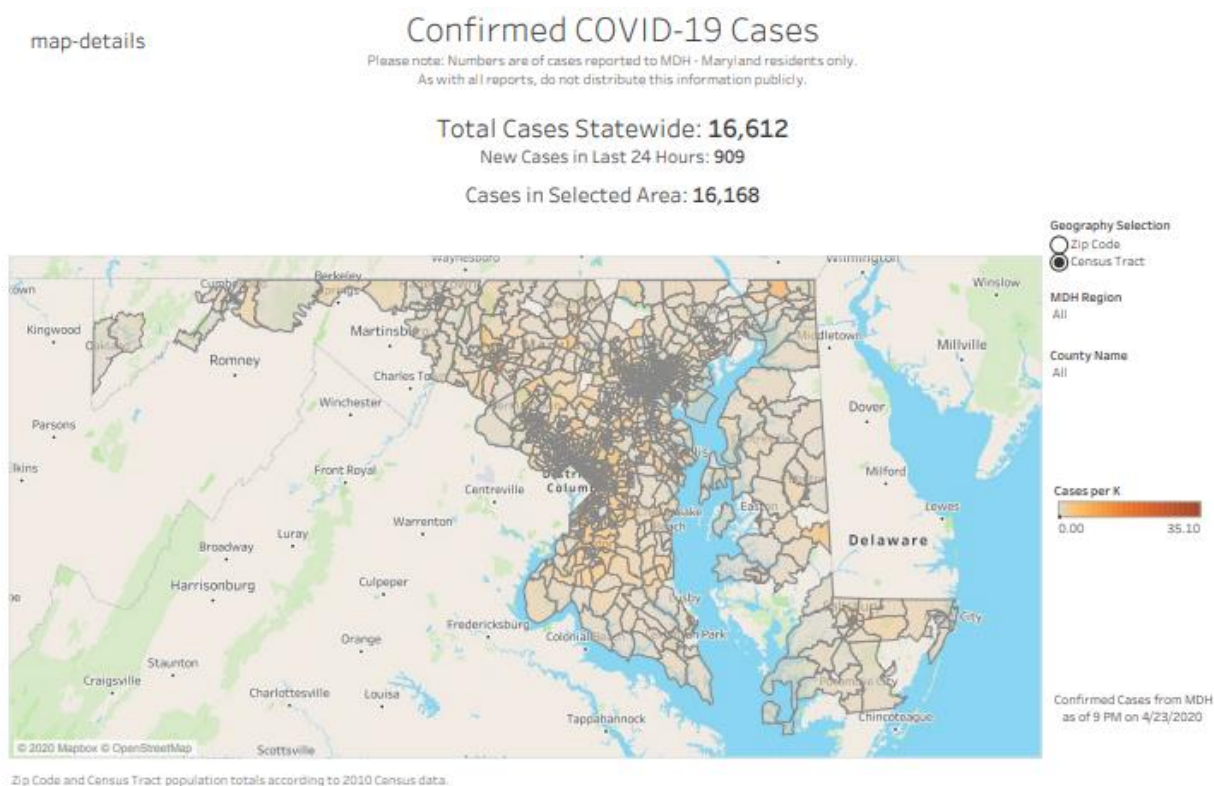
- **Heat Map of Southern Maryland**



- **Heat Map of Charles County**



- **Maryland Case Map**



- **Southern Maryland Case Map**

map-details

Confirmed COVID-19 Cases

Please note: Numbers are of cases reported to MDH - Maryland residents only.
As with all reports, do not distribute this information publicly.

Total Cases Statewide: **16,612**New Cases in Last 24 Hours: **909**Cases in Selected Area: **688**

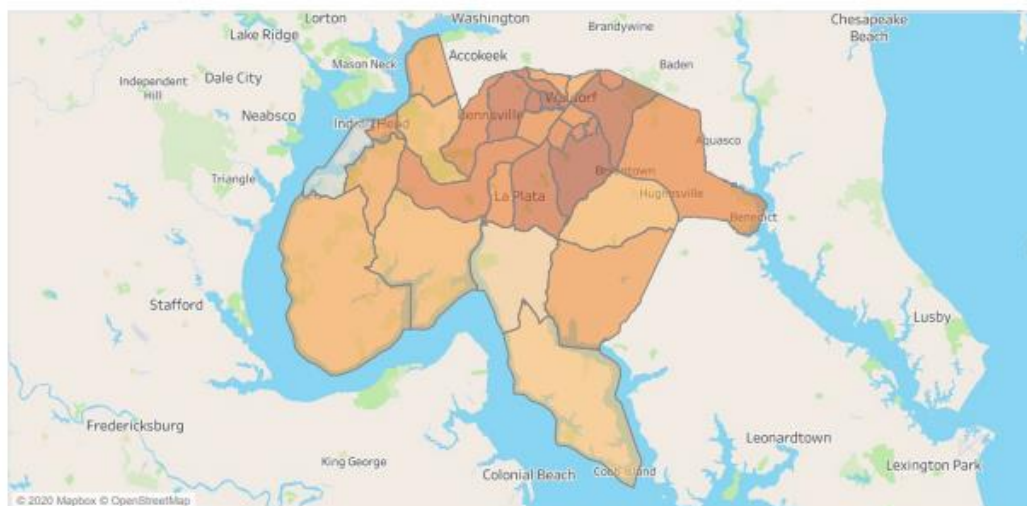
Zip Code and Census Tract population totals according to 2010 Census data.

- **Charles County Case Map**

map-details

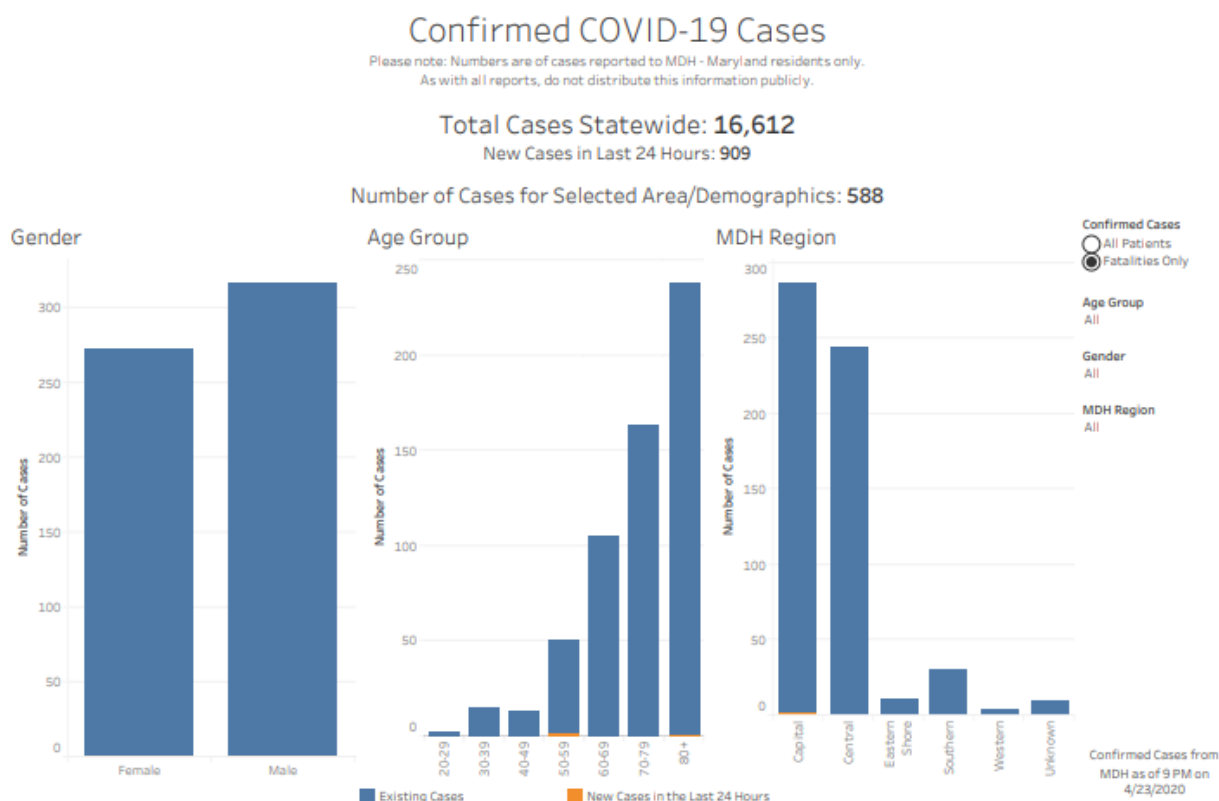
Confirmed COVID-19 Cases

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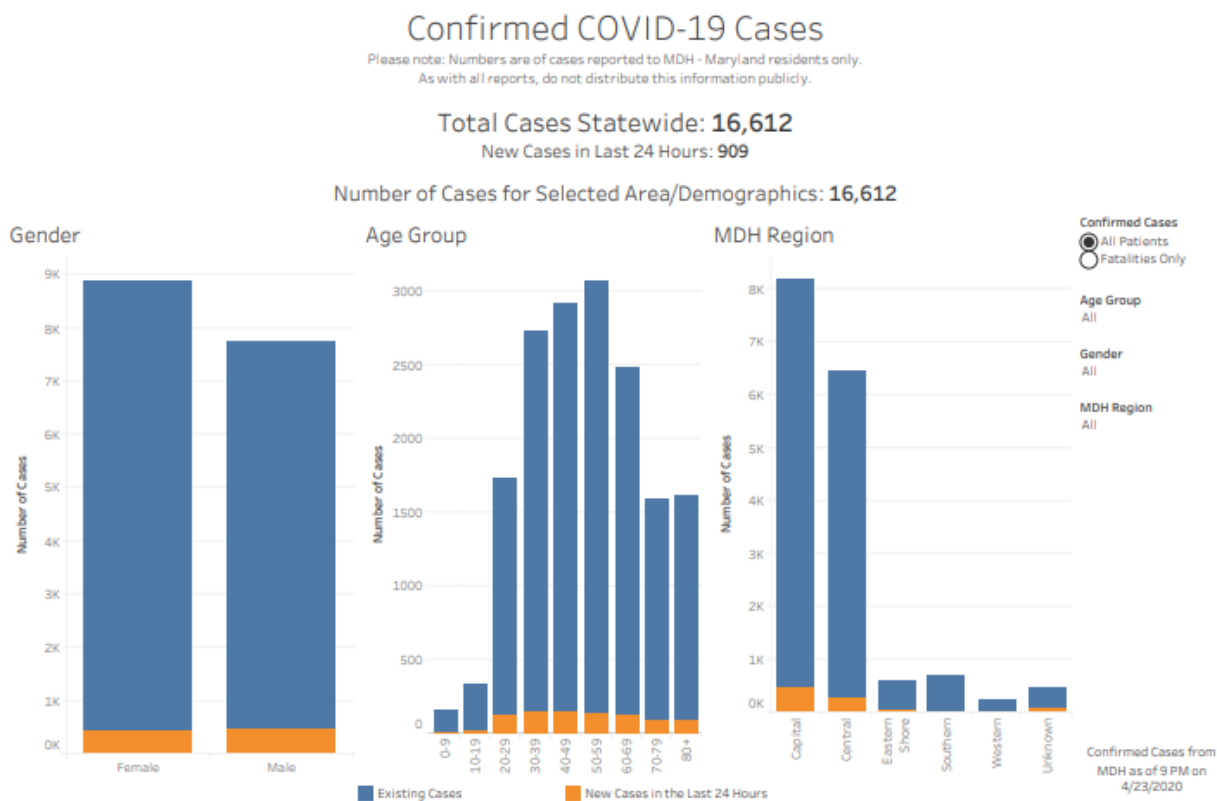
Total Cases Statewide: **16,612**New Cases in Last 24 Hours: **909**Cases in Selected Area: **435**

Zip Code and Census Tract population totals according to 2010 Census data.

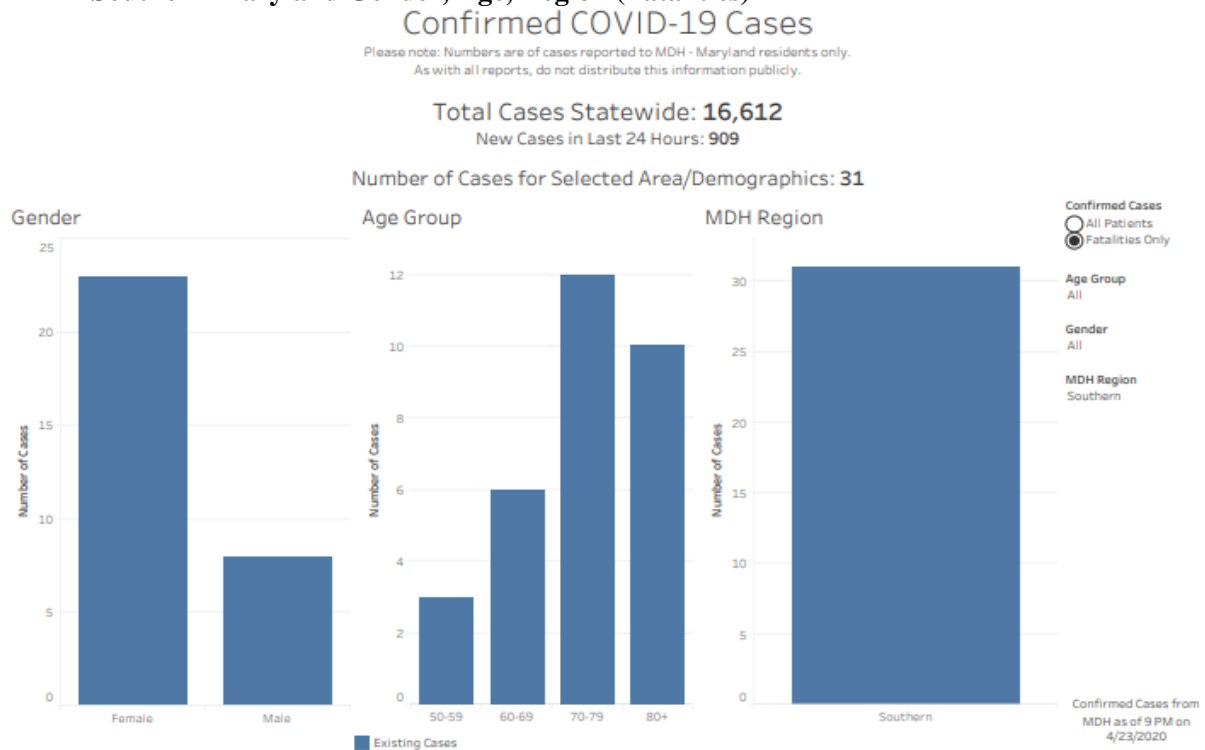
- Gender, Age, Region (Fatalities)



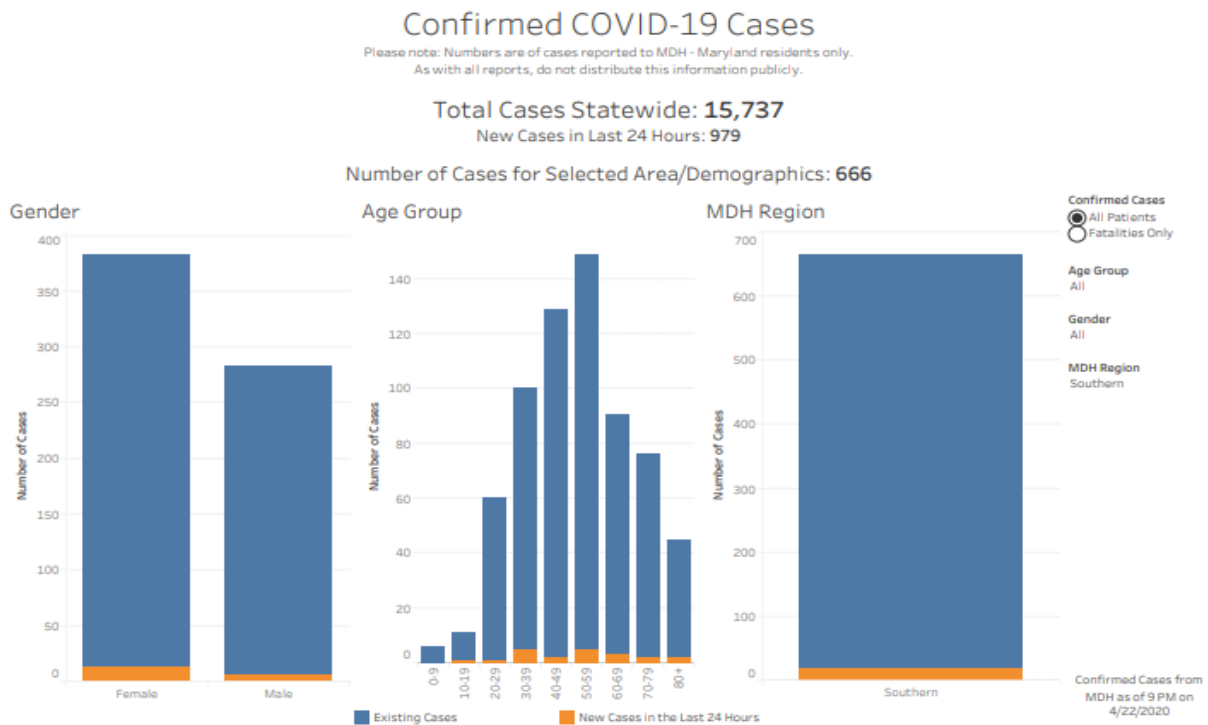
- Gender, Age, Region (All)



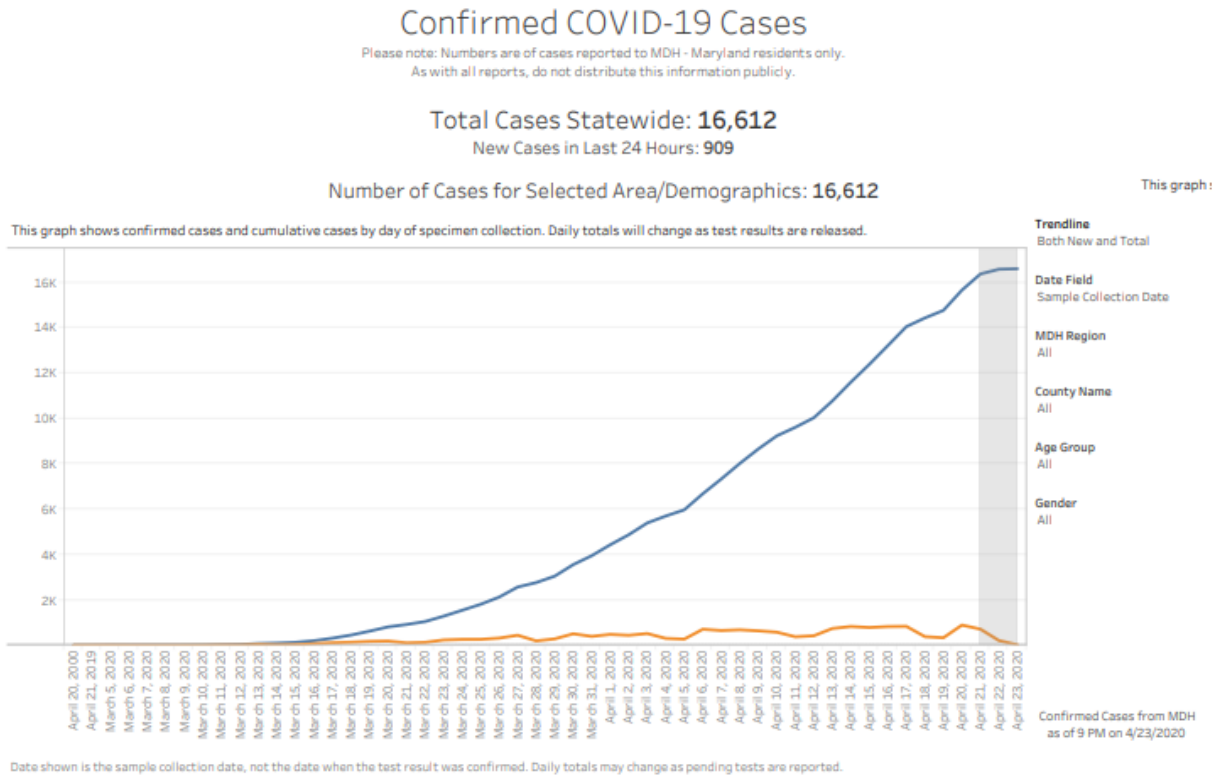
- **Southern Maryland Gender, Age, Region (Fatalities)**



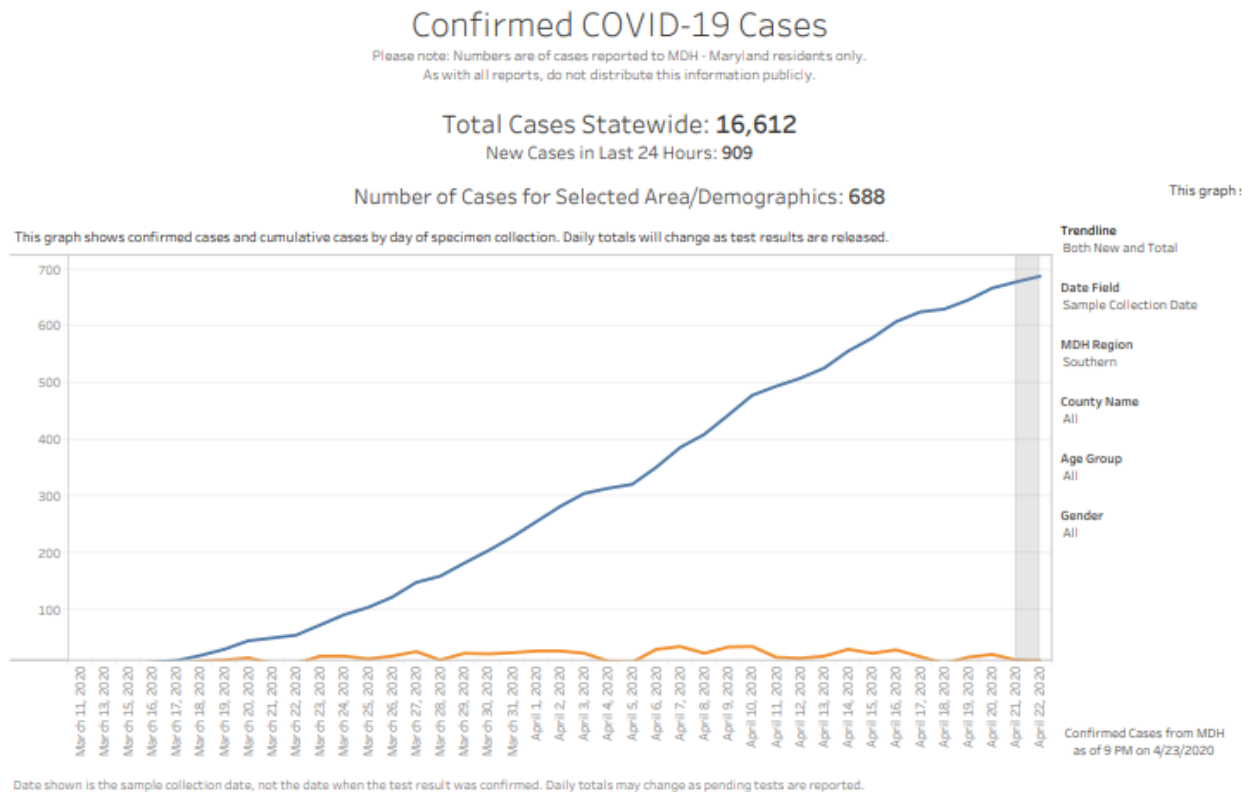
Southern Maryland Gender, Age, Region (All)



- Statewide Cases by Date



- Southern Maryland Cases by Date



- Charles County Cases by Date

Confirmed COVID-19 Cases

Please note: Numbers are of cases reported to MDH - Maryland residents only.
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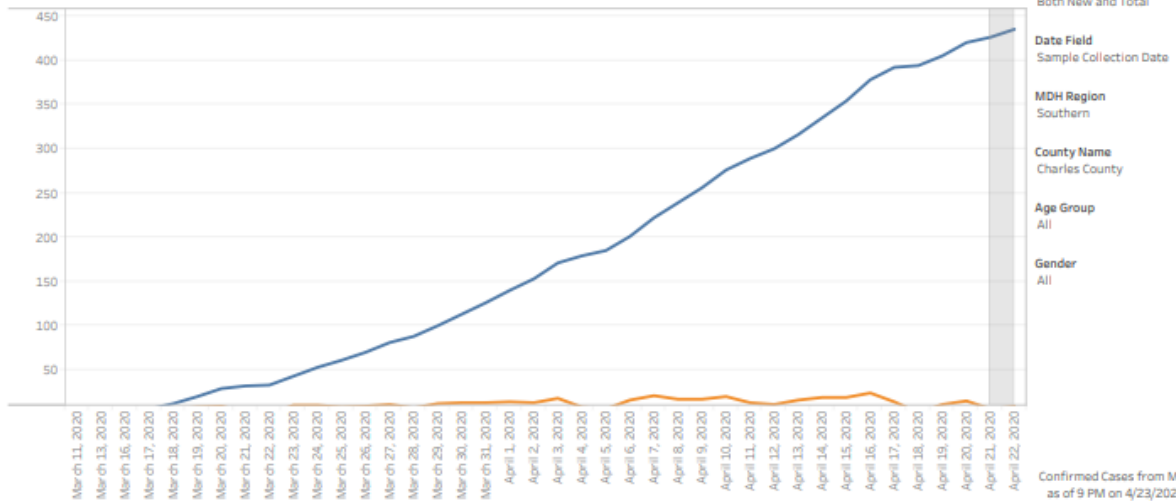
Total Cases Statewide: **16,612**

New Cases in Last 24 Hours: **909**

Number of Cases for Selected Area/Demographics: **435**

This graph:

This graph shows confirmed cases and cumulative cases by day of specimen collection. Daily totals will change as test results are released.



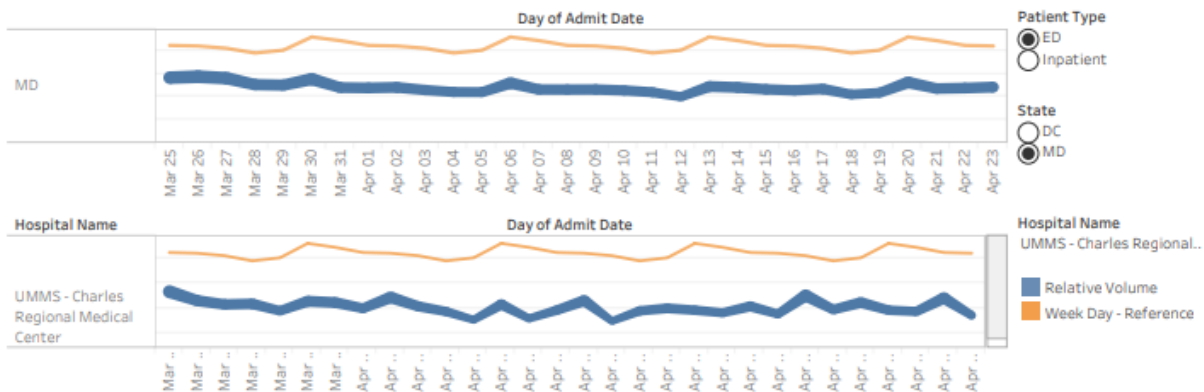
Date shown is the sample collection date, not the date when the test result was confirmed. Daily totals may change as pending tests are reported.

- Hospital Volume Trends ED

Hospital Volume Trend Lines

These volume data are derived from real-time Admission/Discharge/Transfer feeds sent to CRISP. The thickness of the line is a measure of volume. These volume counts are imprecise for reasons such as differences in how feeds are implemented among hospitals. However, the trendlines provide utility in understanding directional volume change over time.

The orange reference line shows the statewide average relative volume by the day of the week, using all ADT data from January 1, 2020 to February 29, 2020.

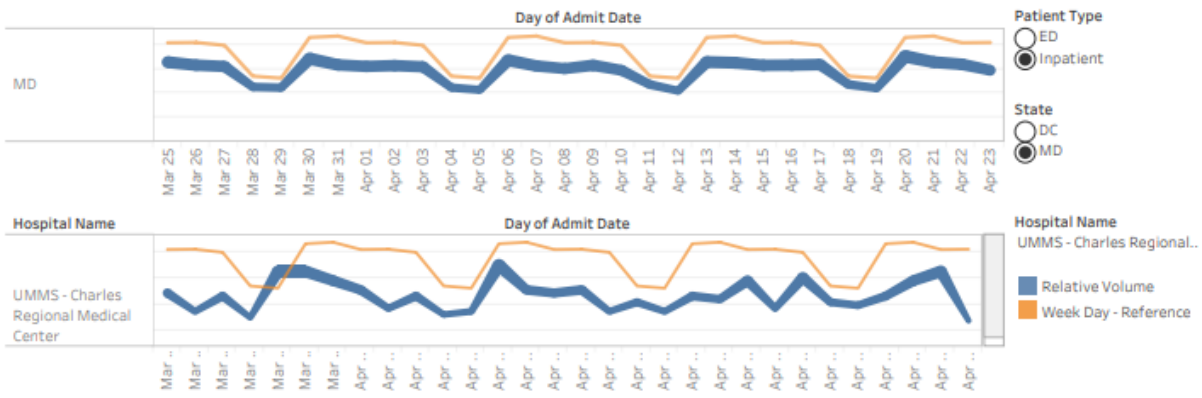


• Hospital Volume Trends Inpatient

Hospital Volume Trend Lines

These volume data are derived from real-time Admission/Discharge/Transfer feeds sent to CRISP. The thickness of the line is a measure of volume. These volume counts are imprecise for reasons such as differences in how feeds are implemented among hospitals. However, the trendlines provide utility in understanding directional volume change over time.

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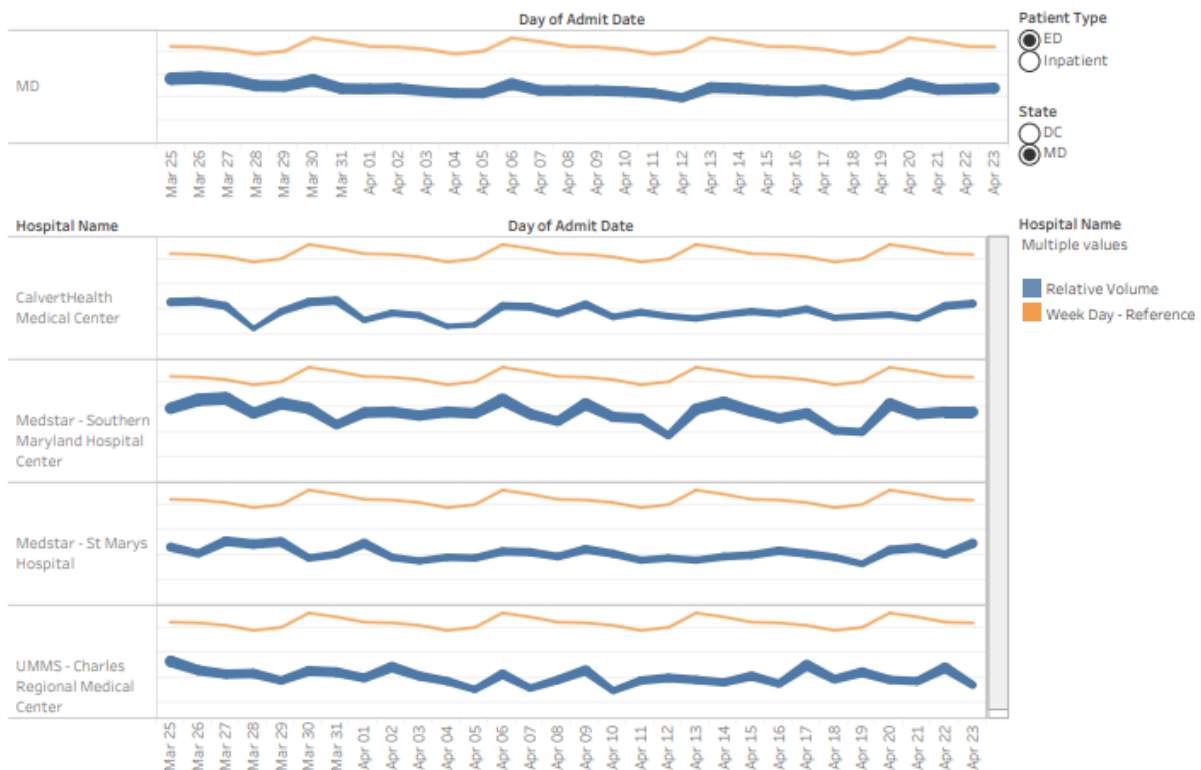


• Regional Hospital Volume Trends ED

Hospital Volume Trend Lines

These volume data are derived from real-time Admission/Discharge/Transfer feeds sent to CRISP. The thickness of the line is a measure of volume. These volume counts are imprecise for reasons such as differences in how feeds are implemented among hospitals. However, the trendlines provide utility in understanding directional volume change over time.

The orange reference line shows the statewide average relative volume by the day of the week, using all ADT data from January 1, 2020 to February 29, 2020.

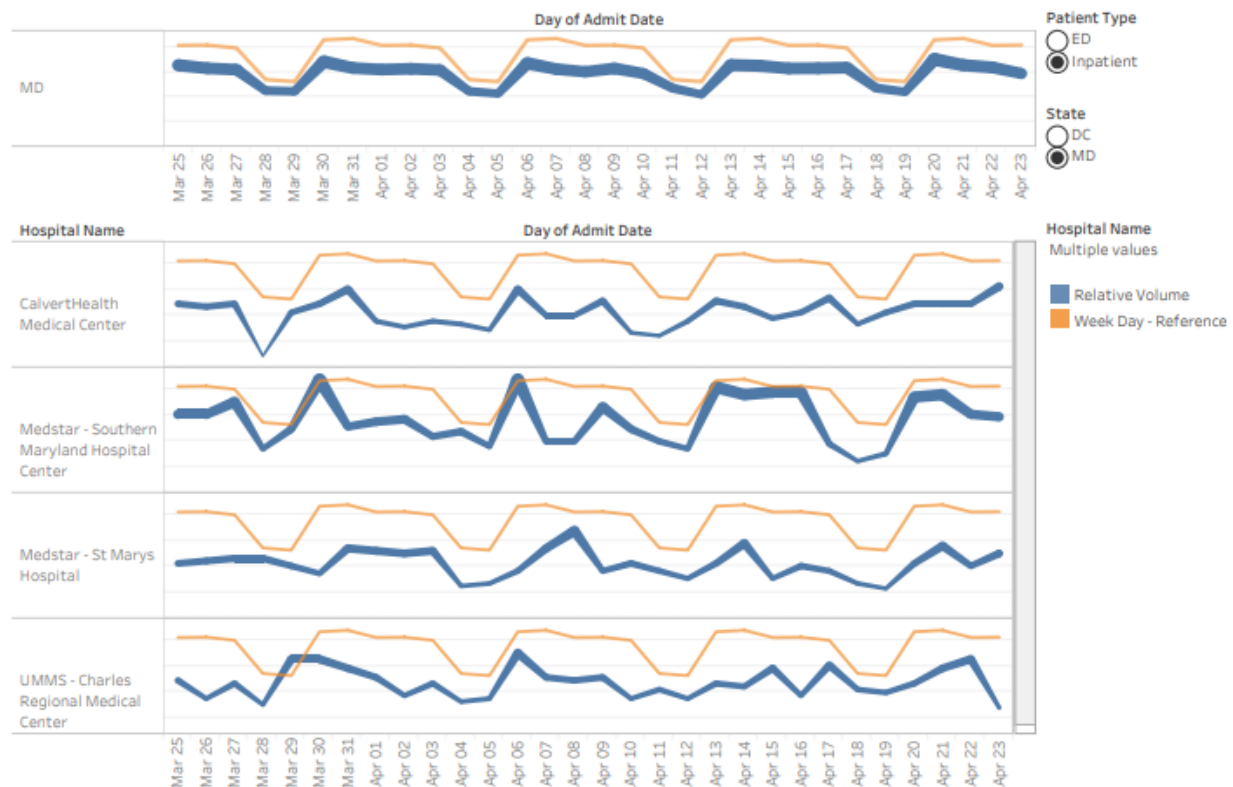


• Regional Hospital Volume Trends Inpatient

Hospital Volume Trend Lines

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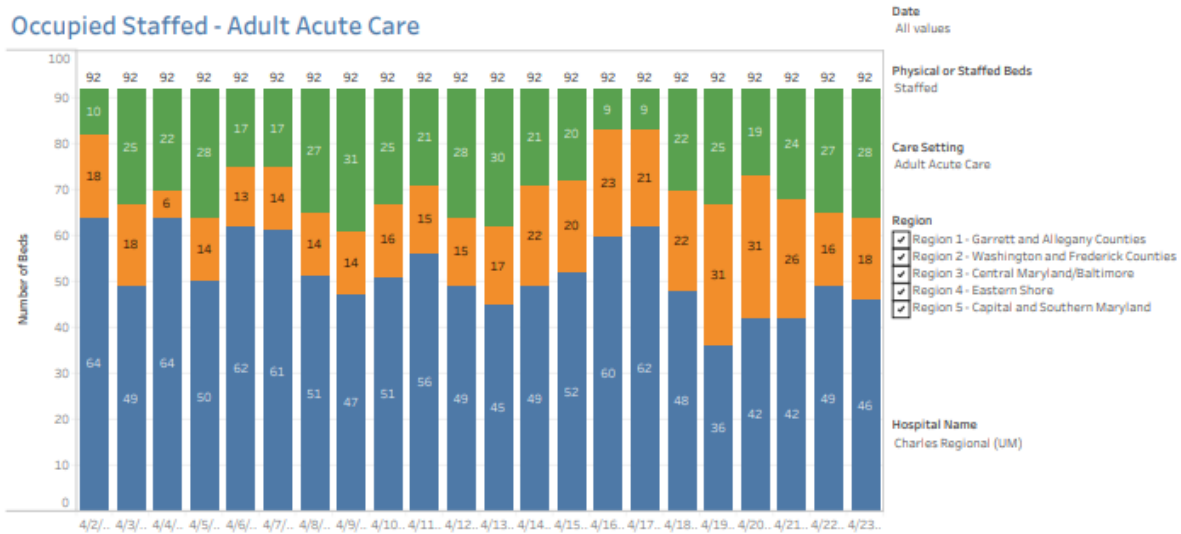
• Maryland Occupied Staff Acute Care

MIEMSS Facility Resources Emergency Database (FRED)

Data as of 4/23/2020

The data in this report is self-reported daily by hospitals to Maryland Institute for Emergency Medical Services Systems (MIEMSS). The data in this report reflect point in time counts. Please note data is presented as reported and is not edited or validated by CRISP.

Occupied Staffed - Adult Acute Care



Occupied Staffed by Hospital - Adult Acute Care



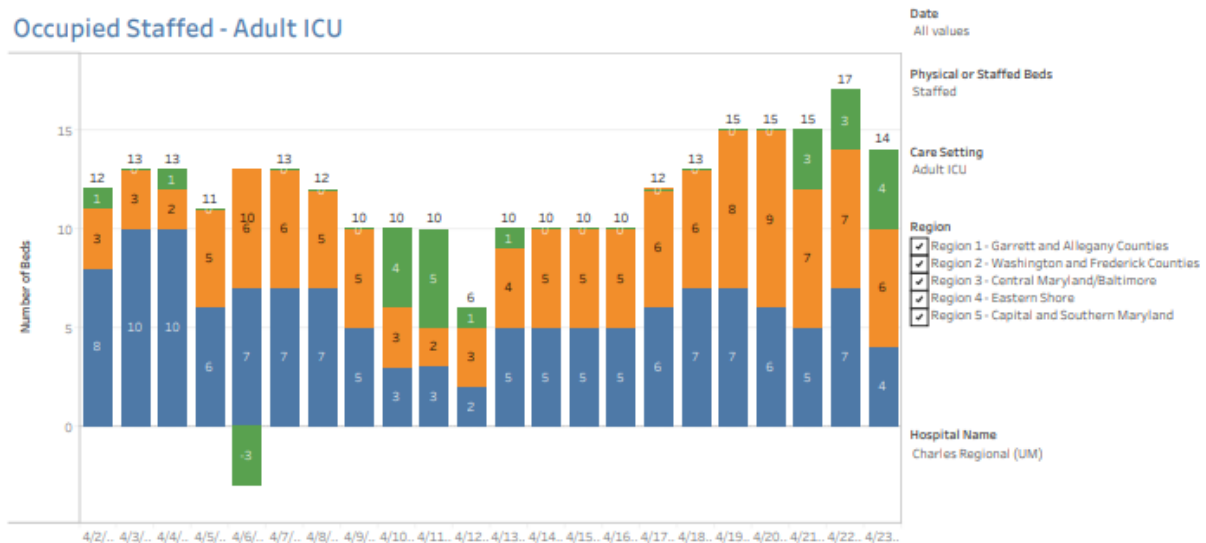
• Maryland Occupied Staff ICU

MIEMSS Facility Resources Emergency Database (FRED)

Data as of 4/23/2020

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Occupied Staffed - Adult ICU



Occupied Staffed by Hospital - Adult ICU



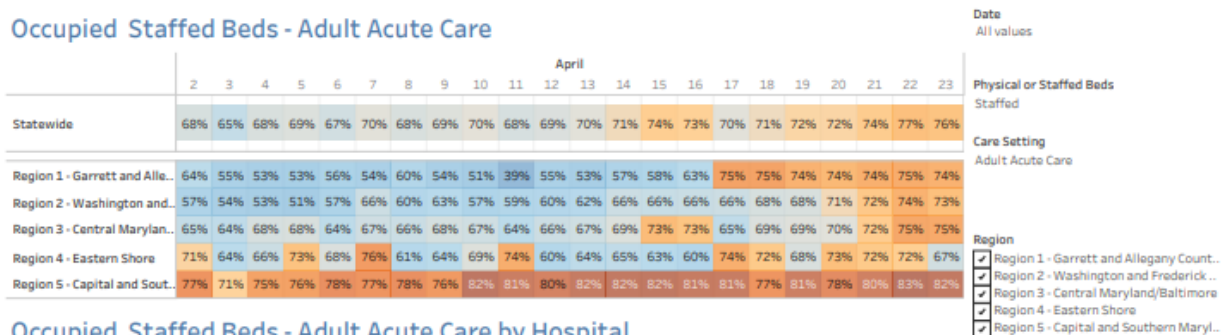
• Maryland Occupied Staffed Beds Acute Care

MIEMSS Facility Resources Emergency Database (FRED)

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Occupied Staffed Beds - Adult Acute Care



Occupied Staffed Beds - Adult Acute Care by Hospital

Hospital Name	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Charles Regional (UM)	89%	73%	76%	70%	82%	82%	71%	66%	73%	77%	70%	67%	77%	78%	90%	90%	76%	73%	79%	74%	71%	70%

Hospital Name

Charles Regional (UM)

Occupied %

0% 100%

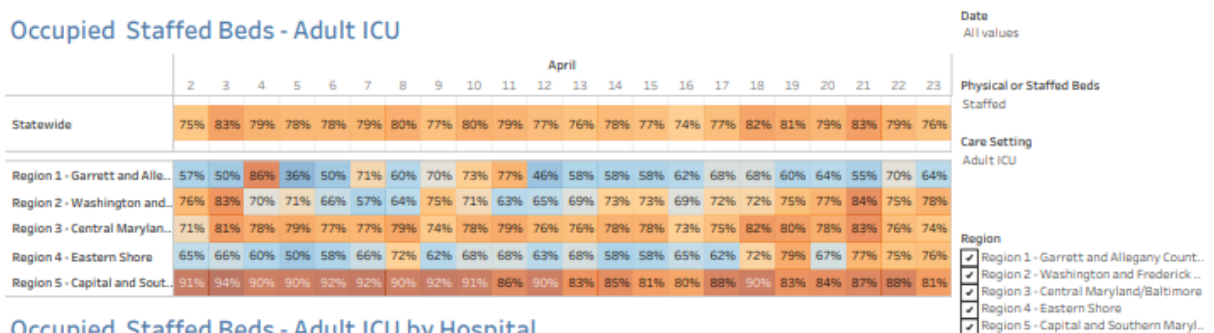
• Maryland Occupied Staffed Beds ICU

MIEMSS Facility Resources Emergency Database (FRED)

Data as of 4/23/2020

The data in this report is self-reported daily by hospitals to Maryland Institute for Emergency Medical Services Systems (MIEMSS). The data in this report reflect point in time counts. Please note data is presented as reported and is not edited or validated by CRISP.

Occupied Staffed Beds - Adult ICU



Occupied Staffed Beds - Adult ICU by Hospital

Hospital Name	2	3	4	5	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Charles Regional (UM)	92%	100%	92%	100%	100%	100%	100%	60%	50%	83%	90%	100%	100%	100%	100%	100%	100%	100%	80%	82%	71%

Hospital Name

Charles Regional (UM)

Occupied %

0% 100%

Statewide Capacity Overview

EMSS Facility Resources Emergency Database (FRED)

Data as of 4/23/2020

The data in this report is self-reported daily by hospitals to Maryland Institute for Emergency Medical Services Systems (MIEMSS). The data in this report reflect point in time counts. Please note data is presented as reported and is not edited or validated by CRISP.

Statewide Capacity Overview

Available Acute Care and ICU Staffed
Beds (Adult):

1,751

(1751/7300) = 24%

Ventilators Available:

1,340

(1340/2024) = 66%

Patients in the Emergency Department:

609

(609/2168) = 28%

Change from day before: +109 beds

Change from day before: -25 vents

Change from day before: +36 patients

Hospitalized Confirmed COVID-19 Patients

Staffed Acute Care Beds Occupied by
COVID-19 Patients:

878

(878/5843) = 15%

Staffed ICU Beds Occupied
by COVID-19 Patients:

547

(547/1457) = 38%

Change from day before:

-12 patients

Change from day before:

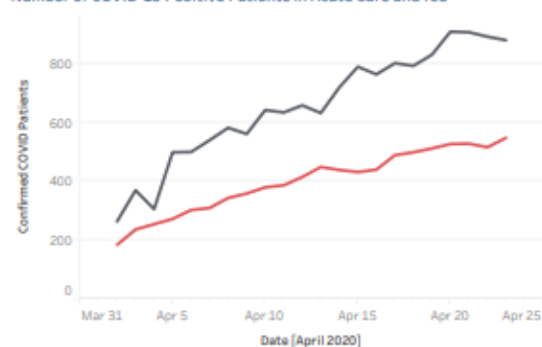
+32 patients

Bed Summary

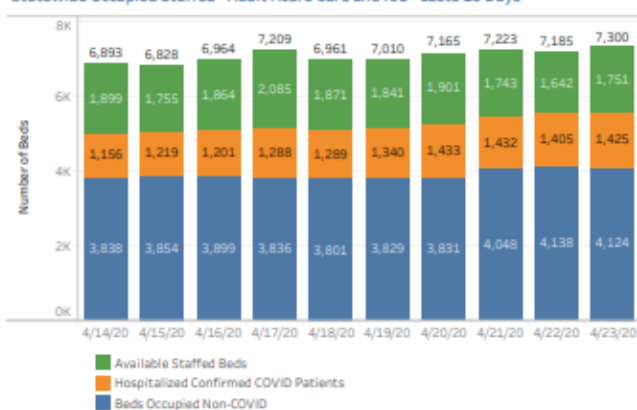
	Physical Beds	Staffed Beds	Occupied Beds	% Occupied Physical Bed	% Occupied Staffed Bed
Adult Acute Care	7,441	5,843	4,441	60%	76%
Adult ICU	1,740	1,457	1,108	64%	76%
Pediatric Acute Care	332	275	104	31%	38%
Pediatric ICU	45	45	35	78%	78%

Hospitalized COVID-19 Patients

Number of COVID-19 Positive Patients in Acute Care and ICU



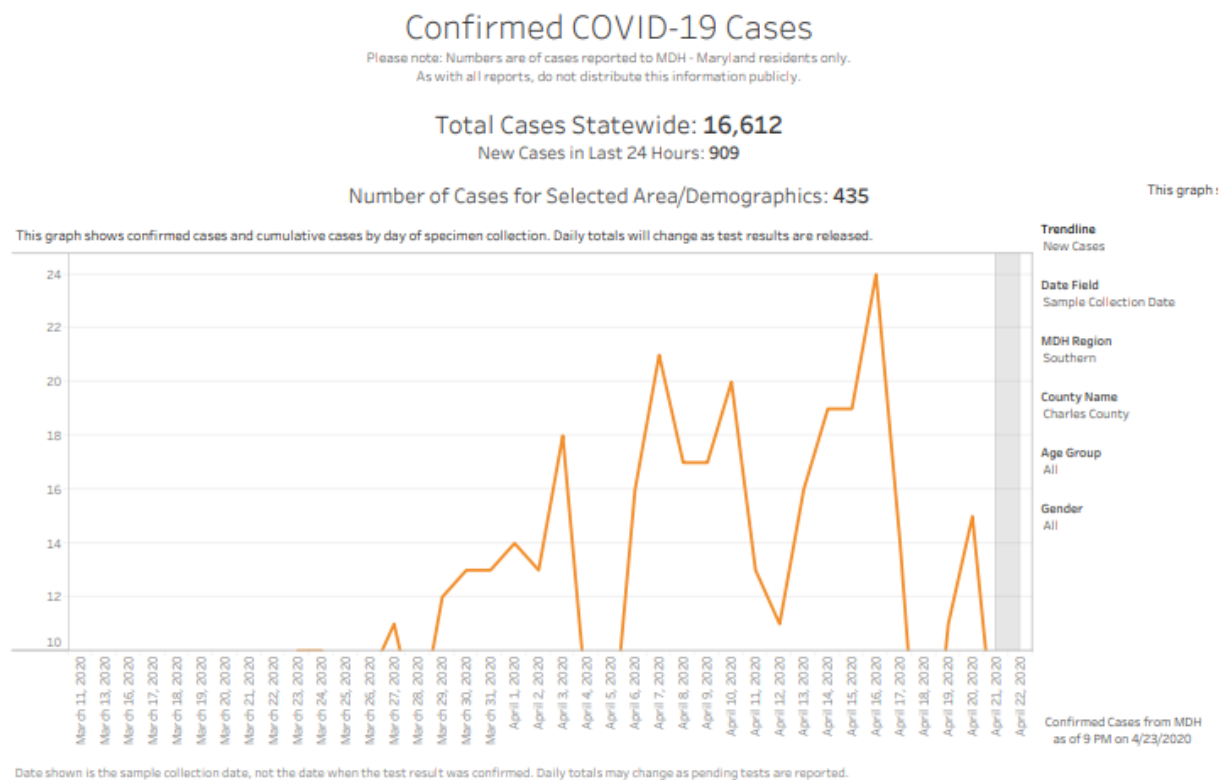
Statewide Occupied Staffed - Adult Acute Care and ICU - Lasts 10 Days



Source: CRISP, 2020. CRISP MIEMSS FRED SmartSheet Download.



- Charles County Epi-Curve



- NCR Case Projections

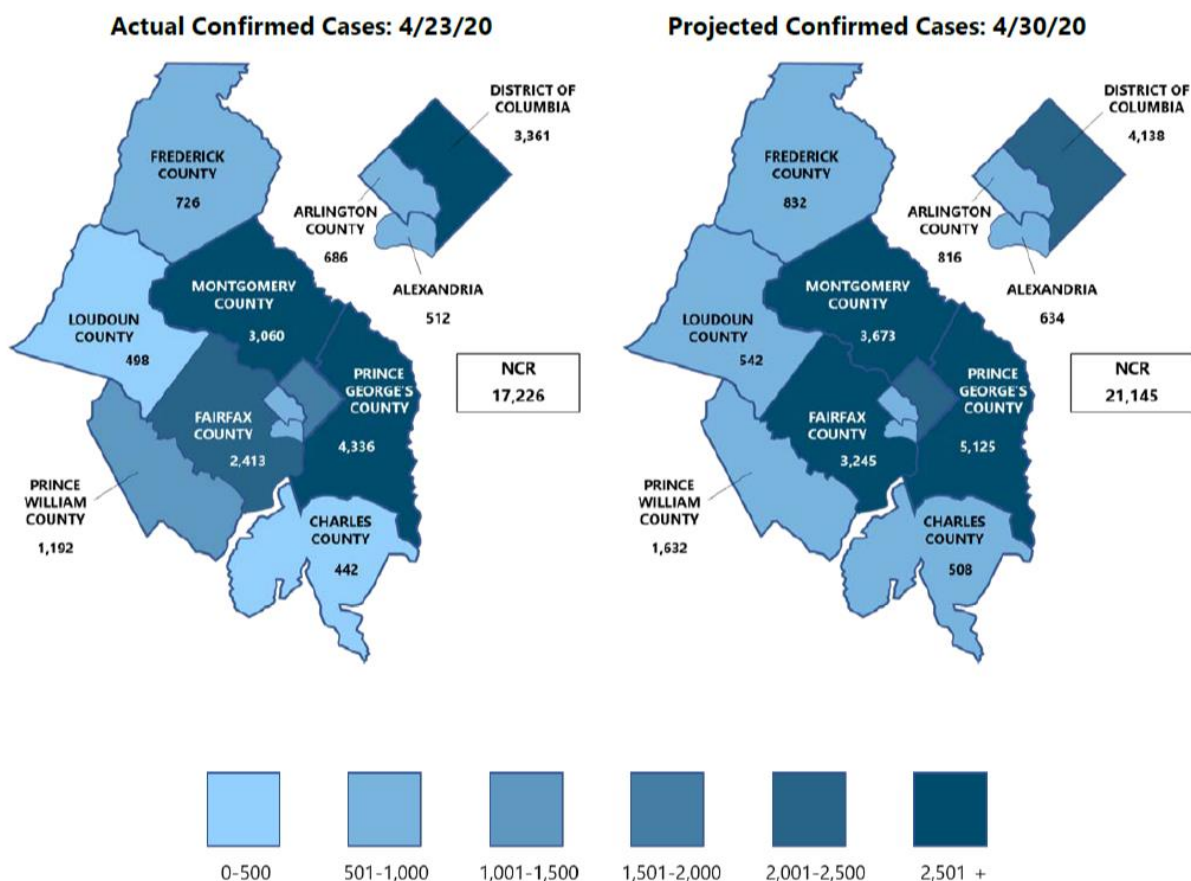
	Actual Confirmed Cases On:				Projected Cases For:						
	4/20	4/21	4/22	4/23	4/24	4/25	4/26	4/27	4/28	4/29	4/30
Washington DC	2,927	3,098	3,206	3,361	3,485	3,606	3,722	3,833	3,940	4,041	4,138
Charles County, MD	392	401	427	442	454	466	476	485	494	501	508
Frederick County, MD	626	632	691	726	746	765	781	796	809	821	832
Montgomery County, MD	2,647	2,768	2,868	3,060	3,166	3,265	3,359	3,447	3,528	3,603	3,673
Prince George's County, MD	3,583	3,734	4,047	4,336	4,474	4,602	4,721	4,832	4,936	5,034	5,125
Arlington County, VA	593	625	663	686	709	730	750	769	786	801	816
Fairfax County, VA	1,970	2,123	2,306	2,413	2,540	2,666	2,788	2,908	3,024	3,137	3,245
Loudoun County, VA	446	468	475	498	506	513	520	526	531	537	542
Prince William County, VA	919	1,008	1,075	1,192	1,259	1,326	1,391	1,454	1,516	1,575	1,632
Alexandria, VA	421	462	474	512	532	552	570	587	604	619	634
NCR	14,524	15,319	16,232	17,226	17,872	18,489	19,078	19,637	20,168	20,671	21,145

- NCR Medical Demand Projections**

Medical Demand Projections:

	Actual Confirmed Cases On:				Projected Cases (Hospitalized) [ICU] [Ventilator] For:											
	4/20	4/21	4/22	4/23	4/25				4/27				4/29			
Washington DC	2,927	3,098	3,206	3,361	3,606	(721)	[173]	{87}	3,833	(767)	[184]	{92}	4,041	(808)	[194]	{97}
Charles County, MD	392	401	427	442	466	(93)	[22]	{11}	485	(97)	[23]	{12}	501	(100)	[24]	{12}
Frederick County, MD	626	632	691	726	765	(153)	[37]	{18}	796	(159)	[38]	{19}	821	(164)	[39]	{20}
Montgomery County, MD	2,647	2,768	2,868	3,060	3,265	(653)	[157]	{78}	3,447	(689)	[165]	{83}	3,603	(721)	[173]	{86}
Prince George's County, MD	3,583	3,734	4,047	4,336	4,602	(920)	[221]	{110}	4,832	(966)	[232]	{116}	5,034	(1,007)	[242]	{121}
Arlington County, VA	593	625	663	686	730	(146)	[35]	{18}	769	(154)	[37]	{18}	801	(160)	[38]	{19}
Fairfax County, VA	1,970	2,123	2,306	2,413	2,666	(533)	[128]	{64}	2,908	(582)	[140]	{70}	3,137	(627)	[151]	{75}
Loudoun County, VA	446	468	475	498	513	(103)	[25]	{12}	526	(105)	[25]	{13}	537	(107)	[26]	{13}
Prince William County, VA	919	1,008	1,075	1,192	1,326	(265)	[64]	{32}	1,454	(291)	[70]	{35}	1,575	(315)	[76]	{38}
Alexandria, VA	421	462	474	512	552	(110)	[26]	{13}	587	(117)	[28]	{14}	619	(124)	[30]	{15}
NCR	14,524	15,319	16,232	17,226	18,489	(3,698)	[887]	{444}	19,637	(3,927)	[943]	{471}	20,671	(4,134)	[992]	{496}

- NCR Medical Demand Projections Map**



MISCELLANEOUS

Nothing new to report

Respectfully submitted by Charles County PHEP