

Maryland ACEP PPE Survey Results

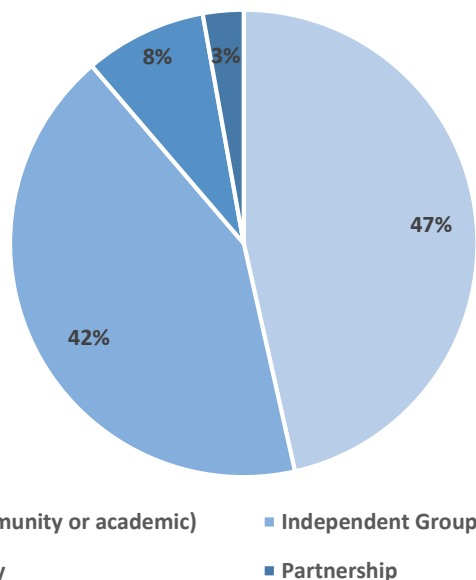
In response to the SARS-CoV-2 pandemic the Centers for Disease Control (CDC) has recommendations on basic Personal Protective Equipment (PPE) that should be worn whenever caring for patients that have suspected or confirmed COVID-19. This includes: an N95 or higher Respirators or Facemasks, Eye Protection, such as goggles or face shields, Gloves, and Gowns. If gowns are disposable, they should be discarded after each use or patient encounter. If cloth gowns are used, they should be laundered after each use or patient encounter. Whenever performing Aerosol Generating Procedures (AGPs) the following PPE should be utilized: an N95 or equivalent or higher-level respirator, eye protection, gloves, and a gown. Additionally, AGPs are performed in an Airborne Infection Isolation Room (AIIR)

During May of this year, the state of Maryland ACEP chapter conducted an online survey to assess the availability of Personal Protective Equipment (PPE) throughout the state of Maryland to our emergency physicians and other frontline workers in the state's emergency departments. The survey was sent to all Emergency Department Chairs and shared amongst the email list of members in the Maryland ACEP chapter. Both members and non-members of ACEP were encouraged to participate in the survey. All responses were anonymous.

The survey was conducted over the month of May and had 71 responses from various emergency departments and practice types across the state. The responses were provided by 63 physicians, 6 physician assistants and 2 nurse practitioners representing at least 26 different emergency departments and/or urgent care centers. The 71 responses included all practice types: community or academic hospitals (33), independent groups (30), Contract Management Group or staffing company (6) and partnership (2).

The selected results of the survey are shown below:

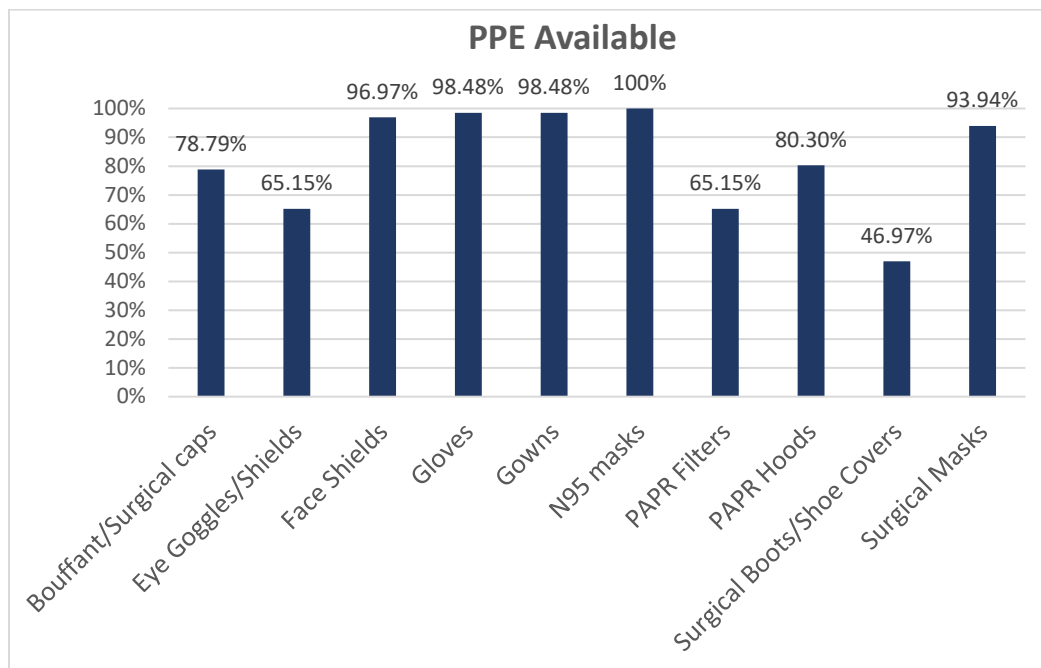
Survey Respondents



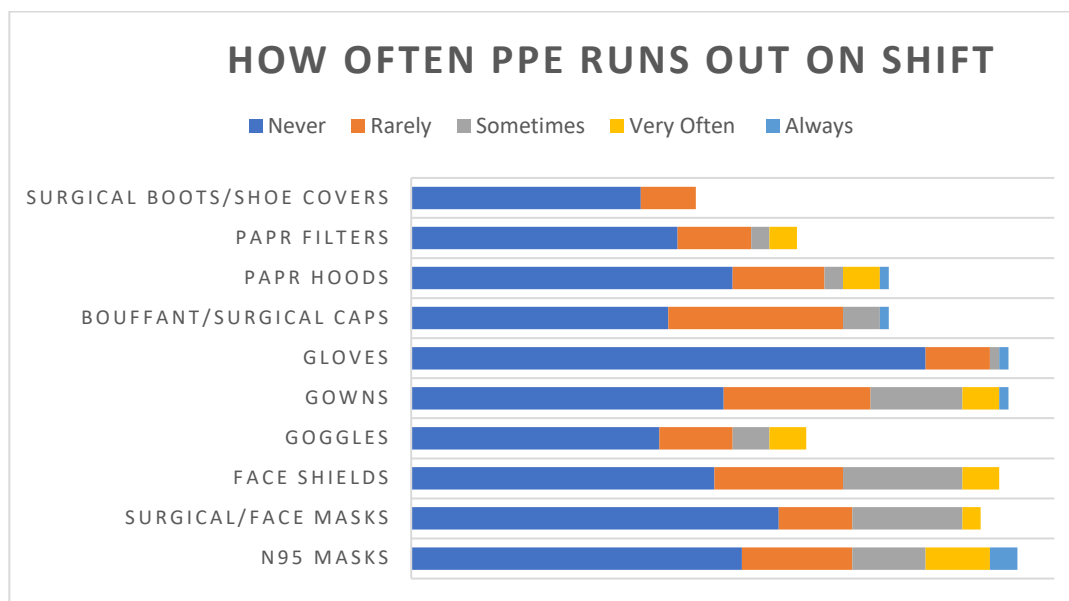
Most respondents endorsed having access to N95 masks, gowns, gloves, and face shields. However, the availability of bouffant/surgical caps, shoe covers, PAPRs or goggles were less common. In some cases, choosing one type of equipment, such as goggles or face shields, instead of having both may explain why not all those surveyed had access each type of PPE. The lower rates of access to basic surgical masks, head coverings and Powered Air Purifying Respirators (PAPRs) is concerning. Only 80.3% of those

surveyed endorsed having access to PAPR Hoods which is likely reflective of those that have PAPRs available.

Given that PAPRs are recommended for aerosolizing procedures, such as using BiPAP or intubation, some of our Maryland EM physicians may benefit from improved access to this form of PPE.



Responses demonstrated that there is great variability quantity of PPE that emergency physicians have available throughout the state. Gloves were cited as the least likely to run out, but 46% cited running out of N95s; 64% Surgical/Face Masks; 52% gowns and 67% PAPR Hoods at some point. Unfortunately, 3 responses cited never having N95 masks available.



Confidence from responders on how long their PPE supply would last was uncertain. Many survey responders did not know how long the supply would last. This is not necessarily unusual as the current PPE supply, supply chain, and projection from hospital administrators is not typically shared with front line employees. For those that did estimate how long their PPE supply would last, confidence was low in long term availability. Aside from the ready supply of gloves, most thought that PPE would not last more than 1 month.

Low confidence in the continued availability or lack of availability prompted 2/3 of those surveyed to purchase their own PPE. 52% that purchased their own PPE said they were regularly using their own PPE on shift, while 47% stated that they had their own PPE as a backup in case hospital supplies failed.

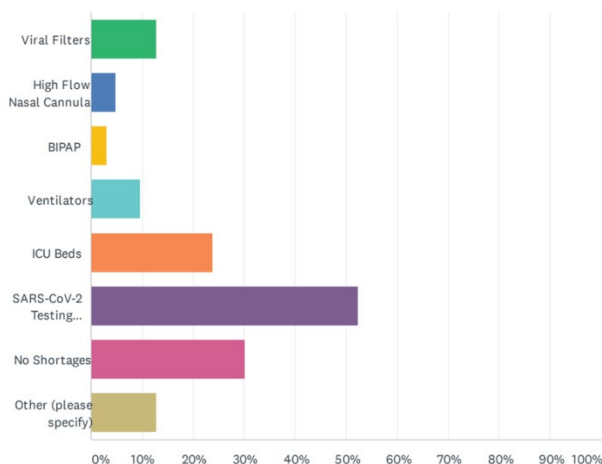
91% of those surveyed stated they must reuse PPE. The most commonly reused PPE items were N95 masks (96.55%), Face Shields (79.31%), PAPR hoods (65.52%), Goggles (55.17%), and surgical masks (48.28%). 12% stated they were reusing gowns. 36% of those surveyed said they were expected to reuse N95 masks indefinitely, while 41.8% were given 1-2 N95 masks per week. Another nearly 22% endorsed reusing 1-2 per shift.

Maryland ACEP Chapter Personal Protective Equipment (PPE) Survey

	I DO NOT REUSE	1-2 PER SHIFT	1-2 PER WEEK	REUSE INDEFINITELY	TOTAL
N95 Masks	0.00% 0	21.82% 12	41.82% 23	36.36% 20	55
Surgical/Face Masks	3.57% 1	25.00% 7	53.57% 15	17.86% 5	28
Face Shields	0.00% 0	6.52% 3	10.87% 5	82.61% 38	46
Eye Goggles/Shields	0.00% 0	3.23% 1	0.00% 0	96.77% 30	31
Gowns	0.00% 0	85.71% 6	0.00% 0	14.29% 1	7
Coveralls	0.00% 0	0.00% 0	100.00% 1	0.00% 0	1
Gloves	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
Bouffant/Surgical Caps	10.00% 1	50.00% 5	10.00% 1	30.00% 3	10
PAPR Hoods	0.00% 0	2.63% 1	0.00% 0	97.37% 37	38
PAPR Filters	0.00% 0	3.85% 1	0.00% 0	96.15% 25	26

Survey respondents reported shortages of the following resources required for COVID-19 patient care.

Answered: 63 Skipped: 8



ANSWER CHOICES	RESPONSES	
Viral Filters	12.70%	8
High Flow Nasal Cannula	4.76%	3
BIPAP	3.17%	2
Ventilators	9.52%	6
ICU Beds	23.81%	15
SARS-CoV-2 Testing Materials	52.38%	33
No Shortages	30.16%	19
Other (please specify)	12.70%	8
Total Respondents: 63		

Many Emergency Physicians across the country have reported being told by their hospital or emergency physician staffing leadership that if they spoke out about the lack of PPE to the media or on personal social media pages, they would be fired. Fortunately, on our survey 94% of the emergency physicians and mid-levels that responded stated that their hospitals had not issued warnings or threats against staff for speaking out about lack of or limitations on PPE supplies.

Overall, physicians and mid-level providers reported inconsistent PPE availability with heavy reuse of equipment that is designed and rated for single use. A need for more testing availability with faster turnaround times was also noted as an ongoing challenge. The lack of transparency on PPE supplies and reports of PPE being locked up has led to low confidence on the continued long-term availability of basic equipment health care workers need to protect themselves while caring for patients. In a pandemic forecasted to last for many more months, hospitals must have the required PPE for this moment, secure PPE for the future and ensure physicians and other frontline health care workers that PPE will continue to be available in the future. Health care workers are facing high levels of stress at this time from multiple realms, and ensuring these frontline workers can, at a minimum keep themselves safe at work, will provide them the support they need to continue caring for Marylanders.

Theresa E. Tassey, MD
Chair
Public Policy Committee