

# Healthcare facilities rapidly adapt and refine practices based on new evidence and supply shortages

June 23 2020

---



Credit: CC0 Public Domain

Healthcare epidemiologists report using unprecedented methods in response to the unique circumstances resulting from the COVID-19

pandemic, according to the results of a new study published today in *Infection Control & Hospital Epidemiology*, the journal of the Society for Healthcare Epidemiology of America (SHEA). Healthcare epidemiologists have been at the center of hospitals' responses to the challenges presented by limited supplies and emerging evidence. These professionals have used resourceful strategies to keep healthcare personnel and patients safe.

"Hospitals and [healthcare facilities](#) managed in extraordinary circumstances to stretch the use of personal protective equipment outside of normal standards to optimize the use of an unpredictable supply," said Michael J. Calderwood, MD, MPH, an author of the study and a hospital epidemiologist at Dartmouth-Hitchcock Medical Center in New Hampshire. "Many facilities have had to get creative—taking steps like self-producing PPE and test materials and reprocessing respirators—in an effort to mitigate risk and maximize safety for patients and [healthcare providers](#)."

In April 2020, the SHEA Research Network collected survey responses from [healthcare](#) epidemiologists at 69 healthcare facilities, including 58 from the U.S. and Canada, and 11 located internationally. These findings provide a 'point-in-time' snapshot of the daunting and urgent experiences hospitals and healthcare personnel have faced in the fight against COVID-19.

Key findings from the survey include:

- PPE: Many facilities were feeling shortages with 40% reporting their supply of respirators was either "limited" or at "crisis level."
- Extended use and reuse of PPE: Many facilities were optimizing use of PPE. Sixty-eight percent of facilities reported using, or planning to use, one or more strategies to extend the supply of respirators. The most frequently cited strategy, utilized by 52%,

was to have [health care providers](#) in certain units reuse the same respirator for an entire day. 71% of facilities with supplies at "limited" to "crisis" level were practicing some form of extended use or reuse of respirators. Many facilities also turned to reprocessing PPE with 48% (33) of facilities indicating that they were reprocessing respirators.

- Self-producing supplies for testing and PPE: In the "other" field in a question about self-producing test components, 13% of facilities wrote in that they were self-producing PPE, such as face shields and gowns, due to shortages. A quarter of facilities were self-producing testing components, such as swabs, transport media, and collection tubes.
- Testing: The vast majority (81%) reported having access to in-house testing for COVID-19. Sixty-four percent of facilities reported testing asymptomatic patients prior to certain procedures.
- Ethical guidance: Approximately two-thirds of facilities reported receiving ethical guidance from their institutions regarding potential therapies for COVID-19, PPE contingency strategies, patient triage, equipment modifications, and visitor policies. Only about one-third of survey participants had received ethical guidance from states and professional societies in these areas. PPE contingency strategies was the topic that facilities said they had most frequently sought and received ethical guidance.

"Time and energy spent creating new approaches to address shortages of basic supplies takes resources away from addressing critical health issues," said Mary Hayden, MD, president-elect of SHEA. "We're learning about this virus. With reopening efforts underway, healthcare facilities need more predictable inventories of personal protective equipment and testing supplies. We can't be put in a shortage situation, especially as non-healthcare demands for these supplies will be increasing."

The authors note that the COVID-19 pandemic has compelled institutions to take rapid, practical actions for healthcare personnel and patient safety. Research is needed to assess further the safety and efficacy of these innovative strategies, and approaches must be identified to strengthen facilities and their communities to protect against shortages of critical healthcare supplies, prepare for potential new waves of COVID-19 cases, and be ready for future outbreaks of emerging pathogens.

The survey provides valuable insight into practices in healthcare facilities; however, the results reflect the experiences of the healthcare epidemiologists in 69 facilities that participated in the survey and may not be generalizable to all hospitals.

**More information:** Michael S. Calderwood et al, Policies and Practices of SHEA Research Network Hospitals during the COVID-19 Pandemic, *Infection Control & Hospital Epidemiology* (2020). [DOI: 10.1017/ice.2020.303](https://doi.org/10.1017/ice.2020.303)

Provided by Society for Healthcare Epidemiology of America

Citation: Healthcare facilities rapidly adapt and refine practices based on new evidence and supply shortages (2020, June 23) retrieved 21 June 2024 from <https://medicalxpress.com/news/2020-06-healthcare-facilities-rapidly-refine-based.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--