

Table 1. List of Procedures Based on Risk for Aerosol Generation

Risk	Procedure
Low-risk AGP	Nasopharyngeal/oropharyngeal sample collection Metered-dose inhaler Insertion of nasogastric/orogastric tube Closed or nasal/oropharyngeal suctioning
High-risk ^a AGP	Open airway deep or tracheal suctioning (below vocal cords) Mechanical ventilation Tracheal intubation or extubation Laryngeal mask airway Noninvasive ventilation (BiPAP, CPAP, HFNC) Tracheostomy placement/patient with tracheostomy Cardiopulmonary resuscitation Bronchoscopy Sputum induction/cough assist Nebulizer therapy Cool mist humidification

Note. BiPAP, bilevel positive airway pressure; CPAP, continuous positive airway pressure; HFNC, high-flow nasal cannula.

^aN95/CAPR recommended only for high-risk aerosol-generating procedures.

successfully limited N95 misuse as community COVID-19 burden increased, despite rising inpatient volumes of confirmed COVID-19 and enacting universal COVID-19 admission testing, which required ~8–24 hours of COVID-19 isolation for all inpatients pending test results.

Following the intervention, IP&C met with hospital units and departments to discuss successes and areas for improvement

in our ongoing hospital COVID-19 response. A consistent theme was that the PPE Spotter team was very well received and fulfilled the intended educational and PPE preservation goals. Stakeholders identified IP&C and the PPE Spotter team as an excellent multi-disciplinary resource, particularly during periods of evolving PPE guidance and supply chain insecurity. An additional benefit of this team was further expanding the pool of hospital staff to advocate for HCW safety and IP&C principles. We are working to determine how we can continue a similar model as COVID-19 activity decreases to maintain a readily available resource to bedside healthcare providers. In summary, our stewardship initiatives for PPE were successful in minimizing PPE misuse, and they provided a conduit for real-time education to frontline providers.

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Coronavirus disease 2019 (COVID-19) among healthcare workers: A call for a low-threshold in-hospital screening

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To the Editor—A recent large study have shown that only 3% of healthcare workers (HCWs) infected with the novel severe acute respiratory coronavirus virus 2 (SARS-CoV-2) have been exposed to an inpatient with coronavirus disease 2019 (COVID-19) prior to the onset of symptoms, suggesting that most HCWs acquire infection in the community, perhaps due to contact with presymptomatic or asymptomatic carriers, rather than in hospital settings.¹ The high prevalence of infection (11%–20%) among HCWs supports this assertion,^{2,3} despite the reportedly low risk of nosocomial infection associated with SARS-CoV-2.^{1,4,5}

Wee *et al*⁶ recently reported their experience with syndromic surveillance of HCWs for COVID-19. The surveillance was based on symptoms of acute respiratory illness (ARI) and fever. Pointing

to community as well as in-hospital secondary transmission, these researchers detected 14 cases of COVID-19 among HCWs with 4 clusters; most were linked via transmission outside of hospital.⁶ However, although syndromic surveillance, based on fever and ARI symptoms, was shown to be effective during the outbreak of severe acute respiratory syndrome (SARS),⁷ it may not be as effective in containment of COVID-19 infection because of different patterns of clinical presentations. Indeed, in the study by Wee *et al*,⁶ heat maps did not pick up the cluster with suspected intrahospital spread. Moreover, in a study by Tostmann *et al*² employing a low-threshold screening for SARS-CoV-2, most HCWs with SARS-CoV-2 infection had mild clinical presentations, frequently not including fever or respiratory symptoms. Using the same clinical data, these researchers developed a model, excluding fever and cough, to predict COVID-19 among HCWs with a fair discriminative ability.²

Early identification and control of COVID-19 among HCWs is of paramount importance particularly in the postoutbreak period to

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prevent in-hospital secondary transmission to other HCWs and inpatients. The concern of transmitting infection into the healthcare system has been highlighted in a recent study in which HCWs were linked to transmission of COVID-19 into long-term healthcare facilities.⁸ Considering that as many as 50% of all SARS-CoV-2 infections are asymptomatic,⁹ it would seem appropriate, when resources are available, to perform routine SARS-CoV-2 nasopharyngeal screening for all HCWs. The prediction model described by Tostmann *et al*,² rather than fever and ARI symptoms, can be used to guide a targeted screening strategy in settings with limited availability of testing materials.

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The prevalence of severe acute respiratory coronavirus virus 2 (SARS-CoV-2) IgG antibodies in intensive care unit (ICU) healthcare personnel (HCP) and its implications—a single-center, prospective, pilot study

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To the Editor—Healthcare personnel (HCP), including practitioners, nursing staff, respiratory therapists, and the prepositioning team caring for coronavirus disease 2019 (COVID-19) patients in the intensive care unit (ICU) are considered to have a high risk of exposure to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Most patients admitted to the ICU are severely sick and need to be intubated. High-risk procedures for droplet dispersion, including tracheal intubation and tracheostomy tube placement, can be performed in the ICU.¹ In a community seroprevalence study in Los Angeles County, the prevalence of antibodies to SARS-CoV-2 was 4.65%.² To our knowledge, no other study has addressed the prevalence of subclinical seroconversion of SARS-CoV-2 among HCP in the ICU setting. In this study, we investigated the seroconversion of asymptomatic SARS-CoV-2 infection in ICU HCP exposed to critically ill COVID-19 patients.

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Methods

This single-center, prospective, pilot study was performed in an ICU at a teaching hospital, Monmouth Medical Center in Long Branch, New Jersey. It was approved by our institutional review board. All HCP caring for COVID-19 patients in the ICU setting from March 1, 2020, to April 30, 2020, were eligible for inclusion in the study. A cross-sectional survey questionnaire was utilized to collect demographic characteristics and to exclude HCP who (1) tested positive for SARS-CoV-2 by reverse transcriptase-polymerase chain reaction assay (RT-PCR), (2) had symptoms consistent with COVID-19, or (3) had COVID-19 exposure in a household setting. In total, 134 ICU HCP responded to the survey, and 121 HCP were eligible for SARS-CoV-2-specific IgG antibody testing. Means and interquartile ranges (IQRs) were used for continuous variables. All participants provided written consent. Antibody testing was performed on the sera using a rapid immunochromatography test (STANDARD Q COVID-19 IgM/IgG Duo, SD Biosensor, Suwon-si, Korea) by lateral flow in a Clinical Laboratory Improvement Amendments certified (CLIA), high-complexity laboratory. The manufacturer's stated