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

August 22, 2024

Atlanta, Georgia

Record of the Proceedings

Contents

Attendees

HICPAC Members
Lisa Baum, MA
Katherine (Kate) Ellingson, PhD
Laura Evans, MD, MSc
Colleen Kraft, MD, MSc
Jennie H. Kwon, DO, MSCI
Michael Lin, MD, MPH
Erica Shenoy, MD, PhD
Connie Steed, MSN, RN, CIC, FAPIC
David Jay Weber, MD, MPH
Sharon Wright, MD, MPH

***Ex Officio* Members**
CPT Scott Cooper, MMSc, PA-C, Centers for Medicare & Medicaid Services (CMS)
Alison Han, MD, MS, National Institutes of Health (NIH)
David Henderson, MD, National Institutes of Health (NIH)
Leyi Lin, MD, Agency for Healthcare Research and Quality (AHRQ)
LCDR Scott Steffen, PhD, CQIA, CQI, U.S. Food and Drug Administration (FDA)

Liaison Representatives
Hilary Babcock, MD, MPH, Society for Healthcare Epidemiology of America (SHEA)
Crystal Bowens, DHA, MSN, RN, LNHA, GERO-BC, PMP, American Health Care Association (AHCA)
Natalie Bruce, Public Health Agency of Canada (PHAC)
Kristina Bryant, MD (American Society of Nephrology (ASN)
Eve Cuny, MS, Organization for Safety, Asepsis and Prevention (OSAP)
Karen DeKay, MSN, RN, CNOR, CIC, Association of periOperative Registered Nurses (AORN)
Erin Epson, MD, Council of State and Territorial Epidemiologists (CSTE)
Chris Lombardozzi, America's Essential Hospitals (AEH)
Anurag Malani, MD, Infectious Disease Society of America (IDSA)
Riza V. Mauricio, PhD, RN, CPNP-PC/AC, FCCM, CCRN, Society of Critical Care Medicine (SCCM)
Lisa McGiffert, Patient Safety Action Network (PSAN)
Karen Ravin, MD, Pediatric Infectious Diseases Society (PIDS)
Robert Sawyer, MD, Surgical Site Infection Society (SIS)
Benjamin Schwartz, MD, National Association of County and City Health Officials (NACCHO)
Justin Smyer, MBA, MPH, Association for Professionals in Infection Control and Epidemiology (APIC)
Tiffany Wiksten, BSN, APN, DNP, The Joint Commission (TJC)

CDC Representatives
Michael Bell, MD
Sydnee Byrd, MPA
Angela Driver, MA
Alexander J. Kallen, MD, MPH
Aaron Kofman, MD
David Kuhar, MD
Michele Neuburger, DDS, MPH
Erin Stone, MPH, MA
Laura Wells, MS

Members of the Public
Seifer Almasy, Member of the Public
Yaneer Bar-Yam, PhD, Professor & President, New England Complex Systems Institute (NECSI); Co-Founder, World Health Network (WHN)
Daniel Bessonov. Member of Public
Roselie Bright, ScD, Retired Federal Epidemiologist
Don Ford, OBT
Linda Green, MD, Retired Physician, Volunteer with Pan End It!
Paul Hennessy
Julie Lam, MFA, MaskTogetherAmerica
Shea and Tommy O'Neil, World Health Network (WHN)
Noah Strauss, Member of the Public
Andrea Taglieri, Disabled Therapist
Kaila Terwitsky, Long Covid Patient; Volunteer, World Health Network (WHN)
Alida Vilatoro, Long COVID Patient
Stephanie Wallace, PhD, MS, Cambridge Communications & Training Institute (CCTI)
Irma Westmoreland, RN, National Nurses United (NNU)

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

Healthcare Infection Control Practices Advisory Committee (HICPAC)

August 22, 2024
Atlanta, Georgia

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 hybrid meeting of the Healthcare Infection Control Practices Advisory Committee (HICPAC) on August 22, 2024.

Thursday, August 22, 2024

Call to Order / Roll Call / Welcome & 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

Alexander J. Kallen, MD, MPH
HICPAC Designated Federal Officer

Ms. Byrd officially called to order the August 22, 2024, HICPAC meeting at 9:11 AM Eastern Time (ET), welcomed everyone, and called the roll. Quorum was established. HICPAC members disclosed the following conflicts of interest (COIs):

- Dr. Colleen Kraft is a scientific advisor for Seres Therapeutics; a consultant for Rebiotix, Inc.; and will participate on a scientific advisory board for Adventa Bioscience.
- Ms. Connie Steed is a consultant for Global Life Technologies that includes education.
- 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.

Ms. Byrd indicated that public comment was scheduled following the presentations. She explained 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 (Q&A) session.

Dr. Kallen welcomed everyone to the August 22, 2024 HICPAC meeting and introduced the following new members and liaisons:

Incoming Members

- Ms. Lisa Baum has been an Occupational Health and Safety Specialist for 30 years and has worked as the Lead Occupational Health and Safety Representative for the New York State Nurses Association (NYSNA) for over 10 years. She is a Certified Safety Professional and a Certified Safe Patient Handling Associate. Her specialties include infection control, ergonomics, workplace violence prevention, chemical and radiation exposures, and other hazards related to the healthcare workplace. She has worked on the NYS Governor's Safe Patient Handling Work Group and is Chair of the New York State Zero-Lift Task Force. Ms. Baum has been closely involved in healthcare facilities and local, state, and national government agencies related to the H1N1 influenza, Ebola, and COVID-19 crises, and has advised numerous healthcare professionals (HCP) on issues related to tuberculosis (TB) Mpox, and other occupational exposures.

- Dr. Katherine (Kate) Ellingson has a BS in Psychobiology from the University of California Los Angeles (UCLA) and a PhD in Epidemiology and Public Health from Yale University. In 2006, she joined the Epidemic Intelligence Service (EIS) at CDC where she served in the DHQP. Following EIS, Dr. Ellingson remained at DHQP for 5 additional years as a Health Scientist in the Prevention and Response Branch (PRB). In 2013, she moved to Oregon and worked as a Communicable Disease Epidemiologist in the Healthcare-Associated Infections (HAI) Program at the Oregon Health Authority (OHA) and consulted for the Oregon Patient Safety Commission (OPSC) and CDC's Blood, Organ, and Other Tissue Safety (BOOTS) Office. In 2017, Dr. Ellingson joined the Department of Epidemiology and Biostatistics at the University of Arizona where she currently works as an Associate Professor of Epidemiology. She has an active research laboratory focused on the transmission and prevention of infectious pathogens in healthcare, workplace, and community settings. She has studied a range of high priority topics, including antibiotic resistance and antibiotic stewardship, COVID-19 in frontline workers, infection prevention in resource-limited settings, and farmworker health. In addition to regular consulting for state and local health authorities, Dr. Ellingson mentors students and teaches courses in infection prevention in healthcare, infectious disease epidemiology, One Health, and border health. In 2023, she started the Infection Prevention and Control Internship Program (IPCIP) at the University of Arizona to train the next generation of Infection Preventionist (IP) and Healthcare Epidemiologists in classroom and field settings.

- Dr. Laura Evans is a Professor of Medicine at the University of Washington and the Medical Director of Critical Care at the University of Washington Medical Center. Her interests focus on sepsis; preparedness for high consequence infectious diseases; guideline development and implementation; and patient safety and quality improvement. Dr. Evans earned her Medical Degree (MD) at the University of Michigan and did her Residency in Internal Medicine at Columbia University. She completed pulmonary and critical care medicine fellowship training and earned her Master of Science in Epidemiology at the University of Washington. She then joined the faculty of New York University (NYU) and Bellevue Hospital in 2006. After 14 years in New York City (NYC), she returned to Seattle in 2019. She joined the Steering Committee of the Surviving Sepsis Campaign (SSC) in 2012 and was Co-Chair of the past 2 revisions of the SSC Campaign Adult Sepsis Guideline and the COVID Management Guidelines Co-Chair. She also served as the Critical Care Team Lead for the NIH COVID Management Guideline. She is current Chair of the American Board of Internal Medicine's (ABIM) Critical Care Medicine Specialty Board and ABIM Council.

- Ms. Connie Steed has worked in the field of infection prevention and control for over 40 years. Her experience spans the continuum of care, including academic and community acute care hospitals, long-term care, and ambulatory care. She most recently served as the Corporate Director of Infection Prevention at Prisma Health in South Carolina from which she retired. Ms. Steed is currently a consultant specializing in infection prevention and control. She is a Fellow of the APIC and has served this organization in multiple capacities, including President, and was the recipient of the 2018 APIC President's Distinguished Service Award and the Carol DeMille Achievement Award in 2024. She has published in the field and has presented nationally and internationally. Ms. Steed received both her Bachelor's Degree in Nursing and Master of Science Degree in Nursing from Clemson University. She has been Board Certified in infection prevention and control since 1985 and she is a Certified Change Agent.

Incoming Liaisons

- Dr. Anurag Malani, IDSA Liaison, is the Medical Director of Hospital Epidemiology, Antimicrobial Stewardship, and Special Pathogens Programs at Trinity Health St. Joseph Mercy in Ann Arbor, Michigan. He is a national expert on topics related to antimicrobial stewardship and infection prevention and how to translate best practices into improving clinical outcomes. He has been a clinical and health systems leader and infectious disease expert surrounding antimicrobial stewardship, infection prevention, and many aspects of COVID-19 response and management locally, regionally, and across the 93 hospitals of the Trinity Health System. His clinical practice relates to general infectious diseases, and he is actively involved in the teaching of medical students, residents, and fellows in infectious diseases. He currently serves as an Adjunct Clinical Professor in the Division of Infectious diseases at the University of Michigan and as an Adjunct Clinical Professor in the Department of Epidemiology at the University of Michigan School of Public Health. Dr. Malani is currently serving as the President of the Michigan Infectious Disease Society (MIDS) and as a Physician Consultant to the Michigan Department of Health and Human Services (MDHHS) for Antimicrobial Stewardship, Antimicrobial Resistance, and Healthcare-Associated infections.

- Mr. Justin Smyer, APIC Liaison, is a Certified Infection Preventionist and Enterprise Director of the Department of Clinical Epidemiology and High-Level Disinfection Team at the Ohio State University Wexner Medical Center. He is a Fellow of the APIC and has been in infection prevention since 2011, working in acute care settings in a variety of acute care medical centers and a variety of settings including community rehabilitation, psychiatric, and oncology hospitals. He also served on the Nominating Committee as the Chairman for the National Comprehensive Cancer Center Infection Prevention Group. He currently serves on the APIC Board of Directors as an instructor. He is a chapter author for the APIC *Infection Preventionist's Guide to the Lab* and *APIC Text of Infection Control and Epidemiology, 4th Edition*. Mr. Smyer has presented at a variety of local, state, and national conferences on topics including environmental infection prevention, electronic hand-hygiene monitoring, and emerging pathogens. He is also a Certified Medical Laboratory Scientist with 6 years of experience working in clinical microbiology. In addition, he is a graduate of the Ohio State University (OSU) College of Public Health's Master of Public Health Program and the Fisher College of Business Master of Business Administration program.

Division of Healthcare Quality Promotion (DHQP) Update

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

Dr. Bell welcomed everyone and provided a brief DHQP update. DHQP continues to focus heavily on the data needed to improve patient care and outcomes. The division is very excited about the process of supporting and growing the National Healthcare Safety Network (NHSN). In terms of the growth in this area, the division is encouraged to have sepsis outcomes and process measures included to help facilities ensure that they are doing all that they can to prevent sepsis. Regarding outcomes, DHQP is continuing to focus on the upcoming respiratory seasons. Similarly to sepsis, the division is engaged with the agency to ensure that they have the ability to capture information about respiratory virus season across the spectrum of healthcare, which includes acute care and nursing homes. This is tied to the important ongoing tracking of vaccine uptake amongst HCP, residents, and patients. Regarding vaccines, DHQP is standing by for a multitude of vaccine-related safety activities. They manager the Vaccine Adverse Event Reporting System (VAERS); V-safe the active engagement process through text messages for people who have received vaccine; and the Vaccine Safety Datalink (VSD), which is a Rapid Cycle Analysis (RCA) process that uses electronic health records (EHRs) and health systems to confirm and evaluate potential signals of adverse events (AEs) related to vaccines. All of this is closely tied to the upcoming respiratory infection season and vaccine receipt, and also is tied to the potential utilization of H5N1 vaccine in the future if that becomes deployed. Mpox continues to spread in Central Africa. There is always the possibility of importation of the new Clade 1, which differs from Clade 2 that circulated a few years ago. The JYNNEOS vaccine remains available. If more people are recommended to receive JYNNEOS vaccine, DHQP will cover the related vaccine safety needs. There are multiple areas for which the DHQP continues to maintain activities despite recent revisions and loss of budget. The goal is to maintain activities such that when financial situations change, it will be possible to resume and push forward again. While there is nothing DHQP can do to control this, they do their best to navigate it.

Isolation Precautions Guideline Workgroup (WG) Update

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

Dr. Lin noted that this brief update would be for information only, with a plan to discuss the draft guideline during the in-person HICPAC meeting in November 2024.

Dr. Wright reminded everyone that the findings and conclusions being shared during this session were draft, had not been formally disseminated by the CDC, and should not be construed to represent any agency determination or policy.

Given that there are some new HICPAC members, she and Dr. Lin thought it would be beneficial to provide a brief reminder of the goal of the creation of the update to the *2007 Isolation Precautions Guideline*, which is to replace the content or find a place for content that is felt no longer to fit well in the guideline. Given that the current document is extremely long, the idea is to make the guideline clearer with more concise language and formatting to make it more

usable by frontline HCP, healthcare leaders, and facilities. The updated guideline will address infection prevention strategies that frontline HCP may implement at the point-of-care (POC). Any information that is felt not to fit in the updated guideline will be moved to other appropriate guidelines and updated where needed. The updated guideline is intended to be applicable to all healthcare settings, not just acute care hospitals.

In terms of the outline structure, the *2007 Isolation Precautions Guideline* contained the following elements:

- Part I: Scientific Data
- Part II: Fundamental Elements
- Part III: Precautions
- Part IV: Recommendations
- Appendix A

The 2025 update will include Part 1 that will combine Parts I-IV from the 2007 document and will be pathogen-agnostic (i.e., describes approaches for Transmission-Based Precautions that are not specific to any particular pathogen), while Part 2 (to be updated in the future) will be an update to what is currently in 2007 Appendix A and will be pathogen-specific guidance. Once Part 1 is finished, Part 2 will be updated.

Since the November 2023 HICPAC meeting, 7 new WG members have been added who represent additional or expanded areas of expertise in Infection Prevention, Healthcare Epidemiology, Employee Occupational Health, Aerosol Science, Industrial Hygiene, and Long-Term Care/Post-Acute Care. The WG has a total of 17 members. There have been 14 meetings since the new members were added on February 29, 2024. External experts from Occupational Safety and Health Administration (OSHA) and National Institute for Occupational Safety and Health (NIOSH) have always been available and have been invited to specific meetings to help answer questions that arose during group discussions. As Dr. Lin mentioned, the goal is to present the WG's progress during the November 2024 HICPAC meeting.

Recommendation Categorization and Articulation Framework for CDC's Infection Control Guidelines

Erin Stone, MPH, MS
Lead, Office of Guidelines and Evidence Reviews
Division of Healthcare Quality Promotion
National Center for Emerging and Zoonotic Infectious Diseases
Centers for Disease Control and Prevention

Ms. Stone presented on the draft update to the DHQP recommendation categorization framework for CDC's infection control guidelines, first noting that the findings and conclusions she would be presenting were draft and had not been formally disseminated by the CDC and should not be construed to represent any agency determination or policy.

Beginning with an overview of the historical context for the current recommendation categorization framework, she provided examples of the earliest infection and prevention control guidelines from CDC including:

- 1970, 1975: Isolation Techniques for Use in Hospitals

- 1981: Urinary Tract Infections
- 1981: Environmental Control
- 1981: Intravascular Infections
- 1982: Surgical Wound Infections
- 1982: Nosocomial Pneumonia
- 1983: Isolation Precautions
- 1983: Infection Control for Hospital Personnel
- 1985: Handwashing and Hospital Environmental Control
- 1985: Surgical Wound
- 1988: Surveillance Definitions for Nosocomial Infections

These topics are similar to current guideline topics because healthcare facilities face much the same infection types and infection prevention and control challenges, such as how to keep their environments clean. For the purposes of this presentation, Ms. Stone referred to this era of guideline development as pre-1991. These guidelines were developed by CDC with the review and input of select external subject matter experts (SMEs). These early guidelines did not provide a summary of recommendations as CDC has now, but rather recommendations were written into the informative text. Because of this narrative format, there were no recommendation categories. In addition, there were no citations or references supporting these texts.

It is important to note that 1991 is the year that HICPAC was chartered and begun. One of HICPAC's chartered scope of activities has always been to provide advice and guidance on the development of CDC's infection control guidelines and recommendations. That year marked the beginning of a different era of guideline development that came with a change in methods. Methods are the transparent and reproducible process by which research is conducted, and by which guidelines are developed.

Before delving into the changes that arose with HICPAC, Ms. Stone shared the list of current guideline documents, which, again, is very similar to the list from the 1970s and 1980s:

- 2002 Hand Hygiene (Standard Precautions, 2007)
- 2003 Environmental Infection Control
- 2003 Pneumonia
- 2006 Multidrug-Resistant Organisms
- 2008 Disinfection and Sterilization
- 2009 Catheter-associated Urinary Tract Infections
- 2011 Intravascular Catheter-Related Infections
- 2011 Norovirus Gastroenteritis Outbreaks in Healthcare Settings
- 2017 Guideline for Prevention of Surgical Site Infection
- 2020-2022 Prevention of Infections in Neonatal Intensive Care Units
- 2019 - 2025 Infection Control in Healthcare Personnel (in Progress–Evidence Informed update of 1998 Guideline)
- 2025 Isolation Precautions (in Progress–Evidence Informed update of 2007)

In addition to facing the same infection prevention and control strategies today, healthcare facilities face the addition of new threats, such as antimicrobial resistance. Across these guidelines, CDC is responsible for maintaining approximately 2,000 recommendations encompassing at least 9 major topics, numerous pathogens, and multiple settings. This large

scope underpinned the framing for this presentation. Some of these current guidelines were developed using the late 1990s early methods framework, referred to as the "Early DHQP and HICPAC Recommendation Categories" in this presentation, which were implemented between 1991 and approximately 2009.

In the Early DHQP and HICPAC Recommendation Categories,[1] there were 3 types of strong recommendations (IA, IB, and IC). These were strong recommendations with very similar implications. The difference was the type of evidence supporting the recommendations. Category IA recommendations for implementation were strongly supported by well-designed experimental, clinical, or epidemiological studies. Category IB recommendations for implementation were supported by some experimental, clinical, or epidemiological studies. Category 1C was intended for recommendations that were required by state or federal regulations. Category II was a conditional/weak recommendation that was suggested for implementation. This was supported by suggestive clinical or epidemiological studies or theoretical rationale. The no recommendation category was utilized for an unresolved issue for which there was insufficient evidence or no consensus on effectiveness. While the roots of evidence-based medicine began far earlier, what is currently thought of as evidence-based medicine or evidence-based clinical practice is attributed to starting in Canada in the 1980s and 1990s. Evidence-based medicine is the integration of the experience of the clinician, the values of the patient, and the best available scientific information to guide decision-making. This thinking was reflected in the way support for these recommendation categories was defined, as it describes the type of evidence. This recommendation categorization scheme is still in use in guidelines developed across CDC.

In terms of the guidelines developed using the Grading of Recommendations, Assessment, Development and Evaluation (GRADE) method. The GRADE methodology is a transparent way of evaluating the body of evidence or the way that relevant studies and their results are assessed as a whole and the level of confidence in those data. GRADE was developed by a group at McMaster University in Canada. These methods came with a different way of thinking and talking about the evidence and, thus, a different way of developing guidelines. This included a uniform and scientific approach to finding the evidence. This change naturally came with some changes to the recommendation definitions.[2] These definitions were used in these 4 guidelines:

- 2009 Catheter-associated Urinary Tract Infections
- 2011 Intravascular Catheter-Related Infections
- 2011 Norovirus Gastroenteritis Outbreaks in Healthcare Settings
- 2017 Guideline for Prevention of Surgical Site Infection

These recommendation categories were used from approximately 2009 to 2017. This scheme was not developed by HICPAC but rather by a GRADE methodologist at the University of Pennsylvania.[3] There is still the complexity of the 3 different types of strong recommendations, conditional/weak recommendations, and no recommendations. The implications are the same, but the way the evidence support is discussed has evolved to take into account the level of confidence in the evidence rather than just the types of studies that make up the evidence. The methods paper specifies that these recommendations will be supported by a systematic review of the literature, which is now taking the scientific approach to collecting the data from articles published in scientific journals in much the same way scientists would collect data from study

[1] https://www.cdc.gov/infection-control/hcp/guidance/index.html
[2] https://www.ajicjournal.org/article/S0196-6553(09)00953-5/abstract
[3] Umscheid et. al., 2010; https://doi.org/10.1016/j.ajic.2009.12.005

participants. The language specified for how to write a strong recommendation was described as active and conditional or weak recommendations were described as using passive language. Options were given for how to write these recommendations, but the language was still not very specific.

Most recently, a full guideline and a targeted guideline recommendation update used the HICPAC recommendation scheme[4] developed while Drs. Daniel Diekema and Deborah Yokoe were Co-Chairs:

- 2017 Chlorhexidine-impregnated Dressing Recommendation Update
- 2020-2022 Prevention of Infections in Neonatal Intensive Care Units

This change in scheme simplified the recommendation categories. The different iterations of the Category I recommendations were streamlined into a single category "Recommendation." The implication is that this should be implemented. The support can be any support from strong evidence, moderate or high quality, sometimes low-quality, and sometimes expert opinion. The language is specified as active and there are examples of language. Again, the format can be any format needed. The "Conditional Recommendation" was the new Category II or weak recommendation for which the benefits likely exceed the harms. This is a recommendation for which the impact of the specific intervention is difficult to disentangle from the impact of other simultaneously implemented interventions, or there appears to be benefit based on the available evidence, but for which the balance may change with further research. Multiple examples of what could tie into a conditional recommendation were provided. No recommendation is consistent. An important addition to this recommendation categorization scheme was the recommendation justification framework. This table was adapted from the American Academy of Otolaryngology—Head and Neck Surgery (AAO-HNS) whose guideline development group defined the domains in which expert opinion is transparently involved in the recommendation development process:

Component	Comments
Supporting evidence	X observational studies
Level of Confidence	Moderate confidence in the evidence
Benefits	Benefits from using the intervention
Risks and Harms	Harms from using the intervention
Resource Use	Human, material, and financial resources associated with intervention
Benefit-Harm Assessment	Balance of benefits & harms
Value Judgements	Value judgements made in formulating the recommendation
Intentional Vagueness	Identify where recommendation language was deliberately vague
Exceptions	Identify if there are exceptions to this recommendation

As noted earlier, expert opinion or expert experience is integral to the development of every recommendation. It is often cited as support or rationale for a recommendation. However, this table was a step in transparently describing how the expert opinion is involved in the development of all recommendation. Currently, there are 2 guidelines under development that do not use this scheme:

- 2019 - 2025 Infection Control in Healthcare Personnel (In Progress –Evidence Informed update of 1998 Guideline)
- 2025 Isolation Precautions (In Progress – Evidence Informed update of 2007 Guideline)

[4] https://www.cdc.gov/hicpac/media/pdfs/recommendation-scheme-update 508.pdf?CDC_AAref_Val=https://www.cdc.gov/hicpac/pdf/recommendation-scheme-update-H.pdf

These are both evidence-informed not evidence-based as was intended with the HICPAC scheme. These 2 guideline efforts highlighted challenges with the current recommendation categorization scheme as it is. The language, organizational format, and sentence style is different from recommendation to recommendation within a single guideline and across guideline documents. It is not possible to update each of the 2000 recommendations in a timely manner using evidence-based methods. The current categorization scheme offers no immediate differentiation of recommendations and how they are developed. There also are methodologic challenges, such as citing expert opinion as a rationale when it is the lens through which each recommendation is developed, not the support for the specific recommendation in the evidence-based era. GRADE provides a transparent method by which the expert experience can be captured and included as evidence if it is necessary, and this is more thorough and transparent than citing expert opinion. Thinking about the breadth of experience on any given WG panel or committee, if patient hours were captured as individual case reports, the numbers would be in the thousands per expert. That is a large amount of experience and evidence that can be transparently captured. All of this to say that there is a need for a recommendation category that differentiates the methods used for development.to develop.

There are two planned guideline updates, the 2003 Environmental Infection Control and the 2008 Disinfection and Sterilization Guidelines, which contain numerous recommendations that are likely stable and do not require updating. Consideration must be given to how to assign a category to them that differentiates them from the recommendations developed using evidence-based methods. This differentiation would also increase transparency and serve to build trust in the recommendations. It is important to note that the “Recommendation” and “Conditional Recommendation” categories will continue in the new DHQP guideline recommendation categories. However, the recommendation definitions now tie back to evidence-based definitions. A “Recommendation” is a statement for intervention or practice for which there is confidence that the benefit outweighs the harms or vice versa. While a “Conditional Recommendation is a statement for an intervention or practice for which there is lower confidence that the benefit outweighs the harms. Both of these categories are supported by evidence that is GRADED. The language for a “Recommendation” will be more prescriptive and would start with an action verb, such as “use” or “perform.” Recommendations should be worded so that compliance can easily be measured. A “Conditional Recommendation” will not begin with an action verb, and the language is softer. Action verbs are softened by using words such as “could” or “may” and examples are provided in the presentation.

There are still “Unresolved Issues,” which are topics for which an intervention or practice would result in unclear positive or negative consequences, or an intervention is not deemed necessary for practice. This includes interventions or practices for which there is low or very low confidence in the evidence of benefit or harm. The balance of benefits or harms may be unclear despite the availability of, or confidence in, the evidence. Sometimes, no direct evidence is found to answer the research question. If this is the case and an intervention does not meet the criteria for a good practice statement, it remains an unresolved issue. The language for an “Unresolved Issue” would specify the appropriate key question PI/ECOS (Population, Intervention/ Exposure, Comparator, Outcome, and Setting) elements where applicable. PI/ECOS is a method for developing research questions to guide the collection and evaluation of evidence. Finally, the language would have to specify that the topic remains an unresolved issue, and an example is included.

The Draft DHQP guideline recommendation categories includes the new category of "Good Practice Statement."[5] This is a statement would be formulated for an intervention or practice for which the evidence is either not easily collected or summarized; where clinicians could possibly fail to make the appropriate decision if the recommendation is not made; and after considering all relevant downstream consequences, implementing the recommendation would result in a large net positive consequence. This recommendation category generally not supported by GRADED evidence. These practices are often actions considered routine or accepted clinical practice or standard of care. These can be based on expert experience collected from panel or committee members; an existing recommendation from CDC or partner organizations; or indirect evidence, such as theory (e.g., animal studies); or pharmacokinetic or mechanism of action data, or basic science studies that are not conducted in real-world settings. The recommendation language would be similar to a recommendation in that it would begin with an action verb and be easily understood and implementable. A healthcare personnel example is given that, while it is not perfect, there are nuances in the healthcare personnel guideline that might lend themselves to this example. For that guideline, different types of personnel need to be specified to which each of these recommendations apply. It is important to note that the implications for a "Good Practice Statement" recommendation align with the classic implications for a "Strong Recommendation" that they *should* be implemented and that the "Conditional Recommendation" *may* be implemented. The implications are outlined for the multiple stakeholders (e.g., patients, facilities, clinicians, policy makers) to which these recommendations would apply.[6]

The next steps are to incorporate feedback and draft the publication for the CDC website. This likely will be posted to regulations.gov for a public comment period that will be announced in the *Federal Register*. Public comments will be reviewed and if there are significant changes that result from these comments, these will be presented during a future HICPAC meeting. Then the document would be published on the CDC website. It is important to note that this draft framework is currently implemented in the *Update to the US Public Health Service Guideline for the Management of Occupational Exposures to Human Immunodeficiency Virus and Recommendations for Postexposure Prophylaxis, 2025*.

Discussion Points

HICPAC Members

- This comprehensive presentation provided a better understanding of the history and future of the guideline process, but it would be beneficial to know whether there is an intent to retrospectively update earlier guidelines within the new framework.

- Some of the slides describing the new framework reference clinicians, while some of the recommendations apply more broadly to HCP—not just clinicians.

- Ms. Stone responded that retrospectively updating earlier guidelines within the new framework would be a major undertaking, given that there are 2,000 recommendations. Her understanding is that as recommendations or guidelines are targeted for update, the plan is to do these sequentially concurrent with those updates. She also indicated that she would make the suggested change with regard to clinicians and HCP.

[5] Informed by: Dewidar, et. al., 2023 doi: 10.1136/bmjebm-2022-111962
[6] Adapted from: Table 6.1 Section 6.1 Grade Handbook: 2013 https://gdt.gradepro.org/app/handbook/handbook.html

- Prior schemes that DHQP used for guidelines included permission to develop a strong recommendation based on low certainty of evidence, which seems to have been removed from the new rubric. Therefore, a strong recommendation definitionally has moderate or high certainty of evidence. While that is fairly consistent with GRADE methodology overall, this seems to remove the possibility of even in rare circumstances developing a strong recommendation based on lower certainty of evidence.

- Referring to Slide 17 with the draft recommended categories shown in lime, yellow, and gray, Ms. Stone replied that was a great point and that in this instance, it could – in rare instances –transition to a "Good Practice Statement" because then it would be in the context of expert experience that would take a recommendation beyond the GRADED evidence.

- In terms of the kind of expertise that is included or required for those providing expert opinion, concern was expressed about the amount of experience of the person who is considered to be the expert. The World Health Organization (WHO) recently released a new terminology document that stresses the importance of a wide range of expertise in creating guidance and recommendations. There is some concern about elevating expert opinion and giving it a weight that possible is not warranted.

- Ms. Stone clarified that previously, expert opinion was allowed as the only support for a recommendation. The intent of the draft proposed DHQP guideline is to move away from that. Regarding what constitutes being an expert, there is a very transparent process for developing WGs through HICPAC and with regard to the expertise in HICPAC. Therefore, she would say that HICPAC is the expertise. If there is a decision amongst the committee members that they do not have the relevant expertise necessary, HICPAC itself may form a WG comprised of needed expertise that the committee may not have. Then once formed, if a workgroup determines that it does not have the relevant necessary expertise, the WG can add a new WG member or a temporary consultant who has the relevant necessary expertise as has been done in the past.

- The draft DHQP recommendation framework accomplishes very important elements of guideline recommendations, which is to convey certainty, uncertainty, rationale, and action to the audiences utilizing the guidance. What is proposed makes sense in that context.

- HICPAC asked what the best-case scenario would be in terms of a timeline for fully adopting this new categorization with respect to the guidelines that are actively in development.

- Ms. Stone expressed her hope that based on the context of internal processes, the new framework would be fully adopted by Spring. The public comment period is typically 60 days, with time for clearance around that.

- Dr. Kallen added that no final determinations have been decided about whether this framework, if approved, would be applied retrospectively to guidelines already in development versus what already has been done. The guidelines Dr. Kofman discussed during the last HICPAC meeting will use the new framework moving forward, unless something changes in the feedback process Ms. Stone outlined.

Liaison Representatives

- SIS indicated that the surgical infection community has begun to undertake the process of assessing recommendation for surgical concerns, such as surgical site infection (SSI), and

translating recommendations from multiple societies to make them applicable in low- and middle-income countries. Many recommendations may be supported by evidence but may not be economically applicable to two-thirds or so of the world. Perhaps the preamble to the new framework could mention the need to be flexible in terms of understanding different practices or conditions under which people are working. This effort began in the context of thinking about areas outside of the US, but also could include various resource settings within the US. A specific example is the use of closed-incision negative pressure therapy (ciNPT) on wounds. While there are decent data indicating that this is effective, this intervention can cost several hundred to a thousand dollars. There are areas in the US and other countries where this would not be economically feasible.

- Ms. Stone pointed out that in the recommendation framework that will be used moving forward, there are transparent elements to outline economic considerations for each recommendation. These could outline such a nuance if the committee determines it to be important.

- TJC recognized and emphasized the importance of providing organizations with well-founded guidelines and recommendations based on evidence and when evidence is not available, expert opinion. Moving forward, it would be helpful to understand how these types of recommendations will be tied to implementation and prioritization of different activities and interventions. There sometimes is a struggle within organizations to understand which recommendations are intended to be priorities to implement versus which are additional or optional. While a pretty good job has been done with this in the past, it is something to consider when formulating recommendations.

- Ms. Stone indicated that within the categories, there is prioritization of a “Recommendation” and a “Good Practice Statement” over a “Conditional Recommendation.” Communications and implementation guidance are developed sequentially after each effort.

Dental Unit Waterlines Guideline Workgroup Update

David Weber, MD, MPH
Dental Unit Waterlines WG, Chair

Dr. Weber provided an update on behalf of the Dental Unit Waterlines Guideline WG, first reminding everyone that the findings and conclusions presented during this session were draft, had not been formally disseminated by the CDC, and should not be construed to represent any agency determination or policy.

Regarding the goals and charge of the Dental Unit Waterlines Guideline WG to update the *Guidelines for Infection Control in Dental Health-Care Settings — 2003, Section on Dental Unit Waterlines, Biofilm and Water Quality*, the goal is to provide updated information on the maintenance and monitoring of dental unit waterlines (DUWL), biofilm, and water quality. The charge is for the WG to focus on DUWL-specific issues for infection control in dental healthcare settings. Where information is out of date, the WG will make updates using evidence-based methods where evidence is available. This is a well-focused WG with a specific question for a guideline that has not been updated in over 20 years.

In terms of background, the existing 2003 recommendations[7] are to:

[7] https://stacks.cdc.gov/view/cdc/6743; https://www.cdc.gov/dental-infection-control/hcp/summary/index.html

1. Use water that meets US Environmental Protection Agency (EPA) regulatory standards for drinking water (i.e., <500 CFU/mL of heterotrophic water bacteria) for routine dental treatment output water.
2. Consult with the dental unit manufacturer for appropriate methods and equipment to maintain the recommended quality of dental water.
3. Follow recommendations for monitoring water quality provided by the manufacturer of the unit or waterline treatment product.
4. Discharge water and air for a minimum of 20 to 30 seconds after each patient, from any device connected to the dental water system that enters the patient's mouth (e.g., handpieces, ultrasonic scalers, and air/water syringes).
5. Consult with the dental unit manufacturer on the need for periodic maintenance of antiretraction mechanisms.
6. Use sterile saline or sterile water as a coolant or irrigant when performing surgical procedures.

Since 2003, multiple published studies have documented disease transmissions from DUWL. In October 2022, CDC released a Health Advisory[8] describing 3 outbreaks of nontuberculous *Mycobacteria* (NTM) in children who received pulpotomy procedures in pediatric dental clinics. A pulpotomy is the removal of the coronal portion of a vital pulp as a means of preserving the vitality of the remaining radicular portion.[9] There was evidence of high levels of bacteria in the DUWL in these cases and a lack of compliance in maintaining and monitoring DUWL per the 2003 recommendations.

There are special considerations for pulpotomy procedures. Pediatric pulpotomy procedures expose the pulp chamber of a tooth, which contains the nerve and blood supply. Exposing the pulp chamber can provide a route of infection to surrounding tissues. The American Academy of Pediatric Dentistry (AAPD) states,[10] "When a pulp exposure occurs and pulp therapy is indicated, irrigants for pulpal therapy should not come from dental unit waterlines." AAPD also recommends that, "A single use disposable syringe should be used to dispense irrigants for pulpal therapy." Outbreaks occurred in practices that were using water from DUWL to irrigate teeth during pulpotomies.

Potential issues might require further evaluation in current CDC guidelines. Manufacturer's instructions for use (IFU) for maintenance of equipment and monitoring of water quality can be confusing or incomplete. There are no recommendations for frequency of monitoring water quality, follow-up steps if monitoring results exceed recommended limit, or use of water during pulpal therapy procedures specifically. The WG's efforts will focus on streamlining recommendations to reduce redundancy, increase clarity, and address gaps.

The Dental Unit Waterline WH began meeting in July 2023. WG members were tasked with reviewing the 2003 guidelines and providing feedback on format and currency, gaps and missing topics that should be included, topics that should not be included, areas of future research, and types of data to review for the update. The draft proposed sections for the guideline update include the following:

1. Establishment and selection of equipment
2. Selection for water use in DUWL/water quality

[8] https://emergency.cdc.gov/han/2022/han00478.asp
[9] https://www.aae.org/specialty/clinical-resources/glossary-endodontic-terms/
[10] https://www.aapd.org/globalassets/media/policies_guidelines/bp_pulptherapy.pdf

3. DUWL maintenance
4. DUWL monitoring and follow-up
5. Use of sterile irrigation
6. Drinking water advisories to align with existing guidelines and local public health regulations
7. Implementation

After the initial scoping of the 2003 guideline, the WG began to identify topics for literature review and develop key questions and CDC conducted an appropriate review of the existing literature, which included the following:

Selection of water/water quality:

- Should the threshold for water quality be updated?
- Should the procedures included in “routine dental treatment” be revisited?

Monitoring dental unit water quality:

- Review IFU recommended monitoring frequency.

To provide a status report for the literature review, selection of the water systematic review research questions was:

- Should the threshold for water quality be updated? The current recommendation is to “Use water that meets US Environmental Protection Agency (EPA) regulatory standards for drinking water (i.e., <500 CFU/mL of heterotrophic water bacteria) for routine dental treatment output water.”
  - RQ1a: Is there an association between heterotrophic plate count (retrieved from water systems and sources of water) and infections in dental settings across outbreak and non-outbreak contexts in the United States?
  - RQ1b: Is there an association between heterotrophic plate count and presence or quantity of pathogenic micro-organisms in water retrieved from dental settings in the United States?

The goal is to retrieve and assess evidence from clinical settings and situations to understand the risk of infection. The WG is currently drafting recommendations. Literature review results and draft recommendations will be presented to the full HICPAC during the November 2024 meeting.

Discussion Points

HICPAC Members

- It would be helpful to have a sense of the regulatory aspect of dental clinics in terms of who, generally speaking, is responsible for enforcing infection prevention recommendations.

- Dr. Weber responded that there are EPA regulations/recommendations for types of water that would meet the drinking water standards and standards to be used in dental clinical. Beyond that, there are guidelines from the American Dental Association (ADA), other professional organizations, and CDC. However, those are guidelines and are not regulatory. As with physicians, dentists fall under regulatory guidelines and are licensed for practice.

Those guidelines and requirements for each state may have their own specific requirements for the practice of dentistry and use of equipment. The WG has not tried to review all of the state- and territory-specific guidelines to ascertain what is required.

Liaison Representatives

- PSAN asked how many states were involved in the outbreaks mentioned and whether the dental boards in the states where the outbreaks occurred responded with any type of action or if there is a way the WG could check on this. Sometimes, state-based boards respond only when a problem is identified.

- Dr. Weber indicated that multiple states were involved in various outbreaks. The WG reviewed the papers and publications, but did not go beyond those to determine what, if any, actions during these time periods were taken by each individual state board.

- Dr. Neuburger added that unfortunately, there is not a lot of infection prevention and control oversight in dental settings, which is challenging. There also are not a lot of data on potential clinics that may be accredited or located in hospitals settings that are typically subject to those accreditations and CMS requirements. The majority of dental practices are private practice settings and are regulated by their state dental practice acts. Years ago, CDC conducted a review of the state dental practice acts to determine which ones specifically mentioned following CDC guidelines for infection control. The findings varied in that some mentioned specific guidelines or specific actions they have to take. CDC plans to update that review of state dental practice acts in the next year under a contract with the new Association for Dental Safety (ADS) organization, formerly known as the Organization for Safety, Asepsis and Prevention (OSAP). The outbreaks were associated with general practice settings. The first outbreak was identified in Georgia in 2015, the second was identified in California in 2016, and the third was in a completely separate dental setting in Georgia. While California has implemented regulatory requirements to change their dental board to address the issue specifically of dental unit water quality, Dr. Neuburger did not believe Georgia had taken regulatory authority yet. The Dental Unit Waterlines Guideline WG includes members who were involved in the California and Georgia outbreak settings and probably were involved with the regulatory changes in California. Other states also have addressed dental unit water quality in their dental practice acts, but they were not involved in the outbreaks.

- NACCHO observed that the presentation mentioned the issue of biofilms but focused primarily on water quality, and inquired about the extent to which biofilms and maintenance of water lines is a key issue versus the question of the bacteria in the water and the water quality.

- Dr. Weber indicated that the data would suggest that biofilms play a key role in infections as opposed to the quality of the water coming in from the municipal water source. That said, there are limited data on how quickly biofilms develop, what physical or chemical agents might be used to remove the biofilms, or the difficulties in cleaning them. There will be discussion about this in the background section of the updated guideline, and the goal of the WG is to develop recommendations that minimize the impact of biofilms.

- Dr. Neuburger added that the 500 CFU limit is traditionally used as an engineering standard to assess how well a facility is doing at controlling biofilms in the water lines. As Dr. Weber explained, it boils down to a biofilm concern. This is due to the dental unit operatory that is

comprised of long narrow-bore tubing, stagnant water flow, and other challenges involved with that type of equipment that leads to rapid biofilm formation if not treated with products to help control biofilm.

Healthcare Personnel Guideline Workgroup Update

Connie Steed, MSN, RN, CIC, FAPIC
Chair, HCP Workgroup

Ms. Steed provided an update on the *Guideline for Infection Control in Healthcare Personnel*, 1998. She noted that the findings and conclusions being presented during this session were draft, had not been formally disseminated by CDC, and should not be construed to represent any agency determination or policy. As a reminder, the original guideline was published in 1998. The goal of the Healthcare Personnel Guideline WG (HCP WG) is to provide updated information on Infection Control in Healthcare Personnel (HCP). The HCP WG was charged with focusing 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.

Regarding the status of this work, **Section 1: Infrastructure and Routine Practices for Occupational Infection Prevention and Control Services** was published in October 2019.[11] The WG is now working its way through the pathogen sections for review, approval, and posting. In terms of **Section 2: Epidemiology and Control of Selected Infections Transmitted Among HCP and Patients,** the decision was made to post infectious diseases as literature reviews and discussions are completed so that they are available more quickly instead of waiting until the WG completes review and discussion of all of them given the volume. In accordance with that decision, Diphtheria, Group A *Streptococcus*, Meningococcal Disease, and Pertussis were published in November 2021 and Rabies was published in November 2022.[12] Measles, Mumps, Rubella, Varicella, and pregnant HCP were published in April 2024.[13]

The Cytomegalovirus (CMV) and Parvovirus B19 sections completed initial CDC clearance and the *Federal Register* 60-day public comment period and received no related comments. A source control definition that will be added to the terminology appendix of this guideline also completed initial CDC clearance and the 60-day public comment period as a part of the CMV and Parvovirus B19 package. The Conjunctivitis section was approved by HICPAC during the June 2023 public meeting and is due to enter initial CDC clearance pending an update of the literature review. *S. aureus* is on hold pending completion of the literature review. The WG has been working diligently on the Viral Respiratory Infections section, which is still in progress. The group has begun identifying the section scope determination for the Gastrointestinal infections section. “On Deck” after that are Scabies/Pediculosis, Hepatitis A, and Herpes.

As noted, HICPAC voted during the June 2023 public meeting to approve the CMV section for submission to CDC clearance. The CMV section completed initial CDC clearance and was submitted to Regulations.gov for a 60-day public comment period during which no related comments were received. No changes have been proposed or made since HICPAC last voted on this draft guideline, so a final vote was planned during this meeting.

[11] https://www.cdc.gov/infectioncontrol/guidelines/healthcare-personnel/infrastructure.html
[12] https://www.cdc.gov/infectioncontrol/guidelines/healthcare-personnel/selected-infections/index.html
[13] https://www.cdc.gov/infection-control/hcp/healthcare-personnel-epidemiology-control/index.html

As a reminder, the 1998 CMV recommendations were as follows:

a) Do not restrict personnel from work who contract CMV-related illnesses.
b) Ensure that pregnant personnel are aware of the risks associated with CMV infection and infection control procedures to prevent transmission when working with high-risk patient groups.
c) Do not routinely use workplace reassignment as a method to reduce CMV exposures among seronegative pregnant personnel.

The rationale for revisiting the CMV section is that since 1998, a robust body of knowledge has become available within which to consider the potential for transmission between patients and HCP. The review did not identify any findings that would suggest that there need to be any work restrictions for HCP. However, the WG did some extensive rewording to the recommendations to make them clearer, which resulted in the following proposed draft updated recommendations:

1. *Work restrictions are not necessary for healthcare personnel who have an exposure to cytomegalovirus.*
2. *Work restrictions are not necessary for healthcare personnel with active cytomegalovirus infection.*

For recommendations about healthcare personnel (HCP) who are pregnant or intending to become pregnant and exposure to cytomegalovirus, please see the Pregnant HCP section.

If HICPAC approves the CMV section, this section will be submitted for final CDC clearance and subsequent posting to the CDC Infection Control guideline website.

Discussion Points

HICPAC Members

- A HICPAC member noted that the draft recommendations for CMV refers to the pregnant HCP section and inquired as to whether the committee would be reviewing that section.

- Ms. Steed responded that her understanding was that the pregnant HCP section had already been through all of the appropriate processes, approval, and has been posted online.

- Regarding the special populations language referring to pregnant HCP, a HICPAC member asked whether it would be possible to reiterate that routine exclusion is not necessary when recommended infection and transmission controls are in place as opposed to not mentioning that.

- Ms. Steed responded that there is no recommendation to exclude pregnant HCP from work.

- Dr. Kuhar, DFO for this WG, added that this recommendation is finalized and already posted online as Ms. Steed noted. None of the recommendations in this guideline are framed for any situation based upon whether recommended infection control precautions are in place. It is an assumption of all of the recommendations through the guideline that those are in place already. Therefore, it was not specifically called out in the CMV recommendation.

- A HICPAC member observed that this section includes viral respiratory infections and inquired as to whether to there would be discussions on bacterial respiratory infections or if that already has occurred.

- Ms. Steed indicated that *S. aureus* is on-deck.

- Dr. Kuhar added that there is a Viral Respiratory Infections section that is going to address a few viral respiratory infections, such as SARS-CoV-2 and influenza. For bacterial respiratory infections, there is not a formal Bacterial Respiratory Infections section, but there are a few that are addressed individually. For instance, pertussis is addressed in a section that already has been posted online. As Ms. Steed said, one manifestation of *S. aureus* infection is pneumonia. The *S. aureus* section is still in the works and pending. A few individual pathogens are being addressed separately, which is a result of how the public guideline design came together during scoping discussions.

- A HICPAC member asked whether there is a plan to review and update the TB guidance within this process.

- Dr. Kallen responded that the TB section falls outside of HICPAC with CDC's Division of Tuberculosis Elimination (DBTE). DTBE has been asked by its federal advisory committee, the Advisory Council for the Elimination of Tuberculosis (ACET), to review their healthcare guidance in light of an update to the TB Controller's community guidance for HCP. That process has recently begun and what happened the last time and likely will again is that once that process is completed, that guidance will come to HICPAC following initial summary for review.

- Dr. Kuhar added that deferring to the DTBE ACET was discussed with the WG and at the time, the feeling was that it was unlikely any additional updates would need to be done for TB. In terms of what is left to do, the "on-deck" sections include Scabies/Pediculosis, Hepatitis A, and Herpes. There are no additional sections planned at this point. While the WG also discussed bloodborne pathogens, those are updated in 3 separate guidelines, 2 of which are current and the other on the management of exposures to HIV, which is being updated in a separate process via the US Public Health Services (USPHS).

- Referring to Slide 12, a HICPAC member requested clarity on how to interpret the currently approved statement related to not routinely excluding HCP and the list of pathogens "(e.g., Cytomegalovirus (CMV), Human Immunodeficiency Virus (HIV), viral hepatitis, herpes simplex, parvovirus, rubella, varicella)" in terms of whether HICPAC is supposed to consider that as an exclusive list, or if these are just examples and this is broadly applied.

- Dr. Kuhar reiterated that this recommendation is finalized and already posted online, and that the list is intended to be an example rather than a comprehensive list.

Ex Officio and Liaison Representatives

- No additional comments were provided from *Ex Officio* and Liaison Representatives.

Votes

All votes were taken following the Public Comment session but have been included with their respective session for ease of reading.

Vote: Cytomegalovirus DRAFT Recommendation

1. Work restrictions are not necessary for healthcare personnel who have an exposure to cytomegalovirus.
2. Work restrictions are not necessary for healthcare personnel with active cytomegalovirus infection.

For recommendations about healthcare personnel (HCP) who are pregnant or intending to become pregnant and exposure to cytomegalovirus, please see the Pregnant HCP section.

HICPAC voted unanimously to approve the language as proposed above for CMV. Disposition of the vote was as follows:

- **8 Approved: Evans, Kraft, Kwon, Lin, Shenoy, Steed, Weber, Wright**
- **0 Opposed: N/A**
- **2 Abstained: Baum, Ellingson**

Viral Hemorrhagic Fever: Appendix A Update

Aaron Kofman, MD
Prevention and Response Branch
Division of Healthcare Quality Promotion
National Center for Emerging and Zoonotic Infectious Diseases
Centers for Disease Control and Prevention

Dr. Kofman provided the rationale for and review of updated patient placement and personal protective equipment (PPE) recommendations for select viral hemorrhagic fevers (Marburg, Crimean-Congo Hemorrhagic Fever [CCHF], Lassa, South American Hemorrhagic Fevers [SAHF]), Andes, and Nipah to update the relevant sections of Appendix A.

The rationale for the update was inspired by a number of recent examples over the last several years of the risk that exists in the US for non-Ebola viral hemorrhagic fever (VHF) pathogen importation. There were concurrent Marburg outbreaks in Equatorial Guinea and Tanzania in 2023. Lassa fever and CCHF are often possible diagnoses for returning ill travelers returning to the US from endemic regions where those viruses are found. In 2023, there were 2 US patients for whom Nipah virus was on the differential diagnosis at some point during their care. In 2018, there was a single imported Andes virus case, which is a type of hantavirus that has demonstrated person-to-person transmission.

With all of these examples in recent years, CDC felt compelled to better layout and highlight the agency's recommendations for PPE and patient placement. During the June 2023 HICPAC meeting, Dr. Kofman presented proposed updates to PPE and patient placement recommendations for Lassa, CCHF, Marburg, and South American Hemorrhagic Fever viruses, which HICPAC approved. That recommendation was for the same PPE and patient placement recommendations as for Ebola.

In November 2023, proposed updates to PPE and patient placement recommendations for Nipah and Andes virus were approved by HICPAC as follows:

Recommendation:

- Andes virus and Nipah virus patient placement: Airborne Infection Isolation Room (AIIR)
- Andes virus PPE: gown, gloves, eye protection, N95 respirator or higher
- Nipah virus PPE:
  - *If suspect Nipah case and clinically stable: gown, gloves, eye protection, N95 respirator or higher*
  - *If suspect Nipah case and clinically unstable (e.g., hemodynamic instability, vomiting) OR confirmed Nipah case regardless of clinical stability: use PPE according to clinically unstable VHF guidance*

The proposed updates were submitted to the *Federal Register* for 60 days during February-April 2024. Only 1 comment was received, which was not related to the subject matter. Therefore, no additional changes were made to these recommendations.

Discussion Points

HICPAC Members

- An observation was made that the SAHF table includes a column on modes of person-to-person transmission that lists outbreaks rather than modes of transmission, except for Chapare. This raised a question regarding whether the modes of transmission are not known and why outbreaks are listed instead.

- Dr. Kofman indicated that this was largely due to incomplete information in the literature for specific modes of transmission for many of the SAHF pathogens. Therefore, the most relevant information available was summarized in the table. The next column in that table includes some data on SAHF pathogen detection in body fluids via different laboratory diagnostic methods, which may be related to transmission but is not necessarily proof of transmission.

- An inquiry was posed regarding whether there are plans to update the term “droplet/aerosol” since the WHO developed new terminology guidance that recommends not differentiating between droplet and aerosol.

- Dr. Lin indicated that this is under active discussion by the Isolation Precautions WG and will be brought before the full membership for discussion during the next HICPAC meeting.

Ex Officios and Liaison Representatives

- No comments, questions, or suggestions were provided.

Votes

Vote on Proposed Update for Marburg

- **Proposal:** Change recommended PPE and placement for Marburg to be the same as recommended for Ebola
- **If change is accepted:**
  - Appendix A will be updated to refer to Ebola guidance

- Ebola guidance will also be updated to include other pathogens to which it applies in addition to Ebola

Vote on Proposed Update for CCHF

- **Proposal:** Change recommended PPE and placement for CCHF to be same as recommended for Ebola
- **If change is accepted:**
  - Appendix A will be updated to refer to Ebola guidance
  - Ebola guidance will also be updated to include other pathogens to which it applies in addition to Ebola

Vote on Proposed Update for Lassa

- **Proposal:** Change recommended PPE and placement for Lassa to be the same as recommended for Ebola
- **If change is accepted:**
  - Appendix A will be updated to refer to Ebola guidance
  - Ebola guidance will also be updated to include other pathogens to which it applies in addition to Ebola

Vote on Proposed Update for South American Hemorrhagic Fevers

- **Proposal:** Change recommended PPE and placement for South American Hemorrhagic Fevers to be same as recommended for Ebola
- **If change is accepted:**
  - Appendix A will be updated to refer to Ebola guidance
  - Ebola guidance will also be updated to include other pathogens to which it applies in addition to Ebola

Vote on Proposed Update for Andes and Nipah Viruses

Andes Virus Patient Placement and PPE

- **Patient Placement:** AIIR
- **PPE:** gown, gloves, eye protection, N95 respirator or higher

Nipah Virus Patient Placement and PPE

- **Patient Placement:** AIIR
- **PPE:**
  - *If suspect Nipah case and clinically stable*: gown, gloves, eye protection, N95 respirator or higher
  - *If suspect Nipah case and clinically unstable* (e.g., hemodynamic instability, vomiting) OR confirmed Nipah case regardless of clinical stability: use PPE according to clinically unstable VHF guidance

HICPAC voted unanimously to approve the language as proposed above for Marburg, CCHF, Lassa, SAHF, Andes virus, and Nipah virus. Disposition of the vote was as follows:

- **8 Approved: Evans, Kraft, Kwon, Lin, Shenoy, Steed, Weber, Wright**
- **0 Opposed: N/A**
- **2 Abstained: Baum, Ellingson**

Public Comment

Overview

Angela Driver, MA
Zoom Coordinator
Centers for Disease Control and Prevention

Ms. Driver explained that when a speaker's name was called, their microphone would be unmuted. She requested that speakers clearly state their full name and organization for the record before providing comment and indicated that a countdown timer would be displayed to specify how much time was remaining. She reiterated that the public comment period was not a question-and-answer session and that the use of disrespectful language or threats would lead to the immediate end of the speaker's public comment.

Public Comment

Shea O'Neil
Volunteer, World Health Network

Hi. I'm Shea O-Neil. World Health Network volunteer. Infection control policies urgently need to be updated to incorporate what we have learned about COVID and long COVID. The WHO and CDC have now done their jobs as far as showing clearly that COVID spreads through the air past 6 feet, that it lingers and accumulates inside, and remains infectious for hours. They have conveyed that it presents a year-long threat to the public, with surges that are the results of actions like increased indoor gatherings without masking, and that it is not just seasonal like the flu, but always present and epidemic. They've stated that it is predominantly spread by aerosols and that masks offer protection, with respirator masks like N95s offering superior protection to surgical masks. NIOSH has done their job by testing and certifying respirator masks that filter out aerosols, and manufacturers have made them plentiful and in varieties that offer extra breathability, clear windows, and are MRI-safe. I have been doing volunteer advocacy for years now as a disabled high-risk person. I've done my job. I've stayed in from the growing risk and advocated for myself and others the best I can, but I still do not have safe access to healthcare and I should. Researchers have shown that hospital-acquired infections account for 40% to 70% of infected healthcare workers and 10% to 40% of infected hospitalized patients. Each reinfection is associated with significantly worse health outcomes and can lead a person into a vulnerable, more at-risk status. We don't have vaccines or sustained immunity that can prevent infection or stop transmission, nor medications that can prevent or cure long COVID and it is affecting millions and costing billions. However, we can reduce these numbers, slow down viral evolutions, and make vaccines last longer by wearing respirators and masks. Researchers have done their jobs. Now it's time for this group to do its job. Only by making respirators like N95s that are equivalent or better a standard precaution in healthcare settings do we acknowledge what we have learned about COVID and reduce mixed signals that cause problems—mixed signals like acknowledging pre-symptomatic and asymptomatic spread, but then having policies where people only mask if they have symptoms; mixed signals like acknowledging COVID is causing long-term health complications, diseases, and disabilities in millions and across all demographics, but then calling COVID "mild" or "only dangerous to vulnerable people;" mixed signals like acknowledging that COVID can travel long distances through the air past doorways and around curtains, but then not requiring all able building occupants to be masked inside. Finally, there are those who acknowledge all of the above, but then use mask discomfort as an excuse to ignore it all or not mask or require masking in healthcare. It's easier and more ethical

to find ways to resolve mask discomfort than to resolve all of the consequences of infecting others with COVID and long COVID. Not masking causes significant numbers of people to develop long-term conditions, worsening the quality, durability, and length of lives that would have been better quality, healthier, more energetic, heartier, longer lives had masks simply been worn. We ask that you care about our lives, prioritize our safety, create integrity in healthcare, and update infection control policies to make masks mandatory and a standard precaution in healthcare facilities. Thank you.

Yaneer Bar-Yam
Professor & President, New England Complex Systems Institute
Co-Founder, World Health Network

Hi. My name is Yaneer Bar-Yam. I am a Professor and President of the New England Complex Systems Institute and a Co-Founder of the World Health Network. HICPAC is legally required to have 14 members, but only has 11. It lacks airborne transmission experts central to the guidance it is writing. It's experts from other domains dismiss airborne scientific evidence in favor of personal opinions. Here are my points enumerated. First, this committee is required to have 14 members. We heard earlier there is a quorum, but with only 11 members, absent a statement of its legality, this meeting and the entire effort or workgroups do not meet legal requirements. Second, the committee lacks the necessary participation of airborne transmission experts, which is required to decide on guidelines for airborne transmission. Science has advanced. Only a qualified committee should create guidance for COVID 19 and other airborne diseases. Third, some members of this committee are on record ignoring and dismissing scientific evidence on airborne transmission based upon unsupported assumptions, claims, and opinions. While expert opinion may be valuable under some conditions, personal opinions, even of experts and surely of non-experts, cannot dismiss scientific evidence. Fourth, CDC has world experts at NIOSH on many aspects of airborne transmission. Their exclusion from supporting a workgroup demonstrates absence of good faith by HICPAC. Fifth, this committee has failed to recognize the essential role of policy in society. A person can take risks for themselves. The healthcare providers cannot take undue risks for their patients. Similarly, this committee cannot take undue risks for 300 million people, or even a million, or 10,000, or 100. Enough. Airborne transmission of asymptomatic carriers must be prevented by universal clean air and well-fitting respirators, surveillance testing, extended isolation and quarantine, technology adoption, and "we can do it" innovation. Thank you.

Roselie Bright, ScD
Retired Federal Epidemiologist

Hi. I'm Dr. Roselie Bright, a doctoral epidemiologist retired from federal service. I remember being trained when I was a little girl, to wash my hands with soap before every meal, even if I wasn't going to touch my food with my hands. I remember finding out how quickly one can be thrown from the backseat because your parent slowed the car suddenly on an open road. I remember learning in Girl Scouts that tiny hot embers can't be trusted to not flare up into a new fire. I remember the seatbelt campaigns to buckle up every time and everywhere, even in one's own neighborhood. I remember when healthcare providers began to be taught to wear gloves for patient encounters, even if the patient seemed well. I remember working as an epidemiologist on medical device safety in the Food and Drug Administration. We worked on medical devices such as gloves that protect both patients and the device users. We also worked on protecting patients and users from devices themselves. A constant principle was that safety features and procedures must be universal and consistent to be effective. My obvious theme is that any safety or protective measure must be practiced consistently and universally. This

concept used to be backed and communicated by relevant professional societies and federal agencies, including the CDC. In this century, CDC successfully used it to suppress outbreaks with pandemic potential, including SARS-1 and Ebola. I've been perplexed and horrified by the abandonment of this basic principle for COVID-19. One clear impact of the failure is the continued repeated surges that build on transmission levels that never fall away to zero. One of the settings known to facilitate transmission is healthcare. Half of COVID-19 infectious people are asymptomatic. Healthcare settings include many vulnerable people: ill patients, stressed visitors, and understaffed healthcare providers who are pressured to work even while they, themselves, are sick. The evidence for special vulnerability is the doubled COVID-19 death rate among patients who caught it in the hospital. A clear lesson from safety research is that layers of protection are crucial, because no one layer of protection is 100% effective. For COVID-19 and other airborne illnesses, that means practicing all of the preventions, all the time, including respirators, ventilation, air cleaning, testing, infectious staff staying home, and vaccination. Please, revive your professional tradition by applying consistent and universal infection control for airborne pathogens. Side benefits include stopping other respiratory diseases, restoring CDC credibility, and making clear to the wider community that airborne infection controls are important and should also be implemented in other settings. Let's defeat this pandemic and prevent future pandemics. Thank you.

Alida Vilatoro
Long COVID Patient

My name is Alida Vilatoro. Before becoming disabled, I studied to become a librarian and received an MSIS. I'm speaking today on my personal experience as a patient who also struggles with long COVID. I have so many wonderful healthcare professionals in my life, but often when I ask them to mask, they can become contentious. It can shift the dynamic from concern to competitive or disinterested in my health issue. The burden of safety is on me, and this leads to not seeking care when I need it or getting subpar care. I also wanted to discuss some research in the journal *Antimicrobial Stewardship & Healthcare Epidemiology*—an article titled, "Incidence and outcome of hospital-acquired COVID-19 infections in secondary and tertiary care hospitals in the era of COVID-19 vaccinations." In this study, the authors conclude that "hospital-acquired COVID-10 infections in the Omicron era were related to high mortality of 11%, especially among patients in medicine wards who also had good vaccination coverage." Of the patients who acquired COVID in the hospital, 80% were vaccinated. This has also been my experience. I contracted COVID the first time when I was vaccinated 5 times while I was outdoors wearing a KN95 mask. The reason I caught COVID and developed long COVID is because the people around me were no longer taking precautions, and so I no longer had other layers of protection. This is a risk to me every time that I go to a healthcare setting, including hospitals, to this day. Then I also wanted to discuss a journal article called, "Relative efficacy of masks and respirators as source control for viral aerosol shedding from people infected with SARS-CoV-2: a controlled human exhaled breath aerosol experimental study." In this study, they conclude that duckbill masks, which are very cheap and effective, could be given to patients and doctors and be very cost-effective in preventing COVID. Thank you so much.

Julie Lam, MFA
Founder, MaskTogetherAmerica

Thank you for letting me speak. I am Julie Lam, Founder of MaskTogetherAmerica, a national advocacy group for infectious disease prevention and health equity. As an immunocompromised NIH RECOVER representative and a long COVID patient, I urge HICPAC members to address the dangers that prevent patients from safely getting healthcare. Immunocompromised people

are repeatedly exposed to infections. We are afraid to see our doctors or go to the ER. High-risk patients are foregoing even cancer screening to avoid airborne infections. We need healthcare providers to wear N95s and have good ventilation to ensure our safety. Your guidance must protect those who cannot get vaccinated, including babies. In 2020, my friend, Dr. Barry Webber, worked at Mt. Sinai's ER. PPE shortages and lack of mask use put him at risk. He died along with over 80,000 New Yorkers in this pandemic. Another friend, Chris Terry, had to work while sick. Organ damage and long COVID killed him at age 39. I have spent over 4 years supporting a community of high-risk people who urge me to remind you that your infection control guidance can either move America forward or set us back. Please set the guidance to prevent the next pandemic. Focus not on cost, but on the threat of novel pathogens driven by climate change. Protect us from airborne infections, including COVID, flu, TB, and measles. Prepare for avian flu and the new deadly Mpox, which we know can be airborne. Universal masking, routine testing, sick leave, and ventilation that meets ASHRAE Standard 241 are essential to prevent transmission. Hospitals should be required to provide workers who are constantly exposed to airborne diseases with N95s, not leaky surgical masks. FDA and NIOSH say surgical masks are not protective enough. You must not suggest a false equivalence. I strongly urge you, don't base your guidelines on harmful and relaxed strategies for pathogens like SARS-CoV-2. There is no such thing as "mild COVID." I can attest long COVID can follow all infections. I have IgAN. The chronic kidney disease worsened after I was infected by someone who was asymptomatic and vaccinated. Although vaccinated myself, COVID caused a sleep disorder and Sjogren's syndrome. My kidney condition progressed from Stage 1 to Stage 2. Since 2020, I have led MaskTogetherAmerica in supporting COVID vaccine rollouts throughout our educational campaigns, but my doctors say I can no longer take the vaccine, which caused severe hyperoxaluria and glomerulonephritis—even though CDC recommends that immunocompromised people double up on vaccines. Please protect those of us who can't get vaccinated. You must strengthen, not weaken mask guidelines to protect the most vulnerable. Thank you.

Irma Westmoreland, RN
Vice President, National Nurses United

My name is Irma Westmoreland. I'm a Registered Nurse and Vice President for National Nurses United, the largest labor union and professional association for Registered Nurses in the US. Given our critical role in infection prevention, nurses' input is essential as you update infection control guidance for healthcare settings. It is a major improvement that you have added NNU's Industrial Hygienists and other experts to HICPAC's Isolation Precautions Guideline Workgroup and NYSNA's Health and Safety Representative to HICPAC. But it is disappointing and frankly concerning that you have omitted an invitation for public written comments for this meeting. The message you are sending to healthcare workers is that you don't care to hear our insights on protecting patients and staff. In healthcare, we face a range of hazards from workplace violence to ergonomics to infectious diseases. They are all preventable. We only face unsafe conditions when healthcare employers fail to take action to protect us. NNU's 2024 infectious disease survey found that healthcare employers across the country are failing to put in place protections against infectious diseases. Only 1 in 10 nurses report that patients are always screened for respiratory infections. Only 4 in 10 nurses report that patients with respiratory infections are always isolated. Many nurses report insufficient PPE use for TB and COVID. Only 6 in 10 nurses report their facility uses a respirator. HICPAC and the CDC have a choice. You can create guidance that gives healthcare employers flexibility to prioritize profits over robust infection prevention measures, or you can choose to create strong, science-based guidance that directs healthcare employers to take the necessary steps to protect us and our patients. Throughout the COVID-19 pandemic, we have seen clearly what healthcare employers do with

flexibility. They lock up PPE. They rip respirators off of nurses' faces. They tell us surgical masks are sufficient and deny us access to N95s when we know the science says otherwise. They deny us access to the measures that will protect us and our patients. I urge you to follow the science on aerosol transmission. Follow the science on ventilation, respirators, source control, and isolation. Listen to the nurses on the protections our patients need. Thank you.

Don Ford, OBT

My name is Don Ford. I have no conflicts of interest. I want to first start by thanking everybody who is coming to participate in this and try to make rules that make everyone safer. That's really, really important and I want to say thank you for doing that. Now I can't help but notice as these meetings are constantly discussed, some of these rules haven't been updated in as long as 20 years. In the past 20 years, as many of you know, there have been significant jumps in how we interpret, even diagnostics, these data points on safety. Now the biggest one that we're facing that a lot of people are not thinking about the specific word choice is we're learning more about the effect on the brain. Through all of these rules that are being set up, they are coming from an era where we did not have the diagnostics to properly determine the negative effects that were happening to people's brains. We can talk about this in a public setting or how it's affecting the public on a large scale all day, but when we're talking about in a healthcare setting, we're learning that the people we depend on to provide healthcare that make important medical decisions that can be life or death for somebody—it might just be a day of work for that person, but it is life or death for their patients. We will all be patients one day. We have to properly understand the damage that is being done to people's brains and how that is going to affect their ability to administer care. Our understanding of the brain has changed. Our ability to do diagnostics on the brain has changed. The CT scans have changed. MRIs have changed. All of these things have advanced, and we have new concepts on how people are affected negatively. I cannot stress the importance enough that this committee properly take that into their assessment of what needs to be done. I feel like a lot of the discussion that's happening here is still being based on very old science. The whole point of updating these is putting it in a place where we'll look for the next 20 years and the 20 years after that. These things do need to be updated more often. I think we can admit that the decisions made here are not trivial. They are important. They will affect people's lives. I appreciate, for example, that some of the decisions made last year regarding airborne protections are being re-assessed by the committee later this year and throughout this year because science changes that quickly. That's how fast we get to a place where now we have changed our definition of "airborne" to "anything that travels through the air." Which is taking droplet theory out to the dumpster where it will stop putting people at risk because we need to understand that in the right conditions, droplets can become aerosol. These things can be transferred this way, and that ultimately harms not only patients, but the medical professionals that we are trusting to administer life-saving care. So, I just hope that everybody will think with a clear conscience when we make these new rules and decisions that we're thinking about their long-term use and how many people they will truly impact. It's easy to see this as just another day, but for everyone it affects, it will be THE day.

Kaila Terwitsky
Long Covid Patient
Volunteer, World Health Network
Volunteer, COVID Survivors for Change

Hi. Thank you for having me. My name is Kaila Terwitsky. I have had long COVID for almost 4 years now from 1 infection back in 2020. I've also volunteered with the World Health Network, as well as COVID Survivors for Change. I'm reaching out to express my deep concern about the

current state of infection control in doctors' offices, hospitals, and other healthcare settings. Since the abandonment of universal masking policies, these spaces have become increasingly hazardous, particularly for those of us who are actually trying to avoid COVID and other airborne infectious diseases. The situation has become untenable. It requires immediate and decisive action to protect public health. As we all know, this disease is far from over. While there may be a perception that the worst is behind us, the reality is that the virus continues to spread, mutate, and cause harm. Its long-term effects are well-documented, with many individuals experiencing chronic health issues, such as long COVID like myself. This condition can be very debilitating and can significantly impact quality of life. For people who are immunocompromised, who have underlying health conditions, elderly, or other conditions that make them high-risk for COVID, the stakes are even higher. These individuals rely on healthcare environments to be safe, controlled spaces and should be able to receive the necessary treatment without the added risk of exposure to infectious diseases. Unfortunately, without universal masking and stringent infection control measures, these environments are no longer the safe havens they once were or should be. The current state of affairs has forced patients into a difficult and unacceptable dilemma to either risk exposure to a potentially life-altering virus by attending medical appointments, or avoid seeking necessary healthcare all together, which can lead to serious and sometimes irreversible consequences. No one should have to make such a choice, especially in settings designed to promote healthcare and healing. To address these concerns, I am calling for the immediate reinstatement of universal N95 masks in all healthcare settings. Simple cloth masks and surgical masks are insufficient to prevent the spread of airborne pathogens, particularly in environments where vulnerable individuals are concentrated. N95 respirators have proven to be far more effective at filtering out airborne particles, including viruses, and should be the standard equipment for all healthcare personnel and patients alike. In addition to universal masking, I urge the implementation of comprehensive infection control protocols with HEPA filtration and UVC disinfection. HEPA filters are capable of trapping airborne particles, such as viruses and bacteria, and can significantly reduce the concentration pathogens in the air. When used in conjunction with proper ventilation, HEPA filters can greatly improve indoor air quality and reduce the risk of transmission. Protecting patients should always be a top priority in healthcare settings. Thank you for your attention in this urgent matter, and I hope that you'll prioritize the health and safety of patients.

Noah Strauss
Member of the Public

We deeply need universal masking requirements with fit-tested N95 respirators at all times in medical institutions (hospitals, nursing homes, congregate care, and otherwise at all times) to dramatically decrease hospital-acquired infections of both staff and patients. The current draft guidance as we last saw it has systematically weakened the numerous recommendations in the guise of standardized terminology across the document and through use of the word "soiled" over "contaminated." To this first point, in patient placement number 5, "anytime room sharing occurs, precautions need to be in place to limit potential for cross-contamination." This was downgraded to "should be in place." This changes a "must do" requirement to a "nice to have" type of requirement. Similarly, under routine air precautions, "a mask is worn by healthcare professionals on entry to a room" is downgraded to "healthcare professionals should use a mask on entry into a room." The original was a requirement, while the revised is a suggestion. Furthermore, a soiled mask is one that basically is dirty, which makes the burden requirement for changing a mask, as opposed to being forced to reuse a mask or getting a replacement mask, a higher threshold to meet. Employers would easily misuse this criterion to then ask personnel, "Well, is your mask soiled?" "No." "Then you're fine to continue wearing it" when the mask would then be continued source of contamination and possible infectious transmission to

both healthcare providers and to the patients that they are caring for. Again, a well-fitted N95 respirator needs to be explicitly defined as opposed to the incredibly vaguely written source control that replaced areas where masks originally were written. The most egregious example of weakening the guidelines is saying “one should use PPE when someone is visibly sick or symptomatic.” This ignores asymptomatic presentation, which still results in infection and completely disregards a patient’s exposure history. Every patient should be treated as possibly infectious. This is the only way we can reduce nosocomial hospital-acquired infections like SARS-CoV-2. It’s the only way to make hospitals safe and make it safe for people at the highest levels of risk, like people with tracheostomies. Thank you.

Seifer Almasy
Member of the Public

I’m Seifer Almasy, a member of the public. I am deeply sad and very angry that the CDC and HICPAC failed and continues failing to provide the guidance needed to make healthcare settings safe for all who seek or provide healthcare. This failure affects me personally. Pre-pandemic, I regularly attended my routine appointments with healthcare providers. But now those providers do not acknowledge that COVID-19 transmits through aerosols. Where were the COVID-19 policy documents to inform me about the protections in each healthcare facility? Why are healthcare representatives confused when I call them with questions about COVID-19 safety? If I seek care and I share air with a person who is sick with COVID, how could I expect to safely receive care? In the absence of information about safety, I cannot assume that I am safe, so I am still avoiding healthcare as much as possible. I did seek care for a COVID-19 booster and flu shot last year. It took me 34 phone calls and 4 hours of waiting on hold or pleading to find a provider who would wear an N95 respirator during my appointment. My experience makes me concerned for people with urgent needs who cannot choose to forego healthcare when there is no infection control for aerosol transmission. In the last year, my relative suddenly acquired heart and respiratory conditions. Whether this is the result of cumulative damage from repeat COVID-19 infections or something else, I cannot say. Regardless, if my relatives feel unwell, they must go to the hospital for lifesaving care, but what’s protecting them from a COVID-19 infection that could worsen their conditions? Lately, I think a lot about my friend, Abbie. She is a wonderful, kind person. She is also dealing with chronic health conditions that require long-term care in a hospital, and she’s got a heightened risk for developing long COVID, so every time Abbie encounters a person without an N95 respirator or she needs to remove her N95 to receive care, she is in danger of getting sicker because of COVID-19. My friend’s situation is harrowing and unjust, and you HICPAC members, could write infection control guidelines that could help keep Abbie safe, but you’ve done nothing of consequence. Why do you refuse to protect people from respiratory pathogens? I can’t believe it's up to the public to educate you, the experts, but here’s 5 things you can do:

1. Fully recognize aerosol transmission of SARS-CoV-2 and other respiratory pathogens.
2. Write guidelines that use multiple control measures to prevent aerosol transmission.
3. Declare that N95 respirators are the minimum and essential protection for seeing patients.
4. Incorporate elastomeric and powered air purifying respirators into any updated guidance.
5. Be clear and explicit on the precautions that are needed in situations where infectious pathogens are present or may be present. Don’t adopt a crisis standards approach.

To conclude my comments, members of HICPAC, understand that you abandoned healthcare staff and patients to endless COVID in healthcare settings. Fix this. Do better. I yield my time.

Andrea Taglieri
Disabled Therapist

Good afternoon. Thank you so much for this opportunity to speak. Ditto to what everyone else has said before me. This is excellent. I am a disabled therapist, former avid hiker, former avid pickleballer, former water aerobics fanatic, former avid adventurer, and most of all, I'm a former lover of life who is now trying to deal with a stolen life. I have a dysregulated immune system and am on immunosuppressants as millions and millions of other Americans. I wanted to ask to please establish universal masking in healthcare across all settings. Many aerosol-transmitted pathogens are transmissible without symptoms and without any predictable seasonality, especially COVID as we've seen. Diagnosis and isolation can also be delayed, which can lead to exposures that could have been prevented by universal masking. I really feel that we need to ensure robust protection from infectious diseases in healthcare. We need to follow the science. Trying to obtain healthcare should not make us sicker, especially with the knowledge of a rampant, possibly lifelong severely disabling, multi-system illness. Speaking personally, I truly lost my life. It was stolen. I was living my best life and I ended up unable to speak, unable to tolerate light or sound, unable to feed myself. I'm very lucky I'm able to do that and I was so excited when I moved back to the East Coast and got to the long COVID clinic. I was devastated and pretty scared because what I had been through was terrifying—to be in silence and darkness 24/7, not even being able to tolerate touch following this long COVID myalgic encephalomyelitis presentation. When I got to the long COVID clinic, no one was masking. My life was stolen and there is such great threat and great fear. I'm in a small room. They're taking vitals up close to my face. Horrific. If I say, "I'm scared. Can you please mask? My life was stolen," I get shamed. If there was universal masking, that wouldn't be an issue. I just would like to be protected and that the gains I've made would not be lost again. Please, help protect me and millions like me. Thank you so much for your consideration. I appreciate it.

Linda Green, MD
Retired Physician
Volunteer, Pan End It!

I'm Dr. Linda Green, a physician Board Certified in internal medicine and medical oncology who has been volunteering with Pan End It!, an organization of people with disabilities focused on COVID-19 and disability justice. Pan End It! has approached the CDC and local health officials to reinstate mask requirements in healthcare settings. Today with the surge in COVID infections, it is now clear that COVID is not seasonal, but present year-round. Mask requirements provide infection control and ensure that high-risk people have equal access to healthcare spaces. Masks protect patients as well as hospital staff. In particular, high-quality masks are most protective. N95 and KN95 masks should be the standard used by healthcare workers, nurses, and physicians. Patients should also wear them if possible. Hospitals, nursing homes, and clinics should be provided with masks as well. I have been pleased to see this latter step present in VA hospitals and the cancer hospital, MD Anderson. It is a step in the right direction that oncology, dialysis, transplant, and ER units have more often required this level of protection, although compliance is spotty and accountability is limited. But, this effort at selective protection is flawed. Protection for all patients in a consistent fashion is more likely to succeed in limiting hospital-acquired infections with COVID and paves the way for protection from other airborne infections, such as flu, Mpox, RSV, and possibly bird flu. Some of you may not realize how easy it is to misclassify a patient as immunocompetent, to miss aspects of a patient's history, to have patients unaware that they are high-risk, and to focus only on the acute illness with a goal to rapid discharge in our hospitals today. N95 masks make these situations less dangerous to patients and staff. Changing the culture to masking for healthcare workers and

institutions is as important today as years long campaigns for hand washing have been. Some favor flexibility in the use of masks, lower quality, or more comfortable masks, pegging them to community data and so forth. However, protection is limited and often abandoned all together when these compromises enter into policy. The argument that vaccinations have made this less important is also flawed as uptake of boosters is too low for the system to rely on one strategy. Alone, vaccinations cannot resolve issues with COVID-19. Researching masks design and respirator use may be worth considering. Listing COVID as a hospital-acquired infection can help in data gathering. Establishing standards can give the Joint Commission a role to play in compliance and accountability. Testing patients on admission to hospitals and clinics can help physicians and alert departments where isolations may not yet be routine, such as cardiology testing labs and radiology. Isolation guidelines for healthcare workers need to return to having someone with COVID return to work only after negative tests. Paid sick leave for these workers and provisions of tests are necessary for safety. In all of these interventions to prevent acute infections and decrease risk of long COVID, the issue underlying much of this is cost. We can all join to demand that the current healthcare system pay for what is needed and reject compromises. Thank you.

Daniel Bessonov
Member of Public

Good afternoon. My name is Daniel Bessonov, a member of the public. I'm here to address the urgent need for stronger COVID-19 prevention measures in healthcare settings, specifically the use of N95 respirators. COVID-19 is airborne and highly contagious. We know from multiple studies that N95 respirators provide significantly better protection than surgical masks and 2-way protection is far better than 1-way. Yet, the CDC's latest guidance prioritizes hand washing, which does not address the primary mode of transmission—airborne particles. The CDC's reluctance to recommend N95 respirators tends to stem from political pressure rather than the science-based evidence that should guide your decisions. Although masking is highly polarized, politicizing public health will only lead to more death and disease. We cannot rely solely on vaccines to protect us, as just a quarter of US adults received the updated COVID-19 vaccine and less than half of those ages 65 and older. The effectiveness of the vaccine wanes significantly after 4 to 6 months. Transmission-based precautions should apply universally in healthcare settings because about half of COVID spread is asymptomatic and long COVID is a risk for everyone—not just the vulnerable. With 18 million having had long COVID, including children and healthy people. Repeated reinfection increases the risk of long COVID. I want to share a personal story. My grandmother, whose daughter refused to vaccinate her, was hospitalized with COVID earlier this year and spent a month in critical care before she passed away. This was her third COVID infection in the healthcare setting and no one around her wore N95 masks. She had no control over her protection, and it ultimately cost her life. This is not just about the elderly. It's about the millions of others who are equally vulnerable. Hospital-acquired COVID is unacceptable when we have such a cheap and effective preventative measure as an N95 respiratory. The power dynamics between patients and healthcare providers make it almost impossible for patients to request that staff wear masks. When I asked my primary care doctor to wear an N95 respirator, she refused saying that it goes against CDC guidance. I am afraid to push the issue further, fearing that I might be dropped as a patient. No patient should have to repeatedly request healthcare providers to wear N95 respirators every time they visit their doctor. I implore the CDC to issue clear and unequivocal guidelines for the use of N95 respirators in healthcare settings. Two-way protection is far better than 1-way, and nobody should have to ask their doctor to protect them. Thank you for your time and consideration.

Summary & Work Plan

Michael Lin, MD, MPH
HICPAC Chair

Dr. Lin recapped that HICPAC welcomed 4 new members to HICPAC (Lisa Baum, Kate Ellingson, Laura Evans, and Connie Steed) and 2 new liaisons (Justin Smyer and Anurag Malani). HICPAC heard updates from CDC's DHQP regarding activities related to public health surveillance, such as tracking substance outcomes, tracking respiratory virus burden across the spectrum of healthcare facilities, and monitoring and responding to the public health impact of the Mpox Clade 1 outbreak in Africa. HICPAC heard updates from the Isolation Precautions WG, which has welcomed new WG members and is preparing to present material for discussion during the November 2024 HICPAC meeting. HICPAC heard about and discussed draft new DHQP guideline recommendation categories that will undergo further feedback and public comment. HICPAC heard an update from the Dental Unit Waterline WG, which has proposed sections for the guideline update that revolve around multiple aspects of DUWL usage (e.g., selection of equipment, selection of water for use and assessment of water quality, equipment maintenance, and equipment monitoring), as well as defining high-risk dental procedures where use of sterile irrigation may be indicated. The Infection Control in Healthcare Personnel WG provided an update on draft recommendations regarding HCP with exposure to CMV or active CMV infection, which HICPAC discussed and voted to approve. HICPAC heard an update on placement and PPE recommendations for select VHFs (e.g., Marburg, CCHF, Lassa, SAHF), and Andes and Nipah viruses. These Appendix A updates were discussed and approved by HICPAC. Comments were provided in the public comment session held during this meeting and written public comments were submitted to the committee, all of which HICPAC appreciated. Dr. Lin sincerely thanked HICPAC members, *Ex Officios*, Liaison Representatives, CDC staff, and the general public for their attendance during this meeting. HICPAC looks forward to its next meeting in November 2024.

Closing Remarks / Adjourn

Alexander J. Kallen, MD, MPH
HICPAC Designated Federal Officer

Dr. Kallen thanked everyone for joining the meeting and their work throughout the day. Details about the next HICPAC meeting will be posted to the website. With no additional business raised or comments/questions posed, he officially adjourned this HICPAC meeting at 2:42 PM on August 22, 2024.

Certification

I hereby certify that, to the best of my knowledge and ability, the foregoing minutes of the August 22, 2024 meeting of the Healthcare Infection Control Practices Advisory Committee (HICPAC), CDC are accurate and complete.

_____ _____

Date **Michael Lin, MD, MPH**
Chair, HICPAC

Attachment #1: Acronyms Used in this Document

Acronym	Expansion
AAO-HNS	American Academy of Otolaryngology—Head and Neck Surgery
AAPD	American Academy of Pediatric Dentistry
ABIM	American Board of Internal Medicine
ADA	American Dental Association
ADS	Association for Dental Safety
AE	Adverse Event
AEH	America's Essential Hospitals
AHCA	American Health Care Association
AHRQ	Agency for Healthcare Research and Quality
AIIR	Airborne Infection Isolation Room
AORN	Association of periOperative Registered Nurses
APIC	Association of Professionals of Infection Control and Epidemiology
ASHE	Antimicrobial Stewardship & Healthcare Epidemiology
ASN	American Society of Nephrology
BOOTS	Blood, Organ, and Other Tissue Safety
CCHF	Crimean-Congo Hemorrhagic Fever
CCTI	Cambridge Communications & Training Institute
CDC	Centers for Disease Control and Prevention
CFU	Colony-Forming Unit
ciNPT	Closed-Incision Negative Pressure Therapy
CKD	Chronic Kidney Disease
CMS	Centers for Medicare and Medicaid Services
CMV	Cytomegalovirus
COI	Conflicts of Interest
COVID	Coronavirus Disease
CSTE	Council of State and Territorial Epidemiologists
DFO	Designated Federal Official
DHQP	Division of Healthcare Quality Promotion
DUWL	Dental Unit Waterlines
EHR	Electronic Health Record
EIS	Epidemic Intelligence Service
EPA	Environmental Protection Agency
ET	Eastern Time
EVD	Ebola Virus Disease
FDA	(United States) Food and Drug Administration
GRADE	Grading of Recommendations, Assessment, Development and Evaluation
HAI	Healthcare-Associated Infection
HCP	Healthcare Personnel/Professionals
HCW	Healthcare Workers
HHS	(United States Department of) Health and Human Services
HICPAC	Healthcare Infection Control Practices Advisory Committee
HIV	Human Immunodeficiency Virus
IDSA	Infectious Disease Society of America
IFU	Instructions For Use
IgAN	IgA Nephropathy
IP	Infection Preventionists

Acronym	Expansion
IPCIP	Infection Prevention and Control Internship Program
MD	Medical Degree
MDHHS	Michigan Department of Health and Human Services
MIDS	Michigan Infectious Disease Society
MSIS	Master of Science in Information Systems
NACCHO	National Association of County and City Health Officials
NCEZID	National Center for Emerging and Zoonotic Infectious Diseases
NECSI	New England Complex Systems Institute
NHSN	National Healthcare Safety Network
NIH	National Institutes of Health
NIOSH	National Institute for Occupational Safety and Health
NNU	National Nurses United
NTM	Nontuberculous *Mycobacteria*
NYC	New York City
NYS	New York State
NYSNA	New York State Nurses Association
NYU	New York University
OGER	Office of Guidelines and Evidence Reviews
OHA	Oregon Health Authority
OPSC	Oregon Patient Safety Commission
OSAP	Organization for Safety, Asepsis and Prevention
OSHA	Occupational Safety and Health Administration
OSU	Ohio State University
PEP	Post-Exposure Prophylaxis
PI/ECOS	Population, Intervention/ Exposure, Comparator, Outcome, and Setting
PHAC	Public Health Agency of Canada
PIDS	Pediatric Infectious Disease Society
POC	Point-of-Care
PPE	Personal Protective Equipment
PRB	Prevention and Response Branch
PSAN	Patient Safety Action Network
RCA	Rapid Cycle Analysis
RECOVER	Researching COVID to Enhance Recovery
RN	Registered Nurse
RSV	Respiratory Syncytial Virus
SAHF	South American Hemorrhagic Fevers
SARS	Severe Acute Respiratory Syndrome
SCCM	Society for Critical Care Medicine
SHEA	Society for Healthcare Epidemiology of America
SIS	Surgical Site Infection Society
SME	Subject Matter Expert
SSC	Surviving Sepsis Campaign
SSI	Surgical Site Infection
TB	Tuberculosis
TJC	The Joint Commission
UCLA	University of California Los Angeles
US	United States
USPHS	US Public Health Services

Acronym	Expansion
VAERS	Vaccine Adverse Event Reporting System
VHF	Viral Hemorrhagic Fevers
VSD	Vaccine Safety Datalink
WG	Workgroup
WHN	World Health Network
WHO	World Health Organization