

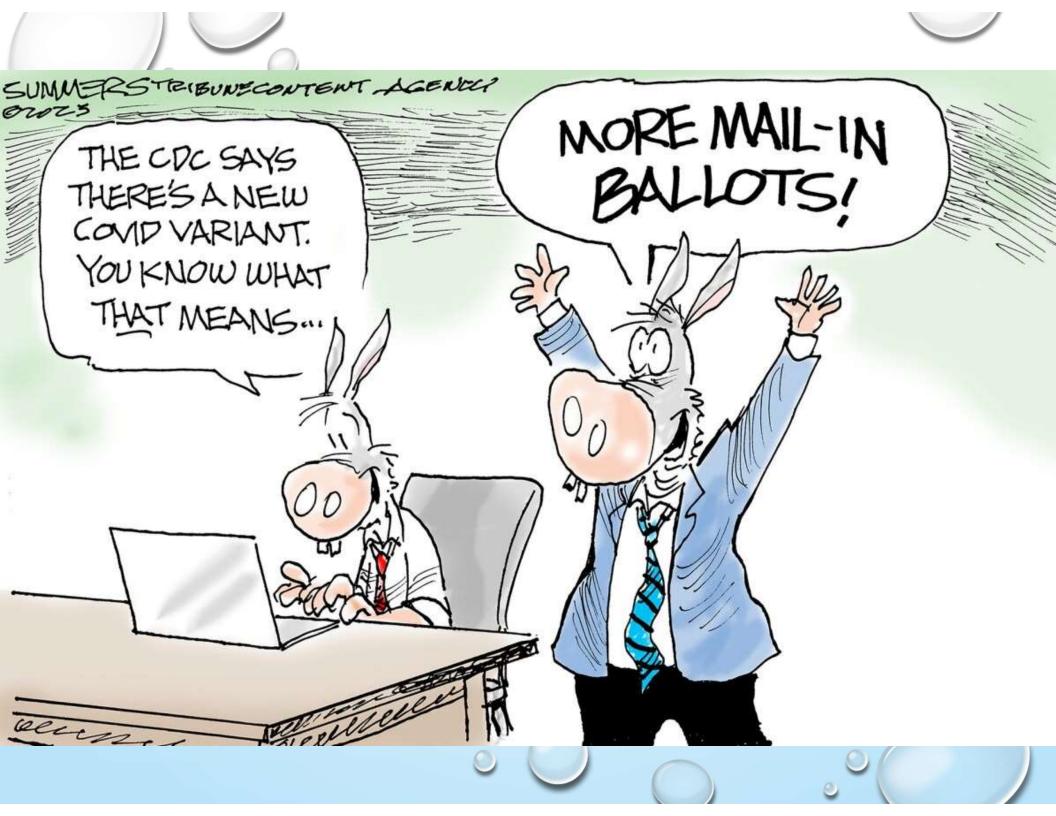
Ground Rules/Housekeeping

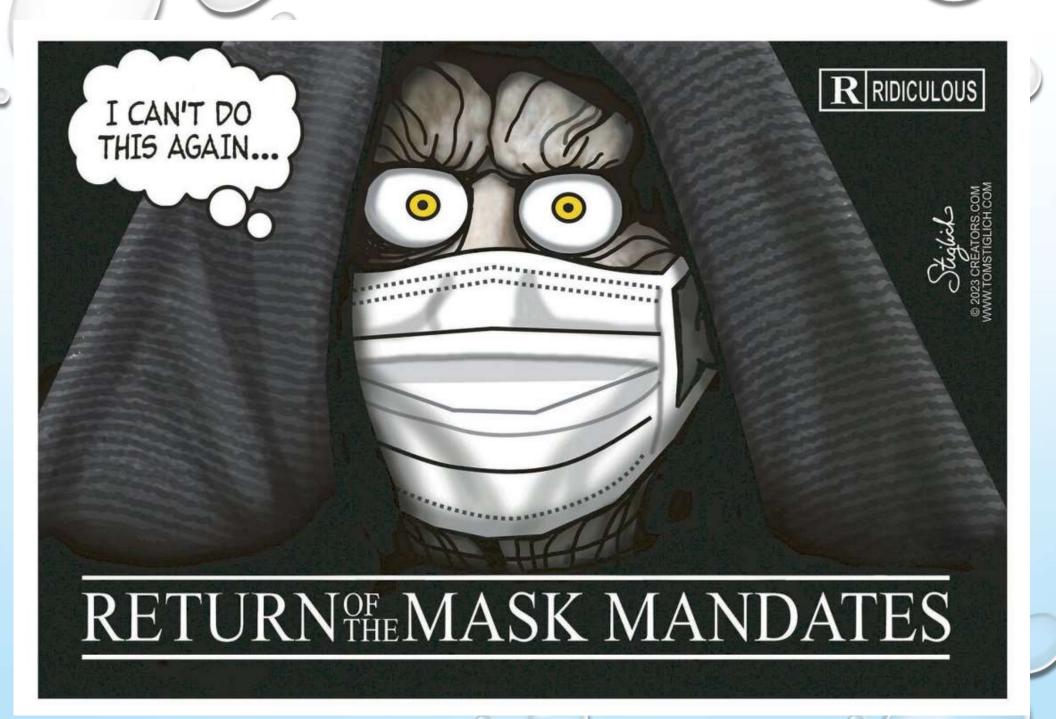
✓ Recordings, slides, and other materials are available at: ARICHKENNEDY.COM

✓ A dream (or was it a nightmare?)

Disagreement is OK......

Disrespect is NOT









CONTENT 62023

FOLLOWUP

A WORD ABOUT KEVIN BLUM

SHOULDA
COULDA
WOULDA

FOLLOWUP - HOW DID COVID START?

TWO THEORIES:

ANIMAL-HUMAN TRANSMISSION FROM THE "WET" MARKET

A LAB LEAK

FOLLOWUP - LOCKDOWNS

WE'RE NOT SAYING THERE IS NO PLACE FOR LOCKDOWNS

THEY NEED TO BE SHORTER AND MORE TARGETED

FOLLOWUP

ARE THERE ANY ISSUES YOU WANT TO REVIEW FROM LAST WEEK?

1918 FLU PANDEMIC - WORLDWIDE

- Killed between 50 and 60 million
- ~2.7% of the world population at the time (1.8 billion)
- Current world population ~8.26 billion
- A similar death rate would be 223 million people
- There were 7.1 million reported deaths from COVID-19

1918 FLU PANDEMIC - UNITED STATES

US Population was around 103.2 million

About 25% (25.8 million) were infected

Approximately 675,000 died (0.65%)

High mortality in young, healthy adults 20-40

2009-2010 SWINE FLU (H1N1)

- A relatively mild flu pandemic
- Around 575,000 deaths worldwide

In the US:

- 60.8 million were infected
- Around 12,500 died

(H5N1)

• Bird flu

Can be severe in humans

Spread is more limited than H1N1

Currently believed to be low risk

WEEK 1 WHAT HAPPENED?

WEEK 2

ACTIONS AND CONSEQUENCES:

WHAT WORKED AND WHAT DIDN'T?

How was disagreement handled?

WEEK 3

ARE WE PREPARED FOR THE NEXT PANDEMIC?
WHAT LESSONS HAVE WE LEARNED?
WHAT SHOULD WE DO DIFFERENTLY?

THE COVID REVIEW COMMISSION

FINAL SESSION

WE'VE LOOKED AT:

WHAT HAPPENED

WHAT WORKED WELL

WHAT DIDN'T WORK

Do WE HAVE ENOUGH INFORMATION?

ARE WE READY TO REACH CONCLUSIONS?

THE COVID REVIEW COMMISSION

FINAL SESSION

WHAT DO WE RECOMMEND?

7

LET'S START WITH A LIGHTNING ROUND......

THE COVID REVIEW COMMISSION

FINAL SESSION

THROW OUT YOUR IDEAS......

WHY WERE THESE RECOMMENDATIONS NOT FOLLOWED?

POLITICIANS FELT THEY HAD TO "DO <u>SOMETHING</u>"

EXPERTS IN EPIDEMIOLOGY AND PUBLIC HEALTH
FOCUSED MAINLY ON SAVING LIVES
AND DID NOT TAKE OTHER COSTS INTO ACCOUNT

ELITES FAVORED POLICIES THAT PROTECTED THEM
AND DISCOUNTED THE IMPACT
ON OTHER SEGMENTS OF THE POPULATION

LESSONS

YOU CAN'T PLAN IN A CRISIS

FOLLOW THE ADVICE LAID OUT IN ADVANCE

BEWARE OF CONCLICTS OF INTEREST

THE LESSONS OF COVID

THE EFFECTIVENESS OF NPIS, ESPECIALLY AFTER A VIRUS HAS SPREAD, IS QUESTIONABLE AT BEST

THE COST OF NPIS CAN BE VERY HIGH AND NEEDS TO BE CONSIDERED

A WORD ABOUT MODELS

MODELS GOT A LOT OF PUBLICITY HOW DID THEY PERFORM?

IN GENERAL, QUITE POORLY

- MANY WERE FAR TOO ALARMIST
- THEY SOUND LIKE A GOOD IDEA,
 BUT ARE OFTEN FAR TOO SUBJECTIVE

IS ANYONE PLANNING?

WORLD HEALTH ORGANIZATION (WHO)

CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)

DEPARTMENT OF HEALTH & HUMAN SERVICES (HHS)

IS ANYONE PLANNING?

Research Institutions and Academic Centers such as:

- University of California, San Francisco (UCSF)
 Center for Pandemic Preparedness and Response
- > Scripps Research
- > Harvard T.H. Chan School of Public

Non-governmental Organizations & Public-Private Partnerships

Coalition for Epidemic Preparedness Innovations (CEPI)

THE WORLD HEALTH ORGANIZATION (WHO)

SHIFTED FOCUS TO:

STRENGTHEN GLOBAL SYSTEMS

FOR PANDEMIC PREPAREDNESS

DURING NON-CRISIS PERIODS

EMPHASIZE THE NEED FOR EQUITABLE ACCESS
TO DIAGNOSTICS, THERAPEUTICS, AND VACCINES

PREPARING FOR THE NEXT PANDEMIC: LESSONS LEARNED AND THE PATH FORWARD

CDC Congressional Testimony

NOVEMBER 14, 2024

https://www.cdc.gov/washington/testimony/2024/t20241114.htm

IMPROVE DATA GATHERING AND SHARING

- Electronic case reporting
- Track symptoms to spot outbreaks (aka syndromic surveillance)
- Allow electronic laboratory reporting
- Facilitate rapid information sharing

UPDATE LABORATORIES

- Build capacity for better detection and identification of outbreaks
- Share information with state and local public health
- Ensure safety and quality control of labs
- Develop public/private partnerships

RESPONSIVENESS

 Be ready to monitor, respond to, and address global and domestic threats

 Maintain rapid deployment capability (e.g. mpox in the DRC and Marburg in Rwanda)

Manage fall/winter respiratory season

NEEDED AUTHORITY

Assist with vaccine development

Be able to require data reporting

Conduct wastewater surveillance

EXAMPLE FROM ANOTHER COUNTRY

UNITED KINGDOM

PEGASUS PANDEMIC SIMULATION - FALL 2025

U.K. PEGASUS PANDEMIC EXERCISE

Objectives:

- Exercise decision-making processes for measures to contain, control, or mitigate the impact of a pandemic
- Explore the impact of inequalities, and their consideration within pandemic decision making.
- Investigate likely impacts of governmental decisions on the health and care system, local responders, communities, businesses, civil society and the general public.
- Examine processes for scaling relevant capabilities needed as part of a central government pandemic response.

U.K. PEGASUS PANDEMIC EXERCISE

Objectives (continued):

- Investigate the effectiveness of coordination, including the exchange of information, between different tiers in a UK-wide response.
- Test the strategic response to disinformation and misinformation.
- Enable and support local exercising of selected capabilities and response issues.
- Identify and report on relevant areas of learning to improve future pandemic preparedness.



Center for Pandemic Preparedness and Response

We work to build public health solutions that engage with community partners, advance equity, and save lives.

We support partners to advance evidence-based public health policies and practices that prioritize the needs of the communities we serve.

Our goal is to make public health equitable, highquality, community-driven, and accessible for all.



ONE EXPERT'S ANALYSIS/RECOMMENDATIONS

MICHAEL OSTERHOLM

an epidemiologist, Regents Professor, and Director of THE CENTER FOR INFECTIOUS DISEASE RESEARCH AND POLICY (CIDRAP)
At the University of Minnesota.

He served on the

COVID-19 ADVISORY BOARD

in the Biden Administration

MICHAEL OSTERHOLM'S ANALYSIS/RECOMMENDATIONS

- We are no better prepared than in 1918
- And it may be worse.....
 - √The world population is almost 4.5 times larger
 - √ Hundreds of millions live close to poultry and pigs
 - ✓ Air travel can quickly move infected people worldwide
 - ✓ Global supply chains make us more interdependent

OSTERHOLM'S ANALYSIS/RECOMMENDATIONS

- Viruses are constantly mutating and reassorting
- Reassortment can occur when a human, pig, or cow is infected by two different viruses simultaneously

"There will be more influenza and coronavirus pandemics"

The next pandemic "... will almost certainly be a virus, primarily transmitted from person to person via the airborne route"

MICHAEL OSTERHOLM'S RECOMMENDATIONS

- Prepare like we do for war
- Funding is expensive, but critical
- Spending on weapons that may never be used, but which are essential if needed

Casualties could well exceed war losses

MICHAEL OSTERHOLM'S RECOMMENDATIONS

Vaccines

- Ramp up development of improved vaccines
- Needs to be safe and provide multi-year protection
- Protect against multiple strains
- Can be manufactured quickly and distributed globally

Personal Protective Equipment

- Improve design
- Develop systems to manufacture mass quantities rapidly with global distribution

THE BIGGEST THREAT

THE EROSION OF TRUST

The good work many are doing will be wasted, if people don't trust key institutions:

government,
public health,
pharmaceutical companies,
academia,
and the media

This section is based in part on an article by Caitlin Rivers

CAITLIN RIVERS is

Director of the Center for Outbreak Response Innovation and an Associate Professor at the Johns Hopkins Center for Health Security.

Associate Director of the Center for Forecasting and Outbreak Analytics at the Centers for Disease Control and Prevention.

She is the author of the forthcoming book *Crisis Averted*.

https://www.foreignaffairs.com/united-states/america-still-not-ready-next-outbreak

Polling

A Kaiser Family Foundation Poll found a nearly ten-point drop between December 2020 and April 2022 in the percentage of Americans who say they trust the CDC.

A PEW Research poll in 2022, found that 46 percent of Americans thought public health officials were unprepared for the COVID-19 outbreak

32% said officials **responded too slowly to changes** during the outbreak.

Other Signs

Anthony Fauci, once trusted by many as the Director of the National Institute of Allergy and Infectious Diseases, is now vilified in many circles

There is growing antivaccine sentiment among many Americans, fueled in part by RFK, Jr.

and others in the Trump Administration

Congress has been reluctant to support crucial public health measures

Funding has been reduced or, in some cases, rescinded

The CDC authority to require state and local jurisdictions to report outbreaks has been undermined

Attempts to loosen restrictions is indicative of not taking the threat of another pandemic seriously

Many states have stripped legal authorities from public health departments:

- North Dakota cannot require face masks, even if someone is infected with a deadly disease
- Montana prohibits quarantines
- Arizona prohibits hospitals from requiring vaccinations

There is "a palpable lack of urgency and purpose at all levels of government"

CDC plans have not been updated to reflect the lessons of COVID-19

HOW TO REGAIN PUBLIC TRUST

Borrow best practices from

fields where failure is not an option

MODELS:

The NTSB rigorously investigates every airline accident, large or small, to maintain trust in air travel

Checklists and **timeouts** in surgery

Public health needs to be "high reliability"

TRUMP'S DERELICITION (OR WORSE)

Instead of leading efforts to improve pandemic preparedness and response

The Trump administration is:

- Appointing unqualified people to key positions
- Undercutting or rolling back research funding
- Weakening reporting requirements
- Undermining public confidence in vaccines and research universities

RECOGNIZE THAT THERE WILL BE A NEXT TIME

HAVE COMPREHENSIVE, AGREED-UPON PLANS IN ADVANCE

SET GOALS FOR VARIOUS CONTINGENCIES

CONSIDER MULTIPLE COMMUNITIES / CONSTITUENCIES

- AVOID GROUPTHINK
- GET INPUT FROM A VARIETY OF EXPERTS
 IN CRITICAL FIELDS
- SUPPRESS THE URGE TO PRIORITZE POLITICS
- ENCOURAGE BIPARTISAN ACTION

COMMUNICATE
CLEARLY, CALMLY, AND CONSISTENTLY

• HAVE A "COMMAND STRUCTURE" IN PLACE

BE REALISTIC ABOUT NPIS

BE HONEST ABOUT UNCERTAINTY

The IMPACT of COVID-19 10/29/25 52

- STOCKPILE CRITICAL MATERIALS
- SUPPORT RAPID VACCINE DEVELOPMENT
- TRIAGE VACCINE DISTRIBUTION

ENCOURAGE VACCINATION

PREPARING YOURSELF FOR THE NEXT TIME

- RECOGNIZE THAT THERE WILL BE A NEXT TIME
- HAVE A PERSONAL PLAN (EVEN A ROUGH ONE)
- AVOID PANIC AND ISOLATION
- KEEP AN OPEN MIND
- ASSESS YOUR OWN RISKS
- PRIORITIZE YOUR LIFE AND HEALTH
- IDENTIFY NEEDS AND RESOURCES YOU MIGHT CALL ON
- BE ADAPTABLE AND RESILIENT

END OF CLASS

THANK YOU!

LEAVE COMMENTS

AND

FIND MORE MATERIAL AT

ARICHKENNEDY.COM