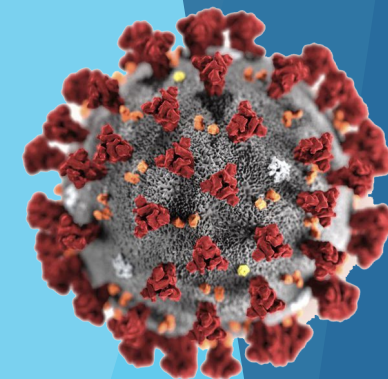




Long COVID's Impact on Patients, Workers & Society

Webinar Nov. 1st, 2023

<https://healthconference.org>

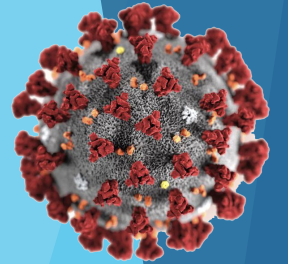


Webinar Introduction

Kevin T. Kavanagh, MD, MS
Board Chairman
Health Watch USAsm



Children do contract and spread COVID-19

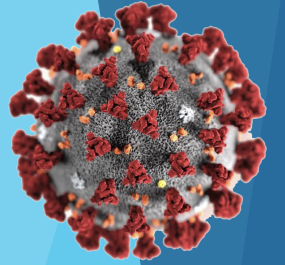


**Table. Sweden In Dec. 2020:
Number of outbreaks in environments
for the public (Non-Medical) per week.
Source: Public Health Agency of Sweden
– Report 50**

<https://www.folkhalsomyndigheten.se/globalassets/statistik-uppfoljning/smittsamma-sjukdomar/veckorapporter-covid-19/2020/veckorapport-covid-19-v50-final.pdf>

Type of environment	Week 46	Week 47	Week 48	Week 49	Week 50
Places of Work	45	52	47	39	39
Nursery School	17	35	27	30	28
Elementary Schools	17	35	27	30	90
Grammar School	34	36	27	20	23
College	3	5	7	7	3
Junior Sports	2	0	0	2	2
Leisure Junior	0	0	0	0	0
Sports Senior	11	10	7	4	1
Leisure Senior	2	1	0	1	0
Spread of infection within societies	1	1	4	3	9
Spread of infection between parties	2	1	1	0	0
Religious gatherings	0	3	2	0	1
Other environments	1	9	5	2	3
Total number of outbreaks	135	214	208	207	199
Number of Reporting Infection Control Units	12	14	12	12	13

Long COVID in Children



“ Kids don't come home and say, 'Mom, I have postexertional malaise, I have brain fog. What happens is that they start doing poorly in school, and parents find out weeks and weeks later.”

– Ziyad Al-Aly, MD

No consensus on prevalence

In 2022, a **systematic review** of 22 studies involving children identified a long-COVID prevalence range of 1.6% to 70%, while a **study** from Germany from the same year that analyzed long-COVID among 157,000 COVID-19 patients suggested that kids were at the same relative risk as adults (30% vs 33%, respectively).

In July 2023, a **systematic review** of 31 studies published in 2022 involving 15,000 children concluded that 16% of children had persistent symptoms 3 months after infection. Another **systematic review** from that period found that 1.3% of US children ever had long COVID and that 0.5% currently had it in 2022.

<https://www.cidrap.umn.edu/covid-19/not-little-adults-experts-say-long-covid-undercounted-misdiagnosed-kids>

CNS Effects of COVID-19

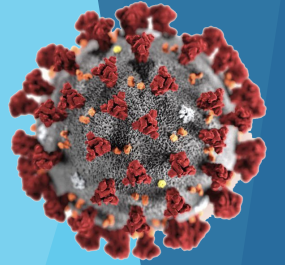


Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

EMERGING INFECTIOUS DISEASES®

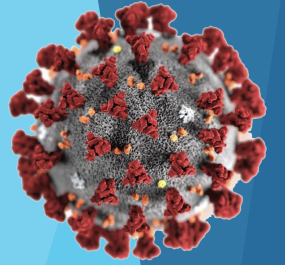


- ▶ CNS Changes in COVID-19 can be profound – even in dogs.
- ▶ “Our findings of degenerative changes in the dog brain during SARS-CoV-2 infection emphasize the potential for transmission to other hosts and induction of similar signs and symptoms. The dynamic brain changes in dogs highlight that even asymptomatic individuals infected with SARS-CoV-2 may develop neuropathologic changes in the brain.”

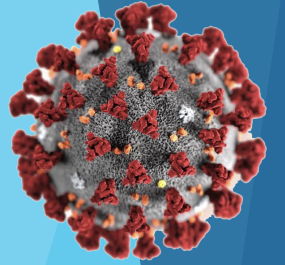


Misinformation

- ▶ Fueled by a mistrust and misunderstanding of Science and Research.
- ▶ Misinformation can also be highly organized and purposely spread in the form of disinformation.
- ▶ Artificial Intelligence will greatly augment the influence of misinformation.



Mistrust of Science - Fueled by Our Leaders

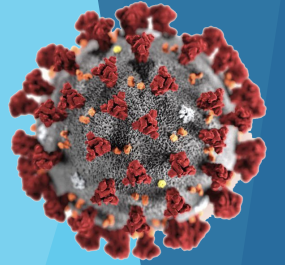


Experts angered and disappointed over Boris Johnson's long Covid remark

- ▶ A document from October 2020 described symptoms of the condition, beside which the then-prime minister wrote “bollocks” and “this is Gulf War Syndrome”.
- ▶ “A similar sentiment was repeated by Mr. Johnson in a WhatsApp message four months later, the UK Covid-19 Inquiry heard.”



Mistrust of Science



- ▶ Federal Agencies currently proposing using Surgical Masks and Not requiring N95 masks for the protection of healthcare workers from some airborne respiratory illnesses.

DRAFT: Transmission-Based Precautions to Prevent Transmission by Air

Category	Facemask or Respiratory Protection	Eye Protection	Airborne Infection Isolation Room (AIIR)	Example Pathogens
Routine Air Precautions	Medical/Surgical Facemask	Per Standard Precautions	Not routinely recommended	Seasonal coronavirus, Seasonal influenza
Novel Air Precautions	N95 respirator	Yes	Not routinely recommended	MERS, SARS-CoV-1, Pandemic-phase respiratory viruses (e.g., influenza, SARS-CoV-2)
Extended Air Precautions	N95 respirator	Per Standard Precautions	Yes	Tuberculosis, measles, varicella

- ▶ This not only fuels mistrust and places nurses and healthcare workers at grave risk.

Organized Disinformation

The Washington Post

Democracy Dies in Darkness

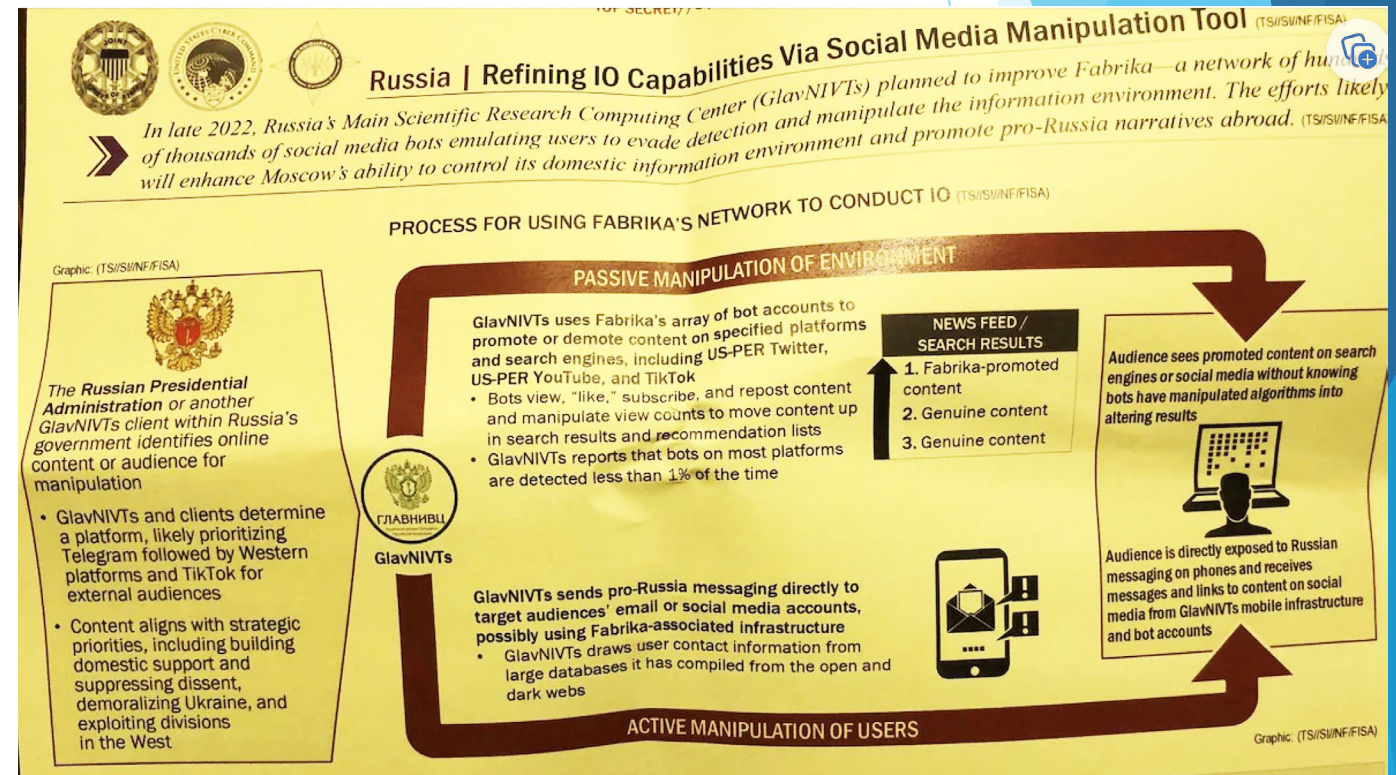
TOP EXCLUSIVE

Russians boasted that just 1% of fake social profiles are caught, leak shows

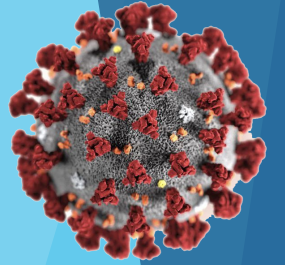
The estimate is contained in a document that is part of a trove of top-secret material leaked in a Discord chatroom

In late 2022, Russia's Main Scientific Research Computing Center (GlavNIVTs) planned to improve Fabrika - a network of hundreds of thousands of social media bots emulating users to evade detection and manipulate the information environment.

<https://www.washingtonpost.com/technology/2023/04/16/russia-disinformation-discord-leaked-documents/>



Disinformation - Artificial Intelligence

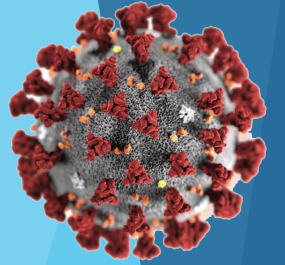


How AI will turbocharge misinformation — and what we can do about it

- Generative AI can churn out misinformation which is even more persuasive than false content created by humans. And it is "extremely cheap and easy to generate content".
- Strategically AIs can change the outputs and conclusions of internet studies by modifying the input. - For example, fake reports on vaccine complications can be entered into the FDA's VAERS database.

<https://www.axios.com/2023/07/10/ai-misinformation-response-measures>

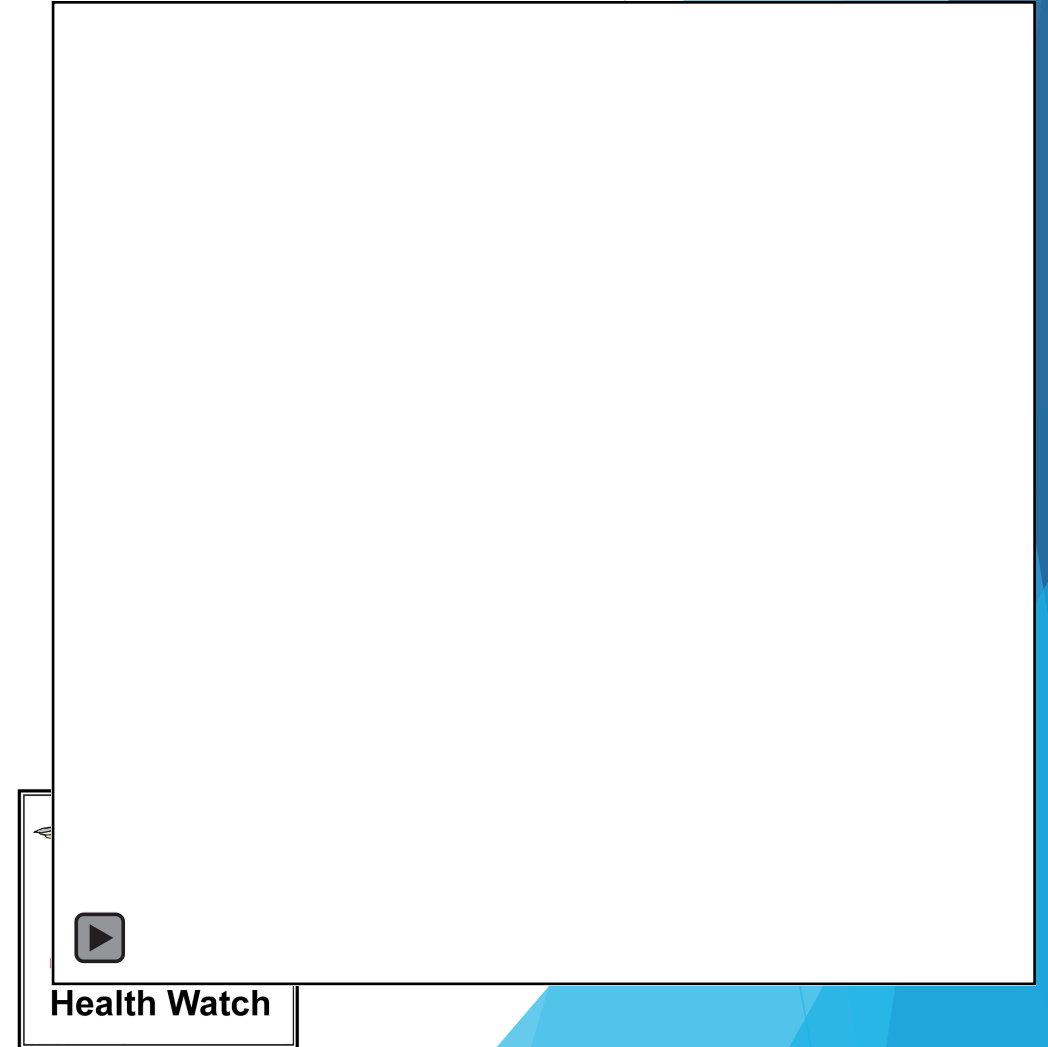
Disinformation - Artificial Intelligence



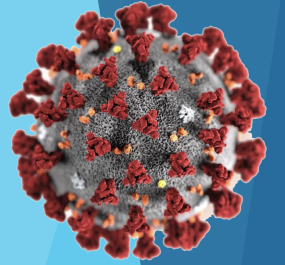
Deep fakes can involve not only pictures but audio and video files to maximize the impact on an unsuspecting population.

This video was made from an audio file and a still picture. The audio file was an AI clone of Dr. Kavanagh's voice. Thus, the entire video was computer generated.

Only two Items Were used: A script & a still picture



Correct Information & PSA

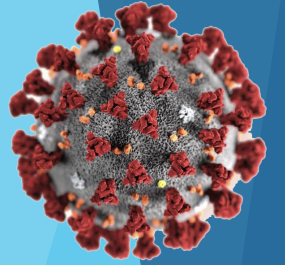


Microsoft Edge has also integrated graphic generation function which is powered by Open AI's image generator, DALL.E.

This is an example of a public service announcement which was automatically generated from the prompt “wolf looking at a little girl holding a basket.”



Valid Information - Artificial Intelligence

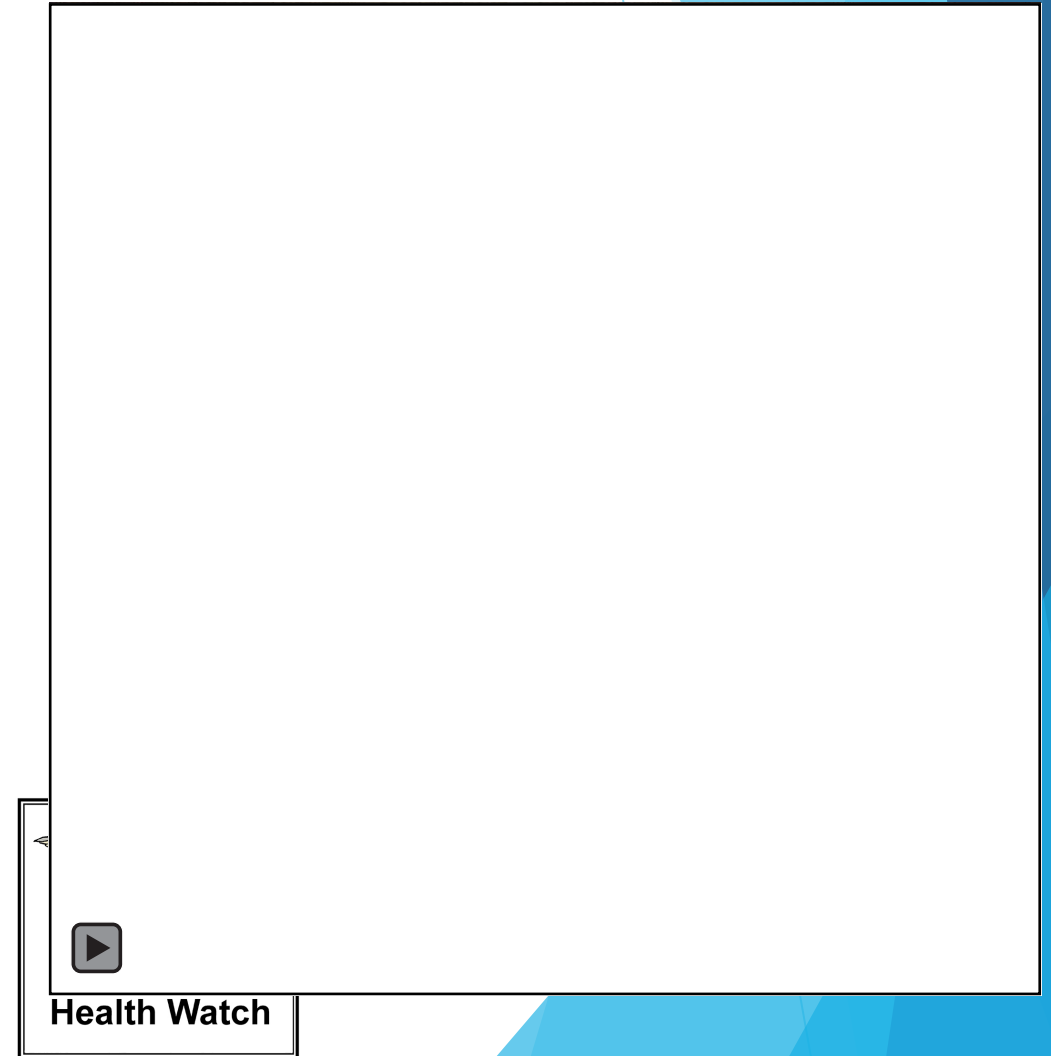


The Dangers of AI in Medicine. What ChatGPT-4 says:

This video is almost 100% AI generated. Only two items were used.

1. A prompt “What are the dangers of AI in healthcare.”
2. A still picture.

The videos script was written by ChatGPT 4 and an AI cloned Dr. Kavanagh’s voice and read the script. An AI then animated the still picture and synced the lip movements to the audio file.



Long COVID Prevention

- ▶ Not contracting COVID in the first place is key to the prevention of long COVID. And this includes the use of vaccinations and masking.
- ▶ Treatments for long COVID are still investigational but advances are starting to be made.

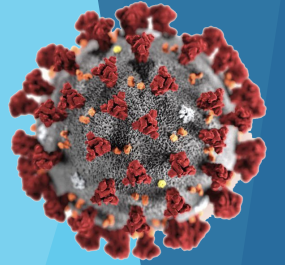
For example, “in people with long Covid, serotonin was the only significant molecule that did not recover to pre-infection levels”

(Pam Belluck: <https://www.nytimes.com/2023/10/16/health/long-covid-serotonin.html>)

Some are advocating the use of Prozac as a possible treatment for Long COVID.

<https://www.telegraph.co.uk/news/2023/10/17/prozac-could-help-long-covid-sufferers-symptoms/>

- ▶ In addition, Vaccines may also help to prevent and treat Long COVID.



Strategic Partners

- ▶ Kentucky Rural Health Association



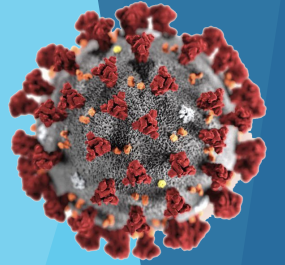
- ▶ Southern Kentucky AHEC



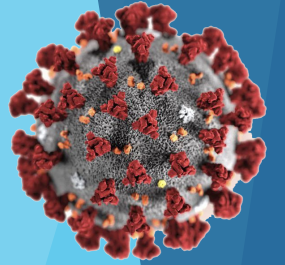
- ▶ Massachusetts Nurses Association



- ▶ Gardiner Consulting Group



ANCC Disclosures for Continuing Education: Long COVIDs Impact on Patients, Workers & Society



- Participants must attend 100% of this activity and complete an evaluation form at the conclusion of the program.
- Dr. Deborah Birx is a consultant for Abbott. The relevant financial relationship has been mitigated
- No other relevant financial relationships were identified for any other individuals with the ability to control content of the activity.
- This nursing continuing professional development activity was approved by Connecticut Nurses' Association an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

At the end of the webinar, we will display a link for course evaluation and to obtain the Continuing Education Certificates for Nursing, Physicians, and Allied Health.

Please place all questions in the Q&A section. If there is time we will answer them at the end of the presentation, otherwise we will email answers to all participants after the webinar.

Long COVID's Impact on Patients, Workers & Society

Nov. 1, 2023



Time	Presenter	Presentation Title
8:45 AM ET	Kevin T. Kavanagh, MD, MS	Conference & Long COVID Introduction
9:00 AM ET	Deborah Birx, MD	Impact of Long COVID on the United States
9:30 AM ET	Eleni Iasonidou, MD	Long Covid: A pediatrician's view as a patient and doctor
10:00 AM ET	Georgios Pappas, MD, PhD	Combatting Disinformation regarding Long COVID and COVID-19
10:30 AM ET	Wilmore Webley, PhD	The effectiveness of vaccines to prevent Long COVID
11:00 AM ET	Pam Belluck	How Long COVID is affecting people's jobs and their needs at work.
11:30 AM ET	Brian Walitt, MD, MPH	Exploring the Post-Acute Sequelae of COVID-19 at the National Institutes of Health
Noon ET	Jane Thomason, MSPH, CIH	The impact of Long COVID on Nurses
12:30 PM ET	Greg Vanichkachorn, MD, MPH	Symptoms, treatment and rehabilitation of patients with Long COVID
1:00 PM ET	Peter Hotez, MD, PhD	Global Vaccines and Vaccinations: The Science vs The Anti-science
1:30 PM ET	Past Surgeon General Joycelyn Elders, MD & Kevin T. Kavanagh, MD, MS	Conference Summary & Closing Remarks