

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION
National Center for Emerging and Zoonotic Infectious Diseases
Division of Healthcare Quality Promotion**



Healthcare Infection Control Practices Advisory Committee

March 24, 2022

Atlanta, Georgia

Record of the Proceedings

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Attendees

HICPAC Members

Lisa Maragakis, MD, MPH, Co-Chair
Deverick Anderson, MD, MPH
Nicholas Daniels, MD, MPH
Elaine Dekker, RN
Mohamad Fakih, MD, MPH
Colleen Kraft, MD, MSc
Michael Lin, MD, MPH
Michael Anne Preas, RN
JoAnne Reifsnyder, PhD, MBA, MSN
Sharon Wright, MD, MPH

Ex Officio Members

Matthew Ellis, MPH, CIC, REHS, Indian Health Service (IHS)
Melissa Miller, MD, MS, Agency for Healthcare Research and Quality (AHRQ)
LCDR Scott Steffen, PhD, CQIA, CQI, Food and Drug Administration (FDA)
Judy Trawick, Health Resources and Service Administration (HRSA)

Liaison Representatives

Holly Carpenter, BSN, American Nurses Association (ANA)
Paul Conway, American Association of Kidney Patients (AAKP)
Patti Costello MT-CHEST, MT-CSCT, American Hospital Association (AHA)
Eve Cuny, MS, Organization for Safety, Asepsis and Prevention (OSAP)
Karen DeKay, MSN, RN, CNOR, CIC, Association of periOperative Registered Nurses (AORN)
Kristen Ehresmann, RN, MPH, Association of State and Territorial Health Officials (ASTHO)
Keith Kaye, MD, MPH, Society for Healthcare Epidemiology of America (SHEA)
Alan Klinger, MD, American Society of Nephrology (ASN)
Chris Lombardozzi, America's Essential Hospitals (AEH)
Ronell Myburgh, MBA, MHA, RN, Det Norske Veritas Germanischer Lloyd (DNV GL) Healthcare
Lisa McGiffert, Patient Safety Action Network (PSAN)
Toju Ogunremi, BSc, MSc, Public Health Agency of Canada (PHAC)
Karen Ravin, MD, MPH, Pediatric Infectious Diseases Society (PIDS)
Mark Russi, MD, MPH, American College of Occupational and Environmental Medicine (ACOEM)
Christa Schorr, DNP, MSN, Society for Critical Care Medicine (SCCM)
Benjamin Schwartz, MD, National Association of County and City Health Officials (NACCHO)
Sarah Smathers, MPH, CIC, FAPIC, Association of Professionals of Infection Control and Epidemiology (APIC)
Pamela Truscott, MSN, RN, DNS-CT, QCP, American Health Care Association (AHCA)
Margaret VanAmringe, MHS, The Joint Commission (TJC)
Valerie Vaughn, MD, MS, FHM, FACP, Society of Hospital Medicine (SHM)

CDC Representatives

Michael Bell, MD	Jamesa Hogges, MPH
Kathy Bridson, BSN, MScPH, CIC	Abrianna Jackson, MPH
Sydnee Byrd, MPA	Alex Kallen, MD, MPH
Denise Cardo, MD	Janelle Kibler, MPH
Koo-Whang Chung, MPH	Lauren Korhonen, MSPH
Regina Cole, DHQP	David Kuhar, MD
Carla Cooper, DHQP	Denise L, NHSN
Kendra Cox, MA	Fernanda Lessa, MD, MPH
Nimita Fifadara, PhD	Stefanie Bumpus McBride, PhD
Rita Helfand, MD	Anita McLees, MPH
Mylaica Conner Henry, MPH	Michele Nueburger, DDS, MPH

Devon Okasako-Schmucker, MPH
Hanako Osuka, MD, MPH
Monica Payne, MS
Kiran Perkins, MD, MPH
Edgar Plummer, DHQP
Ann Goding Sauer, MPH

Melissa Schaefer, MD
Christine So, MPH
Erin Stone, MPH, MA
Marwan Wassef, MPH
Laura Wells, MA
Erin Whitehouse, PhD

Members of the Public

Jackie Abramson National Association of County
and City Health Officials (NACCHO)
Benedetta Allegranzi, World Health Organization
(WHO)
James Arbogast, GOJO Industries
Jordan Bastian, Clorox
Lynne Batshon, Society for Healthcare
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Gregory Gomez, Medline Industries, Inc.
Stephanie Henry, Cambridge Communications &
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Jessica Higginbotham, MPH, Hu-Friedy
Manufacturing Company
Jayson Karas, North Central States Regional
Council of Carpenters (NCSRCC)
Kevin Kavanagh, Health Watch USA
Janice Kim, California Department of Public
Health (CDPH)
Stephen Kralovic, Department of Veterans
Affairs (VA)
Emma Kurnat-Thoma, Georgetown University
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Mary Scott, HCA Healthcare
Nelson Slavik, PhD, CPAC Equipment, Inc.
Kara Jacobs Slifka, North Central States
Regional Council of Carpenters (NCSRCC)
Keith St. John, Professional Disposables
International
Kristy Weinschel, MBA, Society for Healthcare
Epidemiology of America (SHEA)
Alexis Witkowski
American Association of Oral and Maxillofacial
Surgeons (AAOMS)

Executive Summary

The United States (US) Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC) National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) Division of Healthcare Quality Promotion (DHQP) convened a virtual meeting of the Healthcare Infection Control Practices Advisory Committee (HICPAC) on March 24, 2022, via Zoom for Government. The meeting was called to order at 12:00 PM Eastern Time (ET). The presence of a quorum of HICPAC voting members and *Ex Officio* members was confirmed, which was maintained throughout the meeting. Dr. Lisa Maragakis, HICPAC Co-Chair, welcomed and introduced one new HICPAC Liaison Representative, Karen Ravin, MD representing the Pediatric Infectious Disease Society (PIDS).

Dr. Michael Bell and Dr. Denise Cardo provided a DHQP update in which they explained how CDC is incorporating the lessons learned from the COVID-19 response, particularly regarding informing infection prevention for prevention of healthcare-associated infection (HAIs); increasing support through the state and local entities; moving from guidelines to implementation; and addressing all areas of the continuum of care, including long-term care facilities (LTCFs). They also presented a brief overview of the Project Firstline materials and training, the Data Modernization Initiative (DMI), and the important components of ensuring resilient infection prevention in facilities and communities. Dr. Bell also addressed the new community metric for COVID-19 and its relevance to healthcare.

Workgroup (WG) updates were provided from Drs. Michael Lin and Sharon Wright, on behalf of the Isolation Precautions Guideline WG, that included an overview of the existing guideline and the work that lies ahead to revise and restructure the guideline into a more narrowly-focused and user-friendly document. Dr. Colleen Kraft presented an update on behalf of the Healthcare Personnel (HCP) Guideline WG, reporting that the rabies recommendations have achieved clearance and will be finalized and published once the public comment period has ended on April 25, 2022. In progress are *Staphylococcus aureus* (*S. aureus*), measles, mumps, rubella, and varicella. The WG soon will be restarting the conjunctivitis and scabies sections.

Dr. Alex Kallen and Ms. Erin Stone presented the findings from a rapid and evidentiary landscape analysis of the use of gloves and gowns for the care of patients with SARS-CoV-2. In summary of the overall findings, the data available to address this question are extremely limited. Contamination has been identified on hands, clothes, and/or gowns following care in a minority of samples using polymerase chain reaction (PCR). However, the risk of transmission of infection is unclear based on these particular studies. Two observational studies examined the association between the risk of infection and gown/glove use. However, the results of those studies were mixed, and there was likely a high risk of residual confounding in both. Adverse events (AEs) were reported but were generally mild. This presentation was followed by an enlightening discussion about the data presented and how they might inform recommendations going forward.

HICPAC also heard federal entity and public comments, and no votes were taken during this meeting.

Dr. Maragakis concluded the meeting with the recognition that HICPAC has considerable work ahead for continued efforts in infection prevention, particularly in terms of the ongoing work of the HICPAC WGs that will be very busy in the coming weeks.

HICPAC stood adjourned at 1:53 PM ET.

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Minutes of the Meeting

The United States (US) Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC) National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) Division of Healthcare Quality Promotion (DHQP) convened a remote meeting of the Healthcare Infection Control Practices Advisory Committee (HICPAC) on March 24, 2022.

Call to Order / Roll Call / Announcements

**Sydnee Byrd, MPA, Program Analyst
Division of Healthcare Quality Promotion
National Center for Emerging and Zoonotic Infectious Diseases
Centers for Disease Control and Prevention**

Ms. Byrd called to order the March 24, 2022 HICPAC meeting at 12:00 PM Eastern Time (ET), thanked everyone for joining, and reviewed housekeeping items. She then called the roll, establishing that a quorum was present. Quorum was maintained throughout the meeting. HICPAC members disclosed the following conflicts of interest (COIs):

- Dr. Colleen Kraft is on the Scientific Advisory Board of Rebiotix.
- Dr. Michael Lin receives research support in the form of contributed products from OpGen, LLC and Sage Products, which is now a part of Stryker Corporation. He previously received an investigator-initiated grant from CareFusion Foundation, which is now part of BD.
- Dr. Lisa Maragakis has received research funding from the Clorox Company.

Ms. Byrd indicated that public comment was scheduled following the presentations. She explained that when the comment period opened, the Coordinator would provide instructions for how members of the public may provide comments, that public comments would be limited to 3 minutes each, and that commenters should state their names and organization for the record before speaking. She reminded everyone that the public comment period is not a question-and-answer session.

Dr. Maragakis welcomed and thanked everyone for attending. She recognized Dr. Karen Ravin, the new Liaison Representative for the Pediatric Infectious Diseases Society (PIDS). Dr. Ravin was born and raised in Buffalo, New York. After completing her undergraduate degree in Anthropology at Franklin & Marshall (F&M) College in Lancaster, Pennsylvania, she earned a Master's degree in Physical Anthropology from the University of Pennsylvania (Penn). She graduated from Jefferson Medical College in Philadelphia in 1998 and completed Residency Training in Pediatrics at Alfred I. duPont Hospital for Children in Wilmington, Delaware in 2001.

Dr. Ravin practiced general pediatrics in Dover, Delaware before leaving in 2004 to pursue a Fellowship in Pediatric Infectious Diseases at the Children's Hospital of Pittsburgh. During her training, she earned a Master of Science in Clinical Research at the University of Pittsburgh (Pitt) and then joined the staff of Geisinger Medical Center (GMC). Since 2013, Dr. Ravin has served as the Division Chief of Pediatric Infectious Diseases and the Medical Director of Infection Prevention at Nemours Children's Hospital of Delaware.

Division of Healthcare Quality Promotion (DHQP) Update

Denise Cardo, MD

**Director, Division of Healthcare Quality Promotion
National Center for Emerging and Zoonotic Infectious Diseases
Centers for Disease Control and Prevention**

Dr. Cardo provided a high-level update on some of the lessons learned from the COVID-19 pandemic response that have led to improvements and/or expansions that will contribute to better protection of patients and workers, improvement in the quality of healthcare, and enhanced healthcare preparedness. For instance, it has been possible to address infection control prevention in all types of healthcare settings and some types of community settings. DHQP's role has expanded considerably in post-acute care in terms of guidelines and implementation of recommendations, particularly within nursing homes. DHQP will continue to move forward with this, especially in its work with Centers for Medicare and Medicaid Services (CMS) and professional groups to control infections in post-acute care. DHQP is now able to increase and provide more support to state and local programs for healthcare-associated infection (HAI) and antibiotic resistance (AR). This includes implementing all infection control practices that are known to work, as well as innovation in terms of new strategies or new ways of implementing known strategies.

Project Firstline has been a major advance in training and education. Project Firstline is CDC's National Training Collaborative for Healthcare Infection Prevention & Control that aims to provide engaging, innovative, and effective infection control training for millions of frontline US healthcare workers (HCW) and members of the public health workforce. The number of partners engaged and the observed impact has been remarkable, particularly with respect to addressing disparities and equity. Third, how all available data sources are used has expanded tremendously during the COVID-19 pandemic. This includes increased capabilities for modeling. DHQP's modelers provided considerable support to the CDC COVID-19 response. The division is now engaged with the new Center for Forecasting and Outbreak Analytics (CFA) to determine how DHQP's networks and expertise in healthcare can benefit the entire CDC and federal government approach to addressing preparedness and response.

The use of the National Healthcare Safety Network (NHSN) has been very important to DHQP, especially for nursing homes. The NHSN continues to be used for everything that it has been before, but using this system to collect information from nursing homes was a major challenge. In the beginning, it was not clear whether this would be possible. Ultimately, the NHSN was able to enroll 15,000 CMS-certified nursing homes in order to have an initial understanding of the impact of COVID-19 on the residents and healthcare personnel (HCP) within these facilities, the number of cases, the amount of personal protective equipment (PPE), and staffing in place/needed. Working with CMS and partners, it was possible to use the information for decision-making regarding the deployment of Strike Teams for infection control and to enhance and/or change recommendations to better detect and prevent infections. The NHSN shifted from

addressing only the burden to addressing the vaccination of HCP and residents, and it became a very important additional tool for assessing vaccine efficacy (VE) in those settings.

Not only has the NHSN effort informed the use of information for action, but it also expanded to more work and collaborations with the Assistant Secretary for Preparedness and Response (ASPR). DHQP is working closely with the ASPR and the Agency for Healthcare Research and Quality (AHRQ) to address the needs of healthcare without duplicating data collection and overburdening the system. In addition, DHQP has been deeply engaged in CDC's efforts pertaining to the national Data Modernization Initiative (DMI), which seeks to increase automation, provide more timely information, decrease burden, and increase interoperability among core public health surveillance systems. She encouraged anyone interested in further information to contact DHQP for additional background information and have any questions addressed. In addition, Dr. Cardo emphasized that DHQP is always open to having a call with specific organizations and their groups to address questions and/or concerns.

Michael Bell, MD
HICPAC Designated Federal Officer
Deputy Director, Division of Healthcare Quality Promotion
National Center for Emerging and Zoonotic Infectious Diseases
Centers for Disease Control and Prevention

Dr. Bell expressed gratitude to everyone for joining the meeting during what continues to be a very busy and challenging time in many parts of the country, emphasizing that it is extremely valuable for DHQP to have the HICPAC members' participation and input. He noted that CDC recently changed its community metric to a new approach of community levels and shared the rationale behind this change and its relevance to healthcare. The number previously used for community transmission risk had most of the country in bright red. There was no way to delineate what parts of the country were doing better than others, and it was not useful in the context of increasing the proportion of mild or asymptomatic infections paralleling the uptake of vaccination or the generation of immunity over time. It was a different situation during which the major concern at the community level was the burden on the healthcare system and the risk of overwhelming healthcare services. That was the primary driver for community colleagues shifting their metric to something that allowed a different cutoff in terms of focusing on the rate of the most severe illnesses as opposed to the much higher number of asymptomatic or unrecognized cases. As asymptomatic cases increase, it is not possible to count them. Therefore, the old metric became less robust.

The reason for sharing this information was to remind everyone that for healthcare, the metric has not changed—transmission is still being used. While it is not a perfect metric, it still is more sensitive. Those in healthcare need to make determinations that do not rely on just severe illness to prevent the importation of infectious individuals into an already overburdened facility. Mild and asymptomatic infections are still of concern in terms of bringing a COVID-19 case into the hospital and allowing transmission to occur. Consideration is being given to ways of making the old metric simpler to align more closely to the community measure, at least in terms of format. Similarly, guidance to healthcare facilities has not been changed in terms of issues such as source control. It is very important to pay close attention to source control, which includes community members who are in a community that feels it is in the clear based on the new community levels. However, that does not mean they can walk into a healthcare facility and break the rules there. This is a reminder that it is important to remain consistent and that healthcare systems and everyone who works there feel comfortable pointing out and clarifying for people that the rules have not changed in healthcare for very concrete reasons. Patient

populations presenting to healthcare need to feel they are safe. Some people cannot be immunized, and others are not able to tolerate masks for a variety of reasons, so it is very important to maintain a high level of protection.

Discussion Points

PSAN requested additional information about the DMI in terms of how it will provide new and better information to the public.

Dr. Cardo indicated that the DMI is helping to facilitate the production of more timely data and increased transparency. DHQP is leading the effort to push people outside of their comfort zone to have more data available for the public. The COVID-19 response demonstrates clearly that if information is not shared with those who need to be informed in order to take action, there is no reason to have the information. While she did not know all of the details, she suggested that perhaps they could include an agenda item for a future meeting to have a more detailed DMI presentation. The NHSN continues to assess additional ways to provide information, and much has been learned from the CDC COVID Data Tracker and other means for people to have access to this information. The lessons from COVID-19 are very important for the entire agency, but for DHQP, this is true now more than ever.

AAKP pointed out that for kidney and transplant patients, AAKP is the largest patient organization in the US for kidney patients. AAKP strongly suggested that ongoing and future communications from CDC related to relative risk and ongoing risk for immunocompromised and immunosuppressed kidney patients be focused and grouped somehow before the agency articulates them publicly, especially to the media and public-facing platforms, for clarity and inclusion. This has been an ongoing issue for AAKP, patients, and their doctors to get clarity on the ongoing risk posed to these populations. There seems to be a sense in the US that the country is moving beyond COVID-19, but according to the latest research, this has been an extremely devastating pandemic for those at highest risk. This includes dialysis patients, kidney transplant patients, and organ transplant recipients—especially minority populations. Some of the most recently published research shows that the numbers are double in terms of mortality over the past 24 months. There is considerable frustration across many populations, particularly since it is not clear that the pandemic is over. Some of the public narrative gets confused by the lack of consistency in messaging. With all due respect, there has been an issue with the clarity of CDC communications. However, there is an opportunity to work with many organizations. AAKP expressed appreciation for DHQP's spirit of partnership, pledged to use all of its platforms to help CDC improve clarity in advance as opposed to in reaction to information, and thanked everyone at the agency for their ongoing work—recognizing the demands in serving the country during this time.

Dr. Cardo indicated that this is the type of work that the DHQP can assist CDC with because the division can facilitate the connections in a proactive way. They have been engaged in a variety of partnership connections, but this point is even more critical now. DHQP will follow up with AAKP to determine the best way to work with them. If this cannot be done prior to a public announcement, DHQP at least can work with AAKP to ascertain how to clarify messages. This is the kind of feedback that DHQP is seeking.

Dr. Bell added that the agency is hearing from a wide range of constituents and is engaging the healthcare infection prevention side to help with that response. He agreed that early stakeholder sharing is key, and he vowed to feed that back to the groups working on this and use DHQP's partnership capabilities to tie those efforts together.

Regarding Dr. Cardo's comment about moving from guidelines to emphasizing implementation, HICPAC stressed that while this is always important, it is even more essential now. Adverse events (AEs), including infections, have risen during the COVID-19 pandemic such that ground will now have to be regained, and it will be necessary to understand why systems have not been as resistant as hoped to this disruption. One of the main challenges many facilities are facing is an almost complete turnover in personnel on some units. Innovative ways are needed to reach new personnel and quickly bring them up to speed on guidelines and expectations, which will be the work ahead in the coming months.

Dr. Cardo agreed that healthcare has not been resilient and that there is a need to rethink, reframe, and redo in order to achieve better sustainability in situations such as the COVID-19 pandemic.

Dr. Bell added that this is at the heart of DHQP's work on many fronts. At the end of the day, healthcare is delivered by a wide array of people. As a physician, he can help make a good decision at the beginning of a hospital stay and track how things progress. But hour-by-hour and day-by-day, a wide array and a large number of staff (e.g., nursing, environmental services, respiratory therapists, physical therapists, et cetera) need to do everything right every time to ensure that patients survive a hospital stay and get better. He has not been able to find an equal to this in any other type of work. With that in mind, the Project Firstline work is directed toward a much broader base of the people who must do the right things and know why they are doing the right things so that they keep doing the right things. The challenge is that many people in the workforce do not have the luxury of attending an hour-long in-service, attending conferences, and/or receiving continuing education credits (CECs). Figuring out what makes sense for delivering information the workforce needs and can use to make sense of what they are being asked to do is driving a lot of this effort. On a related note, turnover is a very frightening issue right now. The reality of brand new staff coming in without experience or of temporary loading staff who are helping out without a deep knowledge of the location where they are working is extremely troubling. The experiential element is an invisible component of safety and effectiveness that is not easy to measure. There are conversations underway about beginning to evaluate turnover. There is not an easy/official data source for that, but one way to examine this is to assess the number and types of people who received onboard training. This could offer a sense of the magnitude of the turnover and where it is occurring in the health system in order, at a minimum, to direct resources and tools to places that seem to be experiencing more turnover and as a country and health system to be more sophisticated in understanding what is happening with the workforce. This is a major area of work that needs to be done that is likely to be a major uphill struggle, but it is foundational to regaining the ground that has been lost during the COVID-19 pandemic. The good news is that some improvements have been made thanks to investments made during COVID-19, including some painful lessons learned.

HICPAC suggested that perhaps this might fit in with the data expansion and DMI work for modeling and forecasting as a critical element that may point the way toward where the risk is and help mitigate that.

Isolation Precautions Guideline Workgroup Update

Michael Lin, MD, MPH and Sharon Wright, MD, MPH
HICPAC Isolation Precautions Guideline WG Co-Chairs

Dr. Lin pointed out that the findings and conclusions presented during this session were in draft format, have not been formally disseminated by the CDC, and should not be construed to

represent any agency determination or policy. The Isolation Precautions Guideline WG is a new WG that formally began meeting in early March 2022 and has met twice since being established. The focus of this WG is on the *Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007)*,¹ with a goal to provide recommendations for revisions to that guideline.

Since the original publication of the 2007 *Guideline for Isolation Precautions*, new evidence has emerged regarding the science of pathogen transmission in the healthcare setting. For instance, and most importantly, the distinction between droplet and airborne routes of respiratory virus transmission needs to be re-evaluated. The CDC is asking the Isolation Precautions WG and HICPAC to provide recommendations for updating the *Isolation Precautions Guideline*. The 2007 guideline is a large document of 206 pages, much of which is written like a textbook with five sections that include:

- Part I: Review of Scientific Data Regarding Transmission of Infectious Agents in Healthcare Settings
- Part II: Fundamental Elements Needed to Prevent Transmission of Infectious Agents in Healthcare Settings
- Part III: Precautions to Prevent Transmission of Infectious Agents
- Part IV: Recommendations
- Appendix A

There have been updates since 2007 that often have focused on specific pathogens as new information emerges, with targeted updates most recently made in July 2019.

It also is important to discuss other published documents that touch upon similar information. The *Core Infection Prevention and Control Practices for Safe Healthcare Delivery in All Settings—Recommendations of the Healthcare Infection Control Practices Advisory Committee*² is a HICPAC White Paper published in 2017. This is a shorter document of 15 pages that describes a core set of infection prevention and control practices required in all settings collected from existing CDC recommendations. The thought here was to try to take the common set of important infection prevention and control practices that already existed across various guidelines and documents within the CDC literature and assemble them into one document to reduce duplication and the need to have to update across a variety of documents.

This White Paper includes 15 topics: Leadership Support; Education and Training of Healthcare Personnel; Patient, Family, Caregiver Education; Performance Monitoring and Feedback; Standard Precautions; Hand Hygiene; Environmental Cleaning and Disinfection; Injection and Medication Safety; Appropriate Use of PPE; Minimizing Potential Exposures; Reprocessing of Reusable Medical Equipment; Transmission-Based Precautions; Temporary Invasive Medical Devices; and Occupational Health. Many of these topics align with the focus of *Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007)*, but it is important to note that this is a reminder of some topics that are actually in the 2007 guideline. The existence of this White Paper, and perhaps future iterations of documents like this, provide opportunities now to organize which topics go where with the development process of a new product.

¹ <https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html>

² <https://www.cdc.gov/hicpac/recommendations/core-practices.html>

The goal for the Isolation Precautions Guideline WG over the next year is to draft a new guideline that eventually will replace the 2007 *Isolation Precautions Guideline*. This initial document, referred to as “New Part 1,” will be relatively concise at approximately 10 to 15 pages. In contrast to the 2007 guideline that was written in textbook format, New Part 1 will be written in a slightly more digestible format and style that potentially could be read on a cell phone or mobile device rather than having to be pulled up in a PDF format. This will provide an updated scientific foundation for how pathogens spread in the healthcare setting, may recommend new categories of transmission-based precautions, and is intended to apply to all healthcare settings. Given that this will be a smaller document that will not address every aspect pertaining to every type of healthcare setting, it will have to be foundational. It will impact other guidelines and documents along the way.

Dr. Wright provided more details about the WG product and development process. The current 2007 guideline content was reviewed by the WG and compared to existing CDC documents. Sections of the 2007 guideline that were found to focus on transmission mechanisms or methods to prevent infection were selected to be retained as components of the new 2022 guideline. Sections that did not focus on these topics were marked as a first pass to be redirected to one of 3 topic areas: Core Practices, Other Existing CDC Guidelines, and New Guidelines/White Papers. Overall, the rationale is to narrow the scope of the new guideline to make it a more user-friendly and focused document.

In terms of the proposed structure for the new 2022 guideline, New Part 1 would combine Parts I, II, III, and IV of the existing guideline. Appendix A probably would remain largely intact in Part 2 but probably slimmed down. The goal is to define the transmission framework and the evidence base in New Part 1 and focus just on those modes of transmission of infection and prevention. Dr. Wright shared a table to illustrate the proposed outline. New Part 1, Section A will focus on the review of the scientific data. New Part 1, Section B will retain Hand Hygiene, PPE, Patient Placement, and Transport of Patients. New Part 1, Section C will focus on Standard Precautions, Transmission-Based Precautions, Syndromic and Empiric Applications of Transmission-Based Precautions, and Discontinuation of Precautions. The recommendations would be incorporated in those sections as appropriate. At a later date, the WG will circle back to Part 2, Appendix A.

The WG’s next steps will include a review of the literature with assistance largely from CDC colleagues to establish the existing evidence, focusing most initial efforts on the mechanisms of transmission via air and the mechanisms of transmission via contact. Using this information, the WG will design a new approach and expand on the outline further once they see where the evidence exists and potentially where some expert opinion may be needed. They will then compose New Part 1.A describing the basis for the remodeled framework. The New Part 1 will be completed in the first year, with the goal of presenting a draft during the November 2022 HICPAC meeting. Appendix A will be updated during the second year.

Discussion Points

Dr. Bell emphasized there is a lot in the 2007 document that many have become accustomed to finding there. None of that will be thrown away, even if it does not end up in the new iteration of the document. There is a deliberate effort to make this a much leaner and cleaner document that is not textbook-like since there are textbooks for that. This is intended to provide a framework for subsequent products. Some of what has been in the guideline historically might end up in a new iteration as a freestanding document, while other parts might end up in the core practices component. There are many ways of capturing the information. In particular, setting-specific guidance is always an issue, no matter what is recommended. All settings have specific needs, but this is not intended to serve all of them. In fact, this type of product from this type of committee has some significant limitations in terms of tailoring things perfectly for implementation.

HICPAC asked whether there is enough information about any new PPE that may be on the horizon that would be part of what may be examined, such as work being done in terms of respiratory protection in particular. There continues to be a lot of resistance, particularly to wearing eye protection.

Dr. Bell was not aware of new device categories but thought there might be more refined products that are easier to use in respiratory protection. Thus far, there has just been a recognition that better products are needed. There has been some payer-related movement in how reimbursement in this country could potentially support the purchase of slightly more expensive devices made in the US that are less supply chain-dependent. Whether that may directly impact what is contained in the revised guideline is unlikely. When this process is completed, there may also be a need to think about the environmental guideline and what needs to be promoted or recommended in terms of indoor air quality. Plenty of areas need attention, including a few that, because of the COVID-19 experience, might be closer to having the evidence needed to make updates. There has not been anything new or revolutionary in terms of gloves and gown, respiratory protection, facial protection, or splash protection of any sort. While they likely will be addressing existing technology at this point, there are opportunities to continue to drive the demand for improvements and/or changes—especially in terms of eye protection. At best, the implementation of eye protection for respiratory infections has been “half-baked” for a generation. The past two years have demonstrated just how challenging it is to get everyone to use eye protection when they should. That might be a driver for descriptions of what they might want, but it will not be in the document. However, there are editorial and other opportunities to extend from this to explain what healthcare needs in terms of eye and respiratory protection. The fact that colleagues at CMS are engaged is very exciting because nothing says “move” as quickly as a payer’s requirements.

For future consideration, since this document is intended to be more enduring, AHRQ reported that they are hearing comments about the importance of thinking about the environment in relation to isolation, equipment, precautions, the preponderance of single-use materials, et cetera. They are also struggling with this because there is limited evidence in terms of comparative effectiveness. This issue is likely to increase in importance.

Dr. Bell acknowledged there is a need to be very directed in the types of investigations undertaken. The challenge is that CDC relies on a combination of its academic colleagues who do this work and industry, but they do not have the ability to insist. The best they probably can do is be very clear about where more evidence is needed and make it known to colleagues who do that work. They had an interesting conversation recently with pediatric colleagues who very

much want answers to what works best in pediatrics, but there is not a lot of published evidence. Trying to encourage more people to join in the effort to conduct that kind of research is something they all agree on, but the challenge is that it will not happen overnight. Creating a pipeline of people who are skilled at performing these investigations and publishing them takes mentoring and time. That has already been started in various aspects of medical care that have not been well-represented to date. While that is encouraging, it will not provide evidence by the time it is needed for this document. There will be the usual unsatisfying area with which they will be stuck. Still, as a committee and a profession, they can keep referring back to those as important considerations in terms of research grants and other investigational investments.

Healthcare Personnel (HCP) Guideline Workgroup Update

Colleen Kraft, MD, MSc
Chair, HCP Guideline Workgroup

Dr. Kraft provided an update on the *Guideline for Infection Control in Healthcare Personnel (HCP)*. The findings and conclusions presented during this session were drafts, have not been formally disseminated by the CDC, and should not be construed to represent any agency determination or policy. As a reminder, the original guideline was published in 1998 and has been under revision for about a decade. The HCP WG's goal is to provide updated information on issues for Infection Control in Healthcare Personnel (HCP), Section 2. The WG's charge is to focus on pathogen-specific issues for Infection Control in Healthcare Personnel. Where information is out of date, the WG will make updates using evidence-based methods where evidence is available.

In terms of the status report, **Section 1: Infrastructure and Routine Practices for Occupational Infection Prevention and Control Services** was completed and published in October 2019.³ Regarding **Section 2: Epidemiology and Control of Selected Infections Transmitted Among HCP and Patients**, Diphtheria, Group A *Streptococcus*, Meningococcal Disease, and Pertussis all were published in November 2021.⁴ HICPAC already approved the following sections: Measles (August 2018); Mumps, Rubella (May 2018); Varicella (August 2019); Parvo, Cytomegalovirus (November 2019); and Rabies (August 2021). The Rabies section has been cleared. In progress are *S. aureus*, Measles, Mumps, Rubella, and Varicella. The WG will soon be restarting the Conjunctivitis/Adenovirus and Scabies/Pediculosis sections. On Deck are Hepatitis A, Hepatitis B, Hepatitis C, Herpes, Human Immunodeficiency Virus (HIV), and Tuberculosis (TB) as it relates to HCP.

Regarding the next steps, the Rabies section has been cleared and will be finalized and published once the public comment period has ended on April 25, 2022. The *S. aureus* Key Question 1 literature review is underway, and the Key Question 2 review will follow. The Adenovirus literature review update is beginning soon. The Measles, Mumps, Rubella, and Varicella sections are being updated and will be submitted for clearance. These sections were approved pre-pandemic, so updates may require additional HICPAC approval depending on whether there were any changes during those two years.

³ <https://www.cdc.gov/infectioncontrol/guidelines/healthcare-personnel/index.html>

⁴ <https://www.cdc.gov/infectioncontrol/guidelines/healthcare-personnel/selected-infections/index.html>

Prevention and Response Branch (PRB) Update: Gown/Glove Use in Healthcare Settings

A Rapid Systematic Review/Evidentiary Landscape Analysis: Use of Gowns and Gloves for the Care of Patients with SARS-CoV-2 Infection

Alexander Kallen, MD, MPH
Division of Healthcare Quality Promotion
National Center for Emerging and Zoonotic Infectious Diseases
Centers for Disease Control and Prevention

Dr. Kallen presented the findings from a rapid and evidentiary landscape analysis of the use of gloves and gowns for the care of patients with SARS-CoV-2, first pointing out that the findings and conclusions in this report were those of himself and Ms. Stone and did not necessarily represent the official position of the CDC. Since the beginning of the COVID-19 pandemic in January 2020, CDC has recommended gowns and gloves as part of the PPE ensemble (i.e., gown, gloves, N95 respirator, eye protection) for the care of these patients. This is not necessarily inconsistent with other respiratory viruses. Other respiratory viruses, such as respiratory syncytial virus (RSV) and some of the emerging influenza viruses, do have contact precautions. However, the role of surface and contact transmission on the transmission of SARS-CoV-2 is an open question. There is a summary brief available for further information titled *SARS-CoV-2 and Surface (Fomite) Transmission for Indoor Community Environment*. A quote from this brief states, “It is possible for people to be infected through contact with contaminated surfaces or objects (fomites), but the risk is generally considered to be low.”⁵

In terms of the methods for this systematic review, the Key Questions (KQ) were:

- Does the use of gowns and gloves help prevent the transmission of SARS-CoV-2 to healthcare personnel and patients?
 - Do gowns or clothing become contaminated during the care of SARS-CoV-2 patients?
 - Do gloves or hands become contaminated during the care of SARS-CoV-2 patients?

Full study extractions, internal validity assessments, and detailed aggregations were not completed for this effort. Approximately 2500 papers were included initially, most of which were excluded from title and abstract review and 518 from full-text review. The final analysis included 138 papers.

For the question regarding whether gowns or clothing become contaminated during the care of SARS-CoV-2 patients, 7 papers were identified. Most of these papers addressed a small number of these as part of a larger environmental sampling effort. The details of the exposures, such as information about the activities, were fairly limited. With that in mind, 3 of the papers found contamination of gowns or gloves after caring for SARS-CoV-2 patients. This always was in a minority of the samples collected and often involved the sleeves. As is true for this and the next question, this is usually based on polymerase chain reaction (PCR) results. There were a couple of studies that included culture as a secondary method for those who had a positive PCR, but neither of those actually had PCR-positives, so the culture did not factor in. There were 4 studies that did not identify contamination. While the Song 2020 study included the largest sample size compared to the others, it was still relatively modest.

⁵ <https://www.cdc.gov/coronavirus/2019-ncov/more/science-and-research/surface-transmission.html>

In terms of the question regarding whether gloves or hands become contaminated during the care of SARS-CoV-2 patients, there were 10 studies. Of these, 6 studies showed contamination, and 4 did not. The same caveats for the first question also hold true for this question. In all cases, contamination was identified in a minority of samples, and most were very modest-sized evaluations. All of the same limitations apply to the 4 studies that did not show contamination. Again, these studies assessed hands or gloves as part of a larger environmental sampling effort.

The evidence was mixed on the association between gown and glove use and SARS-CoV-2 infection in HCP, limiting the conclusions that can be drawn. In terms of gowns, there was one Italian cohort study by Boffetta (2021) that involved a very large cohort of 10,654 HCP that suggested an increase in the adjusted odds (aOR) of infection with self-reported gown use. However, the confidence interval spanned the null [aOR: 1.39 (95% CI: 0.94-2.09), $p = \text{NR}$]. The odds ratios (OR) were adjusted for sex, age, center, job title, and other PPE. There were two studies identified for gloves. The first was a Kuwaiti cross-sectional study by Al Youha (2021) with 847 HCP that indicated that wearing gloves was associated with an increased likelihood of SARS-CoV-2 infection [aOR: 2.93 (95% CI: 1.19-7.22)]. These HCP practiced extended glove use, cared only for COVID-19 patients, and were housed together away from families. The second was again the Italian cohort study by Boffetta (2021) of 10,654 HCP that suggested that self-reported glove use was associated with a non-significant reduced risk of infection [aOR: 0.72 (95% CI: 0.50-1.02)]. The OR were adjusted for sex, age, center, job title, and other PPE.

Regarding the findings for harms from the use of PPE, 40 studies (N=57,157) included information on adverse events (AEs) in HCP that were attributed to gown and glove use during the care of SARS-CoV-2 infected patients. Among these, 27 studies reported skin reactions from gowns/gloves, 7 studies reported difficulty performing job (e.g., reduced dexterity) from gowns/gloves, 11 studies reported heat-related issues due to gowns/gloves, 8 studies identified shift duration as a contributor to AEs due to gowns/gloves, 1 study reported negative patient perception of gloves, and 1 study reported superficial fungal infection due to gloves.

To summarize the overall findings, the data available to address this question is extremely limited. Contamination has been identified on hands, clothes, and/or gowns following care in a minority of samples using PCR. However, the risk of transmission or infection is unclear based on these particular studies. Two observational studies looked at the association between the risk of infection and gown/glove use. However, the results of those studies were mixed, and there was likely a high risk of residual confounding in both of these studies. AEs were reported but were generally mild.

The following questions were posed for HICPAC discussion and feedback:

- Should gowns and gloves continue to be recommended in healthcare settings as a part of the PPE used when caring for a patient with known or suspected SARS-CoV-2 infection
- If recommended, should their use be targeted?
- Is additional information needed? If so, what type of studies?

Discussion Points

HICPAC Observations:

- Some work assessing COVID-19 contamination in the environment has resulted in the conclusion that PCR identification is not the same as identifying viable virus. This has resulted in skepticism of any result that hinges on only PCR testing. In studies/papers that have assessed both PCR and culture sampling from the environment, the times when both are positive is very much in the minority. Just finding a PCR-positive sample in no way suggests that there is viable virus present. There is a difference between contamination and transmission.
- In thinking about why gowns are used, it seems right to separate the question of gowns versus gloves. Gown use has traditionally been related to contamination from the environment as opposed to contamination from a patient. Someone caring for a patient expects their hands to be contaminated, which is one of the reasons for hand hygiene.
- There are some growing data about using environmental data as a proxy for the need to use gowns with COVID-19 patients. There is concern not only with the transmission issue but also with the bigger issue that gowns are preventing HCP from seeing patients because it is a chore every time a HCP enters a COVID-19 patient's room.
- There have been major disparities among COVID-19 patients with respect to their care and outcomes in terms of HAIs and/or mortality. While the barrier of gowns was initially thought to be important, it is worth re-evaluating whether the benefit of the gown is as important as the benefit of access and better treatment for patients.
- People are interacting with one another in their daily lives outside the healthcare setting and are not being asked to gown outside. Unless there is thought to be a much higher risk of exposure in the healthcare setting, the rationale behind keeping gowns is unclear. Based on the data, it seems that hand hygiene would be sufficient.
- Perhaps a tiered approach could be taken in terms of the basics where PPE is important, and then hospitals and healthcare centers can decide whether to go further depending upon risk.
- Thinking about Ebola, sometimes decisions were made for HCP based on the activities of a HCP standard that was known. It is important to remember that HCP include a variety of individuals whose jobs coming into contact with patients may be fluid-provoking or receiving. Therefore, it is important to consider these guidelines in light of the varied roles across healthcare.
- Hand hygiene adherence may be less reliable with glove use; people must be educated that hand sanitization is needed on gloves or to treat the glove like their extra outer hands.
- Given the level of anxiety and fear in the healthcare setting early on, PPE was a major factor in being able to reassure people that they could be kept safe while they did the jobs they were being asked to do.

- It is important to keep in mind that there are limitations to the studies that have been conducted thus far, so there is not necessarily sufficient evidence to state that there is no risk. The direction points toward less risk of transmission via clothing versus the air route.
- In terms of the specific questions posed, there was support for gowns/gloves to be recommended for care of patients with known or suspected SARS-CoV-2 infection. However, it should be done in a targeted manner that perhaps harkens back to standard precautions. In situations where contact with splashes/droplets is anticipated, the recommendation would be to use gown and gloves. In many situations in the clinical environment, that is not necessarily the case, so respiratory precautions could be recommended versus gown/glove, provided that there is hand hygiene.
- Part of the struggle is that absence of proof is not proof of absence. Just because risk cannot be found based on current methods/data does not mean that it is not occurring and that this is sufficient information to make changes. Perhaps they should revisit what has been recommended for other viruses such as influenza, parainfluenza, adenovirus, RSV, and rhinovirus. In the majority of those, there is no recommendation for the use of contact precautions except in higher-risk scenarios such as the immunocompromised and pediatrics. Existing precedence could be used as a potential framework for trying to take a step back in terms of carve-outs.
- Not just use of PPE, but proper use is important to address. It is concerning that in the data Dr. Kallen presented, some studies found an increased risk when someone was wearing gowns or gloves. Unless that is just a statistical aberration, it must be the result of inappropriate use in some way.

Liaison Representative Observations:

- APIC emphasized the importance of considering human factors in the approach to guidelines/recommendations. It is very difficult to train HCP to use PPE properly, and many HCP have commented that they do not want to have to think about it. Consideration of human factors can help to arrive at guidelines/recommendations that make it easier for HCP not to have to think as much about it. Conversely, there is the barrier of the potential for the reduced likelihood that HCP may visit their patients if more PPE is required. On the contrary, some HCP may use all PPE possible with the mindset that they do not want to have to think about it. HICPAC must wrestle with this to determine the right balance.
- SHM agreed that gowning and gloving limits the ability to enter a patient's room and reduces efficiency. For instance, one scenario is that the moment someone gowns and gloves and enters a patient's room, their phone may ring with a consult call that they have been waiting for all morning. Should HCP break contact precautions and put their gloved hand into their pocket or miss the phone call and have to wait another hour? Whenever possible, it would be beneficial to limit gowning/gloving to the activities and patients for which there is good evidence to support that these are needed. This is likely to improve compliance.

CDC Responses:

- Dr. Kallen indicated that consideration has been given to including some of the environmental contamination studies. Many of the studies he mentioned in the presentation that included hands and gloves were from much broader environmental contamination

studies. Positive PCR results are fairly commonly reported, but a major gap lies in trying to better understand whether the PCR result actually represents the risk for infection. With gowns and gloves, the hope is that people will wash their hands as well. It is a good suggestion to extract further information. He thanked everyone for their input and assured them that it all would be taken into consideration.

- Dr. Bell perceived this as an opportunity to do something that has been quite difficult traditionally—pulling away from initial PPE used during the emergent phase of the pandemic. There typically has been robust uptake of PPE during the emergence of something new, but the pandemic is now in a different phase. This is demonstrated in community precaution activities in that people are no longer sanitizing their groceries, leaving items on the doorstep for several hours before bringing them inside, et cetera that were being done early in the pandemic. In general, people are probably prepared for some degree of adjustment. Depending on the task, someone might very much want a gown. Therefore, they might not want to pull away from gowns in a blanket manner. The entire field is very bad at implementing standard precautions. The goal should be to make recommendations that make it more likely that people will judiciously adopt a device such as a gown when they should.

Federal Entity Comment

Melissa Miller, MD, MS
Agency for Healthcare Research and Quality (AHRQ)

Dr. Miller announced that AHRQ launched its *Toolkit for Decolonization of Non-ICU Patients With Devices* on March 22, 2022, based on the Active Bathing to Eliminate (ABATE) Infection Trial.⁶ The trial, funded by NIH and led by Dr. Susan Huang at the University of California-Irvine, showed a 30% reduction of bloodstream infections (BSI) in non-intensive care unit (ICU) patients with indwelling, central venous catheters (CVCs), and midline catheters and lumbar drains through the use of chlorhexidine bathing and targeted nasal decolonization with mupirocin. The toolkit is available on the AHRQ website.⁷ She also commented that she found the HICPAC conversations to be enlightening.

Public Comment

Gregory Gomez, Director
Clinical Affairs at Medline Industries, Inc.

Hi. Thank you for your time this afternoon. I do appreciate all of the work that you are doing there, recognizing all of the public health challenges that you're working with. I'm Gregory Gomez from Medline Industries. As we've been listening, we've been considering quite a few things, but chief among them is we've been considering the American Society of Anesthesiologists' (ASA's) recent updates to its *Practice Guidelines for Central Venous Access*, which recommended use of catheters containing antimicrobial agents. We believe that the CDC should perhaps consider updating its own guidelines for prevention of catheter-related infections

⁶ Huang SS, Septimus E, Kleinman K, et al. Chlorhexidine versus routine bathing to prevent multi drug-resistant organisms and all-cause bloodstream infection in general medical and surgical units: the ABATE Infection Cluster Randomized Trial. *Lancet*. 2019 Mar 23;393(10177):1205-15. PMID: 30850112.

⁷ <https://www.ahrq.gov/hai/tools/abate/index.html>

so that they are consistent with currently prevailing evidence-based practice guidelines. That's pretty much the comment that we have here. We'd really like to know if there's been any previous consideration around this since the last update from the CDC in 2017.

Kevin Kavanagh, MD, MS, FACS
Board of Directors, Health Watch USA

During the COVID-19 pandemic, there have been inadequate safety precautions for frontline workers and the public. Politico recently had a disturbing report of some hospitals removing patients' N-95 masks and replacing them with surgical masks. One of the facilities mentioned was the Massachusetts General Hospital, the CDC Director's prior facility. Patients should be allowed to keep their N-95 masks or be given a new N-95 mask. Surgical masks are unlikely to provide adequate protection for either Omicron or the highly infectious BA.2 variant. N-95 masks have superior filtration and facial fit. The CDC needs to require uniform use of N-95 masks in healthcare settings for both patients and staff. The new guidelines of community risk zones for COVID-19 may not be optimal for the promotion of patient safety. The current guidelines have a threshold of 200 cases per 100,000 population for 7 days before there is an effect on community recommendations. Current risk zone determinations are largely based upon hospital capacity and not the risk of acquiring SARS-CoV-2. However, they are used to determine implementation of community mask advisements and other public health strategies. These guidelines may be problematic. First, hospitalizations are a lagging indicator in a pandemic. By the time hospitalizations have increased, the virus is already firmly established in the community, and weeks of continued elevation of hospitalizations and deaths will occur. Second, in the medium-risk category, it is recommended to wear a mask around someone at high risk for severe disease. This would include almost 50% of the US population. What are these citizens to do when they need to enter a government building or a retail establishment where no one else is wearing a mask? Finally, focusing on metrics on hospital capacity is all but ignoring mild to moderate disease and overlooking the grave risks of long COVID, which have been reported in 10% to 30% of patients. Even in mild cases, mild COVID has been recently linked to both long-term heart disease and frequency of cognitive deficits. In summary, I would encourage CDC to require universal N-95 masking and to revise their community risk strategy rankings to be more based on SARS-CoV-2 infections so that we can decrease overall spread of the disease. Thank you.

Linda Dickey, RN, MPH, CIC, FAPIC
Association for Professionals in Infection Control and Epidemiology

My name is Linda Dickey, and I'm with the Association for Professionals in Infection Control and Epidemiology. I just wanted to go back to the work that is being done by HICPAC that is very much appreciated around updating the isolation transmission-based and other isolation guidelines. If there could be some inclusion of discussion about the value of standardizing signage—I don't know what the evidence would be around that, but we have such a variety of messaging that goes out not only across acute care settings but across the continuum of care. It could be an opportunity where we might be able to clarify our intent and messaging. So, I just wanted to put that out there for the committee's consideration. Thank you.

Summary and Work Plan

Dr. Maragakis briefly summarized the day, emphasizing that she thought they had wonderful discussions and excellent presentations. The day began with the DHQP update. Drs. Cardo and Bell shared with HICPAC how CDC is incorporating the lessons learned from the COVID-19

response, particularly in regard to informing infection prevention for prevention of HAIs, increasing support through the state and local entities, moving from guidelines to implementation, and including all areas of the continuum of care, including LTCFs. They also presented a brief overview of the Project Frontline materials and training, the DMI, and all of the important components of ensuring that there is resilient infection prevention in facilities and communities. Dr. Bell also addressed the new community metric for COVID-19 and its relevance to healthcare. There was an update from important WGs, including Drs. Lin and Wright presenting on behalf of the Isolation Precautions Guideline WG that included an overview of the existing guideline and the work ahead to revise and restructure it into a more narrowly-focused document. Dr. Kraft presented an update from the Healthcare Personnel Guideline WG, reporting that the rabies recommendations have achieved clearance. In progress are *S. aureus*, measles, mumps, rubella, and varicella, and soon moving on to conjunctivitis and scabies. Dr. Kallen and Ms. Stone presented on the systematic review of gowns and gloves for the prevention of SARS-CoV-2 and a very enlightening discussion about those data and how they might inform recommendations going forward. HICPAC has a lot of work ahead for continued efforts on the implementation of infection prevention and HAI prevention, specifically for the ongoing work of the HICPAC WGs, for which presentations were given during this meeting. Those WGs will be very busy in the coming weeks. No votes were taken during this HICPAC meeting.

Adjournment

Dr. Bell thanked the HICPAC members, Co-Chairs, *Ex Officios*, and Liaison Representatives for their time, participation, and thoughtful discussion during this meeting.

With no additional business raised or comments/questions posed, HICPAC stood adjourned at 1:53 PM ET.

Certification

I hereby certify that, to the best of my knowledge and ability, the foregoing minutes of the March 24, 2022 meeting of the Healthcare Infection Control Practices Advisory Committee, CDC are accurate and complete.

Date

Lisa Maragakis, MD, MPH
Co-Chair, HICPAC / CDC

Attachment #1: Acronyms Used in this Document

Acronym	Expansion
AAKP	American Association of Kidney Patients
AAOMS	Association of Oral and Maxillofacial Surgeons
ABATE Infection Trial	Active Bathing to Eliminate Infection Trial
ACOEM	American College of Occupational and Environmental Medicine
AE	Adverse Events
AEH	America's Essential Hospitals
AHA	American Hospital Association
AHCA	American Health Care Association
AHRQ	Agency for Healthcare Research and Quality
ANA	American Nurses Association
aOR	Adjusted Odds Ratio
AORN	Association of periOperative Registered Nurses
APIC	Association of Professionals of Infection Control and Epidemiology
AR	Antibiotic Resistance
ASA	American Society of Anesthesiologists
ASN	American Society of Nephrology
ASPR	Assistant Secretary for Preparedness and Response
ASTHO	Association of State and Territorial Health Officials
BSI	Bloodstream Infections
CCTI	Cambridge Communications & Training Institute
CDC	Centers for Disease Control and Prevention
CDPH	California Department of Public Health
CEC	Continue Education Credits
CFA	Center for Forecasting and Outbreak Analytics
CHA	Community Health Associates
CMS	Centers for Medicare and Medicaid Services
COI	Conflicts of Interest
CVC	Central Venous Catheter
DHQP	Division of Healthcare Quality Promotion
DMI	Data Modernization Initiative
DNV GL	Det Norske Veritas Germanischer Lloyd Healthcare
ET	Eastern Time
FDA	(United States) Food and Drug Administration
F&M	Franklin & Marshall
GMC	Geisinger Medical Center
HAI	Healthcare-Associated Infection
HCP	Healthcare Personnel
HCW	Healthcare Workers
HHS	(United States Department of) Health and Human Services
HICPAC	Healthcare Infection Control Practices Advisory Committee
HIV	Human Immunodeficiency Virus
HRSA	Health Resources and Services Administration
ICU	Intensive Care Unit
IHS	Indian Health Services
KQ	Key Questions

Acronym	Expansion
LTCF	Long-Term Care Facilities
MSDH	Mississippi State Department of Health
NACCHO	National Association of County and City Health Officials
NCEZID	National Center for Emerging and Zoonotic Infectious Diseases
NHSN	National Healthcare Safety Network
NCSRCC	North Central States Regional Council of Carpenters
NIH	National Institutes of Health
OR	Odds Ratio
OSAP	Organization for Safety, Asepsis and Prevention
PCR	Polymerase Chain Reaction
PHAC	Public Health Agency of Canada
PIDS	Pediatric Infectious Disease Society
PPE	Personal Protective Equipment
PRB	Prevention and Response Branch
PSAN	Patient Safety Action Network
RSV	Respiratory Syncytial Virus
<i>S. Aureus</i>	<i>Staphylococcus Aureus</i>
SCCM	Society for Critical Care Medicine
SHEA	Society for Healthcare Epidemiology of America
SHM	Society of Hospital Medicine
TB	Tuberculosis
TJC	The Joint Commission
US	United States
VA	(Department of) Veterans Affairs
VE	Vaccine Efficacy
WG	Workgroup
WHO	World Health Organization

Attachment #2: Public Comment Submitted in Writing

Kevin Kavanagh, MD, MS, FACS
Board of Directors, Health Watch USA

RE: Public Comment to the CDC Healthcare Infection Control Practices Advisory Committee (HICPAC)

To Whom It May Concern:

During the COVID-19 pandemic there has been inadequate safety precautions for front line workers and the public. Politico recently had a disturbing report of some hospitals removing patients' N95 masks and replacing them with surgical masks.¹ One of the facilities mentioned was the Massachusetts General Hospital, the CDC Director's prior facility. Patients should be allowed to keep their N95 masks or be given a new N95 mask. Surgical masks are unlikely to provide adequate protection for either Omicron or the BA.2 variant. N95 masks have superior filtration and facial fit. The CDC needs to require uniform use of N95 masks in healthcare settings for both patients and staff.

The new guidelines of community risk zones for COVID-19, may not be optimal for the promotion of patient safety. The current guidelines have a threshold of 200 cases per 100,000 population per 7 days² before there is an effect on community recommendations. Current risk zone determinations are largely based upon hospital capacity and not the risk of acquiring SARS-CoV-2. However, they are used to determine implementation of masking advisements and other public health strategies. These guidelines may be problematic.

- First, hospitalizations are a lagging indicator in a pandemic. By the time hospitalizations have increased, the virus is already firmly established in the community and weeks of continued elevations in hospitalizations and deaths will occur.
- Second, in the medium risk category, it is recommended to wear masks around someone at high risk for severe disease. This would include up to 50% of the U.S. adult population. But what are these citizens to do when they need to enter a government building or retail establishment where no one else is wearing a mask? With the BA.1 and BA.2 variants, others also need to wear masks to decrease transmission and viral load as much as possible.
- Third, there is also a disconnect between SARS-CoV-2 community levels and hospital capacity. In Kentucky, we have many counties, which have small critical access hospitals. In these counties, there may be high SARS-CoV-2 levels, but COVID-19 patients are often referred to regional medical centers. Conversely, a regional referral medical center may have many COVID-19 patients but low rates of SARS-CoV-2 infections in the surrounding community.
- Finally, focusing our metrics on hospital capacity, and all but ignoring mild and moderate disease, overlooks the grave risks of Long COVID which have been reported to occur in 10 to 30% of COVID-19 patients. Even in mild cases, Long COVID has been recently linked to both long-term heart disease³ and frequently occurring cognitive deficits.⁴

In summary, when masking is required, I would like to encourage the CDC to require universal use of N95 masks. And in view of the common and disabling effects of long COVID, the CDC should revert to a community risk ranking strategy which is based upon the rate of SARS-CoV-2 infections and has as its goal to decrease the spread of disease.

Thank you for this consideration,
Kevin T. Kavanagh, MD, MS Health Watch USA

References:

1. Levy R. Some hospitals ask patients, visitors to remove N95s, citing CDC. Politico. Mar. 16, 2022. <https://www.politico.com/news/2022/03/16/hospital-mask-cdc-covid-00017556>
2. COVID-19 Community Levels: A measure of the impact of COVID-19 illness on health and healthcare systems. CDC. Mar. 17, 2022. https://www.cdc.gov/coronavirus/2019-ncov/science/community-levels.html#anchor_1646415596059
3. Xie Y, Xu E, Bowe B, Al-Aly Z. Long-term cardiovascular outcomes of COVID-19. Nature Medicine. Feb. 7, 2022. <https://www.nature.com/articles/s41591-022-01689-3>
4. Guo P, et al. COVCOG 2: Cognitive and Memory Deficits in Long COVID: A Second Publication From the COVID and Cognition Study. Frontiers in Aging Neurosciences. March 17, 2022. <https://www.frontiersin.org/articles/10.3389/fnagi.2022.804937/full>