

Evaluating Prehospital Use of Personal Protective Equipment During the COVID-19 Pandemic

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INTRODUCTION

- Challenges with Personal Protective Equipment (PPE) availability during the COVID-19 pandemic have been well documented.
- However, the use and reuse of PPE has not been fully described in the prehospital environment.

OBJECTIVE

- Describe the use and reuse of PPE among EMS providers during the COVID-19 pandemic.

METHODS

DESIGN

- Retrospective Observational Study

POPULATION & DATA SOURCE

- Prehospital patient care records from the ESO Data Collaborative (Austin, TX).
- Study period was March 5, 2020 to June 15, 2020.
- On March 5th, 3 COVID-19 related EMS Impressions were added to the primary and secondary impressions list:
 - COVID-19 – Confirmed by testing
 - COVID-19 – Exposure to confirmed patient
 - COVID-19 – Suspected – no known exposure

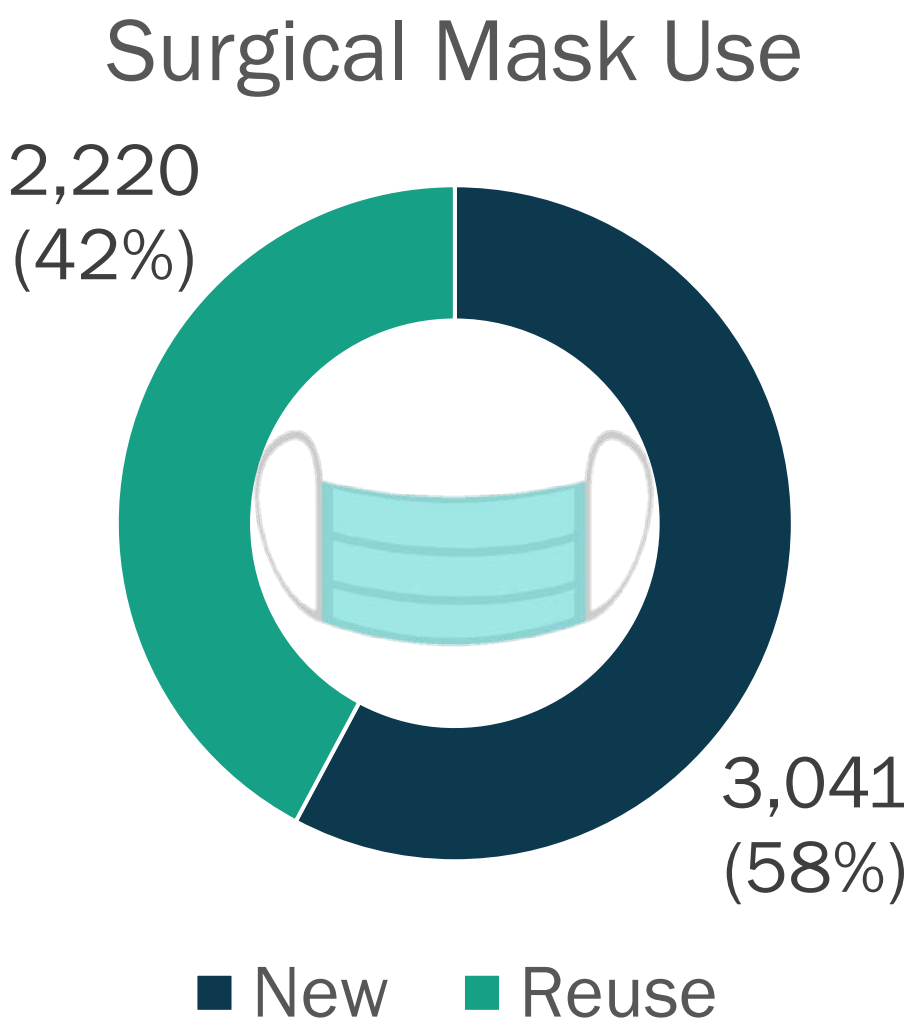
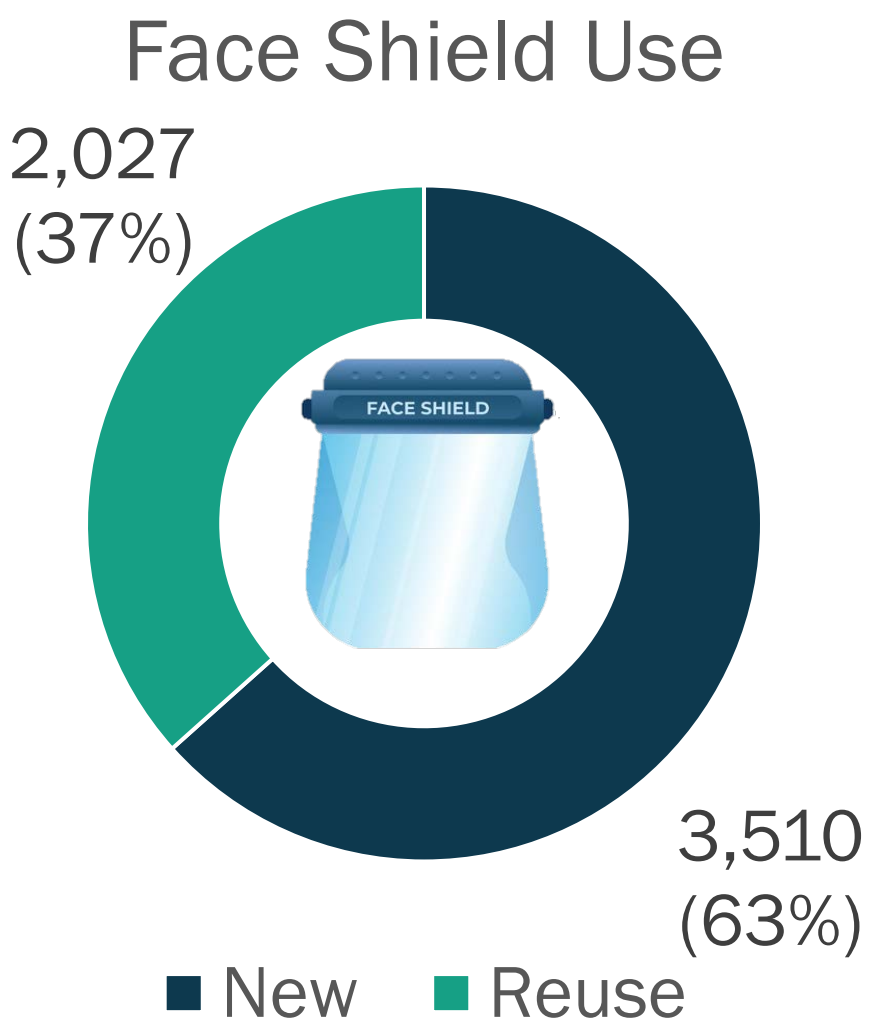
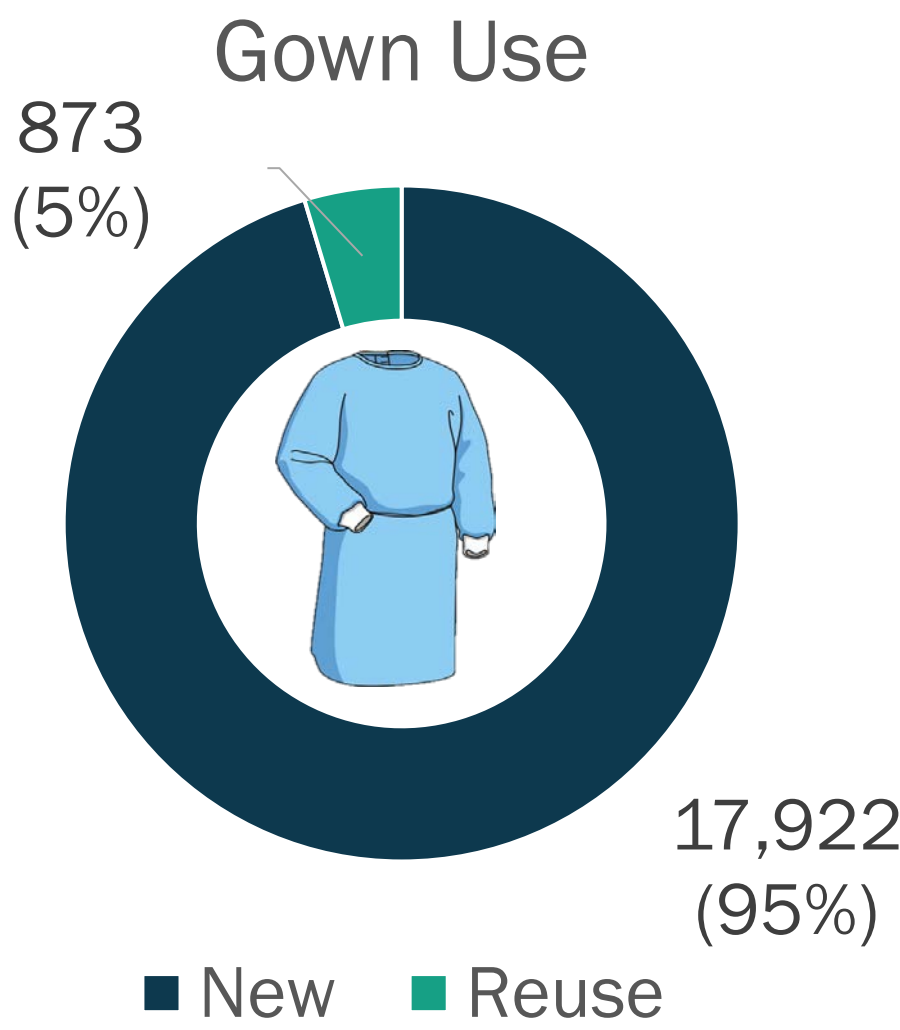
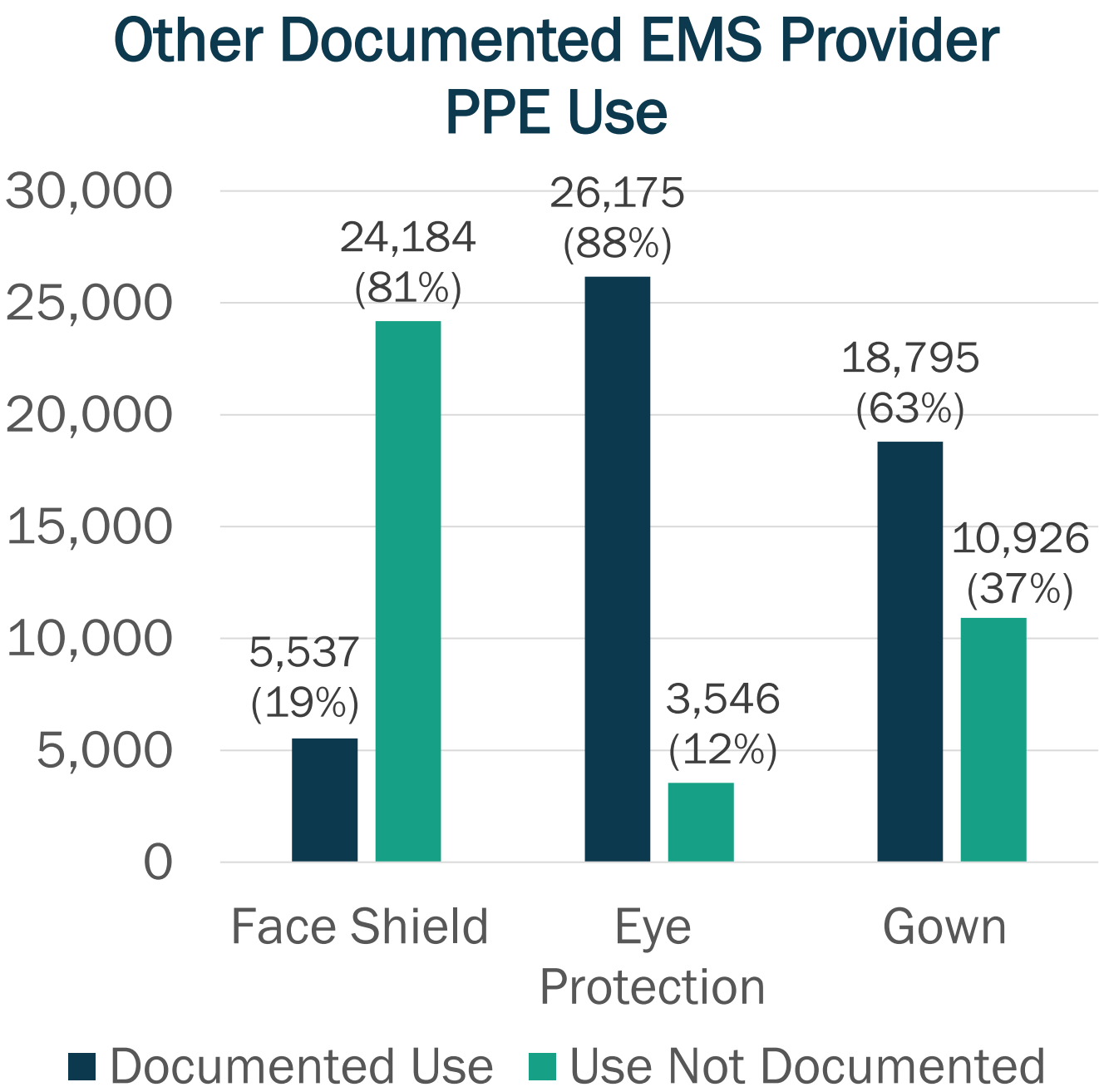
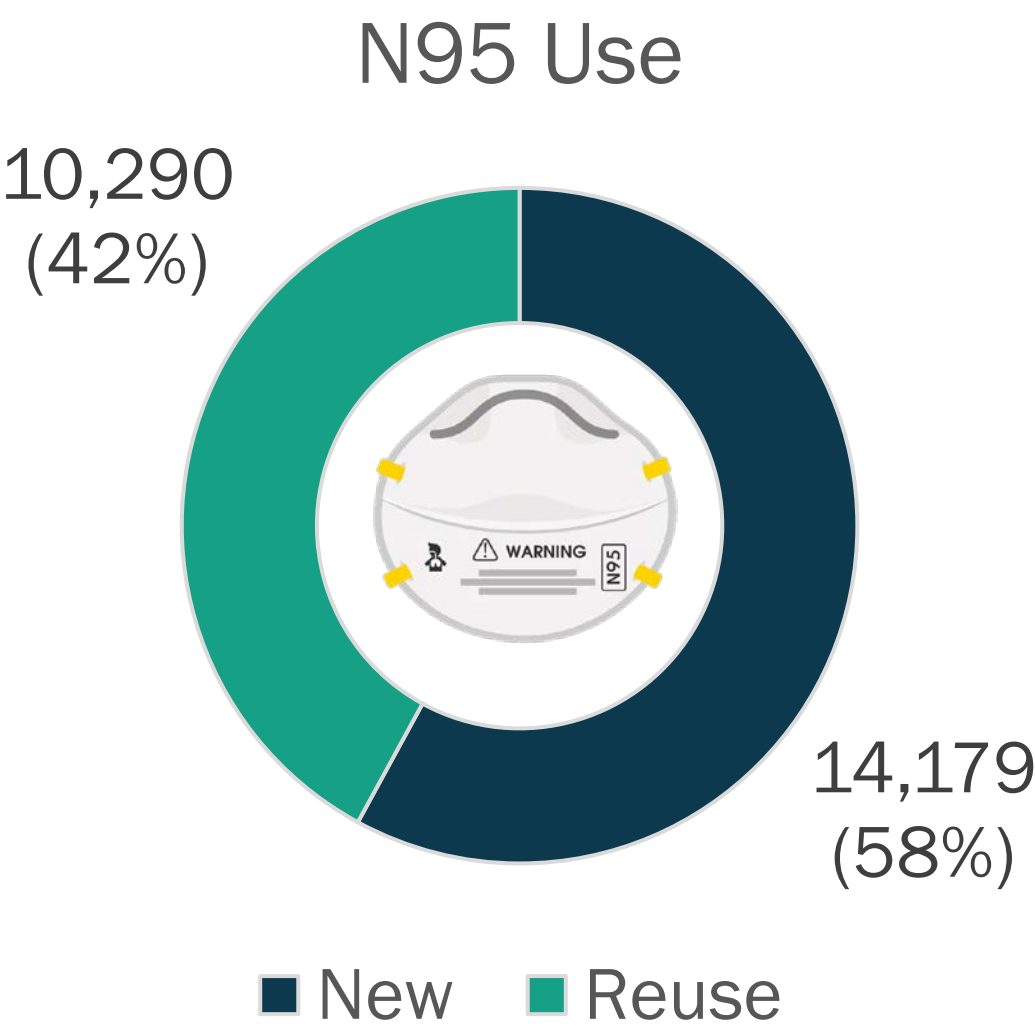
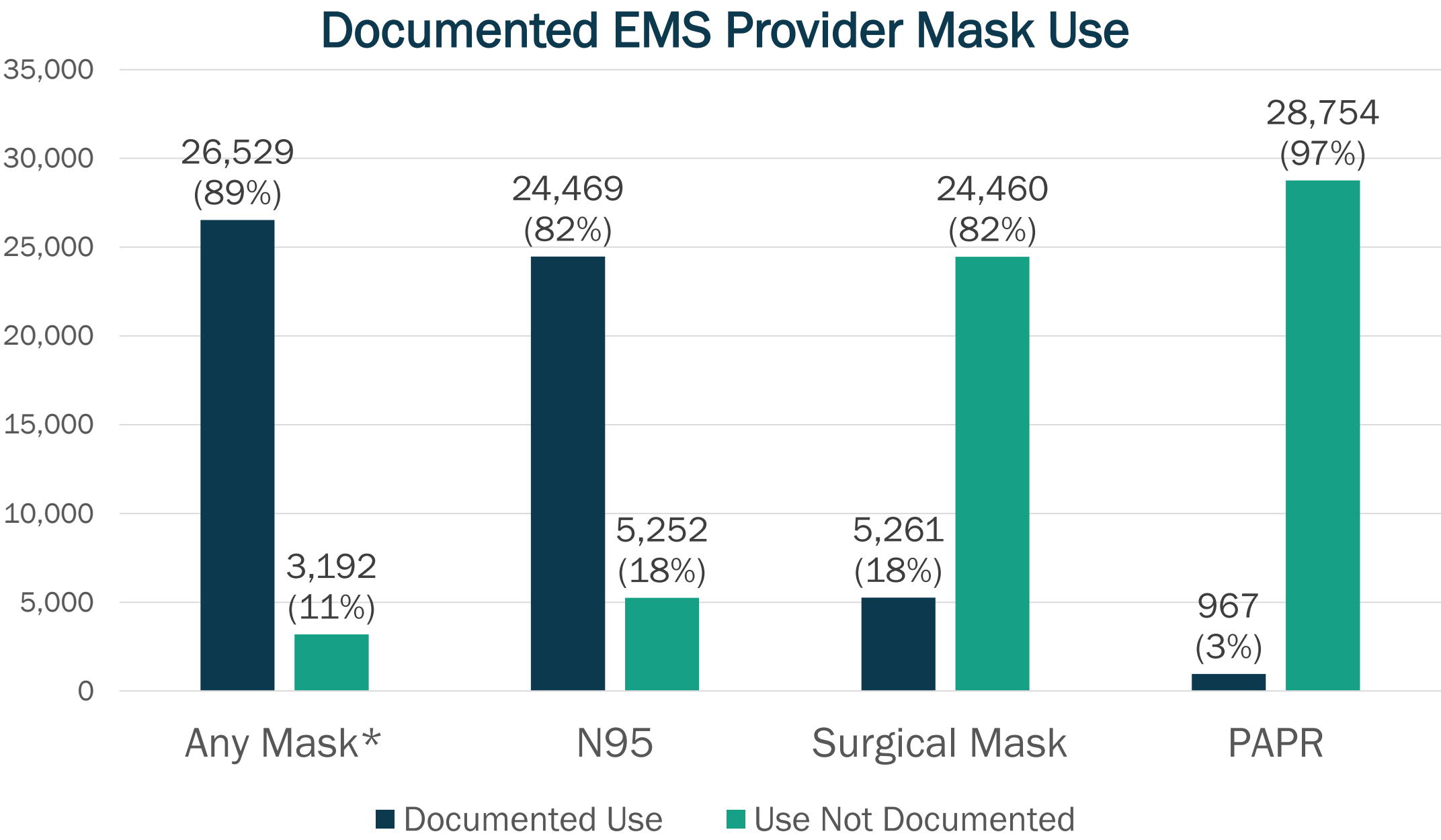
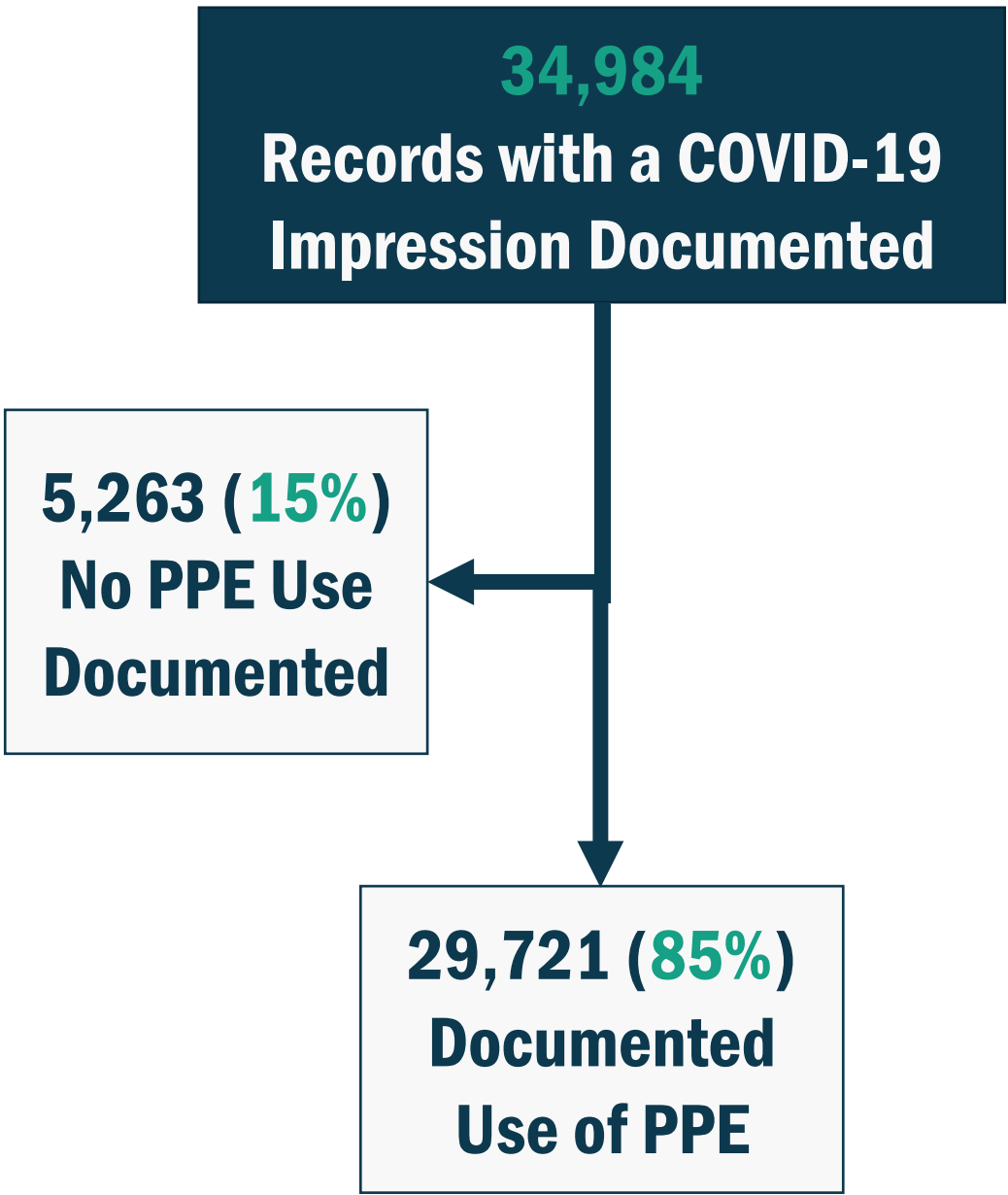
OUTCOMES & MEASURES

- All 9-1-1 responses with a documented EMS primary or secondary impression of COVID-19 were included.
- Descriptive statistics were calculated to evaluate EMS provider documented use* of:
 - N95 respirators (use & reuse)
 - Surgical mask (use & reuse)
 - Face Shields (use & reuse)
 - Gown (use & reuse)
 - Powered Air Purifying Respirator (PAPR)
 - Eye Protection
- PPE was considered to have been used during the encounter if any of the above-mentioned PPE articles were documented for at least one EMS provider listed on the prehospital care record.

ANALYSIS

- Descriptive statistics were calculated.

RESULTS



CONCLUSIONS

- On 15% of 9-1-1 records where the EMS provider believed they were caring for a COVID-19 patient, no PPE use was documented.
- Reuse of PPE was documented often.
- Future research is needed to determine if the lack of documented PPE use was due to limits in availability, incomplete documentation, or simply failure to take adequate precautions.