

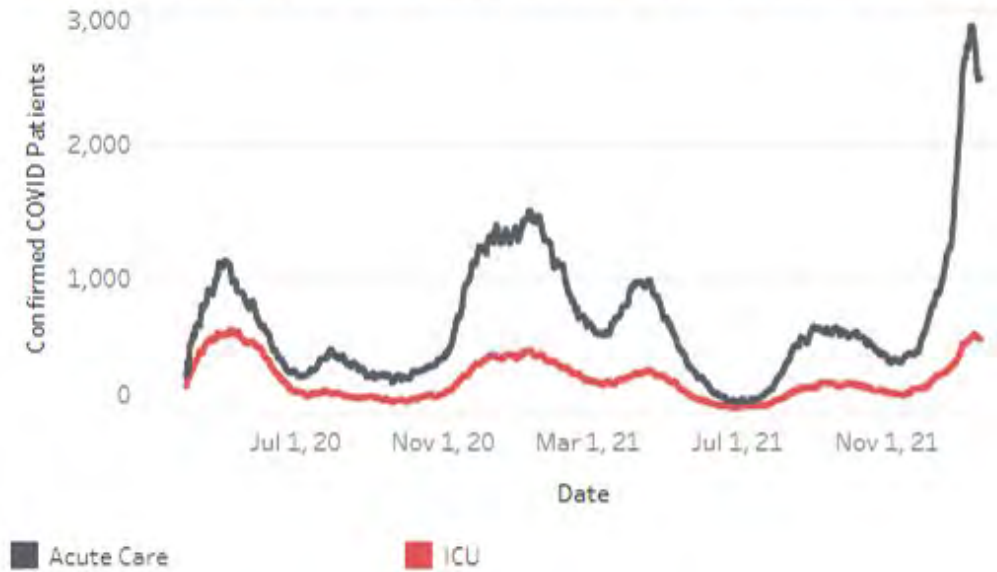


Update on EMS Response to COVID-19

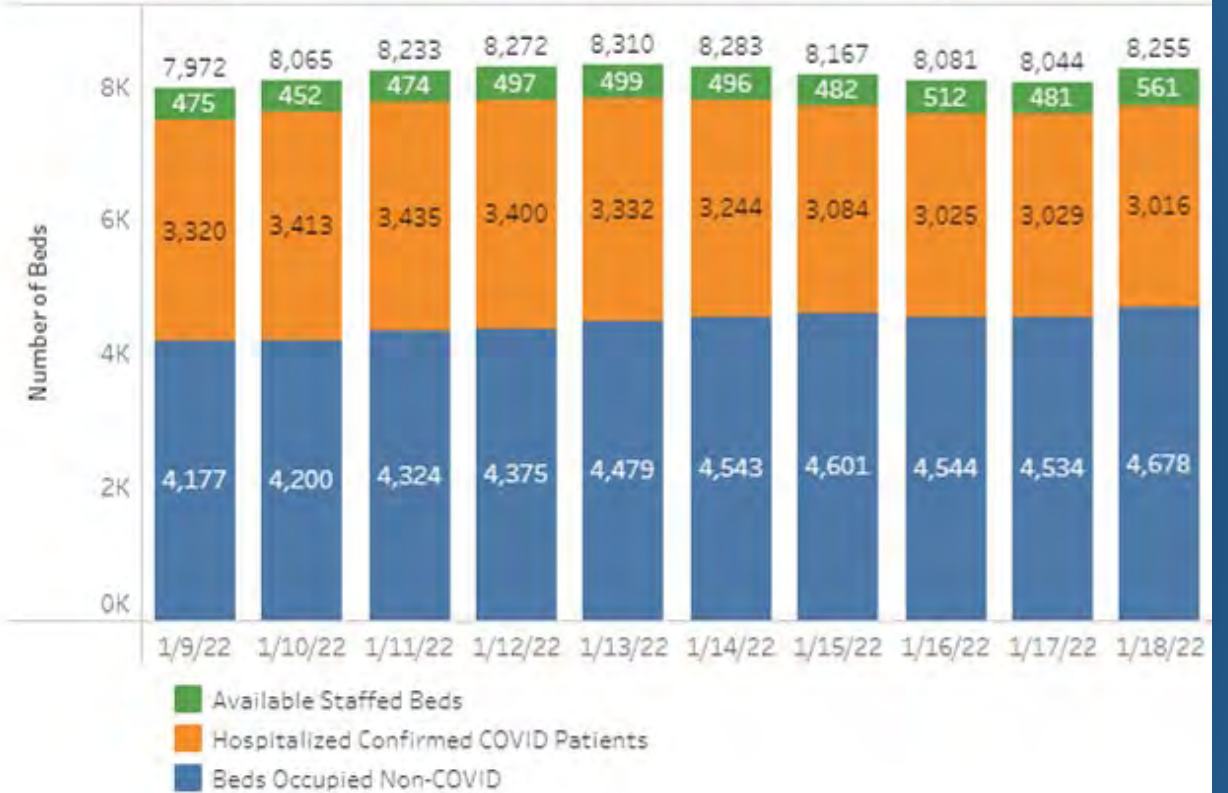
Theodore Delbridge, MD, MPH
Executive Director, MIEMSS

Hospitalized COVID-19 Patients

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



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



Statewide Occupied Bed Threshold

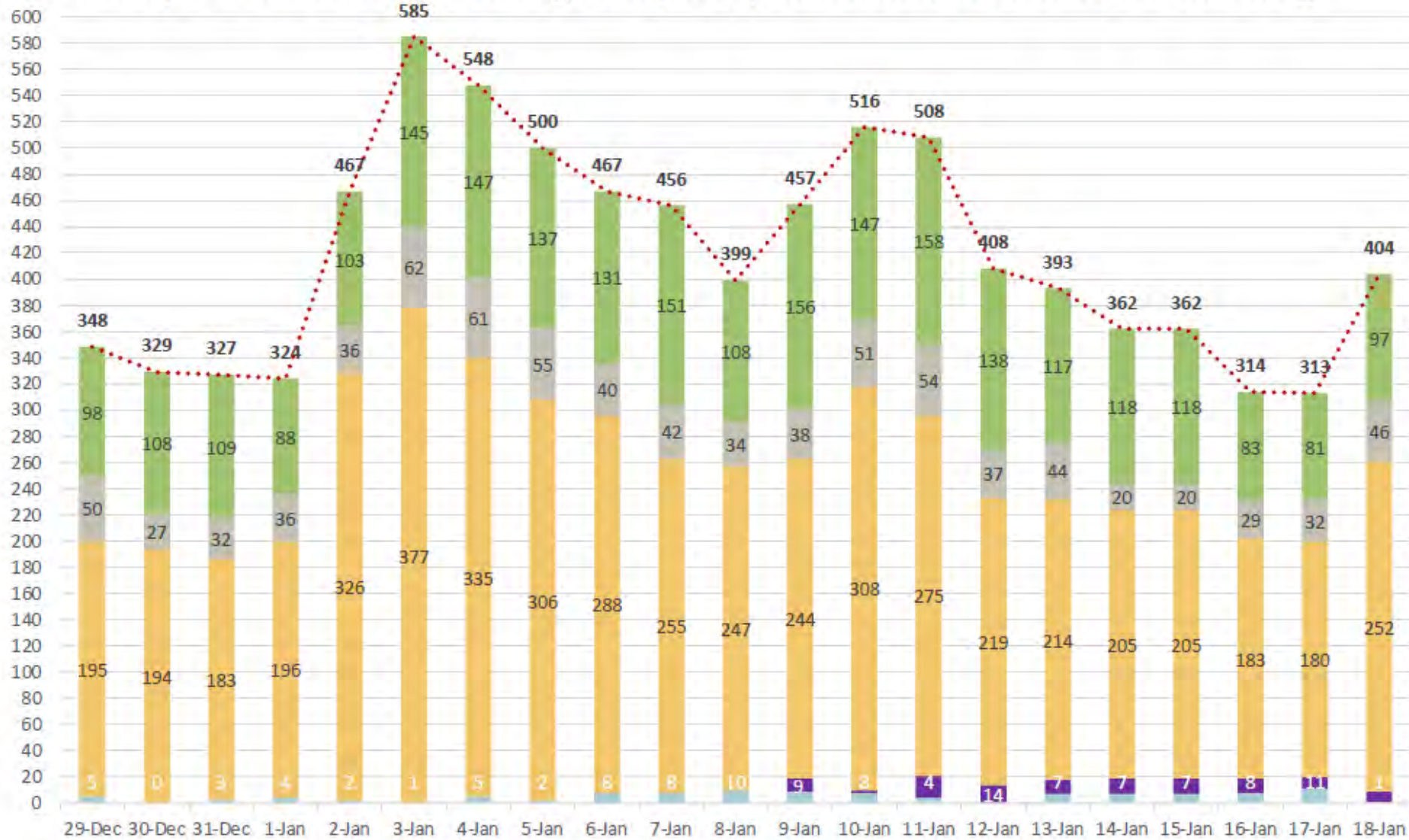
1/18/2022 7,694 Beds Occupied

8,000 Occupied Bed Threshold

N/A

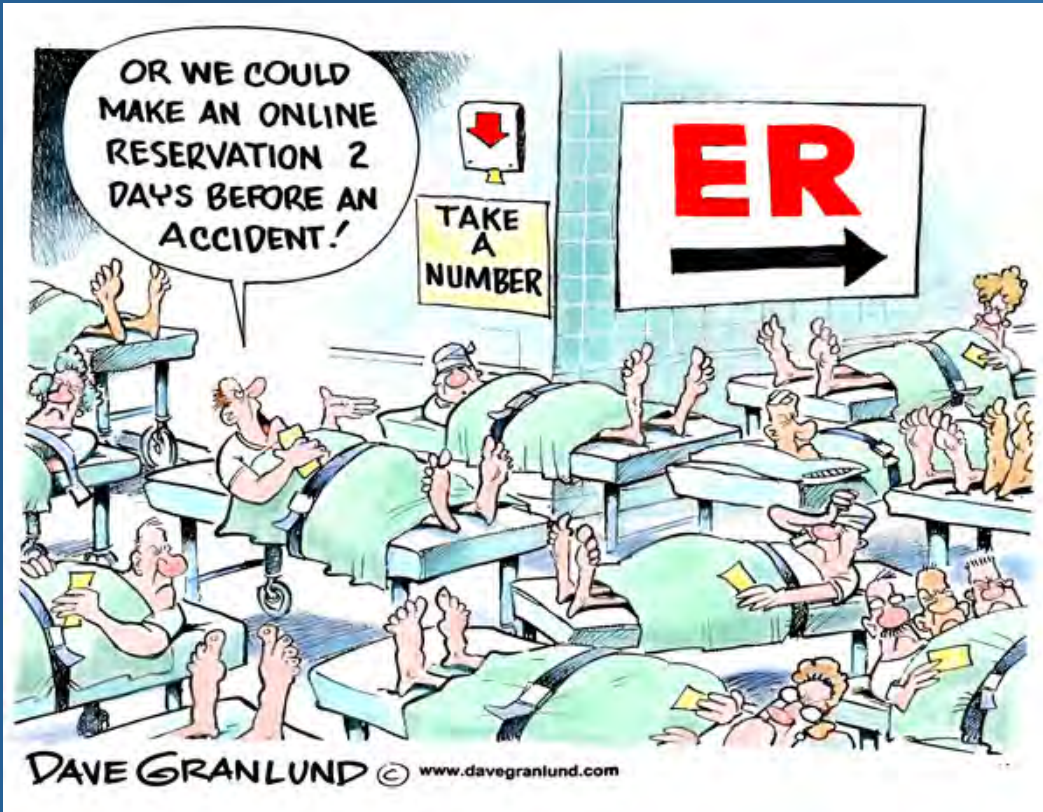


21-day Overview - Emergency Department Patient Boarding



Emergency Department Patient Boarding

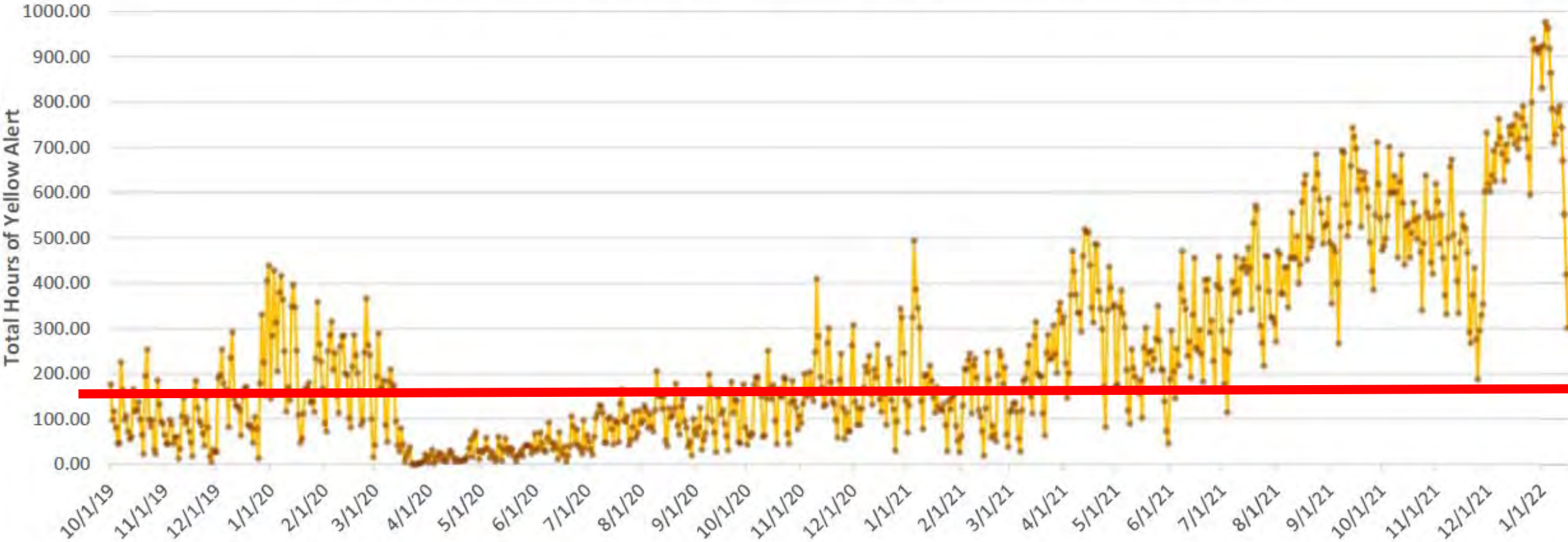
10 Day Analysis November 2021



- Each day, at any given time, 200-350+ patients boarding in Maryland EDs
- 20-25% of ED patients either:
 - Stuck without a disposition (e.g., psych 25%)
 - Holding for a disposition destination to become available (e.g., no room at the inn)
- Snapshot
 - Medical patients: 7.4 hours
 - Psych: 33.7 hours
- Psych = 25% boarders; 68% boarding time



Total Hours of Yellow Alert in all 5 Regions of Maryland (Oct 2019 to Present)





CHATS Region III - County/Hospital Alert Tracking System

Hospitals

Monday, December 13, 2021 4:42:52 PM

[Region I, II, IV](#) [Region III](#) [Region V](#)

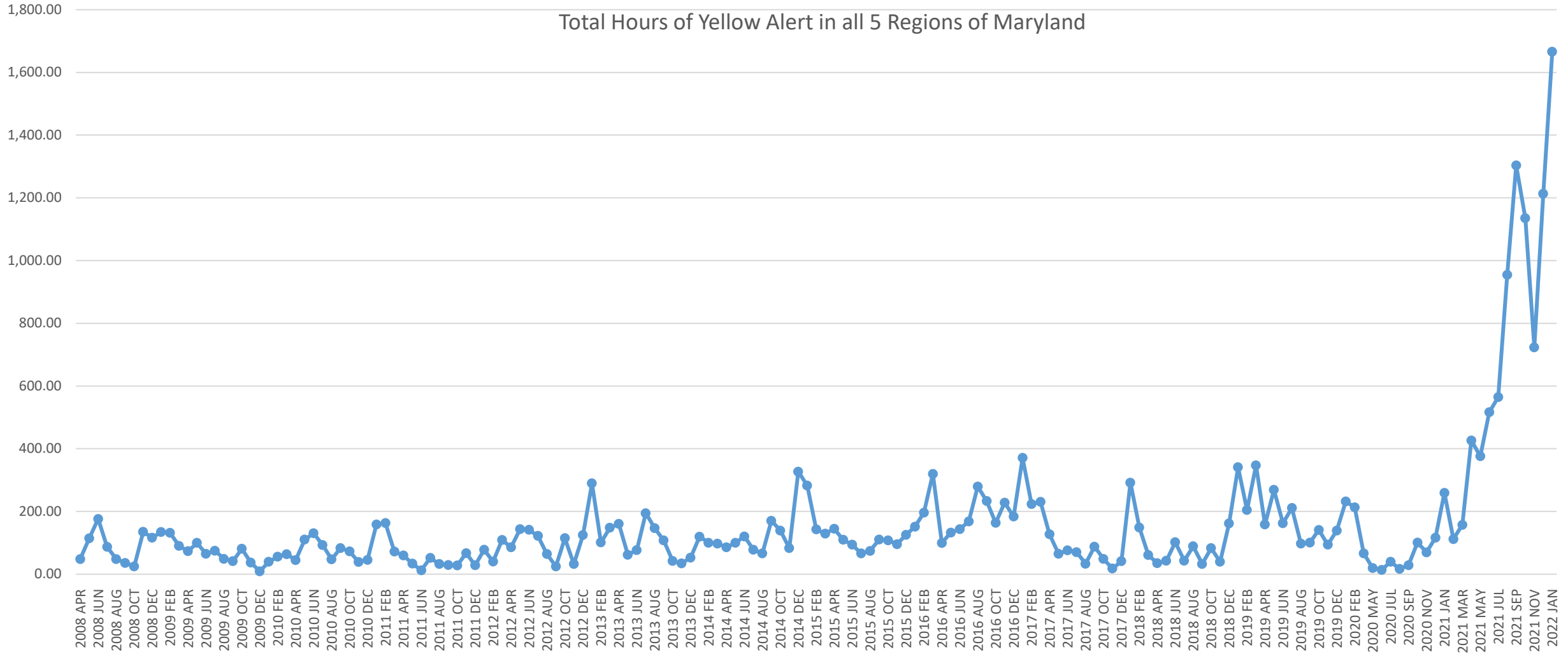
Hospitals Counties Reports

Show Alert Descriptions

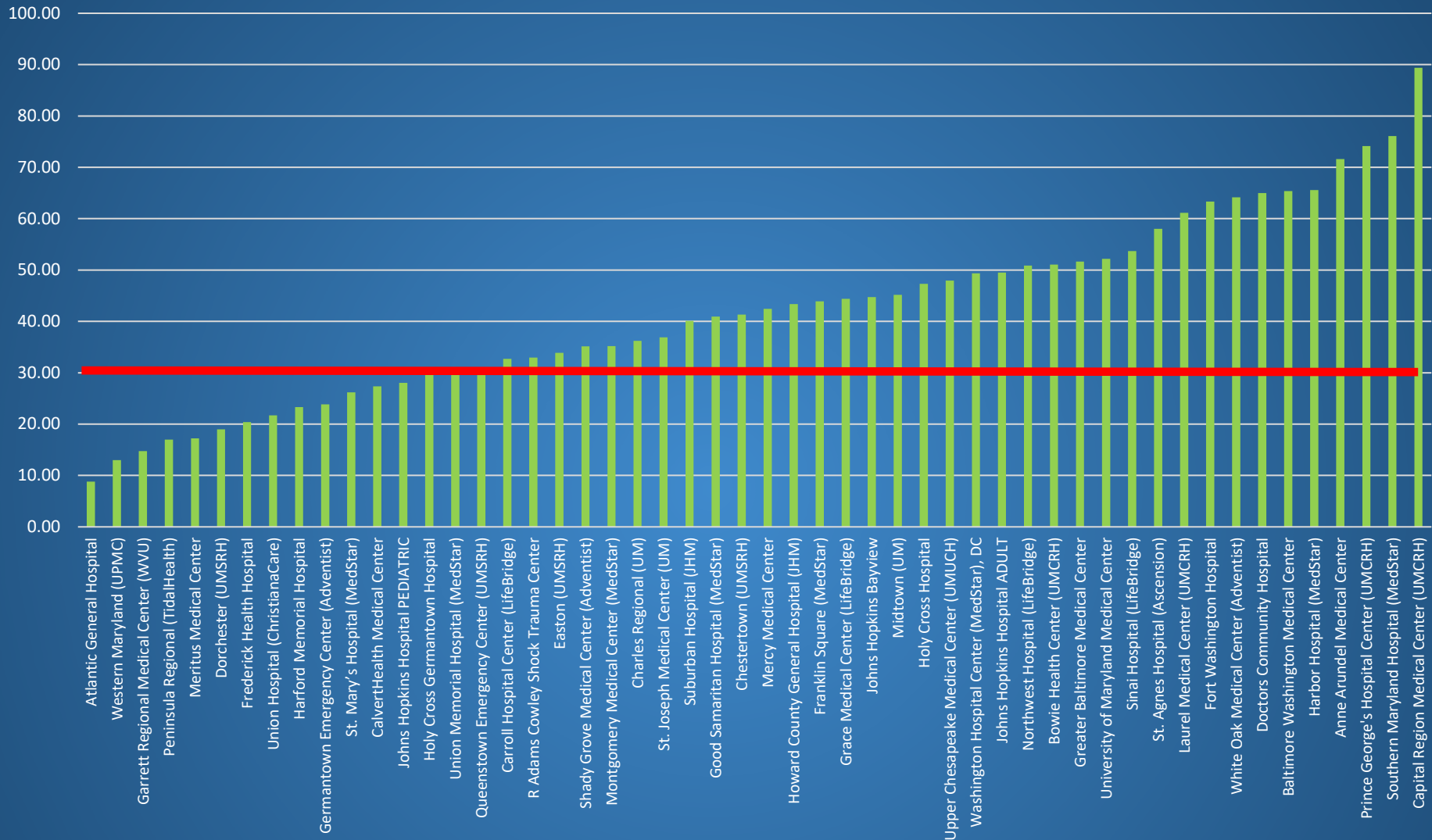
Hospital	Yellow Alert	Red Alert	Mini Disaster	ReRoute	Trauma ByPass	Capacity
Anne Arundel Medical Center	16:42			00:24		
Baltimore Washington Medical Center	16:42	16:42				
Carroll Hospital Center (LifeBridge)	16:42	16:42		02:16		
Franklin Square (MedStar)	16:42	16:42				
Good Samaritan Hospital (MedStar)	16:42	16:42				
Grace Medical Center (LifeBridge)	16:42					
Greater Baltimore Medical Center	07:12	16:42				
Harbor Hospital (MedStar)	16:42	16:42				
Harford Memorial Hospital (UMUCH)	03:21					
Howard County General Hospital (JHM)	16:42	16:42				
Johns Hopkins Bayview	16:42	16:42				
Johns Hopkins Hospital (Adult ED)	16:42					
Johns Hopkins Hospital (Pediatric ED)						
Mercy Medical Center	16:42	16:42				
Midtown (UM)	16:42	15:39		02:20		
Northwest Hospital (LifeBridge)	16:42	16:42				
R Adams Cowley Shock Trauma Center						
Sinai Hospital (LifeBridge)	16:42	03:04		01:13		
St. Agnes Hospital (Ascension)	03:20	03:20				
St. Joseph Medical Center (UM)	16:42	16:42				
Union Memorial Hospital (MedStar)	16:42	16:42				
University of Maryland Medical Center	16:42	16:42				
Upper Chesapeake Medical Center (UMUCH)	16:42	16:42				



Total Hours of Yellow Alert in all 5 Regions of Maryland



90th Percentile EMS:ED Transfer Interval vs. Hospital



Region 3 Transfer of Care: Median 24 minutes; 90th percentile 70 minutes...13% >60 minutes





Maryland EMS @HA
AHA MIEMSS

Logout

Dashboard

Settings

Participating EMSOPs

About

@HA Version 1.0

@Hospital Ambulance

29 Hospitals with 54 Units Statewide

Length of Stay

Hospital Name - ID	Alert Status	Units	Length of Stay
Anne Arundel Medical Center - 221	ReRoute	10 Units	11 - 93 minutes
Baltimore Washington Medical Center - 222	Yellow Alert	3 Units	16 - 61 minutes
Bowie Health Center (UMCRH) - 353	Yellow Alert	0 Unit	
Capital Region Medical Center (UMCRH) - 260	Red Alert Yellow Alert	0 Unit	
Carroll Hospital Center (LifeBridge) - 219	Red Alert Yellow Alert	3 Units	6 - 45 minutes
Charles Regional (UM) - 291		1 Unit	13 minutes
Doctors Community Hospital - 329	Yellow Alert	0 Unit	
Easton (UMSRH) - 297	Red Alert	1 Unit	7 minutes
Franklin Square (MedStar) - 203	Yellow Alert	1 Unit	39 minutes
Frederick Health Hospital - 239	Yellow Alert	2 Units	25 - 25 minutes
Garrett Regional Medical Center (WVU) - 322		1 Unit	23 minutes
Good Samaritan Hospital (MedStar) - 226		1 Unit	1 minute
Grace Medical Center (LifeBridge) - 208	Yellow Alert	0 Unit	
Greater Baltimore Medical Center - 217	Red Alert	0 Unit	
Hanover Hospital (UPMC Pinnacle), PA - 242		1 Unit	69 minutes
Harford Memorial Hospital - 220		1 Unit	20 minutes
Holy Cross Germantown Hospital - 444		2 Units	33 - 35 minutes
Holy Cross Hospital - 244	Yellow Alert	3 Units	1 - 85 minutes
Howard County General Hospital (JHM) - 223	Red Alert Yellow Alert	1 Unit	22 minutes



Maryland Institute *for* Emergency Medical Services Systems



Viral Syndrome Pandemic Triage Protocol



EFFECTIVE March 17, 2020 until rescinded or superseded

For Use By BLS and ALS Clinicians

YES

NO

- | | | |
|-------------------------------------|-------------------------------------|---|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Patient age is between 2 and 55 years |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Patient has a suspected viral syndrome with at least two (2) of the following symptoms: fever, cough, body aches, or sore throat |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Patient has a history of immunosuppression, or is taking medicines that depress the immune system (cancer undergoing chemotherapy, transplant patient, HIV, etc.) |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Patient has a history of diabetes |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Patient has a history of heart disease |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Patient has a history of COPD or lung disease |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Patient has a heart rate between : 50 - 110 bpm (age 13-55 years);
(age 2-5 years: 80-140 bpm; age 6-12 years: 70-120 bpm) |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Patient has a systolic blood pressure between: 110-180 mmHg (age 13-55 years);
(age 2-5 years: > 80mmHg; age 6-12 years: > 90mmHg) |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Oxygen saturation (SpO2) greater than or equal to 94% |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Clear lung sounds |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Respiratory rate between 12 - 22 breaths per minute, and the patient does not complain of shortness of breath |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Patient is able to ambulate without difficulty |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Patient is agreeable to home self-care |

ANY CHECKS in a shaded box indicate that patient transport should be encouraged.

If **ALL** CHECKS are in non-shaded boxes, patient may provide self-care at home.
Refer to no-transport instructions for patients.

Any patient may be transported at the EMS Clinician's discretion.

This emergency protocol was issued by the Maryland Institute for Emergency Medical Services Systems, after approval by the Executive Director and Chairman of the State Emergency Medical Services Board, in response to the COVID-19 pandemic, and in accordance with Education Article Section 13-516(d)(1) and COMAR 30.03.05.02(i) and a catastrophic health emergency proclamation.





DIRECT TO TRIAGE PROTOCOL

- LOW ACUITY / PRIORITY 3 PATIENT
- PATIENT IS 18 YEARS OR OLDER
- ABLE TO COMMUNICATE W/ EMS
- UNDERSTANDS PROCESS
- ABILITY TO SIT INDEPENDENTLY IN A WHEELCHAIR

START



IF THERE IS EVER ANY DOUBT AS TO WHERE TO PLACE THE PATIENT; ALWAYS GO THROUGH ROUTINE AMBULANCE ED REGISTRATION AND TRIAGE PROCEDURE.

VITAL SIGNS ACCEPTABLE? (SEE CHART - 1)
IF YES, MOVE ON

HIGH RISK CONDITIONS? (SEE CHART - 2)
IF ANY PRESENT, STOP
IF NONE, MOVE ON

TIME DEPENDENT NEEDS? (SEE CHART - 3)
IF ANY PRESENT, STOP
IF NONE, MOVE ON

- END OF CALL**
- SHORT FORM COPIED AND GIVEN TO APPROPRIATE NURSE FOR RN SIGNATURES
 - PATIENT TRANSFERRED OFF STRETCHER
 - REPORT GIVEN

PATIENT PLACED DIRECTLY IN WAITING ROOM VIA WHEELCHAIR, AT REGISTRATION. SIGNATURES OBTAINED AND PATIENT IS LEFT WITH MIEMSS APPROVED SHORT FORM

DISCUSSION TAKES PLACE WITH PATIENT ABOUT PLACEMENT IN TRIAGE

ACCEPTABLE VITAL SIGNS: 1

- RESPIRATIONS: 10-20
- PULSE: 60-100
- PULSE OX: >92% (room air)
- TEMPERATURE: 96-101°F
- BLOOD GLUCOSE (if indicated): 71-299 MG/DL
- BLOOD PRESSURES:
 - BETWEEN 110 AND 180 - SYSTOLIC
 - BETWEEN 60 AND 100 - DIASTOLIC

HIGH RISK CONDITIONS 2

- UNEXPLAINED ABDOMINAL PAIN
- ALTERED MENTAL STATUS
- UNEXPLAINED BACK PAIN
- CHEST PAIN
- DYSPNEA / SHORTNESS OF BREATH
- (ACUTE) FOCAL NEUROLOGICAL DEFICITS
- SEIZURES
- SEPSIS (SUSPECTED)
- SYNCOPÉ
- SUICIDAL / HOMICIDAL IDEATIONS
- REQUIRES MORE THAN MINIMAL ASSISTANCE TO WALK
- UNABLE TO COOPERATE WITH HISTORY AND EXAM

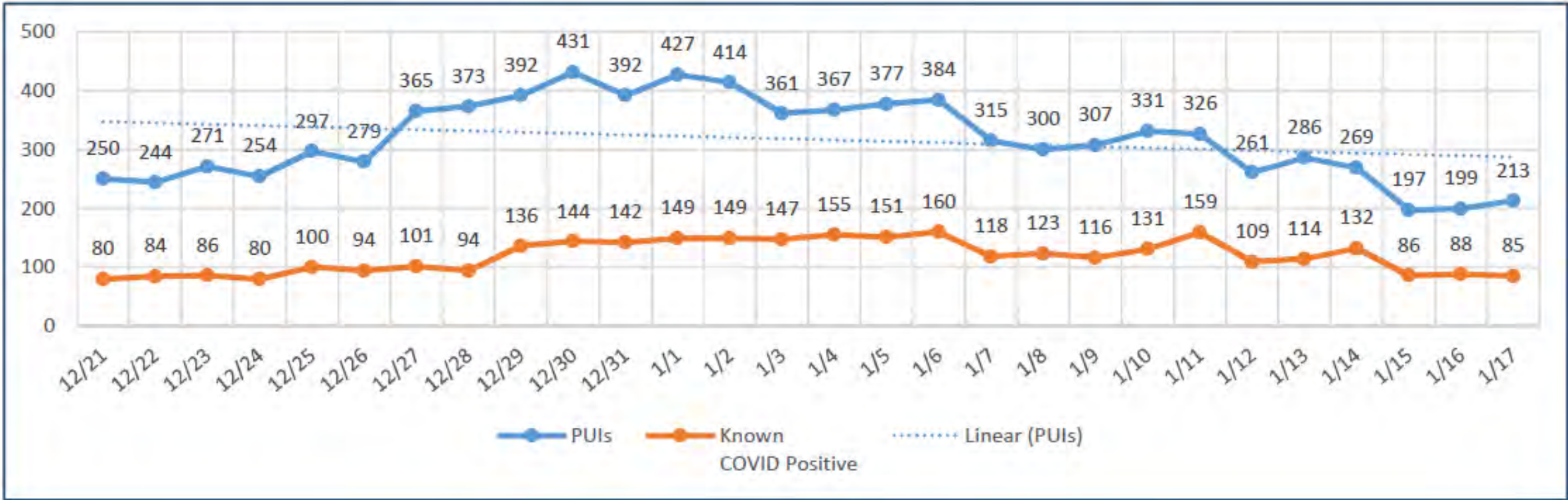
TIME DEPENDENT NEEDS 3

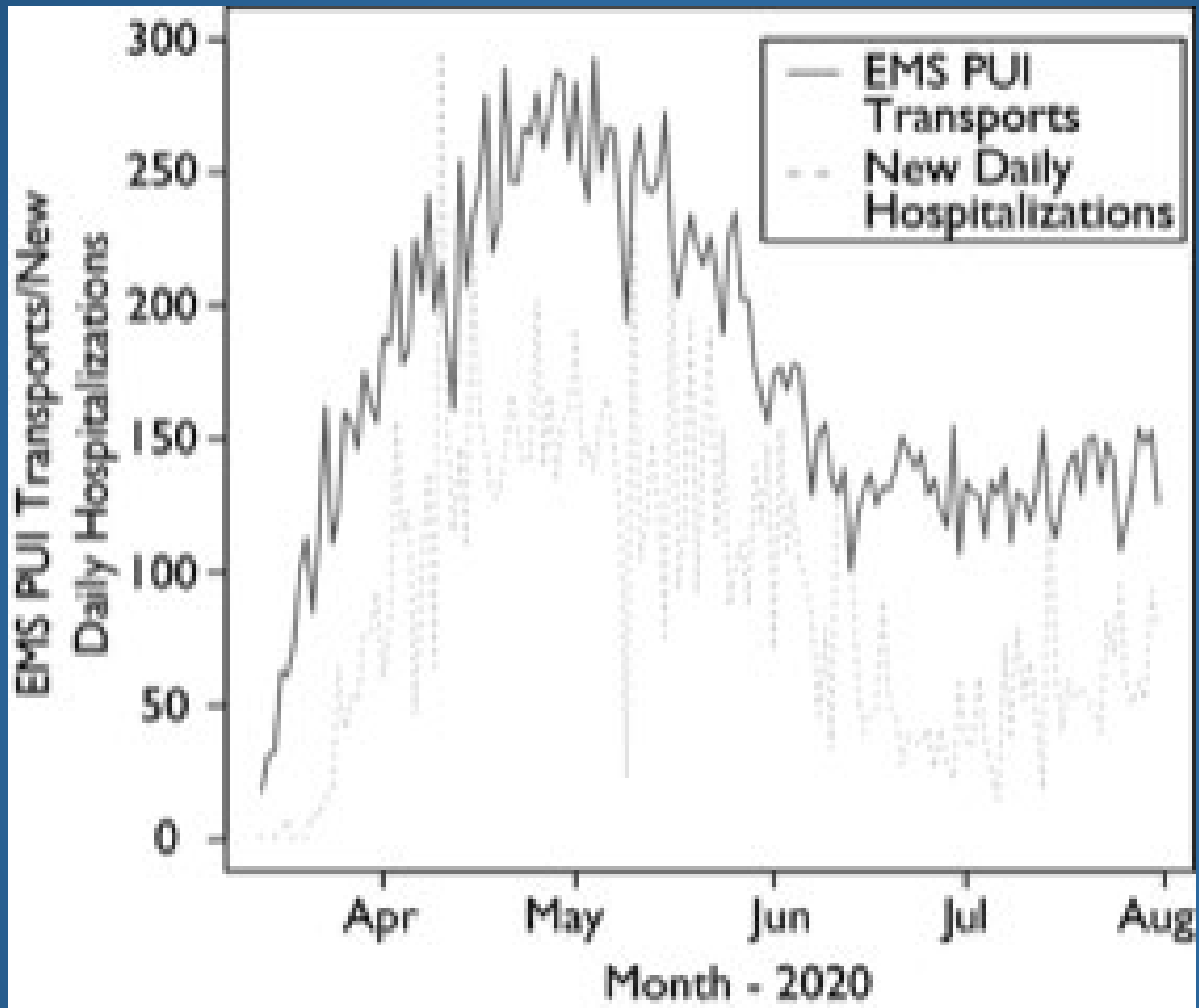
- AIRWAY
- BREATHING
- CIRCULATION (INCLUDING TO EXTREMITY)
- DISABILITY (DEFICIT) OR DEFORMITY
- SEVERE TENDERNESS WITH PALPATION / EXAM
- SIGNIFICANT HEAD OR TRUNCAL TRAUMA
- UNCONTROLLABLE BLEEDING
- REQUIRES ALS MONITORING OR INTERVENTIONS
- CONCERN FOR POTENTIAL DETERIORATION

Approved 10.11.2021

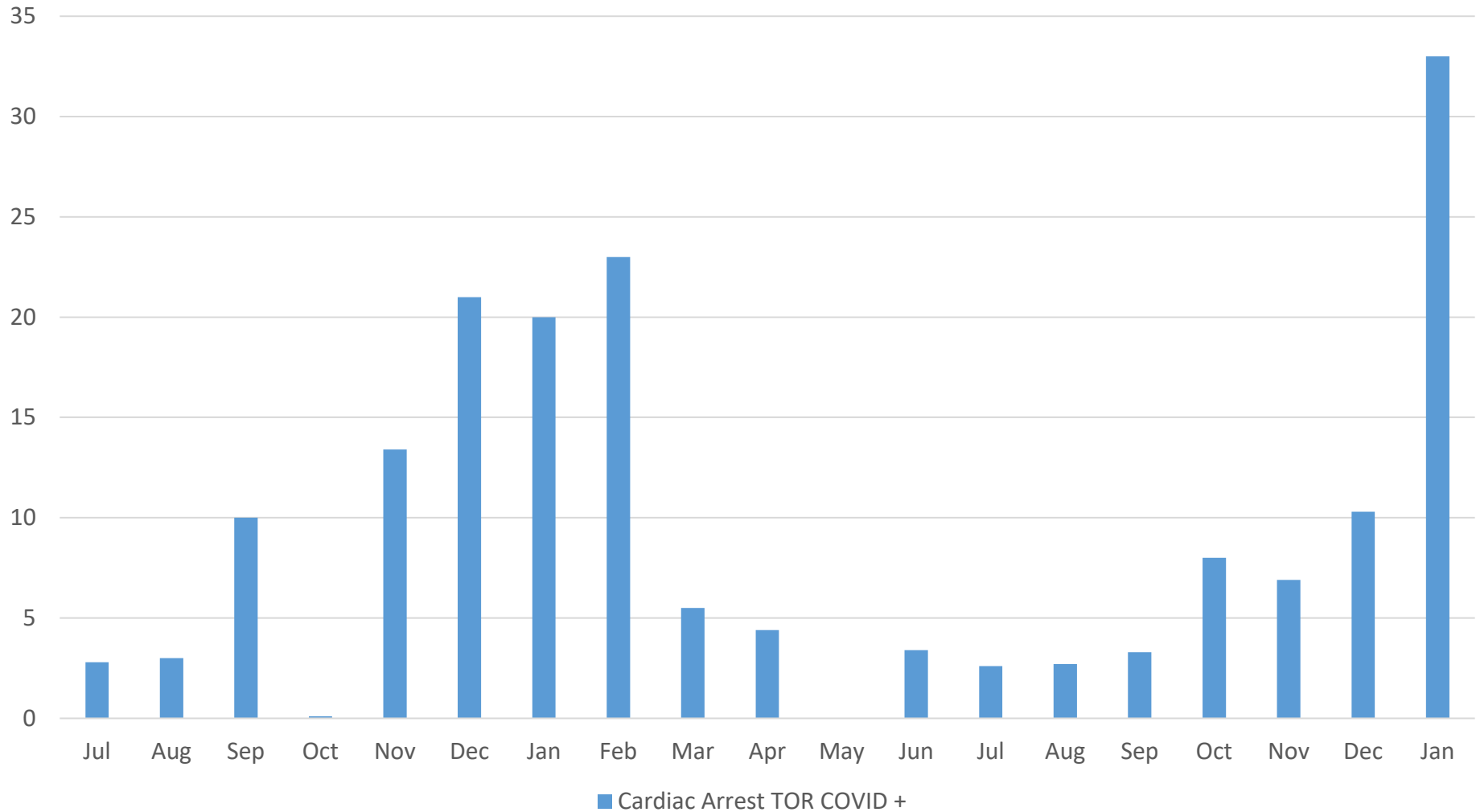


Total PUI Contacts: 8,882





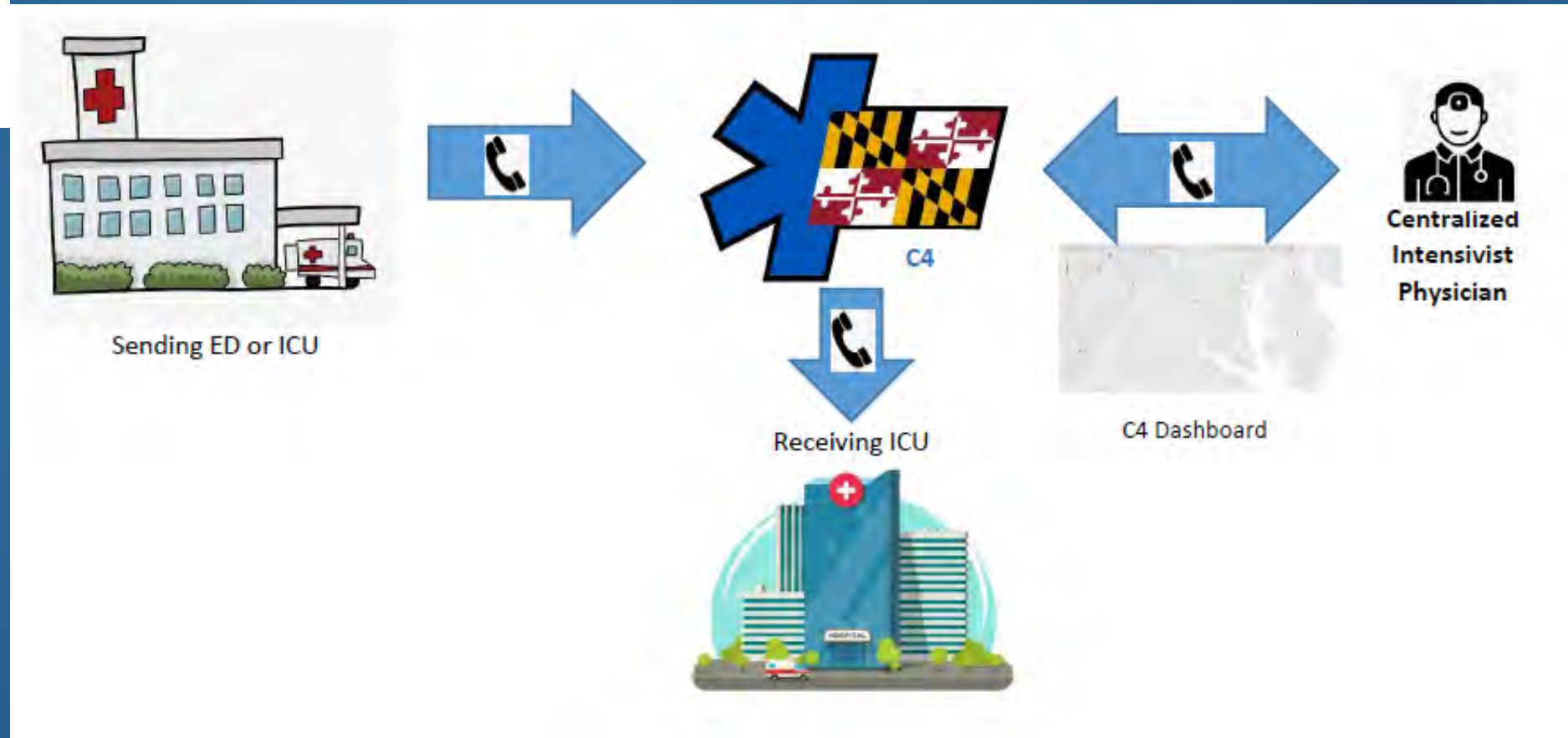
Cardiac Arrest TOR COVID Test Positive Rate (%)





Critical
Care
Coordination
Center

- >2500 cases
- 69 requesting hospitals
- 66 receiving hospitals





The State of Maryland
Executive Department

ORDER
OF THE
GOVERNOR OF THE STATE OF MARYLAND

NUMBER 22-01-04-02

AUGMENTING THE EMERGENCY MEDICAL SERVICES WORKFORCE

Enables suspension of any provision of Sections 13-515, 13-516,
or 13-517 of the Education Article, or of COMAR Title 30



Maryland Institute *for* Emergency Medical Services Systems

January 2022 Public Notices

- EMTs and CRTs as vaccinators
- NREMT cognitive exam before practical experience
- Extends licenses
- Provisional licensure
- Clinical Externs



Commercial Ambulance Weekly Unit Hour Availability after Driver Qualifications Altered

	Start	Recent	Increase	% increase
Smart Trans	124	161	37	29.8%
AAA	1765	2065	300	17.0%
East Coast	1162	1203	41	3.5%
Butler/Best Care	2940	3624	684	23.2%
Pro Care	2209	2764	555	25.1%
Pulse	2786	3104	318	11.4%
Lifestar	1992	2684	692	34.7%
Hart to Heart	488	580	92	18.8%
Total	13466	16185	2719	20.2%

- 11 services (3 too soon for data)
- 91 drivers



MH-CARS

Maryland Hospital Commercial Ambulance Request System



