

COVID Crisis

Monumental Changes for Health Care

MOSH PIT



MASKS

OUTDOORS

SOCIAL DISTANCING

HANDWASHING

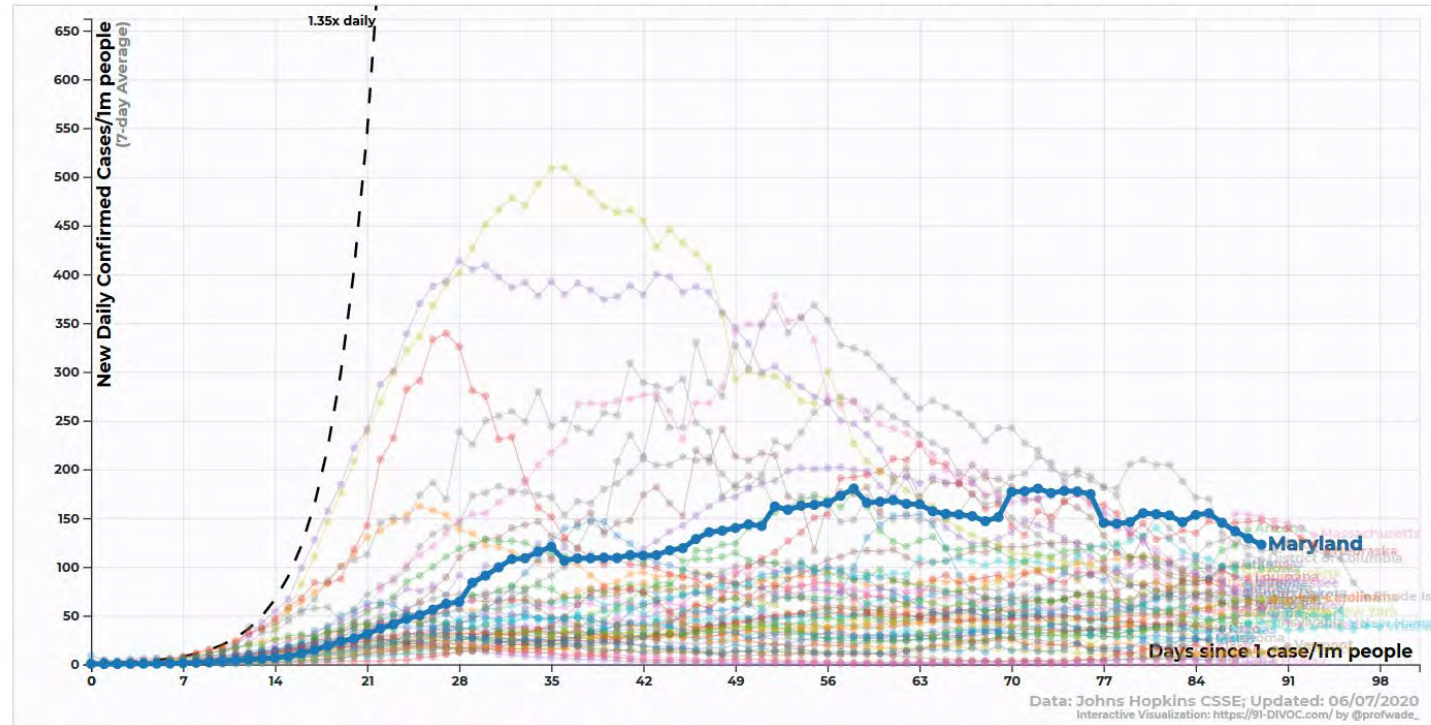
PERSONAL & PUBLIC RESPONSIBILITY

INFORMATION

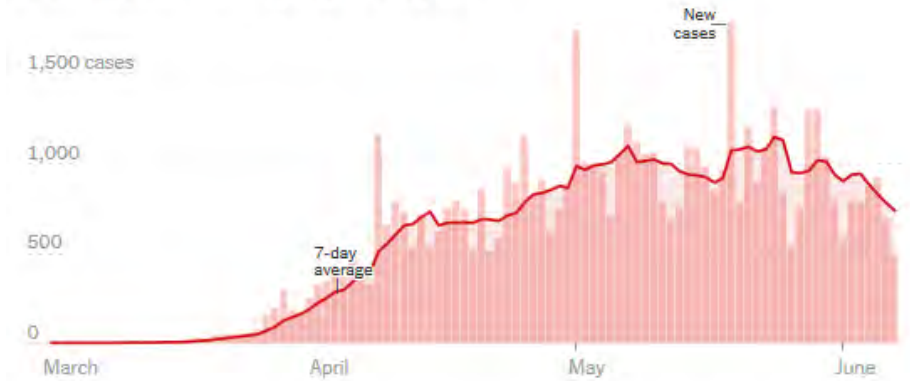
TALKING TO PROFESSIONALS

USA

New COVID-19 Cases by US States/Territories per Day, normalized by population

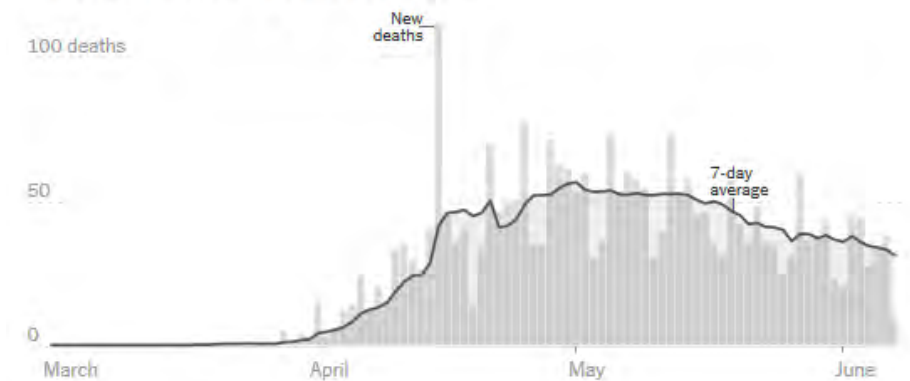


New reported cases by day in Maryland



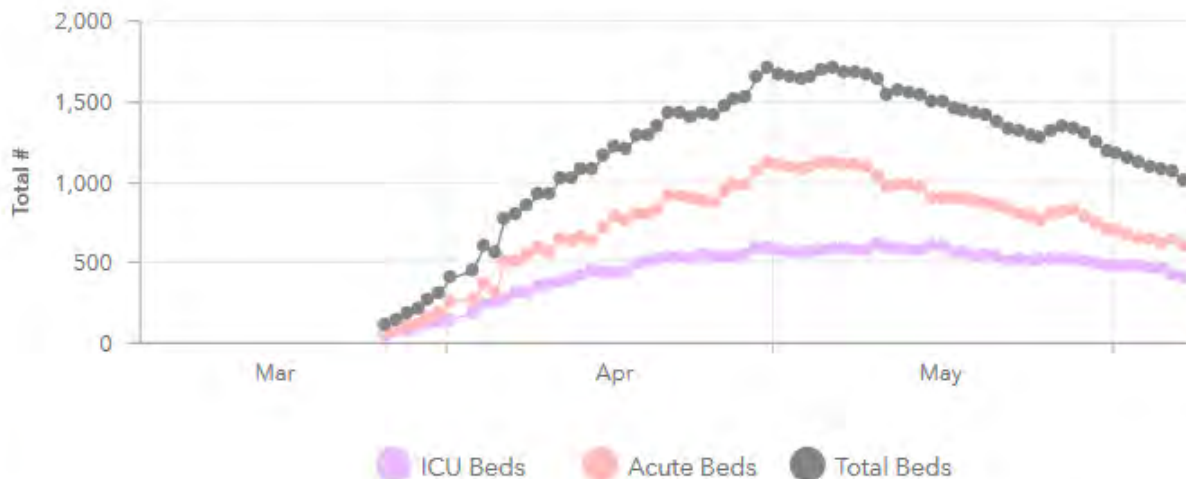
Note: The seven-day average is the average of a day and the previous six days of data.

New reported deaths by day in Maryland

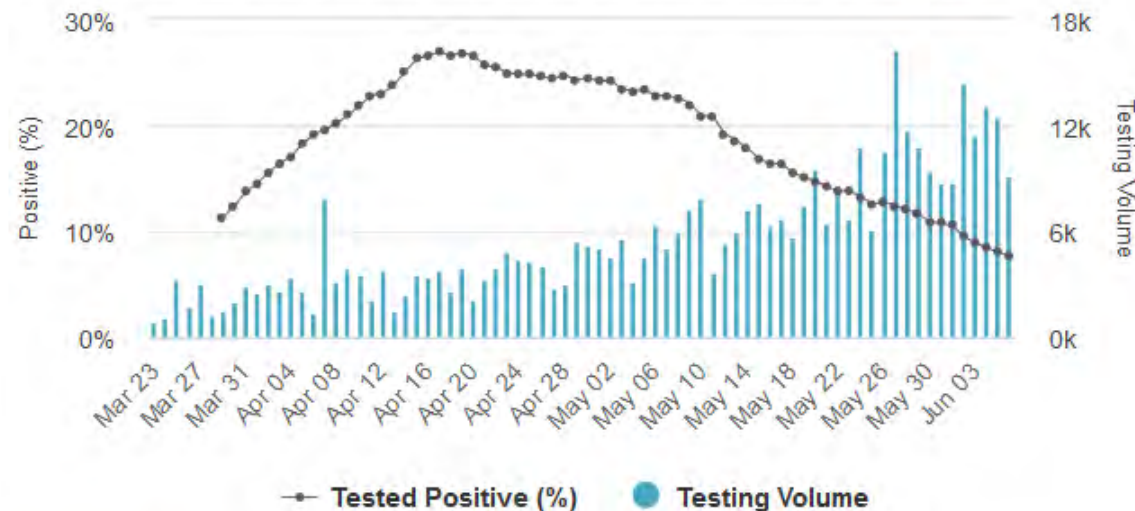


Our Values

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



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



Hospitalizations, Current

Age Distribution

Gender Distribution

Racial Distribution

Positivity Rate

Deaths by Date of Death

Cases, Total Reported

Confirmed Cases

57,973

24hr Change: +491

Persons Tested Negative

306,830

24hr Change: +6,936

Testing Volume

427,155

24hr Change: +9,251

Testing % Positive

7.63%

24hr Change: -0.37

Confirmed Deaths

2,625

24hr Change: +9

Currently Hospitalized

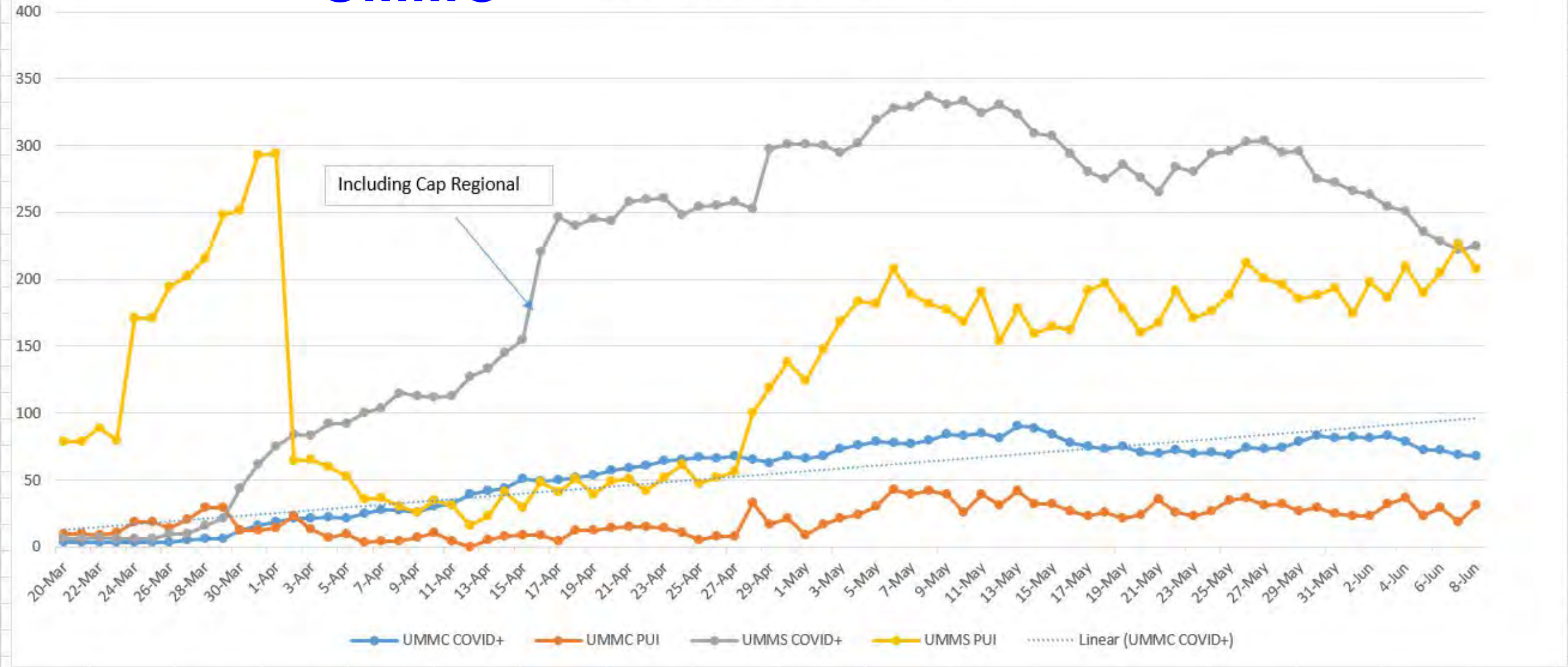
1,003

24hr Change: -56

Our Values

UMMC

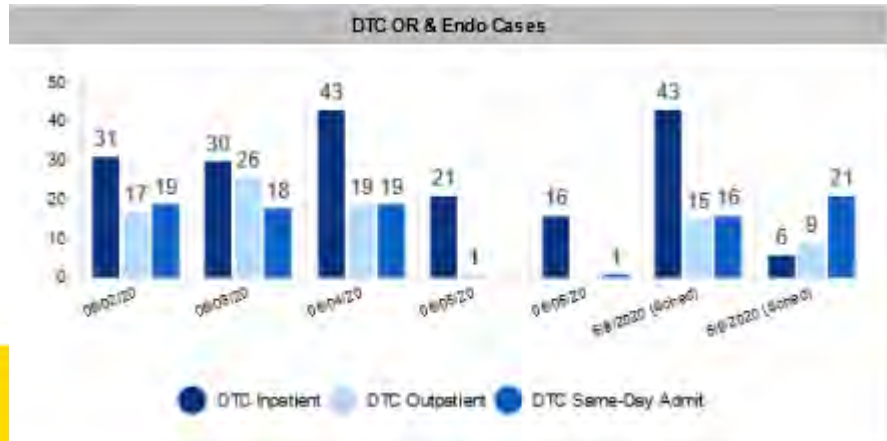
COVID 19 Tracking - DTC and UMMS



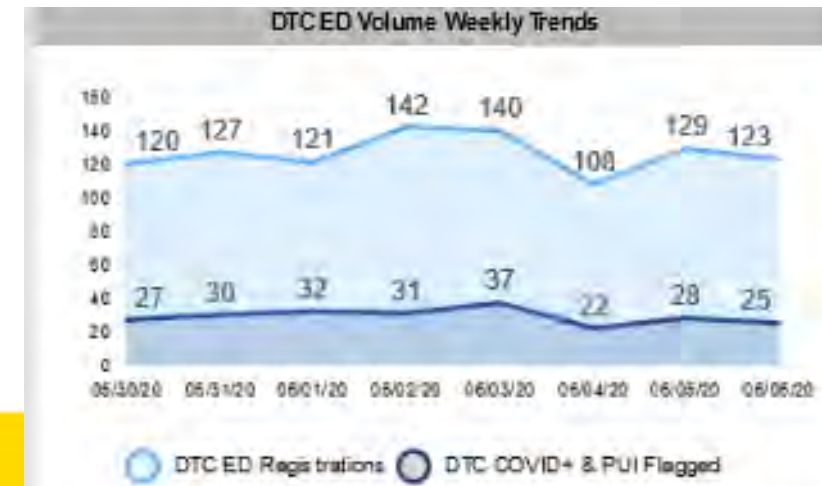
Our Values

- 68 COVID 19 Patients
 - Critical Care/IMC (45)** – T6S(18), MICU(10), 10W(11), T5S(5), T4S
 - Acute care (23)** - 13W (14), 13E (6), S5B (2), AED
 - 38 Vented, 3 HFNC, 3 Trach collar
 - 19 ECMO – T6S-16, T5S-3 (Total 22 in house – 3 W6)
- 31 PUI (Person Under Investigation)
 - 10E, 11A (2), 13E, 3DS, C3E/W, C5E, C7E, C8, C9E/W
 - W5B (2), T3S, T5S, AED (13), Peds ED
 - Women’s/Children’s – PICU, MBU
- COVID Recovered (6)
 - 10E, 10W, 11A, 13E(2), T5N

- To Date 362 COVID positive patients cared for (+6)
 - 232 Patients discharged
 - 53 deaths (no change)
- MTC – 8 COVID 19 in house
 - 2 ICU, 6 Acute care
 - 8 PUI



DTC Capacity	MTC Capacity
99 COVID/PUI Census	16 COVID/PUI Census
554 Total Census	109 Total Census
79% Occupancy	85% Occupancy



Hospital Systems Overwhelmed

Testing

PPE

Beds

Ventilators

Personnel

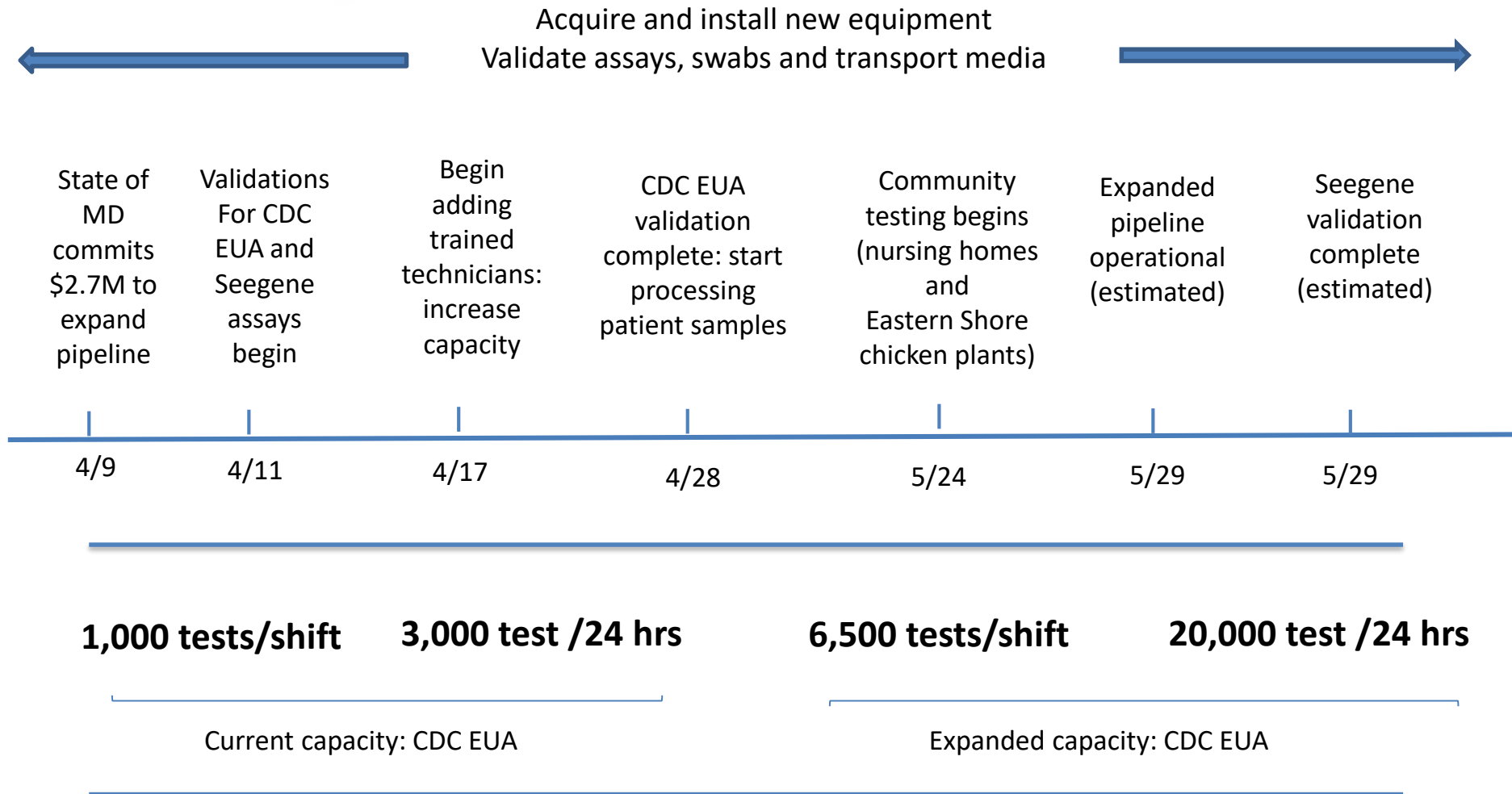
Finances

Supply chain



Dr. Andrea Levine wears an elastomeric when treating Covid-19 patients at the University of Maryland Medical Center in Baltimore. University of Maryland Medical Center

Virus PCR Testing



COVID Patients

What we don't know – how to treat

Exposure → Infection (attack rate)

Infection → Disease (symptomatic) → Transmission

Disease → Severe disease (hospitalized)

Severe disease → Critical disease (ICU, intubated)

Why is the pulmonary or endothelial disease so severe?

What are the determinates of immunity? B cells (Abs), T cells, Innate immunity? Are there 'good' and 'bad' Abs?

How long lived is immunity?

Non-COVID Patients

What we don't know – how to avoid/prevent

Exposure → Infection

Infection → Disease

Disease → Severe disease

Severe disease → Critical disease

Why is the pulmonary disease so severe?

What are the determinates of immunity?

How long lived is immunity?

Non-COVID Patients

Consequences

Visits, Clinics, Elective procedures all canceled

Patients and families afraid to come to offices and hospitals

Increased mortality and morbidity for other diseases

**‘Elective’ procedures are now urgent and emergent with
worse outcomes**

Non-COVID services curtailed

Marked increases in inefficiency and throughput

Faculty, Staff, Trainees

What we don't know

Exposure → Infection

Infection → Disease

Disease → Severe disease

Severe disease → Critical disease

Why is the pulmonary disease so severe?

What are the determinates of immunity?

How long lived is immunity?

Going Forward

Diagnostics – PCR (infection), Abs (exposure)

Therapeutics

Vaccines, Prophylactics

Supply chain

Institutional leadership

Re-organization of patient-caregiver interaction – ‘Zoom clinic’

Limited by availability of technology

Limited by administrative response, e.g., CMS, insurance



We've become like our dogs

***We wander around the house all day
looking for food***

***When we get too close to strangers
we're told "no"***

We get really excited about a car ride

***When our friends walk by, we wave "hi"
to them through the window.***