

CDC: Focus on Protecting Staff and Supplies as Coronavirus Concerns Grow

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By **A.J. Plunkett**

The threat of the 2019 novel coronavirus spreading rapidly in the United States remains low for now, but concerns in the public may be contributing to a growing shortage of personal protective equipment and other supplies.

Hospitals and other healthcare organizations (HCO) should keep a close watch on their N95 respirators, which could be walking out the door with staff or others concerned about contracting the highly contagious but—so far—slow spreading virus in the United States.

And those surgical masks that physician offices, urgent care centers, hospitals, and other HCOs offer patients and visitors at entrances also seem to be disappearing faster than usual, said Skip Skivington, a vice president with Kaiser Permanente Health System, during a webinar sponsored Tuesday by the CDC for hospitals and others who need to stay ahead of what has become a deadly disease in China.

The briefing, “CDC 2019 n-CoV response: Strategies for Ensuring Healthcare Systems Preparedness and Optimizing the N95 supplies,” offered guidance on how to conserve supplies now and if the pandemic becomes widespread here.

While there are 27 countries and more than 40,000 cases worldwide, with most concentrated in the origin country of China, the CDC is monitoring only 13 cases across the United States, said Anita Patel, PharmD, MS, team lead of the CDC’s Pandemic Medical Care and Countermeasures, in opening the webinar.

That said, she also noted that the U.S. public health system remains on high alert as hospitals, airports, and other key sites screen patients and incoming passengers for possible infection.

The COVID-19 virus (the name proposed by the World Health Organization Monday) is much like an ordinary cold in that the best protection is to isolate anyone who may be symptomatic and use respiratory protection, along with standard, contact and airborne precautions, said Michael Bell, MD, the CDC’s deputy director of the Division of Healthcare Quality Promotion.

If possible, patients under investigation should be given a surgical mask and moved to a negative pressure room. Healthcare workers (HCW) should use appropriate PPE, including eye protection that should be goggles and not safety glasses.

Many HCWs think that safety glasses should be enough with respiratory protection, but coughing can spew infection into the eyes around the glasses.

While there is no evidence yet that the COVID-19 virus can remain contagious while airborne like measles, potentially infecting an entire room or building over a short period of time, Bell says the CDC recommends full airborne protection until the U.S. officials “see how bad this can be.”

Bell urged HCOs to check the CDC’s healthcare professionals’ information on its website every day. The

CDC has teams across the world trying to learn about the virus and information is updated frequently—so much so, the CDC has begun to date when material is being updated and mark which sections are new.

The CDC specifically focused the guidance on the supply line because the agency recognizes, along with other HCOs, that China is a major source of medical supplies.

Strategies for optimizing the available supplies of the N95 masks, which can filter out particulates, begin with the most effective control: Eliminating the threat. In this case, that means isolating anyone suspected of COVID-19 infection as soon as possible, hopefully before that person even enters the hospital, urgent care center, ambulatory care site, or primary care office, said Marie de Perio, MD, who works with the CDC's National Institute for Occupational Safety and Health.

That means educating the public as well as those within your organization so you can screen potential patients over the phone or online portals before they get to the facility and keep them isolated. That could mean having them wait in their private vehicle until someone can come out to evaluate them, giving them masks and otherwise keeping them out of the main population area until they can be taken to an isolation area.

The second most effective method would involve engineering controls, said de Perio. That means using glass or plastic barriers at intake desks, using airborne intake isolation rooms (AIIR) and ventilation systems in treatment areas to restrict the infection.

Finally, de Perio said, use administrative controls to manage the supplies you do have. Among other suggestions, she said to:

Consider limiting the personnel who are not directly involved in medical care from entering the patient's room to conserve the number of N95 or other specialized respiratory masks being used. That may mean excluding dietary or housekeeping from the room, she said.

Bundle your healthcare activities so that clinicians and nurses can limit use of PPE.

Consider video monitoring when possible and cohorting HCWs to limit the number of people who need to be fit-tested for N95 use as well as limit potential exposures.

Clearly define when and who will need to be using the specialized masks, and emphasize that they do not need to be worn outside the healthcare setting for those patients.

In preparing for the possibility of a spread of the novel coronavirus to the U.S., Kaiser's Skivington said his health system drew on experience from the post-911 concerns over anthrax, SARS, Ebola, measles and other contagions through the last two decades.

He and David Witt, MD, both co-chairs of Kaiser's National Clinical Workgroup, worked with others at the health system to get guidance out to clinicians and to develop screening questions.

It was important to include doctors and other clinicians in developing those screening tools and getting them into the electronic health records system because they are on the front lines using them, said Skivington.

In addition to hospital preparation, the system created patient management guidance for its home health workers and created a medical office building strike team to deal with patients who presented outside the hospital setting.

Screening questions were updated as needed, including extending the time period that patients were asked about possibly visiting China to 30 days, which at the time was beyond CDC recommendations, noted Witt.

They also reached out to all the staff at its facilities to gather concerns and address them, to get ahead of the overuse of PPE, he said.

The other benefit of that communication was dealing with a fear that cut down on possible discrimination against patients of Asian descent, said Witt.

Among the more than 100 questions posed by the webinar audience—only a fraction were answered because of time—were concerns about what precautions to send home with patients who would be cared for by family members.

Bell said simple surgical masks were enough because those family members would not be expected to perform medical tasks that could cause major airborne exposure.

When asked if home healthcare workers would then be fine working with just the surgical masks, Bell said no. Those workers might be doing more extensive care and would absolutely need the N95 type of respirators and other recommended precautions in caring for their patients. Especially if they are going from home to home, he said.

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