























#### **Health Watch USAsm 2023 Patient Advocacy Report:**

Similar to 2022, 2023 has been a productive year. Our members have had coverage by top national news media and have published a major peer-reviewed article along with numerous op-eds and policy statements. In addition, our 2023 conference regarding long COVID was a huge success.

The Table below indexes resources from Health Watch USA<sup>sm</sup>. Overall, there are 17, Op-Eds in major news media, 32 articles in Infection Control Today, 59 radio shows, 1 webinar, 24 News Reports, and the 2022 Yearly Conference.

#### Table of Contents (Overwhelming Topics Focus On COVID-19 and Long COVID).

- 2023 Conference, Long COVID's Impact on Patients, Workers & Society. AHEC & ANCC Continuing Education (1)
- 2. Peer-Reviewed Articles, Op-Eds, and Blogs.
  - -- Peer-Reviewed Articles (2)
  - -- Op-Eds { USA Today (1), Courier Journal (2), Fierce Healthcare (4), Lexington Herald Leader (1) and The Post and Courier (1)
  - -- Infection Control Today (22)
- 3. Oral Comments Before Federal Committees (PACCARB (1); CDC HICPAC (5)
- 4. Written Comments (FDA VRBPAC 1, CDC ACIP 1, HICPAC 1)
- 5. Action Letter CDC New Regulations and the ADA (1)
- 6. Professional Presentations (Peoples CDC (1), Infection Control Today (1) and HW USA Meetings (8))
- 7. Newspaper Articles Featuring Health Watch USA (13)

#### Long COVID: Patients, Workers & Society



# Long COVID's Impact on Patients, Workers & Society

Health Watch USA<sup>sm</sup> & Massachusetts Nurses Association,
Connecticut Nurses Association and Kentucky Rural Health Association
Webinar Nov. 1<sup>th</sup>, 2023

Webinar Introduction: Kevin T. Kavanagh, MD, MS

<u>View Slides</u> <u>View Video</u>



**Ambassador Deborah Birx, MD,** past White House Coronavirus Coordinator. Presentation: "Impact of Long COVID on the United States." <u>View Slides</u> <u>View Video</u>



**Pam Belluck**, New York Times Reporter -- Presentation: "How Long COVID is affecting people's jobs and their needs at work."

<u>View Slides</u> <u>View Video</u>



Peter J. Hotez, MD, PhD, Dean of the National School of Tropical Medicine and Professor of Pediatrics and Molecular Virology & Microbiology at Baylor College of Medicine. will present on "Global Vaccines and Vaccinations: The Science vs The Anti-science." View Slide



**Eleni Iasonidou, MD,** Pediatrician, Founder of Long Covid Greece and a one of the very first Greek representatives to join Long Covid Kids." Presentation: "Long Covid: A pediatrician's view as a patient and doctor."

#### View Slides View References View Video



**Georgios Pappas, MD, PhD,** Physician, Researcher and Advocate. Specializing on zoonoses and preparedness against deliberate and natural outbreaks/ epidemics – Presentation: "Combating Disinformation regarding COVID-19 and Long COVID." <u>View Slides View Video</u>



Jane Thomason, MSPH, CIH, Industrial Hygienist, National Nurses
United & California Nurses Association -- Presentation: "The impact of
Long COVID on Nurses." <u>View Slides View Video</u>



**Greg Vanichkachorn, MD, MPH,** Occupational and Aerospace Medicine, Mayo Clinic-- Presentation: "Symptoms, treatment and rehabilitation of patients with Long COVID." <u>View Slides</u> <u>View Video</u>



**Dr. Wilmore Webley, PhD,** University of Massachusetts, -- Presentation: "The effectiveness of vaccines to prevent Long COVID." <u>View Slides</u> <u>View References</u> <u>View Video</u>



**Brian T. Walitt, MD, MPH,** Clinician with the NIH's National Institute of Neurological Disorders and Stroke. -- Presentation: "Exploring the Post-Acute Sequelae of COVID-19 at the National Institutes of Health." View Slides View Video



Closing Remarks & Summary by Past Surgeon General Joycelyn Elders, MD and Kevin Kavanagh, MD, MS.

View Slides View Video

#### **Kevin Kavanagh Conclusion:**

View Slides View Video

#### **Continuing Education Courses:**

ANCC approval for 6.0 Credit Hours were given for participation in the 2023 Long COVID webinar.



The following educational credits were awarded for participation in the long COVID webinar. In addition, they can be obtained through an online course provided by Southern Kentucky AHEC and accessed using the link below.

Credits can be obtained for the following healthcare specialties:

- Physician/Nursing Home Administrator: "This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Southern Kentucky Area Health Education Center (AHEC), Massachusetts Nurses Association, and Health Watch USA. Southern KY AHEC is accredited by the Kentucky Medical Association to provide continuing medical education for physicians." The Southern KY Area Health Education Center is accredited by the Kentucky Medical Association (KMA) to sponsor continuing medical education for physicians. The Southern KY Area Health Education Center designates this live activity for a maximum of 6 AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit commensurate with the extent of their participation in the activity. (4 hours AMA PRA CAT I)
- PA/Nurse Practitioner: This program has been approved by the Southern KY AHEC for Category 1 credit. (4 hours)
- Non-Physician attendance will be awarded. (4 hours)
- KBN Approval: Rockcastle Regional Hospital, Inc. has been approved as a provider of continuing education by the Kentucky Board of Nursing (KBN). Provider #4-0059-12-22-115. Expiration Date: December 31, 2022. "Kentucky Board of Nursing approval of an individual nursing education program does not constitute endorsement of program content." Total approved hours 4.8.
- Occupational Therapy: This program has been approval for 4 credit hours by the Kentucky Board of Licensure for Occupational Therapy.
- Physical Therapy: This course has been approved by the Kentucky Physical Therapy Association for continued competency requirements. CS30-2007-KPTA (4 hours)
- Respiratory: This program has been approved by the Kentucky Board of Respiratory Care. (4 hours)
- Dentistry: This program has been approved by the Southern Kentucky AHEC as meeting general medical/dental requirements outlined in 201 KAR 8.531 for dentists and 201 KAR 8.561 for dental hygienists. (4 hours)

- Social Work. Approved for 4 hours of Continuing Education by Kentucky Board of Social Work.
- Certificate of Completion is available for other educational participants. (4 hours)
- EMS 4 Credit Hours. This program has been approved by the Kentucky Board of Emergency Medical Services for credit.

To register for the above online course and obtain continuing education credits through Southern Kentucky AHEC, go to: https://sokyahec.thinkific.com/courses/longcovidimpact

#### Health Watch USA<sup>sm</sup> Peer-Reviewed Articles

SOLUTIONS FOR LEADERS

#### OPEN

#### Frontline Worker Safety in the Age of COVID-19: A Global Perspective

Kevin T. Kavanagh, MD, MS,\* Matthias Maiwald, MD,†‡§ Christine Pontus, MS, RN, COHN-S/CCM,// Jeannie P. Cimiotti, RN, PhD, ¶ Patrick A. Palmieri, DHSc, EdS, MBA, MSN, PGDip(Oxon), ACNP, RN, FFNMRCSI, FAAN,# and Lindsay E. Cormier, PhD, MPH\*\*

The third annual Health Watch USA\*\*\* webinar conference assembled 16 speakers from 4 continents who shared information regarding frontline worker safety in the age of COVID-19. The US. Bureau of Labor Statistics reported a nearly 4000% increase in workplace illness in 2020 compared with 2019. It is estimated that 2% of the US. workforce is not working because of long COVID. In addition, the impact is growing with each surge. After the acute illness, patients are often described as recovered, when in fact tramp have only survived and are coping with the multisystem impacts of long COVID. Long COVID, including its late cognitive, cardiovascular mighation of the composition of the composition of the control of the composition of the composition of the composition of the control of the composition of the abolic, and diabetic complications, disproportionately impacts frontline orkers, many of whom are of lower socioeconomic status and represented

by effinic minorities.

Natural infection and current vaccines do not provide durable protection for reinfection. Herd immunity is not possible at this time. Although SARS-CoV2 is unlikely to be eliminated, decreasing spread is imperative to slow the rate of mutations, decrease the number of reinfections, and lower the chances of developing long COVID. The primary mode of spread is through aerosolization. Both routine breathing and talking aerosolizes the virus. With the extremely high infectivity of SARS-CoV-2, it is unlikely that central building ventilation alone will be enough to satisfactorily mitigate spread. Additional safe active air cleaning technology, such as upper-room germicidal UV-C lighting, needs to be deployed.

Misinformation and disinformation have inhibited response effective-

Misinformation and disinformation have inhibited response effectiveness. Examples include downplaying the benefit of well-fitted mask and the risks that COVID-19 and long COVID pose to children, along with believing children cannot spread the disease. The engagement of local community leaders is essential to decate the community and drive social change to accept vaccinations and other public health interventions. Vaccinations and antural immunity alone are unlikely to adequately prevent community spread and do not provide durable protection against the risk of long COVID. Frontline workers must keep their immunity as high as possible and work in settings with clean air, along with wearing N95 masks when they are in contact with the public. Finally, there needs to be a financial safety net for frontline workers and their families in the event of incapacitation or death from COVID-19.

Key Words: COVID-19, SARS-CoV-2, aerosolization, masks, spread, fomites, disinformation, Sweden, Australia, workplace safety, immunity, vaccination, long COVID, disparities

From the \*Health Watch USA, Lexington, Kentucky; †KK Women's and Children's Hospital; †Yong Loo Lin School of Medicine, National University of Singapore; Glades-National University of Singapore, Glades-National University of Singapore, Glades-National University of Singapore (and the State of Singapore (and the State of Singapore), Glades (and Singapore; Massechusetts, \*University, Health Watch USA, Cantanh, Massechusetts, \*University, Health Watch USA, Lexington, Kentacky Correspondence, Kevin T. Kawangah, MD, MS, 200 Village Green Avenue, Lexington, Ky 40509 (e-mail: tawangah-entiggmail.com). KTK is an associate editor of the Astronal of Phasic Sighty and on the editorial board of Infection Control Today. The other authors disclose no centific of interest. Contains an include the provided by Health Watch USA: Board of Contains and Contains in Kind were provided by Health Watch USA: Board of Contains and Contains

I Patient Saf . Volume 19, Number 5, August 2023

Abbreviations: HVAC - heating, ventilation, air conditioning, ICU intensive care unit, UV-C - ultraviolet light in the C spectrum, U.S. - United States,  $\nu/\nu$  - volume per volume, WHO - World Health Organization (J Patient Saf 2023;19: 293-299)

#### CONFERENCE REPORT

On September 14, 2022, experts from across the world came together in the form of a webinar conference to share knowledge on promoting frontline worker safety in the age of COVID-19 (Table 1). COVID-19 has had a profound impact on worker safety. The Brookings Institute estimates that up to 4 million workers or 2% of the U.S. workforce are not working because of long COVID-3 According to the U.S. Bureau of Labor Statistics, in the United States, there was almost a 4000% increase in workpace illness in 2020 compared with 2019, with the highest in healthcare. 3 Nursing care has been especially negatively impacted during the pandemic. The median tenure for nurses working 12-hour shifts in March 2022 was 2.78 years, decreased 19.5% from the previous year. The number of new nurses within that year filling 12 hour shifts nose by 55%.

Researchers reported in the Lancet online survey responses from 3762 suspected and confirmed cases of long COVID, 45.2% of patients reported requiring a reduced work schedule compared with preillness. An additional 22.3% were not currently working because of illness. There was no difference between suspected and confirmed cases regarding dropping out of the workforce. 3 Among the industrialized nations, the United States has not implemented a reliable, accurate, and transparent case reporting system. Similarly, the U.S. healthcare system does not have a mechanism to accurately track healthcare worker deaths. 8 Kaiser Health News and the Guardian in April 2020 reported that 3607 healthcare worker deaths. 8 Kaiser Health News and the Guardian in April 2020 reported that 3607 healthcare worker deaths. 8 There is no mandatory reporting in the United States had what reports are received are often incomplete and inconsistent across states.

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K.T.K. wrote the first draft of the manuscript. K.T.K., M.M., C.P., J.C., P.A.P., and L.E.C. edited, revised, and reviewed latter versions of the manuscript. All authors were on the conference planning committee or involved in conference production and postconference continuing education. All authors reviewed the manuscript.

www.healthwatchusa.ong/conference/2022/index.hml and at https://
healthconference.org.
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### Frontline Worker Safety in the Age of COVID-19: A Global Perspective

The third annual Health Watch USA<sup>sm</sup> webinar conference assembled 16 speakers from 4 continents who shared information regarding frontline worker safety in the age of COVID-19. The U.S. Bureau of Labor Statistics reported a nearly 4000% increase in workplace illness in 2020 compared with 2019. It is estimated that 2% of the U.S. workforce is not working because of long COVID. In addition, the impact is growing with each surge. After the acute illness, patients are often described as recovered, when in fact many have only survived and are coping with the multisystem impacts of long COVID. Long COVID, including its late cognitive, cardiovascular, embolic, and diabetic complications, disproportionately impacts frontline workers, many of whom are of lower socioeconomic status and represented by ethnic minorities.

Natural infection and current vaccines do not provide durable protection for reinfection. Herd immunity is not possible at this time. Although SARS-CoV-2 is unlikely to be eliminated, decreasing spread is imperative to slow the rate of mutations, decrease the number of reinfections, and lower the chances of developing long COVID. The primary mode of spread is through aerosolization. Both routine breathing and talking aerosolizes the virus. With the

extremely high infectivity of SARS-CoV-2, it is unlikely that central building ventilation alone will be enough to satisfactorily mitigate spread. Additional safe active air cleaning technology, such as upper-room germicidal UV-C lighting, needs to be deployed.

Misinformation and disinformation have inhibited response effectiveness. Examples include downplaying the benefit of well-fitted masks and the risks that COVID-19 and long COVID pose to children, along with believing children cannot spread the disease. The engagement of local community leaders is essential to educate the community and drive social change to accept vaccinations and other public health interventions. Vaccinations and natural immunity alone are unlikely to adequately prevent community spread and do not provide durable protection against the risk of long COVID.

Frontline workers must keep their immunity as high as possible and work in settings with clean air, along with wearing N95 masks when they are in contact with the public. Finally, there needs to be a financial safety net for frontline workers and their families in the event of incapacitation or death from COVID-19. Journal of Patient Safety. Aug. 2022.

https://journals.lww.com/journalpatientsafety/Fulltext/9900/Frontline Worker Safety in the Ag e of COVID 19 A.126.aspx

Narrative Review

### Medicine

#### **Viewpoint**

Patient safety in primary care – patients are not just a beneficiary but a critical component in its achievement

Kevin T. Kavanagh, MD, MSa\* D, Lindsay E. Cormier, PhD, MPHb

Abstract

Promoting and maintaining patient safety in primary care requires different strategies and monitoring than utilized in large healthcare delivery systems. Maintenance of a culture of safety is key to providing patient safety but has been difficult to measure in primary care. This is particularly true in rural settings where practice size is a major barrier to measurement reliability.

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Primary care evaluates a vide range of patients, including those who are immuncompromised and others who have infectious diseases. Providing a safe environment with proper wearing of N95 masks, clean examination rooms, and adequate ventilation is important. Patients with infectious diseases should be separated from other patient populations.

Primary care is often less bureaucrate than hospitals, but also has fewer resources to implement patient safety initiatives, along with detecting safety lapses and adverse events. However, monitoring the practice's safety practices and the culture of safety of unmost importance and should be performed using both outcome and process measures. Because of the small size of many rural practices, effective monitoring of adverse events and maintenance of safety protocols should include patients. Patients are an important resource for reporting of adverse events and maintenance of safety protocols should include patients. Patients are an important resource for reporting of adverse events and maintenance of safety protocols should include patients. Patients are an important resource for reporting of adverse events and maintenance of safety protocols should include patients. Patients are an important resource for specific patients are an important resource for specific patients are an important resource for specific patients. Patients are an important resource for the culture research which is also incorporates the patient perspective. Patients should be viewed not only as beneficiaries of patient safety but also as a critical component of its maintenance.

Abbreviations: AHRQ = Approve for Healthcare Research and Qualify. QQ = Carbon Diode. EPA = European Practice

Abbreviations: AHRQ = Agency for Healthcare Research and Quality, CO2 = Carbon Dloxide, EPA = European Practice Assessment, PC = primary care, RSV = Respiratory Syncytial Virus, SAQ = Safety Attitudes Questionnaire, SCOPE = Safety Culture Questionnaire for General Practice.

Keywords: CAHPS, culture of safety, EPA, just culture, Patient Reported Outpatient Safety Survey, patient survey, primary care, PROSS, SafeQuest, SAQ, SCOPE

1. Introduction
Maintaining patient safety in healthcare delivery systems has been a major concern during the COVID-19 pandemic. Most of our experience and research data has come from inpatient sertings. During the prepandemic calendar year of 2018, Bates et al reported in the New England Journal of Medicine that almost 1 in 4 hospital admissions had an adverse event, 2.2.7% of which were deemed preventable (6.8% of all admissions). This is a dismal statistic, one that has changed little in over a decade from the findings of Classen, et al, <sup>30</sup> where adverse events were found to occur in one-third of all hospital admissions, and confirmed by the findings of Landrigan et al, <sup>30</sup> who reported 25 patient harms per 100 admissions. Antibiotic-resistant bacteria and fungi have flourished during the COVID-19 pandemic. According to the CDC/s<sup>30</sup> COVID-19 (has) created a perfect storm "with hospital infections and deaths increasing by 15%.

However, as illustrated with methicillin-resistant staphylo-coccus aureus hospital acquired infections,<sup>10</sup> it is possible to maintain prepandemic levels of hospital-associated infections while maintaining adequate staffing and mitigation procedures, including active surveillance and contact precautions. Even less is known about safety in primary care, a branch of medicine which has even less resources than hospitals to ensure patient safety. In primary care, the culture of safety has been largely ignored, with little published on the subject. In 2016, Verbakel et a,<sup>10</sup> conducted an extensive literature search on this subject in the Journal of Patient Safety and found only 2 articles eligible for anal-yis. One described the role of an electronic medical record, and the other described the impact of 2 workshops on patient safety. Primary care patient safety is not an easy subject to address because the specialty cuts across a myriad of different set-tugs and practice environments. Those who practice in large facilities or groups are part of an institutional culture which

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### **Viewpoint: Patient safety in** primary care – patients are not just a beneficiary but a critical component in its achievement

Promoting and maintaining patient safety in primary care requires different strategies and monitoring than utilized in large healthcare delivery systems. Maintenance of a culture of safety is key to providing patient safety but has been difficult to measure in primary care. This is particularly true in rural settings where practice size is a major barrier to measurement reliability.

Primary care evaluates a wide range of patients, including those who are immunocompromised and others who have infectious diseases. Providing a safe environment with proper wearing of N95 masks, clean examination rooms, and adequate ventilation is important.

KTK is the Associate Editor of the Journal of Patient Safety and on the Editorial Board of Infection Control Today. LEC is a Section Editor for Medicine. Data sharing not applicable to this article as no datasets were generated or analyzed during the current study.

Health Watch, Lexington, KY, " Health Watch, Eastern Kentucky University, exington, KY.

r: Kevin T. Kavanagh, Health Watch, Lexington 40509, KY

(e-mai: kawanagn,ent@gmaii.com). Copyright © 2023 the Author(s). Published by Wolters Kluwer Health, Inc. This is an open access article distributed under the Creative Commons

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Patients with infectious diseases should be separated from other patient populations.

Primary care is often less bureaucratic than hospitals, but also has fewer resources to implement patient safety initiatives, along with detecting safety lapses and adverse events. However, monitoring the practice's safety practices and the culture of safety is of utmost importance and should be performed using both outcome and process measures. Because of the small size of many rural practices, effective monitoring of adverse events and maintenance of safety protocols should include patients. Patients are an important resource for reporting of adverse events and medical treatment outcomes.

The aim of this manuscript is to underscore the importance of patient safety in primary care and to stimulate future research in developing a metric for the culture of safety in primary care, which also incorporates the patient perspective. Patients should be viewed not only as beneficiaries of patient safety but also as a critical component of its maintenance. Medicine. Sept. 15, 2023. <a href="https://journals.lww.com/md-journal/fulltext/2023/09150/viewpoint\_patient\_safety\_in\_primary\_care\_.3.aspx">https://journals.lww.com/md-journal/fulltext/2023/09150/viewpoint\_patient\_safety\_in\_primary\_care\_.3.aspx</a>

#### **Non-Peer Reviewed Comments of Articles:**

- 3. Kavanagh KT. Is Nosocomial SARS-CoV-2 Still Worth Preventing?
  - ... it is not difficult to imagine hospitals maintaining infection control practices to prevent the spread of SARS-CoV-2. Maintenance is imperative to protect all patients and health care staff. For the immunocompromised, access to healthcare is being restricted which is not only bad medicine but appears to be in conflict with the Americans with Disability Act (ADA). JAMA Network. Nov. 13, 2023.
  - https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2811653
- 2. Kavanagh KT. *Household Transmission of Influenza A Viruses in 2021-2022.*I found the magnitude of the increase in influenza infections to be surprising
  - I found the magnitude of the increase in influenza infections to be surprisingly high and not supportive of the Immune Debt hypothesis. The authors observed a 150% increase in transmission. This is far greater than a theoretical Immune Debt caused by a 1 year lack of exposure to influenza. According to the CDC, the average number of symptomatic influenza cases each year approximates 10% of our population. Thus, one should also consider the possibility of Post COVID-19 Immunodysfunction or hypofunction.
  - JAMA Network. Mar. 1, 2023. https://jamanetwork.com/journals/jama/fullarticle/2800976
- 1. Kavanagh KT. Cormier LE. *Re: Long covid outcomes at one year after mild SARS-CoV-2 infection: nationwide cohort study.* 
  - Another way of stating the results is that in very young unvaccinated adults (median age 25 years) who have mild disease, if one has cognitive impairment during the acute illness, this symptom will probably persist (81% of the time), if one has dyspnea or weakness, well over a third will have persistent symptoms, if one has heart palpitations about a third will have persistence of this symptom. BMJ. Jan. 1, 2023. <a href="https://www.bmj.com/content/380/bmj-2022-072529/rr-2">https://www.bmj.com/content/380/bmj-2022-072529/rr-2</a>

#### Health Watch USA<sup>sm</sup> – Op-Eds USA Today:

1. COVID is closing Kentucky schools – again. Embracing disinformation paralyzes our response. The myth that children do not have to worry about COVID, along with other respiratory diseases, is based on misinformation. Unfortunately, too many of our schools have unhealthy buildings with outdated HVAC systems. This will adversely impact our children's learning, along with placing them at risk for acquiring respiratory diseases (RSV, flu and even colds). I felt the spending of COVID funds on outdoor sports and running tracks, as opposed to improvements in indoor air quality and COVID mitigation strategies, exemplified Kentucky's embrace of disinformation and inability to safeguard the lives and well-being of our children. Let's make Kentucky the national leader in providing a safe educational environment for our children. The first and easiest steps will be to upgrade school ventilation and to respect parents who are masking their children. References USA Today. June 9, 2023.

https://www.usatoday.com/story/opinion/2023/09/06/kentucky-school-districts-close-covid-upgrade-buildings-ventilation/70765140007/

#### Health Watch USA<sup>sm</sup> – Op-Eds Courier Journal:

- 3. Who gets better COVID protection? CEOs or the frontline workers they employ? Opinion

  What does the capitalistic business magazine, Forbes, and the World Socialist Web Site have in common? Answer: Both are pointing out the glaring double standard in COVID-19 precautions given to business CEOs and world business leaders at the DAVOS World Economic Forum, compared to those given to frontline workers which many of them employ. With the dangers of delayed heart disease, memory and disorders cognition, along with post-COVID immune dysfunction, we are dealing with a dangerous pathogen and I have repeatedly given the advice for business owners to upgrade their airflow, patrons to use portable CO2 monitors to estimate air quality and to test before gatherings. If it is good enough for billionaires and Fortune 500 CEOs it is good enough for me. References Courier Journal. Jan. 30, 2023. https://www.courier-journal.com/story/opinion/2023/01/30/ceos-or-the-frontline-frontline-workers-they-employ-who-gets-better-covid-protection/69844461007/
- 3. Why 'herd immunity' is as outdated as 'the earth is flat' when it comes to COVID: Opinion

  This concept was formulated before science knew what viruses and mutations were. In actuality, many biological systems are highly dynamic and constantly adapting. With the exception of smallpox, no pathogen has ever been eradicated from the earth and with smallpox, eradication was achieved with a highly effective long-lasting vaccine. Our goal must be to decrease pathogen spread. We need to embrace vaccinations, the use of N95 masks in crowded venues, along with home delivery, curbside pickup and outside dining. Indoor air quality must be improved to the point where it is safer indoors than it is outdoors. References Courier Journal. Jan. 4, 2023. <a href="https://www.courier-journal.com/story/opinion/2023/01/04/why-herd-immunity-is-as-an-outdated-concept-when-it-comes-to-covid/69750170007/">https://www.courier-journal.com/story/opinion/2023/01/04/why-herd-immunity-is-as-an-outdated-concept-when-it-comes-to-covid/69750170007/</a>

#### **Health Watch USA**<sup>sm</sup> – **Industry Voices Fierce Healthcare**:

4. Industry Voices—Hospitals can't lose sight of infection control as COVID recedes Earlier this month, a news article from the United Kingdom reported that more than 2600 National Health Service staff have missed work due to Long COVID, some up to two years. The vast majority of those impacted were nurses. Two days later, the Journal of Infection Control and Hospital Epidemiology reported that 27.4% of Brazilian healthcare workers who were diagnosed with COVID-19 developed long COVID. The best defense against long COVID is to not get infected in the first place. Unless we commit to a reliable and robust measurement system of hospital-acquired infections, we will continue to have a stressed workforce and need to rely on data generated in other countries. If this does not occur, the United States will take a back seat in public health and healthcare safety and will lose its leadership position in the world. References Fierce Healthcare. June 23, 2023. https://www.fiercehealthcare.com/hospitals/industry-voices-hospitalscant-lose-sight-infection-control-covid-recedes

#### 3. Industry Voices—The case for hospitals to invest in cleaner air

The American Society of Heating, Refrigeration, and Air-conditioning Engineers (ASHRAE) recommends an indoor CO2 level of 870 ppm or below. To achieve this, a minimum ventilation rate of 10 liters per second per person is needed. Lowering CO2 improves cognition: Higher CO2 levels can also cause drowsiness and affect concentration. Joseph Allen, et al., have demonstrated that compared to CO2 levels of 550 ppm, cognitive function was 15% lower at a level of 945 ppm and 50% lower at a level of 1400 ppm. For "strategy" (the ability to plan, sequence and prioritize actions) these scores were 16% and 78% lower, respectively. "On average, a 400 ppm increase in CO2 was associated with a 21% decrease in a typical participant's cognitive scores across all domains ..." New draft ASHRAE recommendations released in May 2023 address "Control of Infectious Aerosols." Equivalent outdoor airflow in healthcare waiting rooms should be 60 liters per second per person (L/s/p), 45 L/s/p in common treatment areas and 90 L/s/p in healthcare patient rooms. Compared to the purchasing of N95 masks, the economic investment in clean air is much lower and should easily be offset by the advantages of maintaining a healthy workforce and increasing the safety of healthcare provided to patients. References Fierce Healthcare. May 15, 2023. https://www.fiercehealthcare.com/hospitals/industry-voices-case-hospitals-invest-

cleaner-air

2. Industry Voices—As healthcare's labor shortages worsen, masking remains critical "Staffing shortages have created healthcare worker burnout and skyrocketed hiring prices. A vicious feedback loop ensued. N95 masks are one of the keys to the optimal maintenance of a healthy healthcare workforce and breaking this cycle. The expense of these masks pales in comparison to the expenses paid by hospitals to hire agency replacement workers. The benefits of high-quality masks extend far beyond SARS-CoV-2, since they will help prevent illnesses from other common airborne pathogens, decreasing sick leave and allowing the facility to maintain the provision of high-quality services. "

References Fierce Healthcare. Apr. 7, 2023. <a href="https://www.fiercehealthcare.com/providers/industry-voices-healthcares-labor-shortages-worsen-masking-remains-critical">https://www.fiercehealthcare.com/providers/industry-voices-healthcares-labor-shortages-worsen-masking-remains-critical</a>

#### 1. Industry Voices—Amid a return to normalcy, COVID remains a threat.

The Federal Reserve Board raising interest rates will not cure the bird flu, nor will it cure COVID. The infections have a lasting negative impact on our workforce, shackling our healthcare system with chronically sick long COVID patients with far too few healthcare staff to service them. Banks are collapsing; our economy is obviously not overheating. Our current economic strategy is like telling someone to run with a broken leg and work through the pain. References Fierce Healthcare. Mar. 27, 2023. <a href="https://www.fiercehealthcare.com/providers/commentary-we-may-be-done-tracking-covid-19-its-not-done-attacking-us">https://www.fiercehealthcare.com/providers/commentary-we-may-be-done-tracking-covid-19-its-not-done-attacking-us</a>

#### **Health Watch USA**<sup>sm</sup> – Op-Eds Lexington Herald Leader:

## 1. Despite misinformation, we can do more to protect against Covid, RSV and flu | Opinion

Much of the current COVID-19 misinformation has its genesis from the newly concocted explanation of "Immune Debt." Mounting evidence indicates this is not the case. A more concerning process may be taking place. In Africa and Southeast Asia, masks and social mitigation measures have been used for decades to blunt the epidemics of SARS, MERS, and Ebola without any observed ill effects. The other more ominous possibility is "immune theft" resulting from an immunodysfunction caused by previous COVID-19 infections. A non-peer reviewed preprint recently reported that children who contracted RSV were twice as likely to have had a previous COVID-19 infection than those who did not develop an RSV infection. Common sense measures need to be taken during this winter surge. And The United States also had a large RSV spike last year. Thus, the "Immune Debt" explanation does not fit. For patrons, high-quality N95 masks should be worn when one enters indoor venues. For business, to the extent possible, make available curbside pickup and online purchasing options. References Lexington Herald Leader. Jan. 6, 2023. https://www.kentucky.com/opinion/op-ed/article270831132.html

#### **Health Watch USA**<sup>sm</sup> – **Op-Eds Post & Courier:**

#### 1. Commentary: Charleston airport needs to improve its air quality

"Besides the concern about the spread of infectious disease — and not just COVID; I do not wish to spend thousands of dollars on a trip and be down for several days with even a cold — there is also the concern regarding cognition and worker performance. It should be noted that HEPA filters and UVC upper-room lighting do not lower carbon dioxide levels. Charleston International Airport needs to upgrade its indoor ventilation and heating and

air conditioning systems. This requires more than just an upgrade of filters, because the increase in resistance to produce adequate airflow often requires new HVAC units, which may also require electrical upgrades. In addition, lowering the CO2 level by increasing the mix of outside air is imperative for both worker and traveler safety." References Post and Courier. Oct. 31, 2023.

https://www.postandcourier.com/opinion/commentary/commentary-charleston-airport-needs-to-improve-its-air-quality/article\_efafa202-74b6-11ee-8b7c-cb511e38e4fc.html

#### **HW USA - Infection Control Today Articles & Viewpoints:**

#### 22. How Artificial Intelligence Is Revolutionizing Diagnosis in Health Care

Diagnostic errors are a long-standing, pervasive problem. A recent study published in the British Medical Journal, Quality & Safety, estimates that in the United States, 795,000 patients suffer serious harm each year from diagnostic errors. The big 3 categories of diseases where these errors occurred were vascular events, infectious diseases, and cancers. There was an average medical error occurrence of 11% and a rate of patient harm of 4.4%. There is little doubt that AIs will be widely used to aid physicians in making diagnoses and nurses in making patient intake and triage decisions. Implementing AI promises to increase patient safety, accuracy, and efficiency. The latter, however, will mean fewer medical jobs for humans, but with the potential of patients having greater access to more affordable health care. References Infection Control Today. Dec. 22, 2023. https://www.infectioncontroltoday.com/view/how-artificial-intelligence-is-revolutionizing-diagnosis-health-care

### 21. CDC's HICPAC Update: Impact on COVID-19, Pathogen Control, and Immunocompromised Safety in Health care Settings

Recent CDC HICPAC revisions regarding SARS-CoV-2 control face criticism from the World Health Network and others due to alleged breaches in committee structure and erroneous infection control guidance, potentially impacting COVID-19 management and immunocompromised individuals in health care. As stated in an action letter sent to the CDC, for the immunocompromised the status quo is unacceptable, and weakening current regulations will result in a "direct threat" to their safety and well-being and does not maintain accessible features for safe and adequate access to a facility. This concern was further underscored by the findings of the INFORM and EPOCH research initiatives. The CDC be "mindful of the provisions of the ADA and the impact recommendations will have regarding vulnerable individuals who both work in health care settings or are experiencing reduced access to healthcare because of unsafe healthcare environments." References Infection Control Today. Nov. 8, 2023.

https://www.infectioncontroltoday.com/view/cdc-s-hicpac-update-impact-covid-19-pathogen-control-immunocompromised-safety-health-care-settings

### 20. A Keynote Speaker's Journey: Strategies to Maximize Respiratory Safety During Air Travel Amid a Pandemic

A high-risk for severe COVID-19 keynote speaker, Kevin Kavanagh, MD, shares strategies for safe air travel during the COVID-19 pandemic, emphasizing mask usage, vaccinations, and air quality monitoring, with mixed observations throughout the journey. On the return, Logan airport had carbon dioxide levels consistently around 600 (549 to 690), making my wait much safer, but I kept my mask on. There was no downside to doing so. I flew on the exact same plane, and carbon dioxide levels were around 2000 ppm. Again, I stayed masked. When I landed, I hurried out of the airport with the stagnant and probably aerosol-ridden air, and then made it back home. The one thing that was very evident was the United States has a long way to go in providing clean indoor air. But for me, so far, so good, I have not developed a respiratory infection. References Infection Control Today. Oct. 16, 2023. https://www.infectioncontroltoday.com/view/a-keynote-speaker-s-journey-strategies-maximize-respiratory-safety-during-air-travel

#### 19. How to Prepare For Possible "Tripledemic" of RSV, Influenza, and SARS-CoV-2

The interaction between the respiratory viruses SARS-CoV-2, influenza, and RSV, poses ongoing challenges. Personal protective measures, testing, and vaccination are critical components of our strategy to mitigate the impact of these viruses. New research focuses on real-time SARS-CoV-2, RSV, and influenza detection. A proof-of-concept portable monitor has been developed to detect SARS-CoV-2 within 5 minutes.18 This technology could also be applied to RSV and influenza. Thus, we must not abandon public health and only rely on personal protection. This is a recipe which may force us to endure another tripledemic. Instead, we should prevent all respiratory illnesses to the highest degree possible, with strategies which are adopted and supported by society. References Infection Control Today. Sept. 25, 2023.

https://www.infectioncontroltoday.com/view/how-prepare-possible-tripledemic-rsv-influenza-sars-cov-2

#### 18. Organized Disinformation Fanning the COVID-19 Flames of Vaccine Hesitancy

"Our pandemic response has undoubtedly been stymied, largely due to the divisive effects of organized disinformation. Many disseminators of disinformation downplay the idea of a multi-layer approach and proclaim that if you can still catch COVID-19 while wearing a mask, they do not work, ignoring that seldom is a single intervention 100% effective. Everything from treating a cold to cancer involves multilayer approaches, as does automobile and airline safety. Why should COVID-19 be any different? .... As COVID-19 cases and hospitalizations increase, do not fall prey to disinformation. It is wise to be vaccine-boosted, wear a mask in high-risk settings, and carry a CO2 monitor to determine safe indoor ventilation. These steps will help us all avoid the disabilities caused by long COVID and help to maintain the health of our families and the nation's workforce."

References Infection Control Today. Sept. 18, 2023.

https://www.infectioncontroltoday.com/view/organized-disinformation-fanning-covid-19-flames-vaccine-hesitancy

### 17. As COVID-19 Hospitalizations Increase Alarmingly, Workers and Patients Call for Better Standards

"After almost 4 years of COVID with over 10,000 patients currently hospitalized, a 22% increase over last week, one must ask, what has the CDC been doing? According to many people, the CDC has been trying to roll back our protections and ability to fight the spread of disease when experts are strongly advising those at high-risk to mask up in indoor settings." During an ongoing pandemic, credibility is of utmost importance. As one commentator stated, "We need consistent messaging to educate the public about the true dangers of COVID and being disabled by long COVID." If the public cannot rely on the agency to communicate safe and effective recommendations on masking and ventilation, how then can they be expected to rely on the CDC's advice on vaccine uptake? And if we minimize the dangers of SARS-CoV-2, how then can we expect the public to see the urgency in obtaining the updated booster? References Aug. 28, 2023. Infection Control Today. https://www.infectioncontroltoday.com/view/as-covid-19-hospitalizations-increase-alarmingly-workers-patients-call-better-standards

#### 16. Flying Blind as COVID-19 Rates Increase: The Eris Variant

Few people doubt COVID-19 will stay around, and it is starting to increase again in August 2023. Daily hospital admissions are on the rise, up over 70% from mid-June. Currently, there are 1500 COVID-19 admissions daily in the United States and projected to increase to over 1800 admissions by the end of August. The Walgreens COVID-19 test positivity rate is at 44.7%, the highest it has ever been. COVID-19 infections will not go away and will have a lasting impact on our resources. We must be able to accurately calculate and project the societal and workforce impact of COVID-19. We should have the data to calculate the percentage of the population disabled by COVID-19 and project this into the future. But at this point, we appear to still have our heads in the sand, hoping that if we do not measure and report the virus one day, like a miracle, will disappear. References Infection Control Today. Aug. 17, 2023.

https://www.infectioncontroltoday.com/view/flying-blind-as-covid-19-rates-increase

### 15. One Step Forward, 2 Back: CDC's Proposals for Infection Control in Health Care Facilities

"During the CDC's June 2023 Healthcare Infection Control Practices Advisory Committee (HICPAC) meeting, concerns were expressed regarding proposed updates to existing infection control guidance for health care facilities which would place patients, health care workers, and nursing home residents at risk.... The United States' post-emergency infection control strategy involves scaling back data collection, weakening guidance, not effectively reporting health care worker or patient acquisitions, and not setting firm and effective standards for control. HICPAC/CDC is on the verge of weakening contact precautions (by adopting EBPs) and weakening airborne precautions, thereby ignoring decades of occupational health research." References Infection Control Today. July 24, 2023. https://www.infectioncontroltoday.com/view/one-step-forward-2-back-cdc-s-proposals-infection-control-health-care-facilities

#### 14. Opinion: Post Pandemic Strategies Are Inadequate To Assure Public Safety

Many COVID-19 experts place the odds at 20% in the next two years of experiencing an outbreak comparable to that caused by the Omicron variant. Unfortunately, SARS-CoV-2 is not the only disease on the rise. The lack of publicly available data regarding the incidence of MRSA, COVID-19, and other pathogens in the United States is concerning. This data should be readily and publicly available for community and facility-onset infections. For now, patients can only guard against exposure to aerosolized pathogens by wearing a well-fitted N95 mask in healthcare settings and using CO2 monitors to screen for adequate air ventilation. What is needed to control an organism is what is required to be implemented. The pathogen does not care where it is. The same interventions are needed in nursing homes as are needed in hospitals. And workers need to be protected from all, not some aerosolizing pathogens. No one wishes to be sick for days or weeks at a time. Just because it does not kill you is not an excuse to only provide a worker with a surgical mask or to not take necessary preventative strategies to limit airborne spread. References Infection Control Today. July 13, 2023. https://www.infectioncontroltoday.com/view/opinion-the-latest-on-covid-19-where-arewe-now-

#### 14. 70% of COVID-19 Cases Transmitted By Children

COVID-19, schools, and children are sensitive topics. Some worry about transmission in schools, while others don't see it as a concern. Which is it? "One of the lessons of the COVID-19 pandemic is that schools can be opened safely if proper mitigation strategies are in place. However, during the pandemic, we witnessed a vicious cycle of concerned and loving parents wanting in-person learning for their children but justifying their position by asserting that COVID-19 in children was "not a thing." This often led to mitigation strategies not being implemented and teachers being reluctant to return to school. Schools remained closed for a period much longer than would have been necessary. We must start planning for the next infectious disease surge and build an effective school infrastructure, including upgrading ventilation and upper room UV-C germicidal lighting." References Infection Control Today. June 5, 2023. https://www.infectioncontroltoday.com/view/70-covid-19-cases-transmitted-by-children

#### 13. Endemic SARS-CoV-2 Demonstrating Workforce/Health Consequences

The rate of unemployment, long COVID, and immune system issues are still causing problems globally. Several countries are reporting workforce shortfalls. China is now short 41 million workers, and in the United Kingdom, for every 13 individuals working, one person is not working because of long-term sickness. The WHO is taking a leadership position, calling for a monovalent XBB booster that targets XBB.1.5 and XBB.1.16. Concerns of immune imprinting and the rapid waning of vaccine and infection-induced immunity make it clear that additional mitigation strategies are needed to mitigate transmission. Unspent COVID-19 funds are available, which should be used to expand infectious disease reporting, testing upgrade facility ventilation and air quality, and use upper room UV-C germicidal lighting. References Infection Control Today. May 22, 2023.

https://www.infectioncontroltoday.com/view/endemic-sars-cov-2-demonstrating-workforce-health-consequences

#### 12. The End of the COVID-19 Public Health Emergency?

Although the public health emergency for COVID-19 is officially over, infection rates, precautions, and safety measures for communities around the United States still need to be addressed. Even though the PHE has ended, numerous workplaces need to implement preventive strategies and upgrade their infrastructure. Adequate ventilation is still lacking in far too many venues, including our dilapidated school infrastructure. There is clearly a critical missed opportunity for engagement of electronic medical records to collect needed data for public health. It may be time to discontinue the Pandemic Health Emergency, but many have concerns regarding this action when the United States appears to be unprepared for another SARS-CoV-2 surge, let alone a new pandemic. As a nation, we can and must do better. References Infection Control Today. May 11, 2023. https://www.infectioncontroltoday.com/view/the-end-of-the-covid-19-public-health-emergency-

#### 11. Opinion: COVID-19 Expanded Reporting Systems Should Continue

One of the most concerning outcomes of the COVID-19 pandemic is that the CDC and other governmental agencies appear to be dismantling our newly expanded reporting systems rather than expanding and maintaining them for the next pandemic, a pandemic which many experts feel has a 15% to 20% chance of occurring in the next 2 years... We need not only to have a permanent system for monitoring the persistence and emergence of dangerous pathogens but also to determine the composition of patients' microbiomes. Everyone should be tested every year and upon admission to acute and long-term care facilities. This would identify pathogens and provide new insights into diabetes, obesity, cancer, and even COVID-19 and long COVID... Control and prevention of infections are of paramount importance. We need to back away from blame. Regardless of who is at "fault" or even if any "fault" exists, if you need an internal prosthesis placed, you may not want to have this procedure in a hospital or a community with high rates of MRSA carriage or infections. Knowing and mitigating the actual numbers are important. Infection Control Today. References May 10, 2023. https://www.infectioncontroltoday.com/view/opinion-covid-19-expanded-reportingsystems-should-continue

### 10. COVID-19 Masking: Hundreds of Thousands of Russian Social Media Bots Have Tricked the Public

"Fake news and disinformation may significantly inhibit the adoption of masking by the public. The Washington Post reports that recently leaked national security documents indicate the Russians "boasted" that "less than 1%" of their sham social media profiles and bots have been caught. One of their propaganda campaigns spread the conspiracy theory that the United States was hiding the side effects of vaccines. A "network of hundreds of thousands of social media bots emulate(ed) users" and was intended to divide the West, and apparently was very successful. One could argue that this has led to

a loss of confidence in public health authorities, adversely impacting adopting of COVID-19 mitigation strategies. As a hyper-traveling world society has emerged, dangerous pathogens spread almost instantaneously. The United States needs to adapt. As a first step, health care facilities should require universal masking to protect patients and staff." References Infection Control Today. Apr. 19, 2023.

https://www.infectioncontroltoday.com/view/covid-19-masking-hundreds-thousands-russian-social-media-bots-have-tricked-public

#### 9. The Health of US Citizens Is Declining—But Why?

Some policymakers have blamed the infection increase on time-tested public health strategies, such as the few weeks of lockdowns 3 years ago. However, this phenomenon is also seen in Sweden, a country that implemented limited mandates and shunned masking. There is mounting research evidence that infection with SARS-CoV-2 causes immunological damage in at least a subset of patients, a subset which may progressively enlarge as reinfections occur. Unfortunately, many interventions have fallen by the wayside in the United States, explaining our marked decrease in life expectancy. We can declare the pandemic has ended, but the virus is an unrelenting adversary that does not respond to political pressure. References Infection Control Today. Apr. 5, 2023. https://www.infectioncontroltoday.com/view/the-health-of-us-citizens-is-declining-but-why-

#### 8. COVID-19: Study Suggests Long-term Damage to Immune System

NIH News Release: "...findings suggest that SARS-CoV-2 infection damages the CD8+ T cell response, an effect akin to that observed in earlier studies showing long-term damage to the immune system after infection with viruses such as hepatitis C or HIV." These findings mirror those reported by Jacob Files, PhD, et al who stated, "Overall, expression of these activation and exhaustion markers indicated more severe immune dysregulation of CD8+ T cells in the hospitalized group." And they found that "CD8 T cell expression of exhaustion markers increased in nonhospitalized individuals over time...." We can choose to declare the pandemic over, but SARS-CoV-2 is deaf to these pronouncements. Hopefully, the dysfunction will be temporary and progressive in most individuals. However, just the possibility makes avoiding COVID-19 infections paramount, and we must keep our immunity as high as possible. References Infection Control Today. March 21, 2023. https://www.infectioncontroltoday.com/view/covid-19-study-suggests-long-term-damage-immune-system

7. Addressing COVID-19 Misinformation: What the Experts Got Right—and Wrong Information presented at this week's Congressional Committee needs a much deeper evaluation and consideration. The Cochrane Masking study may even vindicate the federal government's initial COVID-19 response.

Natural Immunity Is Superior to Vaccinated Immunity:

This is a self-fulfilling prophecy. Early on, it was stated that if the virus continued to spread, it would mutate, and the vaccine would become less effective. This has happened with the help of many individuals who discouraged adopting public health

strategies. Prior to the Delta variant, the vaccine had the edge; afterward, the vaccine's efficacy diminished. However, neither type of immunity is adequate, and whether infected or vaccinated, your immunity will wane, and a booster is beneficial to obtain hybrid immunity.

Masks Prevent COVID-19 Transmission:

One of the main problems is that the study relies heavily on research evaluating the seasonal flu, a virus that is NOT felt to spread primarily by the airborne route. For the season flu, masking will not stop its major route of transmission. For SARS-CoV-2, which is airborne, cloth masks and even surgical masks will not provide optimal protection. Well-fitted N95 masks will provide the greatest protection.

School Closures Reduce COVID-19 Transmission:

Abundant evidence exists that children can spread COVID-19. The Public Health Agency of Sweden Weekly Report #50 states: "(translated) among the environments for the public (excluding health care) was primary school, the environment from which the most outbreaks were reported in week 50..." (Total outbreaks 199, Nursery Schools 39, Elementary Schools 90, Grammar Schools 23, Workplace 39, High Schools were closed.) References Infection Control Today. March 3, 2023.

https://www.infectioncontroltoday.com/view/addressing-covid-19-misinformation-what-experts-got-right-wrong

#### 6. How Soon Is Another Booster Needed? Durability of Vaccine-Induced Immunity

Specifically for older individuals and immunocompromised individuals, a year could be too long. "Is the (bivalent) booster worth taking? Yes, definitely. However, this differs from the booster or vaccine we need to navigate this pandemic. At the conclusion of the CDC Committee meeting, my primary impression was that we senior citizens might be viewed as expendable. Policy makers need to make the hard decisions that must be made to assure our safety during this pandemic. After looking at the data, I will consult my physician about receiving a booster on an accelerated schedule, possibly at 6 months. References Infection Control Today. Feb. 26, 2023.

https://www.infectioncontroltoday.com/view/how-soon-is-another-booster-needed-durability-vaccine-induced-immunity

### 5. Is the Rise in RSV Infections Associated With Immune Debt or SARS-CoV-2 Immune Dysfunction?

Post-COVID-19 immune dysfunction is supported by epidemiological, clinical, and laboratory evidence. Attributing, with little to no evidence, that masking and lack of exposure is the primary driver of increases in bacterial and viral infections discourages critical interventions needed to stop the spread of disease. References Infection Control Today. Feb. 24, 2023. https://www.infectioncontroltoday.com/view/is-rise-rsv-infections-associated-immune-debt-sars-cov-2-immune-dysfunction-

#### 4. COVID-19 Immunity: Catching a Disease to Prevent a Disease?

I had to stop and read the Seattle Times news article "UW study: Catching COVID gives protection from its worst effects." The article's first sentence states: "A past COVID-19

infection offers 'durable,' temporary protection against getting severely sick with the coronavirus." Can you please tell me what 'durable - temporary protection' is? Unfortunately, neither vaccination nor infection provides durable protection. Hybrid immunity is best, but becoming infected to achieve immunity is a perilous strategy. At 40 weeks, the study in question, reported that pooled data found only a 36.1% effectiveness against reinfection. This protection would be expected to be even less effective with the highly immune-invasive XBB.1.5 and BQ.1 variants. Herd immunity is not achievable and has not been achieved in Sweden, a country whose results have been discouraging. There is minimal downside to boosting your immunity to help avoid long COVID. Our goal as a nation must not be to become reinfected yearly; this is not a viable option. References Infection Control Today. Feb. 20, 2023.

https://www.infectioncontroltoday.com/view/covid-19-immunity-catching-disease-prevent-disease-

### 3. FDA VRBPAC Meeting: Bivalent Vaccines, Natural Immunity, Imprinting and COVID-19 Hospitalization Rates

The FDA's Vaccines and Related Biological Products Advisory Committee laid out a simpler direction for SARS-CoV-2 development and deployment. In individuals without a previous infection, the better the original vaccination matches the current viral strain, the better the immunological response will match future viral sublineages and the less of an impact any potential imprinting will have. In addition, during a discussion regarding natural immunity, it was stated: "Major issue is, the concept was that if you had COVID-19 or had been vaccinated previously, you would just need one dose versus others who might have multiple doses." Thus, the new vaccine strategy may bring natural immunity on par with initial vaccination, and require frequent updating of vaccines and boosters to minimize the impact, if any, of immune imprinting and maximize the immunological response to SARS-CoV-2. References Infection Control Today. Jan. 29, 2023. https://www.infectioncontroltoday.com/view/fda-vrbpac-meeting-bivalent-vaccines-natural-immunity-imprinting-covid-19-hospitalization-rates

#### 2. Bird Flu Warning: Its Spreading, Mutating, and Infecting Mammals

I'm starting to experience déjà Vu. Gain-of-Function experiments performed on a hazardous virus, viral spread from birds to mammals, spread between mammals, and mutations beginning to arise, which may be the first step in conferring the ability to transmit in humans. I do not want to go through this again, especially since our current pandemic is not under control. We need to aggressively contain the spread of bird flu and increase our genomic surveillance for this disease. <a href="References">References</a> Infection Control Today. Jan. 23, 2023. <a href="https://www.infectioncontroltoday.com/view/bird-flu-warning-its-spreading-mutating-infecting-mammals">https://www.infectioncontroltoday.com/view/bird-flu-warning-its-spreading-mutating-infecting-mammals</a>

#### 1. Immunodysfunction: A Cause of Stealth COVID-19 Illness and Death

The concept of immune dysfunction caused by COVID-19 is rapidly changing from a theoretical construct to a significant adverse outcome of COVID-19. One which may have the potential to collapse our health care system and impact patients long after they

become COVID-19-negative. Along with heart disease, immune dysfunction and severe infections are becoming another cause of stealth COVID-19 deaths. The public needs a paradigm shift from believing that COVID-19 is a respiratory disease to understanding that COVID-19 impacts every organ of the body, causing delayed manifestations such as strokes, heart attacks, and infections which can present long after one becomes COVID-19-negative. References Infection Control Today. Jan. 17, 2023.

https://www.infectioncontroltoday.com/view/immunodysfunction-a-cause-of-stealth-covid-19-illness-death

#### **Oral Comments Before Federal Committees**

- 1. Dec. 20, 2023. Public Comment: PACCARB Meeting Enhanced Barrier Precautions and Revisions to Recommendations for Contact Precautions.
  - Dr. Kevin Kavanagh from Health Watch USA<sup>sm</sup> discusses concerns regarding the CDC's proposed Enhanced Barrier Precautions and Isolation Precautions. A case is made that these precautions are a step backwards and will not stop infections, nor will they help prepare us for the next pandemic. View Video: <a href="https://youtu.be/q\_UiDIIIEIO">https://youtu.be/q\_UiDIIIEIO</a> Written Comment
- 2. Nov. 3, 2023. Public Comment: CDC HICPAC Meeting Infection Control Standards. Dr. Kevin Kavanagh from Health Watch USA<sup>sm</sup> gives a public comment regarding the weakened CDC infection control guidance in view of the risks they impose to immunocompromised individuals. The CDC needs to be mindful of the Americans with Disability Act and protect the most vulnerable in our society when they are formulating new infection recommendations. View Written Comment. YouTube Video: https://youtu.be/zUV5Tx EFI4
- 3. Aug. 22, 2023. Public Comment: CDC HICPAC Meeting Infection Control Standards.

  Dr. Kevin Kavanagh, MD, MS, from Health Watch USA<sup>sm</sup> makes the case for better CDC infection control recommendations. Respirators or PAPRs should be used when treating all airborne respiratory pathogens. Knowledge of a patient's microbiome is of paramount importance. Asymptomatic carriers in hospitals and nursing homes should be identified with screening and undergo isolation and decolonization protocols. If this fails, cohorting nursing home residents with compatible microbiomes should be considered. Enhanced Barrier Precautions are inadequate to stop the spread of disease. They may even enhance spread by providing a false sense of security. Finally, we must protect the most vulnerable in our society and implement protective strategies in compliance with the ADA. Universal masking in healthcare facilities should be implemented to accomplish this goal. CDC HICPAC Meeting, Aug. 22, 2023. View Written Comment. YouTube Video of written comment (not selected for oral comment): https://youtu.be/E2-ERukRovc
- 4. June 9, 2023. Public Comment: CDC HICPAC Meeting Enhanced Barrier Precautions Enhanced barrier precautions is advocated for use to mitigate the spread of CRE and C.

Auris in Nursing Home Settings. These are highly dangerous organisms. A clinical trial is certainly indicated before planning for adoption in non-research settings. A better approach is screening to identify the microbiome of residents, decolonization and cohorting if decolonization is not successful. It is concerning that the CDC appears to be moving forward with EBP where there is little evidence supporting their effectiveness with dangerous pathogens and also appears to be considering abandoning N95 masking where there is decades of occupational research supporting their use. Control Practices Advisory Committee (HICPAC). View Written Comment YouTube Video: <a href="https://youtu.be/RiFQAaPEHPE">https://youtu.be/RiFQAaPEHPE</a>

5. June 8, 2023. Public Comment: CDC HICPAC Meeting - The Need for Effective Policy to Prevent Airborne Spread of Pathogens

Dr. Kevin Kavanagh discusses the need for universal and continued use of N95 masks **in** healthcare settings. Firm standards regarding building ventilation need to be set along with firm and clear guidance to prevent spread. Comment before the Healthcare Infection Control Practices Advisory Committee (HICPAC). <u>View Written Comment</u> YouTube Video: <a href="https://youtu.be/g1fPL9qRGt8">https://youtu.be/g1fPL9qRGt8</a>

6. Jan. 24, 2023. Public Comment: PACCARB Meeting - Impact of COVID-19 Immunodysfunction on Antibiotic Resistant Organisms.

Dr. Kevin Kavanagh gives a short discussion regarding the impact of immune dysfunction caused by COVID-19 and its impact on antibiotic resistant organisms. It is stressed that exposure needs to be prevented and similar to the protocols used by the Veterans Health Administration system, surveillance and contact precautions are of utmost importance. PACCARB Oral Comment Jan. 24, 2023. <a href="https://www.healthwatchusa.net/Videos-Presentations/20230124-PACCARB-PublicComment.htm">https://www.healthwatchusa.net/Videos-Presentations/20230124-PACCARB-PublicComment.htm</a>
<a href="Download Comment">Download Comment</a>.</a>

#### **Written Comments Regarding Federal Policy:**

- 1. Nov. 30, 2023. Written Comment ASPR. Comment calling for the assurance of an adequate supply of negative pressure patient rooms and an adequate supply and production capacity for N95 masks. New CDC proposals will decrease usage of these resources which will result in a decreased production capacity for N95 masks and an inadequate number of negative pressure rooms available for the next pandemic. Written Comment <a href="https://www.healthwatchusa.org/HWUSA-Initiatives/PDF-Downloads/20231130-ASPR-Masking-Requirements.pdf">https://www.healthwatchusa.org/HWUSA-Initiatives/PDF-Downloads/20231130-ASPR-Masking-Requirements.pdf</a>
- 2. Aug. 22, 2023 Written Comment: CDC HICPAC Meeting Infection Control Standards.

  Dr. Kevin Kavanagh, MD, MS, from Health Watch USA<sup>sm</sup> makes the case for better CDC infection control recommendations. Respirators or PAPRs should be used when treating all airborne respiratory pathogens. https://www.healthwatchusa.org/HWUSA-

- 3. Feb. 15, 2023. CDC ACIP (Meeting Feb 22-24, 2023). Important reason for updating the COVID-19 vaccine's formulation is the mounting evidence of significant immunological imprinting which occurs with SARS-CoV-2 or vaccine exposure. Download Written Comment <a href="https://www.healthwatchusa.org/HWUSA-Initiatives/HW%20USA%20Regulation.GOV">https://www.healthwatchusa.org/HWUSA-Initiatives/HW%20USA%20Regulation.GOV</a> CommentReceipts/CDC-2023-0007-0115 attachment 1.pdf Submission
- 4. Jan. 26, 2023. FDA VRBPAC. COVID-19 Vaccine Imprinting and the Need to Reformulate the COVID-19 Vaccine. Mounting evidence of significant immunological imprinting which occurs with SARS-CoV-2 or vaccine exposure. FDA Vaccines and Related Biological Products Advisory Committee (FDA VRBPAC). Download Comment <a href="https://www.healthwatchusa.org/HWUSA-Presentations-Community/PDF-Downloads/20230126-FDA-VRBPAC-PublicComment-updating-the-vaccine.pdf">https://www.healthwatchusa.org/HWUSA-Presentations-Community/PDF-Downloads/20230126-FDA-VRBPAC-PublicComment-updating-the-vaccine.pdf</a>

#### Health Watch USA<sup>sm</sup> Action Letter

 Oct. 24, 2023 (Updated Dec. 30, 2023). CDC Action Letter. The adverse impact of new recommendations on immunosupressed individuals and how they may conflict with the Americans With Disability Act. Letter to the CDC. Oct. 24, Letter Updated Letter CDC Response

#### **Health Watch USA<sup>sm</sup> Professional Presentations & Interviews**

1. Major Concerns Regarding CDC's "Enhanced" Barrier Precautions

Dr. Kevin Kavanagh discusses concerns regarding the CDC's proposed Enhanced Barrier Precautions for Nursing Homes. These precautions may be used for residents who are carriers of MRSA, CRE and Candida Auris. However, they are only recommended for staff contacts which have a high risk of transmission. But even low risk activities are performed so often that transmission can occur. In addition, colonized residents are allowed to participate in normal activities. On one hand the CDC is warning of Candida Auris outbreaks and on the other they are recommending little intervention to prevent spread. Health Watch USA recommends that screening, isolation and decolonization be used as the primary strategy and if this fails residents should be cohorted with other residents with compatible microbiomes. Presentation given to the People's CDC on Dec. 7, 2023. <a href="https://youtu.be/IQNoDtePBFs">https://youtu.be/IQNoDtePBFs</a> Download Slides <a href="https://www.healthwatchusa.org/HWUSA-Presentations-Community/PDF-Downloads/20231207-EBP-HWUSA.pdf">https://www.healthwatchusa.org/HWUSA-Presentations-Community/PDF-Downloads/20231207-EBP-HWUSA.pdf</a>

#### 2. Public Health is Based on the Concern for Others - Infection Control Today Interview

Dr. Kevin Kavanagh from Health Watch USAsm discusses the problem created by focusing on individual health instead of community health. Too many are only concerned about their risks and choose not to follow public health measures, such as masking, even if this places others at risk. However, one of the greatest protections is to not be exposed to the virus in the first place. Businesses are also too concerned about short-term profits and have not invested in the provision of fitted N95 masks for their employees and improvements in ventilation and UV-C germicidal lighting. We all need to be provided the same protections which were available to the CEOs at the DAVOS World Economic Forum. Infection Control Today Interview. Feb. 6, 2023. https://youtu.be/BQMxA03sG-U

#### **Health Watch USA<sup>sm</sup> Meetings**

### 1. Sept. 20, 2023. Navigating COVID-19: How Kidney Patients Have Taken Responsibility to Protect Themselves

Paul Conway, Chair of Policy & Global Affairs - American Association of Kidney Patients (AAKP) presents on the continued dangers of COVID-19 and calls on the Federal government and healthcare industry to continue strategies to protect vulnerable patients. In addition to continued mitigation and prevention of COVID-19, the government should:

- \* Align regulation and payment policies for vaccine innovation.
- \* Foster innovation for immunosuppressive drugs for transplant patients via the FDA immediately.
- \* Formalize telemedicine flexibilities.
- \* Expand home dialysis options so more patients can qualify.
- \* Protect the rights of kidney patients under the ADA.
- \* Expand data transparency and access to patients, researchers and elected officials.
- \* Finally, the CDC needs to implement stronger mitigation strategies in healthcare settings to ensure the safest possible healthcare for vulnerable patients.

Health Watch USA<sup>sm</sup> meeting <a href="https://youtu.be/NFmIGCrM310">https://youtu.be/NFmIGCrM310</a>

### 2. Aug. 16, 2023. The Economic and Societal Cost of Disinformation and Not Implementing Optimal Strategies.

Dr. Richard Bruns, PhD discusses cost-benefit analysis of public health initiatives. This analysis can be applied to the cost of implementing, discouraging, and not implementing preventative strategies. The calculation relies on the determination of the number of lives saved along with the cost of saving each life, and if the amount of resources allocated would cost more lives than lives saved. In the United States, the breakeven point for strategies is spending 10 million dollars per life saved, or \$500,000 per life year saved. The effects of misinformation and disinformation have discouraged many from becoming vaccinated. When assigning dollar values to the lives lost and health harms of not getting vaccinated, misinformation has a monetized cost of between 50 to 300

million dollars every day, almost all of which is due to the health harms. There is a clear and large benefit to implementing preventative public health strategies. It does not make economic sense to discontinue preprocedural testing for COVID-19 or to drop masking requirements. It is amazing how facilities will not pay for high quality personal protective equipment (PPE). The cost in disability, lives and in healthcare disruption more than justifies expenditures for these strategies.

Health Watch USA<sup>sm</sup> meeting: Aug. 16, 2023. https://youtu.be/qJltlfQsO8k

#### 3. July 19, 2023. Affordable High-quality Medical Security for All Americans

Dr. Alan Sager, PhD, sketches a plan for health care for all in the United States. We currently spend five times as much on healthcare as defense. That spending should be enough to make medical security for everyone the easiest problem to solve in our nation. Today, though, the political path of least resistance is to just throw more money to allow unequal and ineffective business-as-usual to limp along. But that money will run out within the next decade. So we need to be ready with solid ways to stabilize and reform health care. Unfortunately, health care in the U.S. lacks both a functioning free market and effective government oversight. Monopolies and bureaucracies rarely work well for those who rely on them. We therefore have to develop and test simple and trustworthy ways to cover everyone, contain cost, pay doctors and hospitals and other caregivers, and make sure we have the right caregivers in the right places.

Health Watch USA<sup>sm</sup> meeting. <a href="https://youtu.be/kJDnlo-seew">https://youtu.be/kJDnlo-seew</a>

### 4. Jun. 21, 2023. Outbreak Prevention and Mitigation in a Conflict Zone: Ukraine in 2023 - Wiliam Pewen, MD, PhD

Dr. William Pewen discusses the difficulties in vaccinating the population in an active conflict zone. Difficulties with vaccine funding, distribution and disinformation are discussed along with the vaccination history and future outlook for Ukraine. Health Watch USA<sup>sm</sup> meeting, June 21, 2023. https://youtu.be/n244tNGaykA

#### 5. Jun. 7, 2023. The Unbearable Mitigation of SARS-CoV-2 Endemicity

Dr. Georgios Pappas, a physician from Greece, specializing in zoonotic infections and epidemic preparedness and known for his detailed report on the largest laboratory accident in Southeast Asia which release Brucella discussed the Endemicity of COVID-19. He discusses the Greek experience in combating COVID-19 and the political forces in his country which both helped and hindered the public health effort. These forces include: The Church, The Russian Factor, Scientific Dissidents, Political Dissidents, the Need for Tourists and The Pandemic as a Political issue. There are 14 fallacies (mis and disinformation) which segments of the public hold regarding the virus. These include:

- The virus is gone.
- SARS-CoV-2 is just another Influenza.
- The Epidemic is Mild.

- SARS-CoV-2 needs to adapt.
- Omicron is milder.
- We can predict the viral moves.
- Eventually, we will achieve herd immunity.
- We can rely on treatments.
- Immunocompromised should shelter.
- Minimal risk for the "young & healthy".
- Healthcare can handle it.
- The truth will (automatically) prevail.
- It's not our job.
- We won.

Health Watch USA<sup>sm</sup> meeting, <a href="https://youtu.be/ZxM-PQ">https://youtu.be/ZxM-PQ</a> Mryw

### 6. May 17, 2023. Dr. Amed Awan, MD, MPH discusses misinformation and its impact on medicine and public health.

Misinformation and purposefully spread disinformation is being widely posted on social media with little review of its validity. People spend an average of two and a half hours on social media every day. Over 70% of those in the United States use social media daily. Disinformation is prevalent, exemplified by the Washington Post publishing a leaked document which states only 1% of fake Russian social media profiles are caught. The COVID-19 pandemic has been politicized and there are political motives for disseminating disinformation. The consequences are staggering. We know that more than 1.1 million individuals have died of COVID-19. As of May 2022, there were over 318,000 vaccine preventable deaths. Individuals whose deaths were largely caused by mis and disinformation.

Health Watch USA<sup>sm</sup> meeting. <a href="https://youtu.be/NSecP05PrMo">https://youtu.be/NSecP05PrMo</a>

## 7. Apr. 19, 2023. Origins of COVIDO-19 based upon computer modeling and vaccine design.

Nikolai Petrovsky, MBBS, PhD discusses computer modeling of the ACE2 receptors of various species along with vaccine development and the insights these provide into the origin of SARS-CoV-2 (the virus which causes COVID-19). Of importance is that the Furin Cleavage Site on the SARS-CoV-2 virus is not found in SARS-CoV-1 or in the broader family of viruses. The Furin Cleavage Site can be obtained through mutation or recombination, but neither seems plausible. The binding of the original virus to the ACE2 receptor has the highest affinity to human receptors. It binds less tightly to other animal cells. The pangolin was felt to be a possible intermediary host. The recovered coronavirus from this animal had a highly similar spike protein to SARS-CoV-2, but the remainder of the virus was highly dissimilar. The possibility was discussed that the pangolin may be the source of an artificially transferred spike protein to SARS-CoV-2. Modeling predicted that COVID-19 would not efficiently bind to the bat ACE2 receptor which supports the need for an intermediate host. The strongest viral binding to any ACE2 animal receptor

studied, was to humans, which in itself indicates the original virus was already optimally evolved to infect humans at the very first of the pandemic.

Health Watch USA<sup>sm</sup> meeting https://youtu.be/h 3LhZpplow

### 8. Mar. 15, 2023. One Health and the potential of H5N1 jumping from Birds to Humans - Dr. Daniel Perez

Daniel Perez, PhD discusses avian influenza viruses. Some, such as the H5N1 are highly pathogenic and have low infectivity in humans while others have low pathogenicity such as the H9N2 virus but are highly infectious in humans. Even though the H5N1 has caused a massive avian pandemic, there are relatively few cases in humans in the past 6 years compared to 2015 and before. Thus, the risks to humans are low, but there is significant concern regarding risks to our food supply. Whole inactivated virus adjuvanted vaccines gave a stronger immunological response than modified attenuated viral vaccines. However, immunomodulators can increase the response to attenuated viral vaccines. Vaccination of poultry is labor intensive. The use of attenuated live viral vaccines has distinct advantages in agriculture. In addition, some countries will not import vaccinated poultry. Several lessons can be learned regarding our current pandemic:

- The geographic breadth and size of the current N5H1 pandemic is of significant concern regarding possible emergence of new variants which have increased adaption for infection of humans and mammals.
- Viral mutations and new clades do not necessarily mean lower pathogenicity.
- Animal reservoirs can cause the recurrence of a viral strain which became extinct in humans. This happened with the H1N1 influenza virus.

Health Watch USA<sup>sm</sup> meeting March 15, 2023. https://youtu.be/O0Fj95cECcE

#### 9. Feb. 15, 2021. Immune Debt Versus SARS-CoV-2 Immune Dysfunction

Dr. Kevin Kavanagh from Health Watch USAsm explains why Immune Dysfunction is thought by many to be the main driver of the surges in bacterial and viral infections the world is experiencing. Immune debt caused by lockdowns is an unlikely cause of the RSV surges. For example, Sweden had two large surges of respiratory syncytial virus (RSV) infections but did not have lockdowns and had little use of masking by the public. Dr. Kavanagh presents both epidemiological, clinical and laboratory evidence to support this etiology. The overriding message is that public health interventions, such as masking and social distancing protect individuals and communities and do not cause harm.

Health Watch USAsm Meeting. <a href="https://youtu.be/0UaveBlCuPg">https://youtu.be/0UaveBlCuPg</a>

#### **Newspaper Articles Featuring Health Watch USAsm**

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- ➤ Diamond F. Biden taps former North Carolina health official Mandy Cohen as new director of CDC . Fierce Healthcare. June 20, 2023. <a href="https://www.fiercehealthcare.com/payers/initial-response-bidens-appointment-mandy-cohen-new-cdc-director-positive">https://www.fiercehealthcare.com/payers/initial-response-bidens-appointment-mandy-cohen-new-cdc-director-positive</a>
- ➤ Diamond F. Long COVID described as a 'syndrome of syndromes' in NIH funded research Fierce Healthcare. May 30, 2023. <a href="https://www.fiercehealthcare.com/providers/long-covid-described-syndromes-syndromes-nih-funded-research">https://www.fiercehealthcare.com/providers/long-covid-described-syndromes-nih-funded-research</a>
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