LOOKING BACK BEFORE MOVING FORWARD: AS-SESSING CDC'S FAILURES IN FULFILLING ITS MISSION

HEARING

BEFORE THE

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

OF THE

COMMITTEE ON ENERGY AND COMMERCE HOUSE OF REPRESENTATIVES

ONE HUNDRED EIGHTEENTH CONGRESS

FIRST SESSION

JUNE 7, 2023

Serial No. 118-43



Published for the use of the Committee on Energy and Commerce govinfo.gov/committee/house-energy energycommerce.house.gov

U.S. GOVERNMENT PUBLISHING OFFICE

56--528~PDF WASHINGTON: 2025

COMMITTEE ON ENERGY AND COMMERCE

CATHY McMORRIS RODGERS, Washington Chair

MICHAEL C. BURGESS, Texas ROBERT E. LATTA, Ohio BRETT GUTHRIE, Kentucky H. MORGAN GRIFFITH, Virginia GUS M. BILIRAKIS, Florida BILL JOHNSON, Ohio LARRY BUCSHON, Indiana RICHARD HUDSON, North Carolina TIM WALBERG, Michigan
EARL L. "BUDDY" CARTER, Georgia
JEFF DUNCAN, South Carolina GARY J. PALMER, Alabama NEAL P. DUNN, Florida JOHN R. CURTIS, Utah DEBBBIE LESKO, Arizona GREG PENCE, Indiana DAN CRENSHAW, Texas JOHN JOYCE, Pennsylvania KELLY ARMSTRONG, North Dakota, Vice ChairRANDY K. WEBER, SR., TEXAS RICK W. ALLEN, Georgia TROY BALDERSON, Ohio RUSS FULCHER, Idaho AUGUST PFLUGER, Texas DIANA HARSHBARGER, Tennessee MARIANNETTE MILLER-MEEKS, Iowa

KAT CAMMACK, Florida JAY OBERNOLTE, California FRANK PALLONE, JR., New Jersey Ranking Member
ANNA G. ESHOO, California
DIANA DEGETTE, Colorado
JAN SCHAKOWSKY, Illinois
DORIS O. MATSUI, California
KATHY CASTOR, Florida
JOHN P. SARBANES, Maryland
PAUL TONKO, New York
YVETTE D. CLARKE, New York
TONY CARDENAS, California
RAUL RUIZ, California
SCOTT H. PETERS, California
DEBBIE DINGELL, Michigan
MARC A. VEASEY, Texas
ANN M. KUSTER, New Hampshire
ROBIN L. KELLY, Illinois
NANETTE DIAZ BARRAGAN, California
LISA BLUNT ROCHESTER, Delaware
DARREN SOTO, Florida
ANGIE CRAIG, Minnesota
KIM SCHRIER, Washington
LORI TRAHAN, Massachusetts
LIZZIE FLETCHER, Texas

PROFESSIONAL STAFF

NATE HODSON, Staff Director SARAH BURKE, Deputy Staff Director TIFFANY GUARASCIO, Minority Staff Director

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

H. MORGAN GRIFFITH, Virginia Chairman

MICHAEL C. BURGESS, Texas
BRETT GUTHRIE, Kentucky
JEFF DUNCAN, South Carolina
GARY J. PALMER, Alabama
DEBBIE LESKO, Arizona, Vice Chair
DAN CRENSHAW, Texas
KELLY ARMSTRONG, North Dakota
KAT CAMMACK, Florida
CATHY McMORRIS RODGERS, Washington
(ex officio)

KATHY CASTOR, Florida
Ranking Member
DIANA DEGETTE, Colorado
JAN SCHAKOWSKY, Illinois
PAUL TONKO, New York
RAUL RUIZ, California
SCOTT H. PETERS, California
FRANK PALLONE, JR., New Jersey (ex
officio)

CONTENTS

Hon. H. Morgan Griffith, a Representative in Congress from the Commonwealth of Virginia, opening statement Prepared statement Hon. Kathy Castor, a Representative in Congress from the State of Florida, opening statement Prepared statement Hon. Cathy McMorris Rodgers, a Representative in Congress from the State of Washington, opening statement Prepared statement Hon. Frank Pallone, Jr., a Representative in Congress from the State of New Jersey, opening statement Prepared statement	Page 1 4 17 19 22 24 28 30
WITNESSES	
Mary Denigan-Macauley, Ph.D., Director, Health Care, Government Accountability Office Prepared statement Answers to submitted questions Charity Dean, M.D., Chief Executive Officer and Board Chair, The Public Health Company Group, Inc. Prepared statement Answers to submitted questions Tracy Beth Høeg, M.D., Ph.D., Epidemiologist, Department of Epidemiology and Biostatistics, University of California—San Francisco Prepared statement Answers to submitted questions Georges C. Benjamin, M.D., Executive Director, American Public Health Association Prepared statement Answers to submitted questions	33 35 112 44 46 117 49 51 122 57 59 127
SUBMITTED MATERIAL	
Inclusion of the following was approved by unanimous consent. List of documents submitted for the record	92 93 97 106 107
, , , , ,	

 $^{^{\}rm 1}$ Mr. Guthrie presented Mrs. Rodgers' statement orally.

LOOKING BACK BEFORE MOVING FORWARD: ASSESSING CDC'S FAILURES IN FULFILLING ITS MISSION

WEDNESDAY, JUNE 7, 2023

House of Representatives,
Subcommittee on Oversight and Investigations,
Committee on Energy and Commerce,
Washington, DC.

The subcommittee met, pursuant to call, at 10:31 a.m. in room 2322, Rayburn House Office Building, Hon. H. Morgan Griffith (chairman of the subcommittee) presiding.

Members present: Representatives Griffith, Burgess, Guthrie, Duncan, Palmer, Lesko, Armstrong, Cammack, Rodgers (ex officio), Castor (subcommittee ranking member), DeGette, Tonko, Ruiz, Peters, and Pallone (ex officio).

Also present: Representative Miller-Meeks

Staff present: Sean Brebbia, Chief Counsel; Lauren Eriksen, Clerk; Tara Hupman, Chief Counsel; Peter Kielty, General Counsel; Emily King, Member Services Director; Chris Krepich, Press Secretary; Molly Lolli, Counsel; Gavin Proffitt, Professional Staff Member; John Strom, Counsel; Joanne Thomas, Counsel; Austin Flack, Minority Junior Professional Staff Member; Waverly Gordon, Minority Deputy Staff Director and General Counsel; Liz Johns, Minority GAO Detailee; Will McAuliffe, Minority Chief Counsel, Oversight and Investigations; Constance O'Connor, Minority Senior Counsel; Christina Parisi, Minority Professional Staff Member; Harry Samuels, Minority Oversight Counsel; Andrew Souvall, Minority Director of Communications, Outreach, and Member Services; and Caroline Wood, Minority Research Analyst.

Mr. Griffith. The Subcommittee on Oversight and Investigations will now come to order.

The Chair now recognizes himself for a 5-minute opening statement.

OPENING STATEMENT OF HON. H. MORGAN GRIFFITH, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF VIRGINIA

Welcome to today's hearing to look back and to take stock of the recent performance of the Centers for Disease Control and Prevention, or the CDC. I speak for many of my colleagues when I say that the COVID-19 pandemic revealed that we did not have the CDC that we thought we had.

Before I continue my remarks, I want to be clear: The COVID—19 pandemic was an immense challenge for public health agencies, healthcare providers, every level of government, and the American people. There were always going to be mistakes made, and we need

to avoid the distortions of hindsight.

I also believe there are many hard-working, talented doctors and public health experts working at CDC who want to do their part to keep Americans safe. One of my biggest frustrations, however, with the CDC is that, when you look at all of the talent, all of the scientific knowledge, technical resources, and immense funding that we have put into the agency, the end product is somehow less

than the sum of its parts.

It is reasonable for the American people to expect CDC to use the best available science when preparing guidance and recommendations. All too often during the pandemic, the CDC appeared to work backwards. The agency seemed to first decide its preferred policy outcome, whether that was universal masking, vaccine mandates, shutting down businesses, or school closures. Once the policy was decided, then the agency sought out data supporting that policy decision. Data that could undermine CDC's preferred outcome was either ignored or discounted in many cases, particularly if the data came from outside of the CDC itself.

As we saw during the COVID-19 pandemic, the CDC's recommendations carry great weight. There is perhaps no better example of this than the process creating CDC's school reopening guidance. The damage wrought by school closures has been enormous and well-documented, and, fairly, I do not believe that my kids' education has recovered yet from these closures, even as we

speak.

The single biggest factor determining whether schools were inperson or remote was the political power of public school teacher unions. At a time when parents and school systems were desperate for accurate public health guidance, the CDC allowed the group most opposed to reopening to directly edit its finalized guidance. CDC Director Dr. Walensky was even forced to state on national television that her school reopening statements many took as a CDC position—that she made them and they were given in a personal capacity, not as the CDC Director. As best I can tell, this was the only time that she spoke in a personal capacity on an issue related to CDC guidance while she was agency Director.

In addition, when the Department of Labor issued its nationwide vaccine mandate for companies with 100 or more employees in November of 2021, it cited CDC science and guidance more than 80 times to justify the mandate. At the time the mandate was issued, there was a growing body of evidence, largely ignored by the CDC, indicating that vaccines did not stop the transmission of the disease. Thankfully, the Supreme Court struck down this mandate

after only 2 months, ruling that it was unconstitutional.

The CMS vaccine mandate for healthcare providers, which only ended on May 1st of this year, also relied heavily on the CDC, citing the agency over 50 times. Thousands of healthcare workers who were heralded as heroes during the early months of the pandemic lost their jobs, in part because of CDC's reluctance to admit the

limitations of the COVID-19 vaccines and failure to acknowledge that natural immunity can provide protection.

The problems at CDC that led to the failures we saw during the COVID-19 pandemic are not new. The CDC made mistakes during its response to Ebola and Zika and other smaller, localized events. What differentiates the mistakes made during COVID-19 was the scale of the emergency and the impact of those failures on the American people.

It is appropriate that CDC's failures during COVID-19 prompted the agency to conduct an internal review: the first step is admitting you have a problem. This review has now led to a reorganization that appears on its face to be extensive, but there is no way for us to tell without more information from the CDC.

As a part of the reorganization, CDC has asked Congress for extensive legal authorities that would require State and local governments, pharmacies, hospitals, and other healthcare providers to report to the CDC health-related information. This has huge implications for privacy and for data security.

In May, this committee wrote to Director Walensky requesting information and documents related to the review and the reorganization. Congress needs this information to understand and independently assess the CDC's reorganization. Congress is constitutionally entitled to this information.

We did, however, receive—we did receive a four-page letter last night that mostly reflects what is already posted on the CDC website. It was not sufficient, however, and I hope the CDC will provide the complete documentation that we have requested in our letter, and that they will get that to us in short order.

In closing, until we get full cooperation, the CDC's request for new legal authorities cannot and will not move forward.

In today's hearing, we will hear from witnesses who will help us explore what reforms are appropriate and necessary at the CDC. [The prepared statement of Mr. Griffith follows:]

Welcome to today's hearing to look back and take stock of the recent performance of the Centers for Disease Control and Prevention, or the CDC.

I speak for many of my colleagues when I say that the COVID-19 pandemic revealed that we did not have the CDC we thought we had.

Before I continue my remarks, I want to be clear. The COVID-19 pandemic was an immense challenge for public health agencies, healthcare providers, every level of government, and the American People.

1

There were always going to be mistakes made and we need to avoid the distortions of hindsight.

I also believe that there are many hardworking, talented doctors and public health experts working at the CDC who want to do their part to keep Americans safe.

One of my biggest frustrations, however, with the CDC is that when you look at all of the talent, all of the scientific knowledge, technical resources, and immense funding we have put into the agency, the end product is somehow less than the sum of its parts.

It's reasonable for the American people to expect CDC to use the best available science when preparing guidance and recommendations.

All too often during the pandemic, the CDC appeared to work backwards.

The agency seemed to first decide its preferred policy outcome, whether that was universal masking, vaccine mandates, shutting down businesses, or school closures. Once the policy was decided, the agency sought out data supporting that policy.

Data that could undermine CDC's preferred outcome was ignored or discounted.

Particularly if the data came from outside the CDC.

As we saw during the COVID-19 pandemic, the CDC's recommendations carry great weight.

There is perhaps no better example of this than the process creating CDC's school reopening guidance. The damage wrought by school closures has been enormous and well documented. I do not believe my kids education has recovered yet from these closures, even as we speak.

The single biggest factor determining whether schools were in-person or remote was the political power of public-school teachers unions.

At a time when parents and school systems were desperate for accurate public health guidance, the CDC allowed the group most opposed to reopening to directly edit its finalized guidance.

CDC Director Dr. Walensky was even forced to state on national television that her school reopening statements, many took as a CDC position, she made were given "in a personal capacity."

As best I can tell this was the only time she spoke "in a personal capacity" on an issue related to CDC guidance while agency Director.

In addition, when the Department of Labor issued its nationwide vaccine mandate for companies with 100 or more employees in November 2021, it cited CDC science and guidance more than 80 times to justify the mandate.

At the time the mandate was issued, there was a growing body of evidence, largely ignored by the CDC, indicating that the vaccines Did Not Stop transmission. Thankfully, the Supreme Court struck down this mandate after only two months, ruling it as unconstitutional.

The CMS vaccine mandate for healthcare providers, which only ended on May 1st of this year, also relied heavily on the CDC, citing to the agency over 50 times.

Thousands of healthcare workers, who were heralded as heroes during the early months of the pandemic, lost their jobs in part because of CDC's reluctance to admit that the limitations of the COVID-19 vaccines and failure to acknowledge that natural immunity can confer adequate protection.

The problems at the CDC that led to the failures we saw during the COVID-19 pandemic are not new. The CDC made mistakes during its response to Ebola and Zika and other smaller, localized events.

What differentiates the mistakes made during COVID-19 was the scale of the emergency and the impact of those failures on the American people.

It is appropriate that the CDC's failures during COVID-19 prompted the agency to conduct an internal review.

The first step is admitting you have a problem. This review has now led to a reorganization that appears, on its face, to be extensive. But there's no way for us to tell without more information from CDC.

As part of the reorganization, CDC has asked Congress for extensive legal authorities that would require state and local governments, pharmacies, hospitals, and other healthcare providers to report to the CDC health-related information.

This also had huge implications for privacy and data security.

In May, this Committee wrote to Director Walensky, requesting information and documents related to the review and reorganization.

Congress needs this information to understand and independently assess CDC's reorganization.

Congress is constitutionally entitled to this information. We did, however, receive a fourpage letter last night that mostly reflects what is already posted on their website. I hope that CDC will provide the complete documentation requested in our letter that they did not provide last night.

In closing, until we get full cooperation, the CDC's request for new legal authorities cannot move forward.

In today's hearing, we will hear from witnesses who will help us explore what reforms are appropriate and necessary at the CDC.

Mr. GRIFFITH. And with that, I yield back and now recognize the gentlelady from Florida, the ranking member, Ms. Castor, for her 5-minute opening statement.

OPENING STATEMENT OF HON. KATHY CASTOR, A REP-RESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Ms. Castor. Well, thank you, Mr. Chairman. Good morning.

Thank you to the witnesses for being here.

In the 5 months since the start of the Republican majority here in the House, this subcommittee has held several hearings that seem geared more toward undermining public health and the professionals working to protect our neighbors than constructive oversight and improvements to public health partnerships. This is concerning for many reasons. It irresponsibly ignores the lessons from the COVID-19 pandemic, which took the lives of over 1 million Americans, and diminishes the importance of a strong public health network across America.

The pandemic exposed weaknesses and inefficiencies in our existing infrastructure that put us at a disadvantage to adequately re-

spond from the start.

We also saw firsthand how the COVID-19 crisis was further fueled by then-President Trump's early insistence that the virus was not serious, a message that contradicted what health officials were seeing on the ground. During a critical period, we lost time that we couldn't afford in getting a handle on the size and the

scope of the deadly pandemic.

Disinformation also ran rampant. In my home State of Florida, Governor DeSantis and his administration spread disinformation often, and vilified scientists who were recommending ways to protect everyone from the deadly virus. The State withheld and censored data on nursing home infections and deaths, overall mortality data, and other valuable information. This caused confusion at the local, State, and Federal level. And unlike many other States, many more Floridians died after the vaccine was widely available, due to misinformation.

So how can public health officials combat a pandemic if political leaders are actively undermining their efforts to protect and inform the public? These are the sort of historical facts that cannot be ignored when we assess the government response to COVID-19 and

set priorities moving forward.

Federal health agencies are our first line of defense against the next threat, and we need to take an honest, holistic look at their responses to public health challenges. For example, in recent hearings with leaders of the Federal health agencies, they have told us that preparedness needs to be a centerpiece of future plans. Even today, we are using our knowledge from COVID-19 to monitor and

respond to impacts as cases tick back up.

Everyone acknowledges that improvements are needed. The CDC took initiative to conduct an internal review and is pursuing a Moving Forward plan aimed at making the agency more resilient and accountable to the American people. If you are a critic of the CDC for its response to COVID-19, this should be a welcome development. I certainly look forward to hearing more as this reorganization continues, and I appreciated the bipartisan visit to CDC headquarters in Atlanta last year, where we discussed needed improvements.

In addition to the descriptions of the improvement process on CDC's website, CDC has also provided a letter that I would like to include in the record describing in more detail just how thoughtful and extensive their efforts have been.

Hundreds of employees have participated, and they have provided feedback, they have been briefed. In short, CDC continues to apply the hard lessons learned, and we must support that effort.

I also want to take this opportunity to thank outgoing CDC Director Dr. Walensky for her tireless work under incredibly challenging conditions. She inherited a terrible situation. When she took office, there were nearly 100,000 COVID–19 hospitalizations per week and 25,000 deaths per week. We are now under 10,000 new hospitalizations per week and 500 deaths per week. Schools reopened safely under her watch. Despite politicization and misinformation, Americans got vaccinated. I thank her and the dedicated public servants at CDC who work hard every day to keep us healthy.

Last month, CDC Director Walensky testified before the Health Subcommittee and further detailed the reorganization initiative, saying it aims to eliminate bureaucratic reporting layers, break down silos in the agency, promote foundational public health capabilities, and improve accountability at CDC.

But the CDC cannot do it alone. The Congress must step into its role to improve the Nation's public health. That includes investing in data modernization we need at the local level, improving CDC's ability to collect and act upon timely and complete health data.

We will not be successful if Republicans in Congress continue to target public health for large budget cuts. I am deeply disappointed that House Republicans insisted upon rescinding funds for public health efforts in exchange for not destroying the U.S. economy last week. This rescission of funds only worsens the challenges we face in protecting the health and safety of our neighbors. These are not the challenges my colleagues claim they want to solve. They cannot have it both ways.

The Biden administration and Democrats in Congress, however, will remain focused on providing public health institutions the necessary support and resources they need to be more prepared and responsive to public health challenges.

[The prepared statement of Ms. Castor follows:]

Committee on Energy and Commerce

Opening Statement as Prepared for Delivery of Subcommittee on Oversight and Investigations Ranking Member Kathy Castor

Hearing on "Looking Back Before Moving Forward: Assessing CDC's Failures in Fulfilling its Mission"

June 7, 2023

Thank you, Mr. Chairman.

In the five months since the start of the Republican majority in the House, this subcommittee has held several hearings that seem geared more toward undermining public health and the professionals working to protect our neighbors than constructive oversight and improvements to public health partnerships.

This is concerning for many reasons.

It irresponsibly ignores the lessons from the COVID-19 pandemic, which took the lives of over 1 million Americans, and diminishes the importance of a strong public health network across America. The pandemic exposed weaknesses and inefficiencies in our existing infrastructure that put us at a disadvantage to adequately respond from the start.

We also saw firsthand how the COVID-19 crisis was further fueled by then-President Trump's early insistence that the virus was not serious – a message that contradicted what health officials were seeing on the ground.

During a critical period, we lost time that we couldn't afford in getting a handle on the size and scope of the deadly pandemic.

Disinformation also ran rampant. In my home state of Florida, Governor DeSantis and his administration spread disinformation and vilified scientists who were recommending ways to protect everyone from the deadly virus. The state withheld and censored data on nursing home infections and deaths, overall mortality data, and other valuable information, causing confusion on a local, state, and federal level. Unlike other states, many more Floridians died after the vaccine was widely available.

How can public health officials combat a pandemic if political leaders are actively undermining their efforts to protect and inform the public?

These are the sort of historical facts that cannot be ignored when we assess the government response to COVID-19 and set priorities moving forward.

June 7, 2023 Page 2

Federal health agencies are our first line of defense against the next threat, and we need to take an honest, holistic look at their responses to public health challenges. For example, in recent hearings with leaders of federal health agencies, they have told us that preparedness needs to be a centerpiece of future plans.

Even today, we are using our knowledge from COVID-19 to monitor and respond to mpox as cases tick back up.

Everyone acknowledges that improvements are needed. The CDC took initiative to conduct an internal review and is pursuing a Moving Forward plan aimed at making the agency more resilient and accountable to the American people. If you are a critic of CDC for its response to COVID-19, this should be a welcome development. I certainly look forward to hearing more as this reorganization continues. And I appreciated the bipartisan visit to CDC headquarters in Atlanta last year where we discussed needed improvements.

In addition to the descriptions of the improvement process on CDC's website, CDC has also provided a letter (that I would like to include in the record) describing in more detail just how thoughtful and extensive their efforts have been. Hundreds of employees have participated and generated recommendations. Outside experts and stakeholders have provided feedback and been briefed. In short, CDC continues to apply the hard lessons learned, and we must support that effort.

I also want to take this opportunity to thank the outgoing CDC director, Dr. Walensky, for her tireless work under incredibly challenging conditions. She inherited a terrible situation—when she took office, there were nearly 100,000 COVID-19 hospitalizations per week and 25,000 deaths per week. We are now under 10,000 new hospitalizations per week and 500 deaths per week. Schools reopened safely under her watch. Despite politicization and misinformation, Americans got vaccinated. I thank her and the dedicated public servants at CDC who work every day to keep us healthy.

Last month, CDC Director Walensky testified before the Health Subcommittee and further detailed the reorganization initiative, saying it aims to "eliminate bureaucratic reporting layers, break down silos in the agency, promote foundational public health capabilities, and improve accountability at CDC."

The CDC cannot do it alone. Congress must step up in its role to improve the nation's public health. That includes investing in the data modernization we need at the local level -- improving CDC's ability to collect and act upon timely and complete health data rather than a patchwork system. This will ensure that our local partners, hospitals and communities have the best information, based on solid science, to make decisions.

We will not be successful if Republicans in Congress continue to target public health for large budget cuts. I am deeply disappointed that House Republicans insisted on rescinding funds for public health efforts in exchange for not destroying the U.S. economy last week. This recission of funds only worsens the challenges we face in protecting the health and safety of our

June 7, 2023 Page 3

neighbors. These are the challenges that my colleagues claim they want to solve. They cannot have it both ways.

The Biden Administration and Democrats in Congress, however, will remain focused on providing health institutions the necessary support and resources they need to be more prepared and responsive to future health emergencies.

I urge our Republican colleagues to join us.

Thank you, Mr. Chairman, and I yield back.

Ms. CASTOR. Thank you, and I yield back my time.

Mr. Griffith. The gentlelady yields back. I now recognize Mr. Guthrie for a 5-minute opening statement. He is Chair Rodgers' designee this morning.

OPENING STATEMENT OF HON. CATHY McMORRIS RODGERS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON

Mr. GUTHRIE. Thank you, Chair, for yielding. I appreciate every-

one for being here today.

In today's hearing we will focus on understanding the scope of what is wrong at the CDC so that we can begin to fix it. This is not about villainizing the CDC; it is about accountability—accountability for children kept out of school who are dealing with mental, social, and emotional health issues; small business owners who watch their life's work dry up; for people who lost their jobs because of vaccine mandates.

The CDC's response to the COVID-19 pandemic created a crisis in confidence in the agency. The pandemic made it overwhelmingly clear that the CDC has serious foundational problems in the roots,

in many cases spanning multiple administrations.

From the start of the pandemic, it was clear how challenging the novel coronavirus would be to contain, which was made even more difficult because of how unprepared CDC was to respond to the emerging threat. No doubt that a virus as transmissible as SARS—CoV—2 was always going to be difficult. But in the earliest days of the pandemic the CDC's faulty test kits set us back. Without testing, we cannot effectively slow the spread of the virus when cases amounted to just a few numbers.

People also counted on the CDC to provide timely and clear guidance based on the best available science to keep themselves and their loved ones safe. Yet, time and again, CDC's guidance failed to meet this expectation and instead consistently issued guidance

that lacked clarity and the best available science.

More consequentially, CDC's guidance reflected the agency's preferred policy outcomes or political considerations. At its worst, CDC released guidance that was influenced by teachers' unions and was a significant signal to States that they weren't fully confident in the schools' ability to return to school safely, despite earlier versions of the guidance suggesting otherwise. Our children are paying a terrible price academically, physically, and emotionally for the CDC's shortcomings.

Bad science and CDC guidance, when used to justify mandates,

destroyed lives.

CDC public communications on COVID-19 vaccines were just as bad. Simply put, CDC overpromised when it should have known better. CDC's leadership told the public that vaccines prevented transmission, while the agency was streaming reports of breakthrough infections among the vaccinated. CDC downplayed the existence of adverse events while it was receiving reports of postvaccination myocarditis in young men.

The CDC's decades of experience running mass vaccination programs should have prepared it to manage the administration of COVID-19 vaccines. The CDC knows only 30 to 40 percent of peo-

ple get an annual flu shot. That vaccine hesitancy did not just begin with the COVID-19 vaccine.

It is going to be a long road to rebuild the trust, and the agency cannot go it alone. Many of CDC's COVID-19 failures have their roots in longstanding problems at the agency. The CDC needs to address its failures with openness and, frankly, humility. I am deeply worried that CDC's insular, academic culture will prevent it from learning the right lessons.

Outgoing Director Walensky launched a reorganization at CDC. Whether it survives her departure is unclear. Whether the reorganization would address CDC's foundational problems is also unclear.

This committee intends on conducting oversight to ensure the agency gets back on track. The CDC still hasn't provided this committee with the information needed to independently assess the reorganization. As Chairman Griffith noted, in a conclusory letter sent to us the night before, a hearing isn't sufficient. But I do look forward to obtaining more details from the agency about this restructuring plan in the coming weeks.

I will close by noting that Congress is not without blame for the current state of CDC. CDC has never been authorized. Congress has never, in a single voice, told the CDC what its mission is and is not. This must be fixed. This committee's majority is committed to working on CDC reform.

Today's hearing, Dr. Miller-Meeks, and our ongoing oversight of CDC's—Dr. Miller-Meeks' request for information, and our ongoing oversight of CDC's reorganization are the first steps towards getting the agency back on track. In addition to this work, I look forward to our Health legislative hearing next week to reauthorize immediate preparedness and response programs.

It is critical we come together to assure the American people the Federal Government is equipped for the immediate response for all types of public health hazards, such as a pandemic or a chemical, nuclear, radiological, biological, or cyber attack.

[The prepared statement of Mrs. Rodgers follows:]

INTRODUCTION

Today's hearing will focus on understanding the scope of what is wrong at the CDC so that we can begin to fix it.

This is not about settling scores or villainizing the CDC, it's about accountability.

Accountability for children kept out of school... who are dealing with mental, social, and emotional health issues...

Small businesses owners who watched their life's work dry up... for people who lost their jobs because of vaccine mandates...

The CDC's response to the COVID-19 pandemic created a crisis in confidence in the agency.

The crisis made it overwhelmingly clear that the CDC has serious, foundational problems and the roots, in many cases, span multiple administrations.

RECKONING WITH THE SCOPE OF CDC'S COVID-19 FAILURES

No doubt that a virus as transmissible as SARS-CoV-2 was always going to be difficult. But in the earliest days of the pandemic, the CDC's faulty test kits sealed our fate.

Without testing we could not effectively slow the spread of the virus when cases amounted to just a few embers.

People also counted on the CDC to provide timely and clear guidance based on the best available science to keep themselves and their loved ones safe.

Time and again CDC's guidance was neither timely nor clear nor based on the best available science. Rather, CDC's guidance reflected the agency's preferred policy outcomes or political considerations.

At its worst, CDC released guidance that was influenced by teachers' unions and was used to keep schools closed.

At the time the CDC issued its school re-opening guidance, many schools that had been open safely for months would have had to close.

Our children are paying a terrible price academically, physically, and emotionally for the CDC's shortcomings.

Bad science in CDC guidance, when used to justify mandates, destroyed lives.

CDC public communications on COVID-19 vaccines were just as bad. Simply put, CDC overpromised when it should have known better.

CDC leadership told the public that vaccines prevented transmission while the agency was receiving reports of break through infections among the vaccinated.

CDC denied the existence of adverse events while it was receiving reports of post-vaccination myocarditis in young men.

The CDC's decades of experience running mass vaccination programs should have prepared it to manage the administration of COVID-19 vaccines.

The CDC knows only 30 to 40% of people get an annual flu shot... that vaccine hesitancy is a real issue.

Planning to end the pandemic by achieving a 100% vaccination rate was never realistic.

The CDC also knows that vaccines can lose effectiveness over time.

When the CDC told the public that the COVID-19 vaccines would be 100% effective at preventing both transmission and illness, it set itself up to break the public's trust.

THE PATH FORWARD

It is going to be a long road to rebuild this trust—and the agency cannot go it alone.

Many of the CDC's COVID-19 failures have their roots in longstanding problems at the agency.

Before CDC's COVID-19 test kit failed in 2020, there were problems with the agency's zika test in 2016.

Two years after the COVID-19 test kit failures, the CDC produced a faulty mpox test in 2022.

The CDC needs to address its failures with openness and, frankly, humility.

I am deeply worried that CDC's insular, academic culture will prevent it from learning the right lessons.

Outgoing Director Walensky launched a reorganization of the CDC. Whether it survives her departure is unclear.

Whether the reorganization would address CDC's foundational problems is also unclear.

The CDC has refused to provide this Committee with the information needed to independently assess the reorganization. That must change and it must change fast.

CONCLUSION

I'll close by noting that Congress is not without blame for the current state of the CDC.

The CDC has never been authorized, Congress has never – in a single voice – told the CDC what its mission is and is not. That must be fixed...

... especially as we see the CDC lose sight of its mission by embracing agendas—oftentimes political—outside this scope of being a trusted infectious disease agency.

This Committee's majority is committed to working on CDC reform.

Today's hearing, Dr. Miller-Meeks' RFI, and our ongoing oversight of CDC's reorganization are the first steps towards getting the agency back on track.

Thank you to our witnesses, I look forward to your testimony.

Mr. GUTHRIE. Thank you to our witnesses. I look forward to your testimony, and I yield back.

Mr. GRIFFITH. The gentleman yields back. I now recognize the ranking member of the full committee, Mr. Pallone, for his 5-minute opening statement.

OPENING STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. PALLONE. Thank you, Mr. Chairman. Let's call this hearing what it is, an opportunity for committee Republicans to criticize the work of the Centers for Disease Control and Prevention during the

COVID-19 pandemic without them being here.

CDC Director Walensky testified before this subcommittee in February, along with leaders of the other key public health agencies. She then testified before the Health Subcommittee last month. And while I appreciate the witnesses for being here and look forward to their testimony, if Republicans were really interested in conducting oversight of the CDC, they would have invited the CDC to be here today.

Now, the COVID-19 pandemic was an unprecedented challenge for the Nation. From the outset, there was uncertainty and confu-

sion and a total lack of leadership.

If we are going to take a look back, let's start by going back to the beginning of the pandemic and looking right at the top: then-President Donald Trump. We all remember him repeatedly casting doubt about the dangers of COVID-19 right from the start. In January of 2020, Trump said that it was "one person coming in from China, and we have it under control, it is going to be just fine." He praised the efforts of the Chinese Government, saying, "It will all work out well. In particular on behalf of the American people, I want to thank President Xi." At the end of February 2020, he said that cases would "be down to close to zero," and that "one day it is like a miracle, it will all disappear like magic."

He publicly promoted hydro—what is it—hydroxychloroquine as a treatment. I remember that. Maybe the Republicans have forgotten that one. He asked whether disinfectant could be injected. He pondered whether UV light inside the body would cure people. Then, in June, when the virus was killing hundreds of people every day, he said, and I quote, "It is fading away, and the numbers are starting to get very good." He admitted that—he quoted again, "said to my people, 'slow the testing down, please, slow the testing

down."

Now, that is just a small sample of the antiscience misinformation that President Trump spread during the first years of the pandemic. This misinformation seriously undercut our public health institutions, including the CDC, who were doing difficult work under impossible circumstances with President Trump.

And certainly, there are lessons to be learned, and CDC has acknowledged the need for reforms. It is implementing over 100 recommendations that were developed based on the feedback of hundreds of CDC staffers and is also recognizing to be more efficient

and responsive when facing future threats.

Last month, the—Director Walensky further detailed the CDC's plans during her appearance before the Health Subcommittee. She said the agency's Moving Forward initiative aims to "eliminate bureaucratic reporting layers, break down silos in the agency, promote foundational public health capabilities, and improve accountability at CDC." And we certainly look forward to hearing more from CDC as it continues that process.

Now, the committee, I have to say, is also in the process of reauthorizing the Pandemic and All-Hazards Preparedness Act, the first opportunity to review PAHPA since COVID-19. It is clear that CDC needs additional authorities, including public health data authority, to be better prepared for the future.

We also need to strengthen our drug and medical device supply chains, which have known vulnerabilities that would be exacerbated by another pandemic.

But unfortunately, it seems the Republican majority is not interested in these approaches to better prepare for the next pandemic but instead is focused on tearing down public health institutions, and that is extremely disappointing. We should be working together to strengthen our Nation's health agencies for the future and enable them to institute reforms that will improve future pandemic response. So I am hoping we will be able to do that in the future

But it is clear that that is not the Republicans' goal right now. So I don't know what else to say. I mean, I certainly don't—I certainly want to hear from this panel, but the CDC should be here, and the idea that there were problems with the CDC, you know, just go back and look at what your President was doing that first year. I mean, I was listening to all this nonsense while he was President and supposedly dealing with this crisis, and all he did was make things worse. And I think a lot of people died and—because of the fact that he misinformed everybody about what was going on.

[The prepared statement of Mr. Pallone follows:]

Committee on Energy and Commerce

Opening Statement as Prepared for Delivery of Ranking Member Frank Pallone, Jr.

Hearing on "Looking Back Before Moving Forward: Assessing CDC's Failures in Fulfilling its Mission"

June 7, 2023

Let's call this hearing what it is – an opportunity for Committee Republicans to criticize the work of the Centers for Disease Control and Prevention during the COVID-19 pandemic without them being here. CDC Director Walensky testified before this Subcommittee in February along with leaders of the other key public health agencies. She then testified before the Health Subcommittee last month.

While I appreciate the witnesses for being here and look forward to their testimony, if Republicans were really interested in conducting oversight of the CDC, they would have invited the CDC to be here today. That clearly was not their goal. Republicans just wanted another venue to continue their attack against the CDC.

The COVID-19 pandemic was an unprecedented challenge for the nation. From the outset, there was uncertainty and confusion and a total lack of leadership. If we're going to take a look back, let's start by going back to the beginning of the pandemic and looking right at the top—then President Donald Trump. We all remember him repeatedly casting doubt about the dangers of COVID-19 right from the start.

- In January of 2020, he said that it was, "one person coming in from China, and we have it
 under control. It's going to be just fine."
- He praised the efforts of the Chinese government, saying, "It will all work out well. In particular, on behalf of the American People, I want to thank President Xi."
- At the end of February 2020, he said that cases would, "be down to close to zero," and that, "one day, it's like a miracle, it will disappear."
- He publicly promoted hydroxychloroquine as a treatment. He asked whether disinfectant could be injected. He pondered whether UV light, "inside the body" would cure people.
- In June when the virus was killing hundreds of people every day, he said, "It's fading away" and "the numbers are starting to get very good."
- He admitted that he, "said to my people 'slow the testing down, please."

This is just a small sample of the anti-science misinformation that President Trump spread during the first year of the pandemic. This misinformation seriously undercut our public health institutions, including the CDC, who were doing difficult work under impossible circumstances.

Certainly, there are lessons to be learned, and CDC has acknowledged the need for reforms. It is implementing over 100 recommendations that were developed based on the feedback of

June 7, 2023 Page 2

hundreds of CDC staffers and is also reorganizing to be more efficient and responsive when facing future threats. Last month, CDC Director Walensky further detailed the CDC's plans during her appearance before the Health Subcommittee. She said the agency's Moving Forward initiative aims to, "eliminate bureaucratic reporting layers, break down silos in the agency, promote foundational public health capabilities, and improve accountability at CDC." We look forward to hearing more from CDC as it continues that process.

The Committee is also in the process of reauthorizing the Pandemic and All-Hazards Preparedness Act – the first opportunity to review PAHPA since COVID-19. It's clear that CDC needs additional authorities, including public health data authority, to be better prepared in the future. We also need to strengthen our drug and medical device supply chains, which have known vulnerabilities that would be exacerbated by another pandemic. Unfortunately, it seems the Republican majority is not interested in these approaches to better prepare for the next pandemic, but instead is focused on tearing down public health institutions.

That's extremely disappointing. We should be working together to strengthen our nation's health agencies for the future and enable them to institute reforms that will improve future pandemic response. I'm hoping we will be able to do that in the future, but it's clear that's not the Republican's goal right now.

And with that I yield back the balance of my time.

Mr. PALLONE. So with that—

Ms. DEGETTE. Will the gentleman yield?

Mr. Pallone. Yes, sure.

Ms. DEGETTE. Thank you for yielding. I just want to also add the lack of cohesive leadership from the top, from the White House, added to preexisting issues at the CDC that were longstanding. And this committee, in a bipartisan way, has explored those for many years, and that led to the chaos.

So we do need to move forward, but blaming it on the current CDC is just wrong.

Thank you, Mr. Ranking Member, and I yield back.

Mr. PALLONE. Thank you, and I yield back, Mr. Chairman.

Mr. GRIFFITH. I thank the gentleman for yielding back, and in response to his question about the CDC being here, we will get to the CDC in due time. But they need to answer our written requests for documents and information in something other than just a thin, cursory statement and response, a superficial response, before we bring them in there—in here for a detailed oversight hearing.

Today we are going to gather information. We are going to go forward and get the information that we can today and then, when we bring in the CDC, they will have the stage all to themselves to explain it to us. But first they have got to cooperate with this subcommittee and its jurisdiction.

That being said——

Ms. CASTOR. Mr. Chairman, I did have a unanimous consent request for—

Mr. GRIFFITH. You did, and we will get to that at the end of the hearing.

Ms. CASTOR. OK, thank you.

Mr. GRIFFITH. Yes. Not ignoring you, just putting it to the end, where we do that.

All right, I want to thank our witnesses for being here today and taking time to testify before the subcommittee.

You all will have an opportunity to give an opening statement, followed by a round of questions from our Members.

Our witnesses today are Mary Denigan-Macauley, director of public health, U.S. Government Accountability Office. We are going to have to get you a permanent seat here. You give great testimony, and we appreciate you coming in today to talk yet again about issues, but today's issues focused on the CDC.

We also have Charity Dean, CEO and founder of the Public Health Company; Tracy Beth Høeg, epidemiologist, Department of Epidemiology and Biostatistics, University of California, San Francisco; and Georges C. Benjamin, executive director of American Public Health Association.

We appreciate you all being here today, and I look forward to hearing from you all.

As you are aware, this subcommittee is holding a oversight hearing and when doing so has the practice of taking our testimony under oath. Does anyone have an objection to—any of our witnesses have an objection to taking the testimony under oath?

Seeing no objections, we will proceed.

The Chair would also advise you that you are entitled to be advised by counsel, pursuant to House rules. Do you have a desire to be advised by counsel during your testimony today?

Seeing that no one has requested that, if you all would, please rise and raise your right hand.

[Witnesses sworn.]

Mr. Griffith. Seeing the witnesses all answered in the affirmative, you are now sworn in and under oath and subject to the penalties set forth in title 18, section 1001 of the United States Code.

With that, we will now recognize Mary Denigan-Macauley for her 5-minute opening statement.

STATEMENTS OF MARY DENIGAN-MACAULEY, Ph.D., DIREC-TOR, HEALTH CARE, GOVERNMENT ACCOUNTABILITY OF-FICE; CHARITY DEAN, M.D., CHIEF EXECUTIVE OFFICER AND BOARD CHAIR, THE PUBLIC HEALTH COMPANY GROUP, INC.; TRACY BETH HØEG, M.D., PH.D., EPIDEMIOLOGIST, DEPART-MENT OF EPIDEMIOLOGY AND BIOSTATISTICS, UNIVERSITY OF CALIFORNIA-SAN FRANCISCO; AND GEORGES C. BEN-JAMIN, M.D., EXECUTIVE DIRECTOR, AMERICAN PUBLIC HEALTH ASSOCIATION

STATEMENT OF MARY DENIGAN-MACAULEY, Ph.D.

Dr. Denigan-Macauley. Thank you.

Chairs Griffith, Guthrie, Ranking Members Castor and Pallone, and members of the subcommittee, thank you for the opportunity to discuss the Centers for Disease Control and Prevention reform efforts.

In January 2022, we determined that HHS's leadership and coordination of our Nation's preparedness for and response to public health emergencies is in need of transformation, placing it on GAO's high-risk list. We made this determination based on a body of work that found persistent deficiencies for more than a decade in HHS's ability to perform its leadership role. These deficiencies, including those at the CDC, hindered the Nation's response to the COVID-19 pandemic and to a variety of past emergencies.

In April we reported that CDC intends to undergo programmatic, scientific, and operational improvements to better support the agency's public health response during emergencies and in peacetime. We met with CDC to get more information about the reform efforts and to share GAO's leading practices for successful agency

reform.

These leading practices state that, while transformation to improve performance is no easy task and that it can take time to fully implement, agencies can successfully change when careful consideration is given to capacity, capabilities and essential change management practices such as the involvement of key stakeholders. We developed questions that Congress, CDC, and others can use to assess agencies' proposals for and implementation of reform efforts.

For example, what is CDC trying to achieve with its proposed reforms, and who or which agencies should achieve them? Public health preparedness, as we all have seen, is not a capability held just at the CDC. It takes a whole-of-nation approach.

To that end, how did CDC develop the proposed reforms, and what factors were considered? For example, to what extent did the agency consult with Congress; State, local, Tribal, and territorial

jurisdictions; public health and private laboratories?

How will the reforms address identified concerns, including GAO's concerns about clearly identifying roles and responsibilities; improving the completeness and consistency of data; ensuring clear and consistent communication; enhancing transparency and accountability; and understanding key partners' capabilities and their limitations?

Further, what practices did CDC put in place to ensure the proposed reforms will succeed? For example, is there a dedicated implementation team that has the capacity?

Do they have the staffing, the resources, and the authorities needed to manage the reform process?

Has CDC developed a plan with key milestones and deliverables

to track their progress?

What considerations are given to the workforce? For example, to what extent has CDC conducted strategic workforce planning to determine whether it will have the needed resources and capacity, including the right people with the right skills to carry out the reforms now and in the future?

CDC has acknowledged failures and launched a review to help the agency know what it needs to change. For example, CDC says that it needs to share science and data faster, it needs to translate science into practical policy, it needs to prioritize communications for the American public, it needs to develop a workforce ready to respond to future threats, and it needs to promote partnerships. But CDC has not detailed answers to the questions I posed for how it will carry out these reforms.

These leading practices, importantly, along with sustained leadership commitment, are essential to helping ensure the country is better prepared for future public health emergencies. Leadership commitment is critical for initiating and sustaining progress and making the types of management and operational improvements

required to narrow or remove it from a high-risk area.

With Dr. Walensky leaving her post at the end of this month, it raises additional questions about leadership commitment for these reforms going forward. We encourage the next Director to engage with stakeholders to develop detailed, transparent, and accountable reform plans that close identified gaps and to work with Congress doing so, for is not a question of if but when the next public health emergency will occur. CDC has an opportunity now to learn from past mistakes so that it is better prepared for the future.

Mr. Chairman, and Ranking Member, and distinguished members of the subcommittee, this concludes my prepared statement. I

look forward to any questions you may have.

[The prepared statement of Dr. Denigan-Macauley follows:]



United States Government Accountability Office

Testimony before the Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives

For Release on Delivery Expected at 10:30 a.m. ET Wednesday, June 7, 2023

PUBLIC HEALTH

Leading Practices Could Help Guide HHS Reform Efforts to Address Risk and Improve Preparedness

Statement of Mary Denigan-Macauley, Director, Health Care

Chair Griffith, Ranking Member Castor, and Members of the Subcommittee:

I appreciate the opportunity to be here today to discuss efforts to reform the Department of Health and Human Services (HHS) within the context of the designation of HHS's leadership and coordination of public health emergencies in GAO's High-Risk List.

In January 2022, we added HHS's leadership and coordination of our nation's preparedness for, and response to, public health emergencies—including extreme weather events, infectious disease outbreaks and pandemics, and intentional acts—to our High-Risk List. We have determined this is an area in need of transformation. Improving HHS's leadership and coordination in this area will better prepare the nation for future emergencies and help mitigate their devastating public health and economic effects.

My statement today provides information from our prior work on HHS's leadership and coordination of public health emergencies and describes leading practices for agency reform efforts. This statement is based on the work that led us to designate this area as high risk, as well as our June 2018 report on agency reform leading practices.

We conducted our work in accordance with all sections of GAO's Quality Assurance Framework that are relevant to our objectives. The framework requires that we plan and perform the engagement to obtain sufficient and appropriate evidence to meet our stated objectives and to discuss any limitations in our work. We believe that the information and data obtained, and the analysis conducted, provide a reasonable basis for any findings and conclusions in this product.

HHS Leadership and Coordination of Public Health Emergencies

Our recent high-risk designation is based on a body of work that found persistent deficiencies for more than a decade in HHS's ability to perform its leadership role. These deficiencies hindered the nation's response to the COVID-19 pandemic and to a variety of other past emergencies, including other infectious diseases—such as the H1N1 influenza

¹See GAO, New High-Risk Designation: HHS and Public Health Emergencies appendix in COVID-19: Significant Improvements Are Needed for Overseeing Relief Funds and Leading Responses to Public Health Emergencies, GAO-22-105291 (Washington, D.C.: Jan. 27, 2022), High-Risk Series: Efforts Made to Achieve Progress Need to Be Maintained and Expanded to Fully Address All Areas, GAO-23-106203 (Washington, D.C.: Apr. 20, 2023), and Government Reorganization: Key Questions to Assess Agency Reform Efforts, GAO-18-427 (Washington, D.C.: June 13, 2018).

pandemic, Zika, and Ebola—and extreme weather events, such as hurricanes. Specifically, HHS's efforts have fallen short in five key areas of an effective national response:

- Clear roles and responsibilities. The unprecedented scale of the COVID-19 pandemic, and the whole-of-nation response required to address it, highlighted the critical importance of clearly defining the roles and responsibilities for the wide range of federal departments and other key partners involved when preparing for pandemics and addressing unforeseen emergencies. Unclear roles and responsibilities persisted at HHS and affected response efforts. For example, we found that when HHS helped repatriate U.S. citizens from abroad and quarantine them domestically at the beginning of the COVID-19 pandemic to prevent the spread of the virus, significant confusion ensued due to a lack of clarity as to which HHS agency was in charge.² As a result, HHS put repatriates, its own personnel, and nearby communities at risk.
- Complete and consistent data. Data are critical to inform the response to a public health emergency. However, the data HHS relied on during the COVID-19 pandemic were incomplete and inconsistent, highlighting longstanding concerns in this area. Moreover, we found in 2010, 2017, and again in 2022 that, although required by statute since 2006, HHS had made little progress in implementing a nationwide public health situational awareness capability through an interoperable network of systems to help ensure timely and complete collection of public health data to aid a response.³ Under the existing process—which HHS had to rely on during the COVID-19 pandemic—public health data are collected by thousands of disparate health departments, health care providers, and laboratories, as well as multiple federal agencies.
- Clear and consistent communication. In the midst of a public health emergency, clear and consistent communication—among all levels of

²GAO, COVID-19: HHS Should Clarify Agency Roles for Emergency Return of U.S. Citizens during a Pandemic, GAO-21-334 (Washington, D.C.: Apr. 19, 2021).

³GAO, COVID-19: Pandemic Lessons Highlight Need for Public Health Situational Awareness Network, GAO-22-104600 (Washington, D.C.: June 23, 2022); Public Health Information Technology: HHS Has Made Little Progress toward Implementing Enhanced Situational Awareness Network Capabilities, GAO-17-377 (Washington, D.C.: Sept. 6, 2017); and Public Health Information Technology: Additional Strategic Planning Needed to Guide HHS: Efforts to Establish Electronic Situational Awareness Capabilities, GAO-11-99 (Washington, D.C.: Dec. 17, 2010).

government, with health care providers, and to the public—is paramount. Our work over the years, including most recently during the COVID-19 pandemic, has found that HHS has provided unclear and inconsistent communication during critical incidents. For example, this was problematic during the H1N1 response when we found that selected state officials reported being overwhelmed by the large volume of, and sometimes inconsistent, information received from HHS and the Department of Homeland Security.4

- Transparency and accountability. When agencies need to quickly disseminate funding and information during public health emergencies, transparency and accountability are especially critical to help ensure program integrity and build public trust. However, we have found deficiencies in this area both prior to and during the COVID-19 pandemic. For example, within HHS, the Centers for Disease Control and Prevention (CDC) changed its COVID-19 testing guidelines several times over the course of the pandemic with little explanation of the scientific rationale behind the changes. This resulted in confusion among the providers and public health stakeholder groups implementing the guidelines and risked the erosion of trust in the federal government.
- Key partners' capabilities and limitations. We found in September 2019 that, in general, the agency within HHS tasked with leading preparedness and response activities on behalf of the Secretary—the Administration for Strategic Preparedness and Response (ASPR)—had limited capacity. Specifically, its personnel and supplies could support a response to two simultaneous events that occurred in different areas in the continental U.S. for 30 days, according to officials. Beyond that, ASPR relies on other response partners, but does not have a complete understanding of the capabilities and limitations of those partners, which creates a vulnerability.

Furthermore, we have concerns that ASPR lacks the capability to fully execute its responsibilities. In April 2022, we found that ASPR had not

⁴GAO, Influenza Pandemic: Lessons from the H1N1 Pandemic Should Be Incorporated into Future Planning, GAO-11-632 (Washington, D.C.: June 27, 2011).

⁵GAO, COVID-19 Testing Guidance enclosure in GAO, COVID-19: Urgent Actions Needed to Better Ensure an Effective Federal Response, GAO-21-191 (Washington, D.C.: Nov. 30, 2020).

⁶GAO, Disaster Response: HHS Should Address Deficiencies Highlighted by Recent Hurricanes in the U.S. Virgin Islands and Puerto Rico, GAO-19-592 (Washington, D.C.: Sept. 20, 2019).

undertaken key workforce planning steps to support the mission and goals of the new office it created to address medical product supply vulnerabilities highlighted during the pandemic. Additionally, in June 2020, we found that ASPR had aligned the size of its emergency responder workforce with the agency's strategic goals and objectives to a limited extent, affecting ASPR's ability to ensure that the size of the workforce could support its mission.

We have made 155 recommendations to HHS to help address the aforementioned deficiencies and others we have identified in this area since 2007. As of April 2023, 91 of these recommendations remained unimplemented. We maintain that implementing these remaining recommendations will strengthen HHS's leadership and coordination of public health emergencies.

In our April 2023 update on this high-risk area, we reported that two HHS agencies that play key preparedness and response roles—ASPR and CDC—are undergoing reforms. Specifically, in July 2022, HHS announced that it had elevated ASPR to a stand-alone agency alongside other HHS agencies, such as CDC. According to an HHS statement, this change will ultimately allow ASPR to mobilize a coordinated national emergency response more effectively and efficiently. In August 2022, CDC announced programmatic, scientific, and operational improvements to better support the agency's public health response during emergencies and in normal operations. These agencies have taken some actions since their initial announcements, which we will continue to monitor. For example, in February 2023, ASPR announced a new organizational structure that, according to ASPR, accounts for the agency's expanded mission and new capabilities, among other considerations.

Leading Agency Reform Practices

We have identified leading practices for successful agency reforms, by which agencies could address deficiencies such as those that led us to include HHS's leadership and coordination of public health emergencies on our High-Risk List.⁹ These leading practices indicate that agencies can successfully change if they have (1) clear goals, (2) follow a process to

⁷See the Public Health Industrial Base Expansion enclosure in GAO, COVID-19: Current and Future Federal Preparedness Requires Fixes to Improve Health Data and Address Improper Payments, GAO-22-105397 (Washington, D.C.: Apr. 27, 2022).

GAO-23-106872

⁸GAO, Public Health Preparedness: HHS Should Take Actions to Ensure It Has an Adequate Number of Effectively Trained Emergency Responders, GAO-20-525 (Washington, D.C.: June 18, 2020).

⁹GAO-18-427.

develop proposed reforms, (3) allocate implementation resources, and (4) consider workforce needs during and after the reform. See table 1 for examples of key questions that Congress can use to assess agencies' proposals for and implementation of reform efforts, in these four broad categories.

Leading practice category	Examples of key questions to assess agency reform efforts
Goals and outcomes	To what extent has the agency established clear outcome-oriented goals and performance measures for the proposed reforms?
Process for developing reforms	To what extent has the agency addressed areas of fragmentation, overlap, and duplication—including the ones GAO identified—in developing its reform proposals?
Implementing the reforms	Has the agency developed an implementation plan with key milestones and deliverables to track implementation progress?
Strategically managing the federal workforce	To what extent has the agency conducted strategic workforce planning to determine whether it will have the needed resources and capacity, including the skills and competencies, in place for the proposed reforms or reorganization?

Source: GAO. | GAO-23-106872

For example, one key question to assess agency reform efforts is the extent to which the agency conducts strategic workforce planning to determine whether it will have the needed resources and capacity in place for the proposed reforms or reorganization. This planning includes determining the critical skills and competencies needed to achieve an agency's current and future programmatic results, and developing strategies to address gaps in the number of staff and their skills and competencies to meet those results. ¹⁰

We shared these leading practices with HHS in January 2023 to use as it implements its planned reforms. These leading practices, along with the prerequisite of sustained leadership commitment, are essential to helping ensure the country is better prepared for future public health emergencies. Leadership commitment is the critical element for initiating and sustaining progress and making the types of management and operational improvements required to narrow or remove high-risk areas.

In closing, it is too soon to tell if HHS's efforts at reform will address the deficiencies we have identified in our high-risk designation. However, to the extent HHS chooses to follow these leading agency reform practices, they will help the department in its efforts to improve its leadership and

¹⁰GAO, Human Capital: Key Principles for Effective Strategic Workforce Planning, GAO-04-39 (Washington, D.C.: Dec. 11, 2003).

coordination of future public health emergencies. The practices can also assist Congress as it oversees HHS's implementation of these reforms.

Chair Griffith, Ranking Member Castor, and Members of the Subcommittee, this concludes my statement. I would be pleased to respond to any questions you may have.

GAO Contacts and Staff Acknowledgments

For further information about this statement, please contact Mary Denigan-Macauley at (202) 512-7114 or deniganmacauleym@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this testimony. In addition to the contacts named above, key contributors to this statement were Deirdre G. Brown (Assistant Director), Kaitlin Farquharson, Sarah Resavy, and Cathleen Whitmore. Additional support was provided by Erin B. Pearson, Lillian Riehl Schultze, and Sarah Veale.

Page 6 GAO-23-106872

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.

GAO's Mission	The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.
Obtaining Copies of GAO Reports and Testimony	The fastest and easiest way to obtain copies of GAO documents at no cost is through our website. Each weekday afternoon, GAO posts on its website newly released reports, testimony, and correspondence. You can also subscribe to GAO's email updates to receive notification of newly posted products.
Order by Phone	The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, https://www.gao.gov/ordering.htm.
	Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.
	Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.
Connect with GAO	Connect with GAO on Facebook, Flickr, Twitter, and YouTube. Subscribe to our RSS Feeds or Email Updates. Listen to our Podcasts. Visit GAO on the web at https://www.gao.gov.
To Report Fraud,	Contact FraudNet:
Waste, and Abuse in	Website: https://www.gao.gov/about/what-gao-does/fraudnet
Federal Programs	Automated answering system: (800) 424-5454 or (202) 512-7700
Congressional Relations	A. Nicole Clowers, Managing Director, ClowersA@gao.gov, (202) 512-4400, U.S. Government Accountability Office, 441 G Street NW, Room 7125, Washington, DC 20548
Public Affairs	Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800 U.S. Government Accountability Office, 441 G Street NW, Room 7149 Washington, DC 20548
Strategic Planning and External Liaison	Stephen J. Sanford, Managing Director, spel@gao.gov, (202) 512-4707 U.S. Government Accountability Office, 441 G Street NW, Room 7814, Washington, DC 20548



Please Print on Recycled Paper.

Mr. Griffith. I thank the lady for yielding back and now recognize Dr. Charity Dean for her 5-minute opening statement.

STATEMENT OF CHARITY DEAN, M.D.

Dr. DEAN. Thank you. Is my microphone on?

Chairs McMorris Rodgers and Griffith, Ranking Members Pallone and Castor, and distinguished members of this committee,

thank you for the invitation to be here today.

I believe that, in order to prepare for future disease threats, we have a duty to conduct a rigorous assessment of our COVID-19 response. Even if it is painful, this thorough inventory then becomes a gift, a clear roadmap of what we must do now to meet future threats with strength, and that is something I have dedicated my life to: building system solutions to protect all Americans from public health threats.

My experience as a local and State public health official has given me a unique vantage point which I have shared in other forums, including in Michael Lewis' "The Premonition" as well as in "Lessons From the COVID War," an investigative report of which

I am a coauthor.

The COVID-19 response was a massive systems failure across the whole of the U.S. public health system, including the CDC. I want to be clear: Our humans didn't fail, our systems failed. Our humans and our public servants gave it their all. This core failure was due to a lack of an intelligence and operational infrastructure capable of meeting the moment. Containment of biological threats, which must always be the first objective, is not possible without these twin capabilities. They would have enabled the United States to convert disparate, scattered data into reliable intelligence across both public and private sectors, enabling fast, unified, front-line decisions. Intelligence makes the invisible visible.

I served as the local health officer for Santa Barbara County when the Disneyland measles outbreak struck in 2014. I received a panicked phone call that a toddler in a busy daycare center had a rash spreading down from their forehead. Their cousin had visited Disneyland just a few weeks before. Soon there were two cases in young children and exposures across three adjoining counties and a suspicious cluster in two other States. With measles, every hour matters. When a kiddo first develops the classic rash, they have already been contagious for 4 days, so we are 4 days behind.

It is a race against time.

Around-the-clock flurry of phone calls, emails, fax machines ensued with my tribe of local health officers, which now included more than five other States. My wall was covered in sticky notes with connecting locations and suspects and large exposure venues. We formed an ad hoc intelligence infrastructure, using tools essentially from the 1970s. The outbreak ultimately spread to seven States, Mexico, and Canada before we contained it.

A college meningococcal outbreak had similar lessons. On a Saturday afternoon in 2013, I received a phone call alerting me to a college kid with what appeared to be meningococcal disease, a bacterial blood infection that goes to the brain and spreads fast among students. I immediately attempted to form an intelligence picture:

How many kids were infected? Which dorm rooms? Which sports teams?

Operating without much of a playbook of intelligence, I implemented a range of broad temporary measures all at once: canceled parties, sports, gave antibiotics. I enlisted the university, ERs, local businesses to find cases. We found more. By contrast, the CDC wanted to implement one mitigation measure at a time, like a controlled academic study. At the end of one long conference call with them, I was told I was alone in my decisions and response.

The truth is, trust is the currency of public health. It is earned with honesty and transparency. It has little to do with government titles. To quote "Braveheart," "Men don't follow titles, they follow courage." Together with the university and community, we contained that outbreak. A few years later, CDC guidance was pub-

lished with our approach as a model.

I am not going to dwell on the COVID-19 story, as much ink has been spilled on that. Suffice it to say, I was the number-two doctor for the State of California. I experienced the same phenomenon yet again. We were all flying blind, relying on an antiquated public health system built on disconnected local nodes that are siloed from each other to meet a fast-moving 21st century biological threat. To quote Edwards Deming, "A bad system beats a good person every time."

In September 2020, I founded the Public Health Company out of a deep conviction that a new intelligence capability must exist, built on transparency and accountability. I believe that the core technology for this capability had to come not from government but from the innovation made possible by the private sector, with its advances in artificial intelligence and data streaming. Nearly 3 years later, we have now built from scratch commercial-grade software. Our company is venture capital backed, and we are honored to be supported by BARDA Ventures within ASPR.

In closing, I want to emphasize my belief that the United States is still capable of solving hard problems. Solutions will require innovation, courage, and bold leadership. I am deeply grateful to every committee member here for your tireless efforts to that end. Thank you.

[The prepared statement of Dr. Dean follows:]

House Energy & Commerce Subcommittee on Oversight & Investigations June 7, 2023

Testimony of Charity Dean

Chairs McMorris Rodgers and Griffith, Ranking Members Pallone and Castor, and distinguished members of the Committee:

Thank you for the invitation to be here today.

I believe that in order to prepare for future disease threats, we have a duty to conduct a rigorous assessment of our COVID-19 response. Even if it is painful, this thorough inventory then becomes a gift: a clear roadmap of what we must do *now* to meet future threats with strength. And that is something I've dedicated my life to: building system solutions to protect Americans from public health threats. My experience as a local and state public health official has given me a unique vantage point, which I have shared in other forums, including in Michael Lewis's *The Premonition* as well as in *Lessons from the COVID War; An investigative Report*, of which I am a co-author.

The COVID-19 response was a massive systems failure across the whole of the U.S. Public Health System, including the CDC. I want to be clear: our humans didn't fail—dedicated public servants gave it their all—our systems failed. This core failure was due to lack of an intelligence and an operational infrastructure capable of meeting the moment. Containment of a biological threat, which must always be the first objective, is not possible without these twin capabilities. They would have enabled the United States to convert disparate, scattered data into reliable intelligence, across both public and private sectors; enabling fast, unified, front-line decisions. Intelligence makes the invisible, visible.

I served as the local health officer for Santa Barbara County when the Disneyland measles outbreak struck in 2014. I received a panicked phone call that a toddler in a busy daycare center had a rash spreading down from their forehead. Their cousin had visited Disneyland a few weeks before. Soon there were two cases in young children and exposures across three adjoining counties, and a suspicious cluster in two other states. With measles, every hour matters. When a kiddo first develops the classic rash they've already been contagious for 4 days, so we're 4 days behind. It's a race against time.

A round-the-clock flurry of phone calls, emails, and fax machines ensued with my tribe of local health officers, which now included more than five other states. My wall was covered with sticky notes connecting locations, suspects, and large exposure venues. We formed an ad hoc intelligence infrastructure using tools essentially from the 1970s. The outbreak ultimately spread to seven states, Mexico, and Canada before we contained it.

A college meningococcal outbreak had similar lessons. On a Saturday afternoon in 2013, I received a phone call alerting me to a college kid with what appeared to be meningococcal disease—a bacterial blood infection that goes to the brain and spreads fast among students. I immediately attempted to form an intelligence picture: how many kids were infected? Which dorm rooms, which sports teams?

Operating without much of a playbook or intelligence, I implemented a range of broad, temporary measures all at once: canceled parties, canceled sports, gave post-exposure antibiotics to 1,200 students. And I enlisted the university, ERs, and local businesses in the hunt for more early cases. We found four more. By contrast, the CDC wanted to implement one mitigation measure at a time, like a controlled academic study. At the end of one long conference call with them, I was told I was alone in my decisions and response.

Trust is the currency of public health. It is earned with honesty and transparency, and has little to do with official government titles. To quote Braveheart, "Men don't follow titles; they follow courage." Together with the university and community, we contained the outbreak. A few years later the CDC published guidance, with our approach as a model.

I won't dwell on the COVID-19 story, as much ink has been spilled. Suffice it to say, as the #2 doctor for the State of California, I experienced the same phenomenon yet again. We were flying blind, relying on an antiquated public health system—built on disconnected local nodes that are siloed from each other—to meet a fast-moving, 21st century biological threat. Intelligence sharing, when it happened, was slow, fragmented, and often uni-directional. I found the CDC to be disconnected from front-lines response; taking months or years to share aggregate data or publish guidance. My personal motto—no one is coming to save us—served as my north star, and that reality was experienced by many governors and business leaders alike.

To quote Edwards Deming, "A bad system beats a good person every time."

In September 2020, I founded The Public Health Company ("PHC") out of a deep conviction that a new intelligence capability must exist built on transparency and accountability. I believed that the core technology for this capability had to come not from government, but from the innovation made possible by the private sector with its advances in artificial intelligence and data streaming.

Nearly three years later, we have now built from scratch commercial-grade software with a scalable threat agnostic architecture. What we are building will enable our customers to learn of developing threats with near real-time situational awareness, and enable aligned operational responses across large geographies and multiple decision-makers.

Our company is venture capital backed, and we are honored to be supported by BARDA Ventures within ASPR. They, too, believe intelligence is a critical medical countermeasure and that what PHC is building can be an important complement to, and aligned with, the U.S. government with the ultimate goal of greatly improving our intelligence infrastructure for the benefit of both the private and public sectors.

In closing, I want to emphasize my belief that the United States is still capable of solving hard problems. Solutions will require innovation, courage, and bold leadership. I am deeply grateful to every Committee member for your tireless efforts to that end. Thank you.

Mr. GRIFFITH. Thank you. I now recognize Dr. Høeg for her 5 minutes.

STATEMENT OF TRACY BETH HØEG, M.D., PH.D.

Dr. Høeg. All right, good morning. Thank you for the invitation to be here. My name is Tracy Beth Høeg. I am a practicing M.D. and Ph.D. epidemiologist currently in the Department of Epidemiology and Biostatistics at the University of California, San Francisco. And I am also affiliated with the University of Southern Denmark.

I am a Danish-American dual citizen, and moved back to the U.S. from Denmark in 2015. I have coauthored 14 scientific publications related to the epidemiology and medical evidence during the COVID–19 pandemic, 13 where I was first or senior author. My own research and publication experiences during the pandemic led me to numerous eye-opening and disappointing revelations about the CDC.

One of the most important questions—if not the most important question—as we look back on the pandemic is why, under the CDC's guidance, K-through-12 schools in the United States remained closed to in-person learning longer than any other high-income nations, with around a fifth of U.S. students out of in-person learning for an entire year.

In the fall of 2020 I was the senior author of a landmark study published in the CDC's journal, MMWR, on COVID-19 transmission in schools. My coauthors and I expected the findings of our study would be used to swiftly reopen the schools in early 2021, as our peer nations had done many months earlier. In line with research from Europe and our own country, we found remarkably limited transmission between students and none to teachers and staff during a time of high community disease prevalence among greater than 5,000 students and staff over a 14-week period.

However, shortly after our study's publication, the CDC, under Rochelle Walensky, in spite of the scientific data, doubled down on the need for closures at high community transmission levels and the unproven need for 6 feet of distance in screening testing. When the school reopening guidelines were released, over 90 percent of the country was in the high transmission level, meaning the CDC recommended virtual learning for secondary schools that did not have access to screening testing programs and hybrid learning, with 6 feet of distancing for elementary students. This would keep as many as 90 percent of students in the U.S. out of either full-time school or any in-person learning.

I thought the current administration, like Europe, believed in a progressive ideology which valued the education of the most vulnerable and disadvantaged in our society. So why were they putting up so many unproven barriers in their guidelines when it came to getting children back in the classrooms?

And why did they not consult us, the authors of the study published on this very topic in their own journal? We could have told them we did not have a screening testing program, and greater than 90 percent of elementary students in our study were less than 6 feet apart, and children ate lunch without masks indoors.

In fact, out of desperation to communicate with the CDC, we rapidly released a preprint outlining the simple circumstances under which the schools in our study stayed open. I eventually learned what was happening, that the CDC was consulting with the leaders of the U.S.'s two largest teachers unions over text messages up to the day before about exactly how the school reopening guidelines should be worded. It was not that I felt teachers should not be consulted, but that the science and anticipated harms of continued school closures were being ignored when they should have been the utmost priority.

My second experience involved the downplaying and lack of sense of urgency about postvaccination myocarditis in young people, especially males, which I have published two harm-benefit analyses on and one additional publication. Briefly, the CDC's unwillingness to properly communicate and address this adverse effect among young, healthy people, especially those who had already been infected with COVID-19 for whom the benefit of vaccination was entirely unclear, demonstrated a greater commitment to partisanship than the health of our Nation's youth.

My third example has to do with concerning publication bias within the CDC's journal, MMWR, when they refused in 2021 to publish a followup study that I and my coauthor did, looking at a study that was published in fall of 2021, which was a brief, 2-week study which found a barely significant association between school mask mandates and a lower rise in pediatric cases in counties. When we expanded the study out to 6 weeks and included the remaining counties that had reopened the schools, we failed to find any significant association between the pediatric—between the school mask mandates and pediatric cases, and MMWR refused to publish the followup publication, which any journal should have readily published, considering that we found a reversal of the original findings.

We did go on to get this published in the highly respected Journal of Infection, and one should bear in mind that what we found, the lack of correlation, was consistent with the highest evidence at the time, from randomized studies, that wearing masks in the community probably makes little to no difference in the outcome of laboratory-confirmed influenza or SARS-CoV-2.

There is a desperate need for more scientific rigor within the CDC and MMWR and a transparent review process, including external peer review, to restore integrity of the journal. Whatever our political beliefs, we should all be deeply concerned about a national public health agency that chooses to publish, promote, and develop guidelines around politically favorable policies instead of the highest quality evidence. Thank you.

[The prepared statement of Dr. Høeg follows:]

Congressional Testimony by Tracy Beth Høeg, MD, PhD Committee on Energy and Commerce "Looking Back Before Moving Forward: Assessing CDC's Failures in Fulfilling its Mission" June 7th, 2023

My name is Tracy Beth Høeg. I am a practicing MD and a PhD epidemiologist working in the Department of Epidemiology and Biostatistics at University of California-San Francisco. I am a Danish American dual citizen who moved back to the US from Denmark in 2015. I have coauthored 14 scientific publications related to epidemiology and medical evidence during the COVID-19 pandemic, 13 where I was first or senior author (see accompanying CV).

My own research and publication experiences during the COVID-19 pandemic have led me to numerous eye-opening and disappointing revelations about the US Centers for Disease Control and Prevention (CDC) which I will outline today.

One of the most important questions, if not the most important question, as we look back on the COVID-19 pandemic is why, under the CDC's guidance, many K-12 schools in the United States remained closed to in person learning longer than any other high-income nations, with almost a third of US students out of full time in person learning for 15 months (1).

In the Fall of 2020, I was the senior author of a landmark study (2) published in the CDC's journal MMWR on COVID-19 transmission in schools. My co-authors and I expected the findings of our study would be used by the CDC to recommend the swift reopening schools in the winter of 2021 as our peer nations had done, most many months earlier. In line with research out of Europe (3,4, 5) and our own country (6,7,8) we found remarkably limited transmission between students and none to teachers during a time of high community disease prevalence – among 5530 students & staff over a 14-week period.

Unthinkable to me at the time, the CDC under Rochelle Walensky, provided updated guidance to schools that, doubled down (9) on the need for closures at times of high community transmission levels and for the unproven need for 6 feet of distance and screening testing (10,11). When the February 2021 school reopening guidelines were released, >90% (12) of the country was in the "high" transmission level meaning the CDC recommended virtual learning for secondary schools that did not have access to a screening testing program and hybrid learning with 6 feet of distancing for elementary students. This guidance would keep as many as 90% of students in the US out of either full time school or any in-person learning.

I thought the current administration believed in a progressive ideology which valued the education of the most vulnerable and disadvantaged in our society. So why were they putting up so many unproven barriers to getting children back into school? Why did they not consult with us, the authors of the study published on this very topic in their own journal? We could have told them we did not have a screening testing program and >90% of elementary students in our study were < 6 feet apart in classrooms and kids ate lunch without masks indoors (!)(13). In fact, out of

desperation to communicate with the CDC, we rapidly released a preprint (13) outlining the simple circumstances under which the schools in our study stayed open.

I eventually learned what was happening -- the CDC was consulting with the leaders of the US's two largest teachers unions, including Randi Weingarten and Becky Pringle over text messages (up to the day before the release) about the language of their reopening guidelines (13). It is not that I feel that teachers should have been excluded from the discussion but that the scientific evidence and anticipated harms of continued school closures (15,16) should have been the utmost priority.

This was my first major personal experience with what I have come to recognize as an unacceptable and, ultimately harmful, political bias within the CDC.

My second experience involved the downplaying and lack of sense of urgency about the post-vaccination myocarditis signal in young people about which I have published two harm-benefit analyses (17[preprint], 18, 19) and one additional scientific publication (20). Briefly, the CDC's unwillingness to properly communicate and address this adverse effect, particularly among young healthy people who had already been infected with COVID-19, for whom the benefit of vaccination remains entirely unclear, demonstrated a greater commitment to partisanship than the health of our nation's youth.

My third example speaks to the publication bias within the CDC's flagship journal, MMWR. Historically this is a highly respected journal; I believe it has the potential to be again. However, during the COVID-19 pandemic a litany of poor-quality studies often with results consistent with the current administration's views (21=Arizona mask study, 22=hairstylist mask study, 23=telephone masking survey 24=Post-COVID conditions 25=myocarditis) but inconsistent with higher quality research and publications (26, 27, 28, 29, 30), were published - and without external peer review. My own research group's experience is illustrative of the inner workings of the journal's dubious scientific review process. We replicated the methods of a study published in MMWR (31) which was used to justify school mask recommendations for the 2021-2022 academic year. This study by Budzyn et al (21) included a very short 2-week study period and found a association between school mask mandates and the rise in county pediatric cases. When we expanded the study out to 6 weeks and were able to include a larger, more nationally representative group of counties, we failed to find any significant association between school mask mandates and pediatric cases. MMWR however refused to publish this follow-up analysis, which scientific journals with integrity would have readily published. They did not not cite issues with our methods but rather that our findings were "rife with polemics" and would "be more suitable for publication in another journal where more space could be afforded.'

We were able to promptly get this published (32) in the highly respected *Journal of Infection*, our findings a valuable example of the limitations and pitfalls of using highly-likely-to-be confounded observational data to set public health policy. If you look at enough periods of time and places, you will most certainly be able to generate results that support your preferred policies and narratives. Meanwhile, a systematic review of randomized studies (26)- the highest level evidence we have found "Wearing masks in the community probably makes little or no difference to the outcome of laboratory-confirmed influenza/SARS-CoV-2."(26)

There is a desperate need for more scientific rigor from their studies and MWWR and a transparent review process including external peer review is essential for the integrity of the journal that helps set public health guidelines.

Finally, as further evidence of bias within the agency, my research group recently published an analysis (33) of the CDC's errors in data reporting between 2021 and spring of 2023. We found, disturbingly, that basic errors reported by the agency systematically overestimated the risks of COVID-19 to the public, particularly in children, 94% of the time.

Whatever our political beliefs, we should all be deeply concerned about a national public health agency that chooses to publish, promote & develop guidelines around politically favorable policies instead of producing and/or utilizing the highest quality data or admitting uncertainty.

Reforms to the agency may include separating the researchers responsible for generating and publishing scientific data in MMWR from political influence from the current administration or a bipartisan effort, a commitment to transparency, external peer review in the MMWR scientific publication process, as well as more opportunity for public involvement and debate in the development of public health guidelines.

Thank you.

References

- Burbio. Burbio's K-12 School Reopening Tracker. Accessed 5/28/2023. https://about.burbio.com/school-opening-tracker
- Falk A, Benda A, Falk P, Steffen S, Wallace Z, Høeg TB. COVID-19 Cases and Transmission in 17 K-12 Schools - Wood County, Wisconsin, August 31-November 29, 2020. MMWR Morb Mortal Wkly Rep. 2021 Jan 29;70(4):136-140. doi: 10.15585/mmwr.mm7004e3. PMID: 33507890; PMCID: PMC7842817.
- 3. Public Health Agency of Sweden. COVID-19 in schoolchildren: A comparison between Sweden and Finland. Published 6/14/2020. Accessed 5/27/2023 https://www.folkhalsomyndigheten.se/contentassets/c1b78bffbfde4a7899eb0d8ffdb57b09/covid-19-school-aged-children.pdf
- Center for Global Development. Back to School: An Update on COVID Cases as Schools Reopen. Published 6/12/2020. Accessed 5/27/2023. https://www.cgdev.org/blog/back-school-update-covid-cases-schools-reopen
- Brandal LT, Ofitserova TS, Meijerink H, Rykkvin R, Lund HM, Hungnes O, Greve-Isdahl M, Bragstad K, Nygård K, Winje BA. Minimal transmission of SARS-CoV-2 from paediatric COVID-19 cases in primary schools, Norway, August to November 2020. Euro Surveill. 2021 Jan;26(1):2002011. doi: 10.2807/1560-7917.ES.2020.26.1.2002011. PMID: 33413743; PMCID: PMC7791599.
- Zimmerman KO, Akinboyo IC, Brookhart MA, Boutzoukas AE, McGann KA, Smith MJ, Maradiaga Panayotti G, Armstrong SC, Bristow H, Parker D, Zadrozny S, Weber DJ, Benjamin DK Jr; ABC SCIENCE COLLABORATIVE. Incidence and Secondary Transmission of SARS-CoV-2 Infections in Schools. Pediatrics. 2021

- Apr;147(4):e2020048090. doi: 10.1542/peds.2020-048090. Epub 2021 Jan 8. PMID: 33419869; PMCID: PMC8015158.
- Kamenetz, A. What parents can learn from childcare centers that stayed open during lockdown. NPR. Published 6/24/2020. Accessed 5/28/2023. https://www.npr.org/2020/06/24/882316641/what-parents-can-learn-from-child-care-centers-that-stayed-open-during-lockdowns
- Link-Gelles R, DellaGrotta AL, Molina C, et al. Limited Secondary Transmission of SARS-CoV-2 in Child Care Programs — Rhode Island, June 1–July 31, 2020.
 MMWR Morb Mortal Wkly Rep 2020;69:1170–1172.
- 9. Centers for Disease Control and Prevention. Operational Strategy for K-12 Schools through Phased Mitigation. Updated Feb. 12, 2021. Access via Wayback Machine 6/5/2023.https://web.archive.org/web/20210213045212/https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/operation-strategy.html
- 10. van den Berg P, Schechter-Perkins EM, Jack RS, Epshtein I, Nelson R, Oster E, Branch-Elliman W. Effectiveness of 3 Versus 6 ft of Physical Distancing for Controlling Spread of Coronavirus Disease 2019 Among Primary and Secondary Students and Staff: A Retrospective, Statewide Cohort Study. Clin Infect Dis. 2021 Nov 16;73(10):1871-1878. doi: 10.1093/cid/ciab230. Erratum in: Clin Infect Dis. 2022 Mar 23;74(6):1127-1129. PMID: 33704422; PMCID: PMC7989511.
- Falk A, Decoster M, Wallace Z, Falk P, Steffen S, Benda A, Høeg TB. COVID-19 Surveillance Testing in Secondary Schools: Findings and Barriers to Implementation. WMJ. 2022 Apr;121(1):13-17. PMID: 35442573.
- Kogan V & Prasad V. New CDC school opening guidelines fail to 'follow the science'. STAT. Published 2/20/2021. Accessed 6/5/2023. https://www.statnews.com/2021/02/20/new-cdc-school-opening-guidelines-dont-follow-the-science/
- Falk A, Benda B, Falk P, Steffen S, DeCoster M, Gandhi M, Høeg TB. Details of COVID-19 Disease Mitigation Strategies in 17 K-12 Schools in Wood County, Wisconsin. MedRxiv 3/16/2021.
- 14. DeAngelis, CA [@DeAngelisCorey]. (2023, June 2nd). BREAKING: Fairfax County Parents Association obtained text messages between the CDC Director and the presidents of the nation's two largest teachers unions (Randi Weingarten and Becky Pringle) with a FOIA request.. [Tweet]. Twitter.

 https://twitter.com/DeAngelisCorey/status/166466644889706497?ref_src=twsrc%5

 Etfw%7Ctwcamp%5Etweetembed%7Ctwterm%5E1664666644889706497%7Ctwgr
 %5E98a018f128c898b121417196925f1572bc964c59%7Ctwcon%5Es1_&ref_url=htt
 ps%3A%2F%2Fwww.schoolinfosystem.org%2F2023%2F06%2F02%2Ftaxpayerfunded-cdc-and-covid-policy-teacher-union-emails%2F
- Christakis DA, Van Cleve W, Zimmerman FJ. Estimation of US Children's Educational Attainment and Years of Life Lost Associated With Primary School Closures During the Coronavirus Disease 2019 Pandemic. JAMA Netw Open. 2020;3(11):e2028786.
- 16. https://credo.stanford.edu/wp-content/uploads/2021/08/online press release.pdf
- Høeg TB, Krug A, Stevenson J, Mandrola J. SARS-CoV-2 mRNA Vaccination-Associated Myocarditis in Children Ages 12-17: A Stratified National Database Analysis. MedRxiv. 8/30/2021.

- Krug A, Stevenson J, Høeg TB. SARS-CoV-2 mRNA Vaccine-Associated Myo/Pericarditis in Adolescents: Stratified Risk-Benefit Analysis. European Journal of Clinical Investigation. 2022. 14.2. https://doi.org/10.1111/eci.13759
- 19. Bardosh K, Krug A, Jamrozik E, Lemmens T, Keshavjee S, Prasad F, Makary M, Baral S & Høeg TB. COVID-19 vaccine boosters for young adults: a risk benefit assessment and ethical analysis of mandate policies at universities *Journal of Medical Ethics* Published Online First: 05 December 2022. doi: 10.1136/jme-2022-108449
- Høeg TB, Krug A, Baral S, Jamrozik E, Keshavjee S, Lemmens T, Prasad V, Makary MA, Bardosh K. University-age vaccine mandates: reply to Lam and Nichols. J Med Ethics. 2023 May 24:jme-2023-109163. doi: 10.1136/jme-2023-109163. Epub ahead of print. PMID: 37225414.
- Jehn M, Mac McCullough J, Dale AP, Gue M, Eller B, Cullen T, Scott SE. Association between K-12 school mask policies and school-associated COVID-19 outbreaks—Maricopa and Pima Counties, Arizona, July-August 2021. Morbidity and Mortality Weekly Report. 2021 Oct 1;70(39):1372.
- Hendrix MJ, Walde C, Findley K, Trotman R. Absence of Apparent Transmission of SARS-CoV-2 from Two Stylists After Exposure at a Hair Salon with a Universal Face Covering Policy - Springfield, Missouri, May 2020. MMWR Morb Mortal Wkly Rep. 2020 Jul 17;69(28):930-932. doi: 10.15585/mmwr.mm6928e2. PMID: 32673300.
- 23. Telephone mask survey
- 24. Bull-Otterson L, Baca S, Saydah S et al. Post-COVID conditions among adult COVID-19 Survivors Aged 18-64 and >65 years – United States, March 2020-November 2021. MMWR Morb Mortal Wkly Rep. 2022;71:713-717
- 25. Block JP, Boehmer TK, Forrest CB, Carton TW, Lee GM, Ajani UA, Christakis DA, Cowell LG, Draper C, Ghildayal N, Harris AM, Kappelman MD, Ko JY, Mayer KH, Nagavedu K, Oster ME, Paranjape A, Puro J, Ritchey MD, Shay DK, Thacker D, Gundlapalli AV. Cardiac Complications After SARS-CoV-2 Infection and mRNA COVID-19 Vaccination PCORnet, United States, January 2021-January 2022. MMWR Morb Mortal Wkly Rep. 2022 Apr 8;71(14):517-523. doi: 10.15585/mmwr.mm7114e1. PMID: 35389977; PMCID: PMC8989373.
- Jefferson T, Dooley L, Ferroni E, Al-Ansary LA, van Driel ML, Bawazeer GA, Jones MA, Hoffmann TC, Clark J, Beller EM, Glasziou PP, Conly JM. Physical interventions to interrupt or reduce the spread of respiratory viruses. Cochrane Database Syst Rev. 2023 Jan 30;1(1):CD006207. doi: 10.1002/14651858.CD006207.pub6. PMID: 36715243; PMCID: PMC9885521.
- 27. Coma E, Català M, Méndez-Boo L, Alonso S, Hermosilla E, Alvarez-Lacalle E, Pino D, Medina M, Asso L, Gatell A, Bassat Q, Mas A, Soriano-Arandes A, Fina Avilés F, Prats C. Unravelling the role of the mandatory use of face covering masks for the control of SARS-CoV-2 in schools: a quasi-experimental study nested in a population-based cohort in Catalonia (Spain). Arch Dis Child. 2023 Feb;108(2):131-136. doi: 10.1136/archdischild-2022-324172. Epub 2022 Aug 23. PMID: 35999036.
- Office of National Statistics. Technical article: Updated estimates of the prevalence of
 postacute symptoms among people with coronavirus (COVID-19 in the UK: 26 April
 2020 to 1 August 2021. Accessed 15 December 2022.
 https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditi

- onsanddiseases/articles/technicalarticleupdatedestimatesoftheprevalenceofpostacutesy mptomsamongpeoplewithcoronaviruscovid19intheuk/26april2020to1august2021.
- Karlstad Ø, Hovi P, Husby A, Härkänen T, Selmer RM, Pihlström N, Hansen JV, Nohynek H, Gunnes N, Sundström A, Wohlfahrt J, Nieminen TA, Grünewald M, Gulseth HL, Hviid A, Ljung R. SARS-CoV-2 Vaccination and Myocarditis in a Nordic Cohort Study of 23 Million Residents. JAMA Cardiol. 2022 Jun 1;7(6):600-612. doi: 10.1001/jamacardio.2022.0583. PMID: 35442390; PMCID: PMC9021987.Budzyn SE, Panaggio MJ, Parks SE, Papazian M, Magid J, Eng M, Barrios LC. Pediatric COVID-19 cases in counties with and without school mask requirements—United States, July 1–September 4, 2021. Morbidity and Mortality Weekly Report. 2021 Oct 1;70(39):1377.
- 30. Swiss school post covid study
- Budzyn SE, Panaggio MJ, Parks SE, Papazian M, Magid J, Eng M, Barrios LC.
 Pediatric COVID-19 cases in counties with and without school mask requirements— United States, July 1–September 4, 2021. Morbidity and Mortality Weekly Report. 2021 Oct 1;70(39):1377.
- Chandra A & Høeg TB. Lack of correlation between school mask mandates and paediatric COVID-19 cases in a large cohort. Journal of Infection. 29 Sept 2022.
- Krohnert K, Haslam A, Høeg TB, Prasad V. Statistical and Numerical Errors Made by the US Centers for Disease Control and Prevention During the COVID-19 Pandemic (March 7, 2023). Available at SSRN http://dx.doi.org/10.2139/ssrn.4381627

Mr. GRIFFITH. I appreciate it, thank you. Now I recognize Dr. Georges Benjamin for his 5 minutes of opening statement.

STATEMENT OF GEORGES C. BENJAMIN, M.D.

Dr. Benjamin. Thank you, Mr. Chairman and Ranking Member Castor and members of the subcommittee. Thank you very much for allowing me to spend some time with you today. I am Georges Benjamin. I am the executive director at the American Public Health Association. I am in my 21st year. What that means is I am old, and it also means that I have had a chance, over not only the 20 years of being at APHA but also the many years of practicing public health in this community, both in D.C. and Maryland, in interacting with the CDC in a variety of roles.

I have had the opportunity to advise both the agency and the Department of Health and Human Services, both in administrations—both the Republican and Democratic administrations. I have had a chance to support their efforts, and I have a chance—have had an opportunity to yell at them when I think they are not on track.

I think that one of the things we have to be very careful about is the retrospective scope, which I think is a very, very powerful tool. It is a powerful tool because it allows you to go back and look at what happened in the past, and you want to be careful that you don't—you remember what decisions you made and what you knew when you made those decisions going forward. And I know we all know that, and I just wanted to say that.

I also think that it is important that we understand that the politicization that has happened for public health is very destructive, and people die because of that destructive nature. The misinformation and disinformation that has occurred at a variety of levels has resulted in people, I believe, dying prematurely. And so we, as a collective—those of us doing policy, those of us on the advocacy world, those of us doing science—need to do a better job to bring that to an end as quickly as we possibly can.

We live in a very, very rapidly changing health environment. COVID is transitioning to something else. We will figure out what that is when it tells us what it is about to do. We have been wrong on almost every single assumption that we have made with COVID, and I suspect we are still going to learn some things.

But just to remind you that we still have an obesity epidemic, we still have an opioid epidemic, we still have an epidemic of firearms and premature death from injury from firearms, we have the opportunity to finally get our hands around HIV AIDS, to finally get the opportunity to stamp out hepatitis C. We have a growing STD epidemic, and I remind you we now have the return of babies with syphilis, which we used to think was very, very uncommon. And we have the return of vaccine-preventable diseases.

Dr. Dean's experience in southern California is just the tip of the iceberg of what we should expect as we look at what is going forward with vaccines and vaccine hesitancy in our country.

My point is that we need a very, very strong CDC if we are serious about that. It is the only agency within the Department of Health and Human Services that does what it does. It has historically done it very, very well. That does not mean that they are per-

fect. It does not mean that they are not perfect—or that they are perfect. They are not.

So going forward, let's talk about what they need. They need data. Public health is fundamentally a data-driven science. Without data, we can't make data-driven decisions. And we need to end the practice of being data archaeologists.

We need a health information technology system. The fact is that I can get food right now on my phone in DoorDash in this room,

but I can't get my EKG. We need to fix that.

We need to strengthen the public health workforce. We have a huge vacancy level in public health, even though—thank you very much—the funding that you have given under the Recovery Act certainly has gone to help public health, but we still have lots of vacancies, and we need to fix those.

We need—CDC needs budget flexibility. Their budget is extremely rigid, and they are unable to do a lot of the things that I was able to do as a State and local health officer.

Clearly, public health needs adequate and sustainable funding. This yo-yo funding has to end, where we put in a lot of money in when something bad happens—often it comes a little late, not quite enough—and then we take it away too quickly. And you can't build a system like that. In fact, none of you would tolerate that for the Department of Defense.

And CDC needs external supports. You have heard from, I think, every one of these witnesses how important it is to have this as part of a system.

And we need to finally, once and for all, build a sound public health system in our country.

With that, I will stop and thank you very much, Mr. Chairman and Ranking Member.

[The prepared statement of Dr. Benjamin follows:]



Testimony of Georges C. Benjamin, MD, MACP, FACEP(E), FNAPA

Executive Director
American Public Health Association
Looking Back Before Moving Forward: Assessing CDC's Failures in Fulfilling its Mission
House Energy and Commerce Committee
Subcommittee on Oversight and Investigations
June 7, 2023

Chairman Griffith, Ranking Member Castor, and members of the subcommittee, thank you for giving me the opportunity to address you today as we explore opportunities to enhance the capacity of the U.S. Centers for Disease Control and Prevention to improve our health and protect our nation from emerging health threats.

I am Georges C. Benjamin, MD, executive director of the American Public Health Association. APHA is our nation's leading society of public health professionals that champion the health of all people and all communities. We just celebrated our 150th anniversary as an association and are looking forward to our future work to improve the health and well-being of our nation and the world

I am a physician who is trained and certified in internal medicine. I spent the first half of my career as a clinician, practicing and teaching emergency medicine both in the private sector and in the military. I have also had the opportunity to serve my community in a variety of executive management positions including Chief of Emergency Medicine at the Walter Reed Army Medical Center; Chairman of the Department of Community Health and Ambulatory Care at the District of Columbia General Hospital; Acting Commissioner for Public Health for Washington, D.C.; Interim Director of the Emergency Ambulance Bureau of the D.C. Fire and EMS Department; and Health Secretary for the State of Maryland. I have served as the executive director of APHA for the last 20 years. I also have had the privilege to advise and work with the U.S. Department of Health and Human Services and particularly CDC for over 30 years with both Democratic and Republican administrations. I share my professional background with you here today to point out I have seen HHS, and in particular CDC, at its best and when the agency has struggled. I am a supporter who has also been a critic of CDC when needed, with the goal of helping them achieve their stated mission "to protect America from health, safety and security threats, both foreign and in the U.S."

From my years in management of health care and public health systems, it is clear to me that understanding the facts around what, when and how things happen is an essential first step to ensuring we are better prepared for the future. In addition, the retro-spectroscope is a powerful tool. We must be incredibly careful that we do not forget what we knew when we initially made critical decisions. What we know today should indeed inform our future planning, but we must be mindful that what we know now is different from what we knew when key decisions were made in the past. It is also clear that the growing politization of public health is dangerous, counterproductive and undermines the health of the public.

We live in a rapidly evolving environment of health threats, and we need our public health system to be as resilient and versatile as possible in managing unchartered territory to effectively meet these threats. Today, the nation is recovering from COVID-19, the greatest pandemic in over 100 years. It is an infectious threat that continues and is transforming to a new and still unclear phase. We still have several persistent and growing epidemics including obesity, opioids and injury and death from firearms that we need to address much more vigorously. The potential of bringing the epidemics of HIV/AIDS and Hepatitis C under control are within our reach as well. On the other hand, reducing preventable problems like suicides, sexually transmitted diseases and maternal deaths, as well as the reemergence of vaccinepreventable diseases such as measles and polio continue to elude the health community. As a nation we have lost almost three years of life expectancy, not just because of COVID-19, but also due to the lack of adequate attention to some of our other health needs. As we saw during the COVID pandemic, like most other health problems, health disparities remain a significant burden to all and are not improving. The federal leadership to address these health challenges is not the responsibility of CDC alone, but the agency is an important part of the collaboration of governmental and nongovernmental entities tasked with developing a comprehensive approach. We need a strong and well-resourced CDC to adequately protect the public's health from the many challenges we face today.

Several reports have been written about opportunities to improve the CDC's capacity to achieve its mission, and all of them have found the following needs:

- Data & IT modernization
- Strengthening the workforce
- Budget flexibility
- Adequate and sustained funding
- External supports

A terrific report was recently developed by a prestigious working group at the Center for Strategic and International Studies. CSIS focused on the external supports that CDC needs to be more successful. The working group focused on six areas to include:

- Development of scientific guidance and communications
- Management of large and complicated sets of health data
- Budget structure
- External partnerships with state and local entities and the private sector
- Engagement within the executive branch ecosystem and with Capitol Hill
- CDC global health security mission

I will not reiterate their work here except to point out that we align our support with the workgroup's recommendations. Two key recommendations included highlight that CDC is not an agency on its own and requires significant support and integration with other HHS agencies during health emergencies. The need for a well thought out and functioning integrated incident command structure is an essential need within HHS, as noted by the GAO in its May 11, 2023, report to Congress entitled Critical Needs to Address Deficiencies in HHS's Leadership and Coordination of Emergencies.² Additionally, CDC's inflexible budget structure limits its ability to be as agile as it needs to be during emergencies. This is a finding that has been noted by several reviews and has been acknowledged by several former CDC directors. A suitable solution needs to be found to address this barrier.

Internal Efforts: Moving Forward: Strengthening CDC For the Future

CDC's Moving Forward initiative, announced by CDC Director Rochelle Walensky in the spring of 2022, is an ongoing process to ensure CDC can better deliver on its mission to protect the health, safety and security of our communities. CDC acknowledges that in addition to the successes the agency achieved during the pandemic, there were inadequacies. Agency leadership has acknowledged they needed to take steps to change the culture and processes of the agency to make it a more responsive organization. There was a critical need for the agency to move from an academic posture to a forward-leaning emergency response posture and to be a better communicator to the public on its guidance and decisionmaking. We are supportive of the agency's efforts to address these concerns and believe that Congress should allow the agency the appropriate amount of time to implement these significant changes to its structure and programs. At this time, we do not believe any additional major restructuring is needed to

¹ Center for Strategic and International Studies. Building the CDC the Country Needs. Published January 12, 2023. Available at: https://www.csis.org/analysis/building-cdc-country-needs.

² Public Health Preparedness: Critical Need to Address Deficiencies in HHS's Leadership and Coordination of Emergencies. GAO-23-106829. Published: May 11, 2023. Publicly Released: May 11, 2023. Available at: https://www.gao.gov/products/gao-23-106829

overhaul the agency's structure or programs. The agency's internal review found the need to address issues in six core areas:

- Share scientific findings and data faster
- · Enhance laboratory science and quality
- Translate science into practical, easy-to-understand policy
- · Prioritize public health communications
- Develop a workforce prepared for future emergencies CDC and nationwide
- Promote results-based partnerships

The agency reports making progress in all of these areas, but it also still has several additional needs that Congress can and should support to strengthen the agency's ability to protect the public from the many health threats we face both domestically and globally.

Data collection and IT modernization

Data is the lifeblood by which public health does its work. Without reliable and timely data, public health decisionmaking is ineffective. For far too long, data collection has been slow, inconsistent and based on a patchwork of individually negotiated data use agreements between CDC, states and local entities. Numerous studies and reviews have documented the need for better and more timely data collection at all levels of the public health system. We all watched with horror as local health departments were forced to send data by fax machines during the COVID-19 pandemic, often captured on paper by pen and pencil. CDC has a data modernization initiative in process, but it needs more support to accelerate that progress. One ongoing problem is the lack of authority to obtain required data, and another is the ongoing technical problems with the interoperability of data systems throughout the health system.

Congress can help by passing the Improving DATA in Public Health Act. This legislation will provide CDC with the authority to collect public health data directly from health providers; public health and clinical laboratories; state, local and tribal public health departments; and other entities, as necessary. This is essential to ensuring the nation's public health system at all levels can respond adequately and in a timely manner to our greatest public health challenges, including the next pandemic and other public health emergencies.

The Improving DATA in Public Health Act would:

 Promote coordination between federal agencies to share critical public health data used to prepare for, identify, monitor and respond to public health emergencies.

- Create standards to improve the exchange of electronic health information, ensuring that health data can be transferred seamlessly and securely to protect confidentiality and improve infectious disease surveillance and other public health initiatives.
- Establish an Advisory Committee with key public health stakeholders to ensure that health data reporting and sharing processes are conducted as effectively as possible.
- Provide funding for health care providers; academic medical centers; community-based organizations; state, local and tribal governments and organizations; non-profit organizations; and other entities to identify, develop and disseminate best practices in the collection and sharing of electronic health information.

Strengthening Workforce Capacity

CDC has administrative restraints, such as overtime pay caps, hazard pay and reassignment limitations, which hinder its nimbleness during emergencies and need to be addressed. Congress should also extend authority for temporary reassignment of federal, state, tribal or local public health department or agency personnel during public health emergencies to allow flexibility for agencies funded under the Public Health Service Act to immediately respond to public health emergencies with their existing workforce. Currently, only state governors and tribal leaders are authorized to submit reassignment requests, and we recommend amending the language to allow federal and local jurisdictions to request temporary reassignment of their existing personnel and to enable health officials to function as the requesting entity, as they are the grantees of many relevant public health funding streams. Broadening this authority to federal and local health officials is critical to ensuring a timely and well-resourced response to a public health emergency.

Support the Public Health Workforce Loan Repayment Program

Congress recently authorized the Public Health Workforce Loan Repayment Program and now must also appropriate funding at its \$100 million authorization level. This program will help incentivize new and recent graduates to join the governmental public health workforce, encourage them to stay in these roles and strengthen the public health workforce as a whole. The public health workforce is the backbone of our nation's governmental public health system at the city, county, state, territorial and tribal levels. These skilled professionals deliver critical public health programs and services. They lead efforts to ensure the tracking and surveillance of infectious disease outbreaks, such as COVID-19 and mpox, prepare for and respond to natural or man-made disasters and ensure the safety of the air we breathe, the food we eat and the water we drink.

Support CDC's Public Health Infrastructure funding program

Congress should continue to support CDC's Public Health Infrastructure program, the first of its kind, which provides flexible funding to the nation's state, local and territorial health departments to support efforts to modernize data systems, recruit and retain a skilled and diverse public health workforce and address the many longstanding public health infrastructure needs across the nation. In FY 2023, Congress provided \$250 million for the program and we urge Congress to continue to support this important program.

Provide adequate and sustained funding for CDC and state and local public health

For too long, Congress has failed to provide adequate funding for CDC and its many important programs on which our state and local governments rely to help keep their communities healthy. In FY 2024, Congress should provide at least \$11.581 billion for the CDC's programs in the FY 2024 Labor, Health and Human Services, Education and Related Agencies appropriations bill. Strong funding and sustained funding for CDC is critical to supporting all of CDC's activities and programs as well as state and local public health departments, all of which play an essential role in protecting the public's health in your communities. Due to years of underfunding, many CDC programs have not received the resources needed to address the many health challenges we face as a nation, resulting in many of CDC's most effective prevention programs not reaching all states and communities. In addition, we will strongly oppose any efforts to cut funding from any of the agency's critical public health programs. CDC funding makes up a substantial portion of the total budget of your state and local health departments.

CDC serves as the command center for our federal, state and local public health defense system protecting against emerging and reemerging infectious diseases as well as man-made and natural disasters. From playing a leading role in the detection and mitigation of the COVID-19 pandemic in the U.S. and globally, to monitoring and investigating the mpox outbreak and other disease outbreaks, to pandemic flu preparedness, CDC is the nation's – and a global – expert resource and response center, coordinating communications and action and serving as the laboratory reference center for the nation's state and local public health network that keeps our communities safe.

Your states, communities and international partners rely on CDC for accurate information, direction and resources to ensure they can prepare, respond and recover from a crisis or disease outbreak.

Support all of CDC's important public health programs

Strengthening public health means protecting people from preventable illness, health threats and death. CDC must proactively address the foundational elements of well-being for all individuals and continue to invest significantly in public health infrastructure. As the pandemic has demonstrated, chronic disease and infectious disease are inextricably linked. Indeed, in the

absence of vaccines, good underlying health is the best way to prevent severe infection and death from communicable diseases. Any efforts to improve CDC's and our other public health agencies' responses to the next pandemic and to prevent the spread of infectious disease must also include efforts to prevent chronic disease, address health disparities, and improve underlying health and wellness for all.

CDC has experts across issues and supports communities to do the same. Crises like COVID-19 and Zika demonstrated the need for collaboration across multiple issues areas. During Zika, CDC implemented a cross-agency response that used infectious disease experts and experts in birth defects and maternal health to reduce the risk in pregnant women and infants. Communicable and non-communicable diseases are linked and the ability to address them across disciplines gives CDC the most effective and efficient means of accomplishing its mission of protecting the nation's health.

Sustained investment in core public health infrastructure capabilities

Finally, Congress can help improve the core capacities of our federal, state, territorial, local and tribal public health agencies. Sen. Patty Murray's Public Health Infrastructure Saves Lives Act would provide \$4.5 billion in additional long-term annual mandatory funding for CDC and state, territorial, local and tribal public health agencies for core public health infrastructure activities. This funding would support essential cross-cutting activities such as disease surveillance, epidemiology, laboratory capacity, all-hazards preparedness and response, policy development and support, communications, community partnership development and organizational competencies. This funding is essential to ensure our health departments have broad core capacity and workforce to not only respond to the current pandemic but also better respond to the many other public health challenges they face on a daily basis. For far too long, we have neglected our nation's public health infrastructure, and we must end the cycle of temporary infusions of funding during emergencies and provide a sustained and reliable funding mechanism to ensure we are better prepared to protect and improve the public's health, including our most vulnerable communities, from all threats.

Thank you again for the opportunity to provide our comments on how to best strengthen CDC today and in the future. I look forward to providing additional input and answering any questions you may have about my testimony today.

Mr. GRIFFITH. Thank you very much. I appreciate your testimony. I appreciate all the witnesses' testimony. I will now begin the question-and-answer portion of our hearing, and I will recog-

nize myself for 5 minutes.

Dr. Benjamin, I would agree that making this issue into the—into a political football will not help us. It will distract us from our job. It is true early on President Trump made statements that turned out to be in error. It is also true that then-candidate Biden made statements that turned out to be in error. What we need to do is to get answers from the CDC, so we can figure out what went wrong, what went right, and what we can do to move forward appropriately.

Dr. Denigan-Macauley, I heard in your opening statement that, just like this committee, you are having a hard time getting an-

swers out of the CDC. Is that correct, yes or no?

Dr. Denigan-Macauley. Yes.

Mr. GRIFFITH. And do you feel that the lack of being able to get these answers has impaired your ability to give us an assessment of whether or not this reorganization is going to help solve problems or not?

Dr. Denigan-Macauley. We do need more information.

Mr. GRIFFITH. All right, and I appreciate that, and I agree with you. All of us need more information if we are going to try to make this not a political football but something where we are just trying to get to the facts, as Jack Webb would have said many years ago. "Just the facts."

All right, Dr. Høeg, I got to tell you, I appreciate your testimony, very concerned. And as I said in my opening statement, I don't think my kids have yet recovered. The schools in my district were scared that if they didn't follow the CDC guidelines they would be sued. I talked to a number of them, and that is what I was told behind the scenes: "Well, we don't know that—we think we can do it, but if we do it our lawyers tell us we are in jeopardy." And so they kept them—they closed them, and then they kept them closed for longer out of fear of reopening because the CDC guidelines about reopening came out, and they did not reflect, as you said, science.

Did they—I mean, they clearly ignored your studies. They clearly wouldn't publish your peer-reviewed paper in their flagship journal, The Morbidity and Mortality Weekly Report. To your knowledge, did they—to any extent did they consider the science, the studies, the reports that were out there showing that, among school-aged children, social distancing and transmission rates were

fairly low, if existing at all?

Dr. HøEG. So we had data very early on from Europe from already June of 2020 that—comparing Finland to Sweden—that reopening or having schools closed did not have any impact on community transmission of the disease. And we had similar investigation from the Centers of Global Education and Development that they found, similarly, with all of the countries that reopened their schools, which was most of Europe in the spring of 2020, that there was no correlation between opening and increase in community disease spread.

And so I think that we really—you know, the CDC really failed for quite a long time to look at the data coming out of Europe, which, you know, not only considered the very low transmission that we were seeing in schools but also considered the effects, the long-term effects and the collateral damage, of keeping the schools closed.

And many private schools were open. I was the advisor for a large diocese in Sacramento, where we reopened the schools actually based on the data out of Europe in the fall of 2020. And we were able to keep them open the entire year and had a very successful year. And it is very sad that schools, especially public schools, especially inner-city schools, defaulted to the CDC for their guidance, when the CDC was really—you know, they were—well, we know that they—now—that they were basing, at least in February of 2021, their guidelines on the teachers unions, what the teachers unions wanted, rather than the science that had been accumulating for months out of Europe and our own country, also from our own daycares.

And so it is really tragic, what happened to American children. And I do view it as a result of politicization and schools relying on the CDC and defaulting to them, and it hurt our Nation's children.

Mr. GRIFFITH. And it wasn't just the inner cities. It was also the rural schools and everywhere that you have any disadvantaged children, because what I have done for my kids is we have brought in tutors, and they are catching up. I don't think they will ever get fully recovered for that lost year, but they are catching up. But most families can't afford to bring in tutors one or two times a week to try to get that—particularly in our family, math—to get that math skill back to where it ought to be if they had been in the classroom. Would you agree with that? Yes or no, because I am running out of time.

Dr. Høeg. Yes, I agree with that, yes.

Mr. GRIFFITH. All right. And because I am running out of time, I am just going to make this next one simple. It is not just the learning. It is also the mental health, is it not?

Dr. Høeg. Absolutely.

Mr. GRIFFITH. The socialization, the lack of socialization. And for kids that are already in trauma, not having that security of going to see their friends at school, not being able to have interaction with their teachers who love them—teachers are great—is a mental health crisis in and of itself, is it not, yes or no?

Dr. Høeg. Absolutely.

Mr. GRIFFITH. I have to yield back. I yield back and now recognize Ms. Castor, the ranking member, for 5 minutes of questions.

Ms. CASTOR. Well, thank you, Mr. Chairman. I think everyone agrees with Dr. Benjamin. We need a strong CDC. And as we transition out of the public health emergency, we have just got to make sure that our public health partnerships across the country have the tools necessary to protect our neighbors and ensure they are healthy and well.

And I think I see a common thread in what a lot of you are saying: We need to have the most accurate, thorough, and timely data to inform the guidance. We need to be able to detect disease in real time, stamping out problems before they grow.

I know the GAO, one of your top recommendations, data are critical to inform the response to a public health emergency. However, the data HHS relied on during COVID-19 were incomplete and inconsistent, highlighting longstanding concerns there. Public health data are collected by thousands of disparate health departments, healthcare providers, and laboratories, as well as multiple agen-

But Dr. Benjamin, as you state in your testimony, you watched in horror as rural communities, hospitals, skilled nursing centers tried to send data via fax machine. It is completely outdated. So the Congress responded, and we provided some emergency authorities to CDC and some funds to modernize.

But now, as the public health emergency expires, those emergency authorities expire. That is why I have reintroduced the Improving Data and Public Health Act with Congresswoman Lauren Underwood to promote data sharing and modernization, to better identify, monitor, and respond to public health emergencies.

So how would—Dr. Benjamin, talk to us about the outdated nature of data gathering across the country and how a more modern

system would improve the result.

Dr. Benjamin. You know, the—thank you very much. The truth of the matter is that, when I was the deputy health officer in Maryland in the mid-1990s, we were sending information by fax machine, and we are still doing it. And the problem with that is that the person that fills it out fills it out by pen and ink, they put it in the machine, it goes off to another place, and then you suddenly realize the data set is incomplete. Now you have got to go back and track and find the person who filled out the data. And we have just far too much of that.

And, you know, look, Congress did invest after 9/11 and the anthrax letters funding for public health. The problem was obsolescence kicked in. We didn't keep the funding up.

We were just talking a little earlier that, you know, college today is a—used to be a one-computer experience. Now it is a two- or three-computer experience for your kids, just because the technology changes so quickly. And we have not done that, we have not built a data information technology highway. We don't have a single patient identifier. We don't know that Dr. George Benjamin in one system is the same George Benjamin in another data system.

I know there are concerns about patient privacy and the data being misused, but the bank gets your data, other systems get your data. The proof of concept we had during COVID was that it worked. And I think you have heard from all of us that the impor-

tance of—how important that data is.

Ms. Castor. So you can deidentify personal identification of people, but it is important to collect all sorts of information on age and

health_disparities. Isn't that right?

Dr. Benjamin. Yes, most of the time—and we can divide it up in many ways, but most of the time what CDC needs is to know whether it is going up, down, and whether or not the numbers are not duplicative. And so there are systems that can do that. And you can—the box can make that happen for you. We have—the data systems are ready to do it. This is not new technology.

Ms. Castor. But it is not standardized. So-

Dr. Benjamin. It is not even standardized.

Ms. Castor. So that is a very significant problem. Talk about that a little bit.

Dr. Benjamin. Yes, the fact that just the data that comes from one hospital to another hospital from a health department, you may not be all sitting in the same data set. Those of you who have looked at your lab tests when you have gone to the doctor, you will know that sometimes they are not the same. They don't get reported in the same way. And that is a problem, particularly when you are using electronic systems which use, you know, zeros and ones, the system will misinterpret what it is getting.

Ms. Castor. So where would you rank improving data reporting and giving CDC the authority to standardize things across the country in our toolbox as we move to improve the CDC?

Dr. Benjamin. I think it is a tool that is number one. I think, from a functional perspective, I have another issue. But for—in terms of data, data is at the top of my list.

Ms. Castor. Thank you very much. I yield back.

Mr. Griffith. The gentlelady yields back. The Chair now recognizes the chairwoman of the full committee, Mrs. McMorris Rod-

You are now recognized.

Mrs. Rodgers. Thank you. Thank you, Mr. Chairman. Before I begin, I need to respond to what the ranking member said in his opening statement.

I am extremely disappointed that he and others on this committee have decided to make this hearing political about the former President, about scoring political points, not about serious reforms.

If you want to look at bad decisions, the number-one mistake was blindly following Dr. Fauci, who was so focused on COVID-19 that he refused to think about every other aspect of public health to the detriment of our children, our economy, our country.

We have already had CDC Director Walensky in front of this committee, even in the last 5 months. And then Ranking Member Pallone did not—did in the last—we have had her more in front of the committee this Congress than in the last Congress, when the Democrats were setting the agenda and refusing to have her come up here and talk about monkeypox or COVID.

We on this—we celebrate this committee. This is a serious committee that does the hard work necessary to legislate. And we have shown that by moving complicated legislation on privacy and reducing healthcare costs, when we come together, we can do the hard work necessary to legislate.

Why should examining existing agencies be any different? CDC has never been authorized, never. And now CDC has broken the trust of the American people.

To be an effective public health agency, the American people must be able to trust and understand what is coming out of CDC,

Like the chairman said, I had numerous conversations with Dr. Walensky during COVID, and I was impressing upon her that, at the local level, the school districts, my communities believe there should be a different approach to COVID, to the mask, to lockdowns of our schools, our kids being locked down in schools. And yet—and she said, "Oh, Cathy, these are guidelines. These are not mandates. These are guidelines." Well, at the local level, they were mandates. And she said they shouldn't even be at the State level. Washington State was locked down until the spring of 2021.

Unlike CDC's closed-door Moving Forward initiative, this hearing is the start of our effort to focus on public and a transparent process to understand what Congress should be doing to make needed reforms, because that is our role as the elected representatives of the people. That is our constitutional responsibility. And it includes authorizing the committee—or, the agency giving direction and guardrails.

I am not interested in blindly following CDC and saying that, yes, they need more money, they need more authority, and we are just going to say yes to that. The American people rely on us to know how to make decisions or to know how decisions are made. They are relying on us to know how decisions are made—how decisions are made at the CDC, how the priorities are set. The American people are relying on us to ensure that it is a transparent process. And certainly, before we give them more authority and money we, as the elected representatives of the people, need to ensure that we are fulfilling that responsibility.

So I hope that this committee and all the members of this committee that I greatly respect and admire will come together. Let's do our job. Let's improve CDC, and let's make sure that the tone

is not one that is about scoring political points, OK?

Yes, and we do have a disagreement over the data, and the amount of data that we should just be handing over to CDC. So under CDC they are requesting right now sweeping legal authority to require State and local governments, as well as hospitals, pharmacies, doctor's offices to report health information to them if requested. In my opinion, this is dramatically changing the current Federal-State public health relationship, and I am deeply troubled by CDC's inability to articulate any limitations on how they would or would not use this authority.

We know that people were being tracked during COVID-19. We know that. And we are working on a privacy legislation right now because we believe that individuals—I think that there is a shared belief among Republicans and Democrats that individuals need to own their personal data, and we need to have privacy protections

in place.

There is a lot more to do on this issue. There's a lot more questions to ask of CDC. My plea to my colleagues on the other side of the aisle is let's do this together. We are the elected representatives of the people.

I yield back.

Mr. Griffith. The gentlelady yields back. The Chair now recognizes Representative Pallone, the ranking member of the full committee, for 5 minutes for questions.

Mr. PALLONE. Thank you, Chairman. You know, I respect all of you on the other side of the aisle, but I am so frustrated because

I really don't know how we proceed here anymore.

The ranking member criticized Dr. Fauci, who I greatly respect and think was one of the best things we had during the COVID crisis, OK?

Chairman Griffith said that President Trump's statements were in error, but the President doesn't admit his errors. Many of his supporters continue to insist that COVID was a conspiracy, vaccines shouldn't be taken, masks shouldn't be worn, schools shouldn't have been closed in certain circumstances. I don't know how we can make improvements at the CDC when we fundamentally disagree on almost everything that happened during the COVID crisis.

We-you know, we talk about data-and I am going to ask you questions, Dr. Benjamin, about the data—but the bottom line is that we look at the same data and come to totally different conclusions about what to do. So I don't know where we are going here. I mean, I love you on the other side of the aisle, but I really don't know how we proceed when we have such disagreements over fundamentally what happened during the COVID crisisS and how to deal with it in a new way. I just don't see it.

I—you know, I am an advocate for vaccines. I think everyone should take the vaccines. I think that COVID was real. I think masks should have been worn in many circumstances. I think some

schools should have been closed. I don't—I just don't know.

And I, you know, the-Chairwoman Rodgers, it is just so frustrating because I don't know how we can proceed with such a disagreement on everything even though we look at the same facts.

But in any case, let me ask a question. Everything that the CDC does depends on good data. It needs to have accurate, timely health data from State and local partners to determine an appropriate response to health crisis. It informs the guidance that CDC will put out to support State and local healthcare institutions, so the data has great value for the CDC and health officials across the Nation.

But at the same time, through reauthorization of the Pandemic and All-Hazards Preparedness Act, Congress has the opportunity to support sensible reforms and further ensure that our Nation's public health agencies, including CDC, have the necessary authority and resources to respond to future threats.

So let me start out with Dr. Benjamin. I have two questions, if you can do them both in this—whatever time is remaining here. How would better data enable CDC to keep up with persistent health threats the Nation faces?

And secondly, would giving our health institutions like CDC and FDA broader authority to address issues like drug shortages and data transparency help our pandemic response abilities?

Those are separate questions, but you have got 2 minutes.

Dr. Benjamin. Yes, speed and efficiency. We missed opioids when we had, you know, thousands and thousands of doses of opioids going into communities and nobody paying attention because the

data wasn't timely. You heard the measles story.

I am sitting at home during COVID, head of the Public Health Association. My phone rings, and the health officer in Milwaukee, Wisconsin, calls me to tell me that she has seen a disproportionate number of African-American men dying of COVID. That is how I found out there was a disparity occurring. I assumed it was occurring, but it was the first evidence that I had was a phone call to my home from a member of the American Public Health Association who wanted me to fix it at, you know, 9:00 at night. And that should not happen. And CDC was struggling to get that kind of disparity data. So time and efficiency—speed and efficiency are the two things you get.

Mr. Pallone. And what about the authorities? I mentioned about the-giving CDC and FDA broad authority to address drug

shortages and data transparency.

Dr. Benjamin. No, I think it is essential, and I understand there is a difference of opinion there, but I think we can do it. I think we can sit in the room, we can figure out how to do that in a way

that protects patient confidentiality, increases speed.

Look, we give the banks a whole lot of latitude, and they have a lot of information on us. Google has a lot of information on us. You know, the social media companies have a lot of information on us. And I know you are struggling with that, as well, but I don't see why you can't come up with a way to do this. Maybe ask for a study. You know, put the, you know, the authority in the law when you reauthorize the law but require some kind of study in order to understand how best to implement that before it gets implemented. I don't know, but I-

Mr. PALLONE. Well, you are a lot more optimistic than I am at this point—I got to be honest with you—about our ability to come together and address some of these concerns. But hope springs

eternal.

Dr. BENJAMIN. We don't have a choice. And I am just going to, you know, to argue here today we have to solve this. We cannot wait. People are dying, literally, while this is happening because we don't have the numbers, we don't have the data.

And I think we—I can see a solution here. And I can tell you that there are many of us who will be eager to sit down with you to try to figure that one out.

Mr. PALLONE. Thank you. Thank you so much. I yield back.

Mr. Griffith. The gentleman yields back. I now recognize Dr. Burgess of Texas for his 5 minutes of questioning.

Mr. Burgess. Thank you, Mr. Chairman. Boy, I wish we had had Dr. Dean and Dr. Høeg at the Office of Attending Physician a few

We had a microcosm here, if you will, in the United States Capitol. The House of Representatives was required to mask before we could go into the Capitol and sit on the floor masked, and the United States Senate was not. Well, wait a minute, COVID—what is the population that is more likely to be stricken by COVID? It is the older individuals, which—and I don't want to cast aspersions on the United States Senate, but they are generally older than your average House person. So what was magical about the Rotunda that made the virus—took away all its potency by going from the House to the Senate? It made no sense, and the population people saw this. And that is what was so frustrating over and over again.

Look, I want to share with you. In 2005, during the first bird flu, my first term on this committee, I was asked to go to Geneva and visit the World Health Organization, which I did. And my takeaway from that visit at the World Health Organization is that, if it was not for the CDC, the World Health Organization would not be worth anything. It was the embedded people from the CDC at the World Health Organization that gave it its value. That is why it is particularly painful to be here today, recognizing the CDC has lost all kinds of credibility.

It is not—Mr. Pallone, it is not us fighting that caused them to lose their credibility. It was them not having the simple humility to come before the American people and say, "We have never seen this before. This is what we think today. And you know, what we told you last week, something that was a little different, we have learned something along the way." They would not do that. And that was just—it just decimated any credibility that people had—that the CDC might have had with the American people.

Now, look. In 2016 there was Zika crisis, and the Zika crisis was going to affect the Olympics, and the CDC badly mishandled the testing then. I have got an article, Mr. Chairman, from The Washington Post. I am going to ask unanimous consent to put it into the record after I finish. But this article talks about how the CDC sidelined an effective laboratory test, and the test that the CDC recommended be used failed about a third of the time, and there was

a more reliable test.

Look, we had all kinds of young people, athletes going down to Brazil during the height of Zika. These are the people who would be at risk for the sequelae of a Zika infection. And unfortunately, the CDC was way behind on this on the testing. Why is that important? Because in February of 2020 the CDC badly mishandled the test for the coronavirus, for COVID–19. And we were a month behind. The United States was a month behind countries like South Korea and Japan that had the laboratory-developed test that was necessary to detect.

I mean, measles is a problem, I agree with you, and I am so grateful you brought that to the committee's attention. You got 4 days of infectivity that is in the community before you realized it was there. COVID-19, it was 2 weeks, we think. We don't really even know. But that period of infectivity after exposure, 2 weeks,

and we were a month behind in getting a reliable test.

I spoke to Dr. Burke several times during the COVID problem, and I got to tell you one of my great frustrations —we knew we had a problem with testing after we finally got the testing up and running a month late. Then we just didn't have enough. And the President would go on television and—or the Vice President would say, "Everyone who wants a test is going to get a test," and LabCorp would say, "How?" But we all knew that people wanted testing. We actually had a lot of testing capacity, capacity that was probably paid for by NIH grants that sat in hospitals and research labs across the country, and it was on the sidelines and wasn't used.

So Ms. Dean, let me ask you. Does the CDC currently have the authority to tap into that network of hospital and research lab equipment to use it at a time of a national crisis?

[No response.]

Mr. BURGESS. Dr. Dean, yes, you are the one who has probably had the most experience with this.

Dr. DEAN. I am not able to comment on the current authorities the CDC has, what they can or can't do regarding laboratory testing. But I will share that in California I was a cochair of the testing task force in March, and we had to stand it up fast to solve that problem. And it was remarkable to see the private sector voluntarily participate.

Mr. Burgess. Yes.

Dr. Dean. Machines, humans, everyone was in it together, pub-

lic, private. And that is what I saw work.

Mr. Burgess. Well, Mr. Chairman, I see my time has expired. I have got a number of other questions I will submit for the record. And I look forward to your written responses. Thank you.

Mr. Griffith. I thank the gentleman for yielding back. I now recognize Ms. DeGette of Colorado for her 5 minutes of questions.

Ms. DEGETTE. Thank you so much, Mr. Chairman.

You know, I have to associate myself with Dr. Burgess' timeline here, because he is absolutely right. In the late aughts-I have been on this subcommittee for 27 years, and I have either been the Chair or the ranking member a number of years. And the CDC has been an agency that, for all those 27 years, we have been wringing our hands about how we can improve and bring into the 21st cen-

And Dr. Burgess is right. When we had the avian flu hearings, we thought that we had solved some of these fundamental systemic

problems at the agency. We were pretty smug.

But then, as he said, we had Zika in 2016, and then in 2020 well, first of all, let me say December 4th, 2019, this subcommittee had a hearing. And in that hearing we asked—we were doing a hearing about CDC and about pandemic preparedness. And we asked the experts, including Dr. Fauci, "What is your worst nightmare?" This was December 2019. And Dr. Fauci said his worst nightmare would have been an international pandemic. And lo, it came to be only a few months later.

And the problem was the CDC, as an agency, still had not updated its data collection, its communications with the States, its organization to the point where it could deal with an international pandemic. Dr. Redfield was the head of the CDC at that time, and Dr. Burgess is absolutely right, the CDC could not even complete the fundamental efforts of developing a COVID test because the test samples at what is supposed to be the preeminent agency in

the world were contaminated.

So I think we can sit here and emote all we want and finger point about the schools and everything else, and much of that I agree with. But I think that the usefulness of this committee, Madam Chair and Mr. Chair, is if we start to think about what kinds of reforms we can really make, and how we can be partners in that.

So Dr. Walensky, before she—and she saw this, too—this subcommittee had a trip down to Atlanta to look at the CDC, and we met with Dr. Walensky, and she was brought in, and she saw these issues too. So before she announced her departure she had a number of changes that she suggested in the Moving Forward initiative. And I am just going to state what some of those initiatives are, because I think they are worth us and the CDC exploring them: standing up new internal systems, processes, and policies to enhance bidirectional communication and accountability; establishing clear outcomes and timeframes for deliverables and bidirectional engagement for core capabilities and agencywide initiatives; implement new government structure—governance structures to ensure accountability closely tied to funding decisions; share scientific findings and data faster, and better translate; share scientific findings and data better-or no, promote results-based partnerships; develop a workforce prepared for future emergencies.

These are broad goals, but I would like to ask the panel: Do any of you disagree with these as broad goals? First I will ask you, Dr. Denigan-Macauley. Yes or no, do you disagree with these as broad

goals?

Dr. Denigan-Macauley. We do not disagree. Ms. DEGETTE. And what about you, Dr. Dean?

Dr. DEAN. I do not disagree.

Ms. DEGETTE. And what about you, Dr. Høeg?

Dr. Høeg. I don't disagree.

Ms. Degette. And what about you, Dr. Benjamin?

Dr. Benjamin. I agree with those goals. Ms. DEGETTE. Thank you. I think so too.

They also-she also talks about a list of new authorities that Congress should provide: public health and regulatory authorities, e.g., mandatory data reporting, paperwork reduction, action exemptions, et cetera—I know we all love fax machines, but maybe we should look at paperwork reduction; human resources authorities, e.g., hazard pay, overtime pay, direct hire authority, hiring authority exemption, et cetera; and other operational authorities.

And then she suggests a bunch of other next steps: appointing a seasoned executive to implement the vision—and we are really hoping that President Biden's new nominee will do exactly that-

and then some other things I don't have time to mention.

Look, we need to fix this agency, and so let's just do it because the next pandemic is right around the corner. And if we don't have our public health ducks in order, if we are still sitting around bickering about should the schools have been closed or should there have been mask mandates, then we are going to really lose in the next round.

And I yield back.

Mr. GRIFFITH. I thank the gentlelady. I now recognize Mr. Palm-

er of Alabama for his 5 minutes of questioning.

Mr. PALMER. Thank you, Mr. Chairman, and I agree with my distinguished colleague from Colorado that we do need to follow the evidence.

I speak to a lot of young people, and I tell them smart people learn from their mistakes but brilliant people learn from other people's mistakes. This is one of those learning opportunities. And I think mistakes were made, and I think trying to somehow convince

us that mistakes were not made is not helpful.

I think if you look at the evidence—say for instance from Sweden, and how they went about things—it clearly indicates that we did enormous harm with the policies that we enacted with schoolaged children. And it makes me wonder how much interaction was taking place, how much discussion was taking place. It reminds me of politics a lot. You know, you make up your mind what you believe is right, and you dig in, and it doesn't matter what the evidence shows, you just stick with it, and that kind of makes me sick to even think about it on the political side about where we are today.

But the thing that I want to get into is how we went about this decision-making on the mask. And I talk to a lot of people in medicine, and it was pretty evident to me that a lot of people realized the masks were marginally effective, yet we were—we had situations where we weren't—we were forcing kids, toddlers to wear a mask. We saw things where parents were removed from airline flights because they couldn't get their toddler to keep the mask on. I mean, this was unbelievably disruptive.

So that said, it is a learning experience. It is a learning opportunity. And what has happened is we have talked a little bit about how much the CDC's reputation has been damaged, how much other institutions, government institutions' reputations have been damaged. And I think the way you overcome that is you get back to real science, you get back to real medicine, you get back to respecting people's personal rights, which I think this was—the heavyhandedness of government came to bear on people. And like I say, we are still suffering the consequences of it, not the least of which is the enormous amount of debt we have inflicted on coming generations of this country.

Dr. Høeg, in your testimony you outlined your concerns with the CDC making the decision to keep schools closed based on the whims of teachers' union leaders, particularly Randi Weingarten. This is part of what I am talking about. This wasn't science, was it?

Dr. Høeg. I mean, it didn't feel like—I mean—and I can see looking back that the CDC was not looking at the science. I mean, they were not looking at the data that was coming out of Europe. They were not looking at the data from our study. They were not consulting us. I—they were not consulting similar, you know, experts in this subject in the United States who had published a study with similar findings from North Carolina.

And so, to us it felt like politics. It felt like a tragedy. It felt like, you know, why are decisions being made based on, you know, just asking one group of people rather than also consulting the scientists and, you know, the relevant science around this topic? So

Mr. Palmer. Well, what you are saying is you can't cherry pick the data. And it is not just on the COVID virus and other biological issues like that, it is across the board in science right now. It has become so politicized, and both sides are guilty. I will admit that, to a certain extent, both sides are guilty of cherry picking the data. And at the end of the day, who suffers?

Dr. HøEG. We all do. I mean, we all suffer if they cherry pick the

And the masking is another perfect example of that, because the data that was published in their journal, you know, was clearly not in line with the randomized, higher-quality data that we had. And the fact that they would not publish a study that was a more robust data set followup to their initial study that didn't find a significant association between masking and reduced cases just speaks very strongly to the political bias and the cherry picking of

data within the CDC's flagship journal, MMWR. It is a huge problem.

Mr. PALMER. Well, this is—gets into the issue then of transparency and accountability, and it is something, again, that I try to confront on a number of issues related to science.

And Dr. Denigan-Macauley, your written testimony—you said when agencies need to quickly disseminate funding and information during a public health emergency, transparency and accountability are especially critical to help ensure that these programs have integrity, that they build public trust. But we found deficiencies in this area prior to and during the COVID pandemic. Just what—how do you—what do you say about that? How do you address this issue of these deficiencies?

Dr. Denigan-Macauley. Yes, absolutely, and I actually think it is a way forward for the committee, as well, is go on the data, go on the science, and be very transparent and accountable about how decisions are made. We said that with therapeutics. Hydroxychloroquine was mentioned. You know, if you are transparent on how the decisions were made, it will be much easier for everyone going forward. And it is guidance, and that way everyone can make their decisions to the best of their knowledge, based on the information.

Mr. PALMER. Well, I appreciate all the witnesses being here—Mr. Chairman, for you holding this hearing. I just hope this is a learning opportunity for us, and I yield back.

Mr. Griffith. The gentleman yields back, and I now recognize

Mr. Armstrong for his 5 minutes of questions.

Mr. ARMSTRONG. I am going to talk a little bit about data, but I am going to do it in a little different way.

Sunday morning, April 18th, 2021, was the first time I knew we had a problem, and we had a real problem. And I did—there was a hearing, and people got in an interesting conversation. But the head of the CDC was on a Sunday morning show on CNN and said, "This is a public health issue. It has nothing—it is not a civil liberties issue. This has nothing to do with civil liberties."

This committee has been working on comprehensive privacy legislation, and the focus on the extent to which Americans' sensitive information is in the hands of third parties, particularly data brokers and purchasers of that data. In a recent subcommittee hearing we learned how seemingly deidentified data can easily reidentify individuals. While our focus has largely been on private actors' use of this data, I have been equally concerned about the Government's purchase and use of this data.

In March, FTC Chair Kahn testified before the IDC Subcommittee that "a lot of people have concerns about data collection by the Government. I would argue that we should be more concerned about government's collection and use of this data compared to private actors." Republican members of this committee sent a letter to CDC Director Walensky in May of 2022 inquiring about the CDC's \$420,000 purchase of Americans' location data to monitor COVID lockdown compliance.

Mr. Chair, I will seek unanimous consent to enter that into the record.

The company the CDC bought this data from has a checkered history, if I am being polite, of misusing location data. They have sold 2 years of deaggregated data, device-specific location data, to the Illinois State Government which, guess what, turns out wasn't deidentified. And they were selling ads in real time to women who were sitting in an abortion clinic. That is who the CDC contracted with.

This CDC data request details a list of 21 different potential uses for cases for that data, covering location information, points of interest. The CDC request specifically sought data to track people who were attending places of worship during quarantine.

CDC's response to the committee was that this—that it has the authority under 42 USC 241, which is a vague authorization to research diseases. And I want to repeat that: the CDC cited general research statute as justifying purchasing location data about Amer-

icans exercising their First Amendment right.

The CDC's response to the committee's letter also dedicated an entire paragraph describing how this aggregated an anonymous data population. Again, we had hearings in this subcommittee last month describing that is a fallacy, and multiple studies since 2013 showed that less than 5 points of data are enough to reidentify 90 percent of individuals. And individuals can really be identified particularly when they are going to Mass in a place like Beulah, North Dakota, that has under 4,000 citizens.

If we are going to legislate on data privacy and we are going to continue to get asked to provide more and more data, I think it is our duty to address government access to what the Supreme Court has referred to as the time-stamped data that provides an intimate window into a person's life, revealing familial, political, professional, religious, and sexual associations.

I don't know—there is a lot of debate about Dr. Fauci. I am not a doctor. I never went to medical school. I have no idea. But you know what I know he is not an expert on? Civil liberties. And when people continue to ask us for this stuff, and they say that this isthat civil liberties have no place in an emergency, my response to them would be that is when they matter the most. Every single-I don't care if it is a 15-day emergency order, I don't care if it is a 2-year emergency order.

Civil liberties matter the most when the government is trying to clamp down on them. And when we have the head of the CDC on a Sunday morning show acknowledging that he didn't care about civil liberties while he was pontificating out to be the expert on this-because I have a lot of constituents that cared about their civil liberties. I have people who couldn't send their kids to school. Whether that decision was right or not, that is an infringement on their civil liberties. I have people that were worried about whether they were getting tracked to church during quarantine.

And so if we want to have—if we want to fix this data conversation, and we want to be able to track whatever the new disease is and how we do this, the first thing we have to do is figure out how we protect this and keep people from having their—identified by a government that really, really is trying to help, but people don't trust them. And it doesn't help when the head of the CDC, who knows nothing about civil liberties, is opining on them on Sunday morning, April 18th, 2021.

And with that, I yield back.

Mr. GRIFFITH. Will the gentleman yield for a question?

I would assume you are not a—as you told us, you are not a doctor, but I would let the committee know that you are trained as an attorney who did some work in civil liberties. Is that not correct?

Mr. ÅRMSTRONG. I have written quite a few briefs on the Fourth Amendment, yes.

Mr. GRIFFITH. There you go. All right. I yield now to—for 5 minutes to Mr.—Dr. Ruiz from California for his 5 minutes of questioning.

Mr. Ruiz. Thank you. So the esteemed Chair had lots to say about making this partisan, but one of the Republican Members sent a letter to CDC in a purely partisan fashion. Those responses have not been shared with the minority, and we specifically asked committee staff that responses be shared, and we were told that the letter was the act of an individual Member, not the committee. However, today you present a desire to work together and infer that somehow Democrats are making this political. So—

Mr. Griffith. Will the gentleman yield?

Mr. Ruiz. Yes.

Mr. Griffith. Are you referring to the response we got last night?

Mr. Ruiz. I am referring to this letter dated April 5th, 2023.

Mr. Griffith. And the response we received last night? I am happy to share with you I was unaware you had not been shared with. We will make sure you get that response.

Mr. Ruiz. We will work with staff to make sure the staff—it is a different letter?

Mr. Griffith. It is a different letter, all right.

Mr. Ruiz. So do you want to mention which letter it was?

VOICE. [Inaudible.]

Mr. GRIFFITH. Oh, OK. I don't know anything about that, so I apologize.

Mr. Ruiz. Well, we will——

Mr. Griffith. But anything that I have, you are more than welcome to have.

Mr. Ruiz. OK.

Mr. GRIFFITH. All right.

Mr. Ruiz. Thank you.

Mr. GRIFFITH. And I will—we will give you some extra time. Oh, you stopped the clock. OK, good. I didn't want to eat up your time with that.

Mr. Ruiz. All right, thank you.

Mr. GRIFFITH. Thank you, Dr. Ruiz. I yield back, thank you.

Mr. Ruiz. So the suggestion here is that the letter should have been—well, we should have started with sending an oversight letter from the committee that both Republicans and Democratic committee staff would have access to the responses. And so, if you want to do the good oversight together, we are absolutely willing to do that. That is not the approach that the committee and the staff have said that has been taken.

So I ask unanimous consent to add the letter dated April 5th,

2023, into the record. I appreciate it.

So now, CDC. CDC cannot fulfill its mission to equitably protect Americans from disease and death without a foundation of trust between the agency, healthcare providers, and the public. And during the pandemic we saw the confusion and damage caused by policymakers promoting fake treatments or undermining scientific evidence like the importance of masking.

There was a lot of conspiratorial accusations that were not founded with any conclusive evidence. This type of misinformation and disinformation and partisan weighing in on, you know, masks and social distancing and whether the virus was a hoax or not is the misinformation and—sometimes intentionally—disinformation, which I cannot emphasize enough is not the same as a difference

in opinion.

This type undermines the efforts of healthcare providers, CDC, and other public health institution. It manufactures distrust, in fact. The public hears conflicting advice and can become unsure of who to listen to for reliable information. This is a manufactured distrust that harms CDC and other public health entities' ability to be trusted and effective messengers both for physicians, who look to them for guidance, as well as the general public, who now isn't sure who to listen to.

Dr. Benjamin, how did we get here? How did early attacks on the integrity of our public health agencies degrade Americans' long-term trust in our institutions?

Dr. Benjamin. You know, we had a failure of leadership during the COVID pandemic. We didn't function as a collective at a national level to respond to that emergency.

By the way, we still don't do that real well.

And I think that we undercommunicated to the American people. We didn't respond quickly to the amount of misinformation and disinformation that was out there. We, you know, as you know, both of us are emergency docs, so we know how things happen in an emergency. And it is always difficult to address some of these things in an emergency condition. But we have got to do a much better job of partnerships, engagement of people, and addressing the false things that are out there.

And I have got to tell you, there is a leadership vacuum here that has to be filled. And I am very concerned that I still see it coming.

Mr. Ruiz. You know, I think that there is a misguided prioritization of how to deal with lessons learned in this pandemic. There seems to be a lot of—and I say this wholeheartedly in the concern for our country moving forward—there is a lot of emphasis in trying to prove some intentional, nefarious scheme from Dr. Fauci and Dr. Collins that somehow suppressed information that the virus was created in a lab and leaked from a lab, and now there is some kind of web of coverups, and without any conclusive evidence, with multiple statements from our public health leaders, that is not true.

And we are missing the opportunity to focus on things that will actually prevent a pandemic and help us prepare for a pandemic. Nobody in the next pandemic is going to be remembering whether

or not this alleged accusation is true or not. They are going to want to stay safe, and they are going to want to make sure that we have learned so that we can go through a pandemic resilient and not have to close schools or not have to undergo some of the more extreme measures we had to take because we weren't prepared.

And so that is my warning in general, and that is—I am hoping that we can move from this partisan narrative to more concrete so-

lutions. And with that I yield back.

Mr. GRIFFITH. I thank the gentleman for yielding back. And clearing up the question, it appears that the letter was from Dr. Mariannette Miller-Meeks. I was not privy to it until you gave it to me, either. And we will move forward with that, and it certainly is already public, so we can deal with that at the appropriate time.

I now recognize Mrs. Lesko, vice chair of this subcommittee, for

her 5 minutes of questioning.

Mrs. Lesko. Well, thank you, Mr. Chairman, and thank you for

all of you being here today.

I—you know, I don't know if you have ever read the riveting deposition by Dr. Fauci in a lawsuit, but this is where this question is coming from. In a deposition in November 2022, Dr. Anthony Fauci was questioned about an email exchange he shared with former HHS Secretary Sylvia Burwell in February of 2020. She asked him in the email, "I am traveling to"—it is a redacted location. "Folks are suggesting I take a mask through the airport. Is that something I should do?" And Dr. Fauci responded to Ms. Burwell saying that masks don't protect—don't protect—uninfected people from acquiring infection. He recommended not wearing a mask.

And I remember being in the Homeland Security Committee at the beginning of this whole thing, and they—you know, the healthcare workers were wearing masks, and then the Government officials said, "No, you shouldn't wear masks." Like, the standard people shouldn't wear masks. And it went back—it seemed like it went back and forth, and it was very confusing to the American public.

So my question is, why do you think—I guess this is to Ms. Dean and—or Ms. Høeg. Why do you think Dr. Fauci would tell a personal friend not to wear a mask, and then later—I mean, it was shortly later after that he said, "Everybody, everybody should be mandated to wear a mask"?

Dr. DEAN. I can't speak to what Dr. Fauci was thinking, or really comment on his statement.

I will say that in the U.S., because there are about 3,000 local nodes of local health officers who have the authority to give recommendations, issue mandates, and then 50 State health officers, that what we really have is a patchwork quilt. So it is never a surprise in the United States when different places are giving different recommendations.

That is part of the problem that I think we need to fix with a coordinated intelligence capability, operational capability. It led to a lot of confusion during COVID, including different and conflicting mask mandates in different parts of the U.S. with different officials speaking to them.

Dr. Høeg. And I guess I would add to that that the evidence that we had going into the COVID-19 pandemic for influenzalike illness had failed to find in randomized studies that masks prevented transmission in the community setting or the hospital setting. And so in the summer of 2020—and I think you said 2022, but I think you meant 2020—

Mrs. Lesko. Oh, OK, sorry.

Dr. Høeg. That was when Dr. Fauci—

Mrs. Lesko. Thanks for correcting.

Dr. HøEG. We didn't have good evidence showing that masks worked. And so, you know, it was really up to us to generate good data to find out was it going to—were masks going to be effective against COVID-19, surgical and N-95 masks. The United States did not run randomized studies in our country to get the answer to that.

And so really, we then had a Cochrane review that reviewed the data of the randomized studies that had been done during the COVID-19 pandemic. They didn't find that masks were effective at preventing COVID-19 transmission. They failed to find that in the randomized studies. However, the United States continued to recommend masking of children down to age 2, which they actually still do today under certain circumstances. So we act like we are talking about things in the past. CDC is still recommending children down to the ages of 2 mask under certain circumstances of high disease burden.

And so I think that he said that because that is what he felt the data showed at the time, and that—in my understanding of the data, would—is—was an accurate representation of what we knew,

that masks were not effective, from the data that we had.

Mrs. Lesko. Yes. I think, you know, part of the reason that we are asking about this is—in fact, most of the reason—is we don't want to repeat the problems that we had before.

And, you know, I am also on the select subcommittee investigating COVID and its effects. And one of the things I think we talked about there was the closing of schools for our children, and how far behind they are. And Ms. Høeg, I don't know if I had a chance to ask you questions last time, but in Sweden, if I remember right, they didn't close the schools at all. They didn't close the schools at all.

Dr. Høeg. They didn't close the public—

Mrs. Lesko. And none of the kids died, right? None of the kids died. Is that accurate? From COVID.

Dr. Høeg. So from their——

Mrs. Lesko. Yes.

Dr. Høeg [continuing]. Initial report, there were no children that died.

Mrs. Lesko. Yes.

Dr. Høeg. I actually don't have the latest data——

Mrs. Lesko. Yes, right.

Dr. HøEG. I apologize, but—yes. And—but they did not close the primary schools, and then they have had very brief closures of the secondary schools. And their excess mortality—I mean, they—their excess mortality has been none to, you know, negative.

Mrs. Lesko. Yes.

Dr. HøEG. I mean, they have done—probably one of the best countries in the world during the pandemic, if not the best.

Mrs. Lesko. So, Ms. Macauley, do you think that the CDC in the future could look to what other countries did? If this happens again—which, eventually, it will happen again—do you think that they should look to what other countries did? Because some other countries didn't do all these mandates and closing schools and things like that, and they didn't seem to have a problem. Do you think that is a good thing for the CDC to do?

Dr. Denigan-Macauley. Yes.

Mrs. Lesko. Sorry, I ran out of time.

Dr. DENIGAN-MACAULEY. We have always encouraged to look at all lessons learned, and to revise plans as needed.

Mrs. Lesko. Thank you.

Dr. Denigan-Macauley. Domestic or international.

Mrs. Lesko. Thank you. Thank you, Mr.—

Mr. GRIFFITH. The gentlelady yields back. I now recognize Mr.

Tonko of New York for his 5 minutes of questioning.

Mr. Tonko. Thank you Mr. Chair, and I would think that deaths is one—happens to be one measurement, but permanent damage or damage of any kind to the respiratory system and cardio systems might also be another calculation that we should pay attention to.

Public trust in our health agencies can be quickly eroded by political interference in public health decisions. We saw this during the pandemic: politically motivated efforts to downplay the dangers of COVID-19 by then-President Donald Trump are well documented. Reports showed that during the early stages of the pandemic the Trump White House interfered with CDC efforts to carry out media briefings that would have provided science-based information to the public. I am a big believer in relying on science, and I think we have rejected it in many, many occasions on the Hill. And rampant misinformation also impeded public health officials' efforts to get critical information out to the public.

So, Dr. Benjamin, how does low public trust in healthcare institutions impede our ability to effectively respond to what was a public trust in healthcare institutions.

lic health emergency, if not continues to be?

Dr. Benjamin. Yes, it creates an environment when you have low public trust that people won't do what generally is recognized by experts. And we saw that in, you know, vaccine uptake, we saw that in people taking medications that have been clearly proven not to be effective, like hydroxychloroquine. We saw that in people using all kinds of things that they would go to the internet and find and use.

So it is a real problem, and it is persistent. And we are now seeing it bleed into routine childhood vaccinations, uptake in other adult vaccinations. So it is a big problem.

Mr. Tonko. So the damage can spread. I don't ever remember in my many years a public health crisis becoming so politically charged, and I think that is a difficult dynamic to introduce.

How does the spread of misinformation about, for instance, the safety of vaccines worsen the risk posed by an infectious disease like COVID-19?

Dr. Benjamin. Well, it means that people won't get vaccinated or do other protective things, and then they get infected and they in-

fect other people.

You know, in the spring of 2020, early part of the pandemic, we already had antivaccine groups handing out fliers, going into communities and telling those communities don't get tested when the vaccine is available. We didn't have a vaccine yet, but before we even had a vaccine-

Mr. Tonko. Right.

Dr. Benjamin [continuing]. Don't get the vaccine, and all the bad things that they hypothesized would happen if you got it. So they were already working against good public health.

Mr. Tonko. Yes, and that just creates a weak environment and especially as it relates to our children, because they are not many

times making those decisions.

GAO has issued several recommendations to immunize HHS's operating divisions from political influence, including by developing policies and training staff in reporting bias. HHS has agreed with these recommendations and is in the process of implementing

So, Dr. Benjamin, how do efforts to reduce political interference or-excuse me-yes, how do efforts to reduce political interference strengthen CDC and improve public confidence in health institu-

Dr. Benjamin. Well, quite frankly, the current administration stopped screwing around with your website, telling them what to say, interfering with their public presentations, and, all in all, followed the science. And that has dramatically changed the way the agency has been able to function and engage with the public and engage with other partners. That was a terrible mistake that was previously done. And that will help CDC recover the trust of the American people.

Mr. Tonko. Right. Well, science-based and evidence-based data

and anecdotes should be what guide us.

Dr. Denigan-Macauley, GAO's latest high-risk report mentions the importance of HHS building a skilled health workforce. I would argue that persistent political interference with the work of healthcare professionals would be counterproductive to achieving that goal. Why is strengthening the healthcare workforce a key

component to public health emergency preparedness?
Dr. Denigan-Macauley. It is absolutely essential. No matter how many systems you build, or-you have to have the people to be able to run it. I mean, obviously, we are getting artificial intelligence, and we are getting smarter and being able to do things without staff. But that is not where we are. And as we have said on this committee—or on this board right here today, on your panel—it takes the whole of nation. It is patchwork. And the—it is from—at the local level, Tribal, territorial. It is everyone.

Mr. Tonko. OK. Well, my time has now been exhausted. But I would say it is important for us to pay attention to and listen to

science so that we can do the appropriate policy.

Mr. Griffith. I thank the gentleman for yielding back and now recognize Mrs. Cammack of Florida for her 5 minutes of questioning.

Mrs. Cammack. I have a microphone that won't cooperate with

me, so I will adjust. I will start with you, Dr. Dean.

I am going through your testimony for a second time, and there's a couple of things that have just stuck out to me, talking about the failures of the CDC to listen to those on the front lines. This is something that seems to happen, whether it is COVID, whether it is Ebola. It doesn't seem to matter what crisis we are facing down, it seems that the bureaucrats in Washington are greatly removed from those on the front lines, be it EMS, our public health safety officials. Can you elaborate on what you have seen?

And if you had to give me in three bullet points what CDC needs to do to turn this around, to be more forward facing and actually start listening to people on the ground who are dealing with it rather than operating from computer screens up here in Wash-

ington, DC, that would be much appreciated.

Dr. Dean. Thank you for the question. I would highlight this is a systems problem. I never blame the humans. The public servants are my heroes, but we are all operating in a broken system. On the front lines you have to make decisions in the fog of war, oftentimes

without the data that you want.

If I were to bullet point the three things, it would be, number one, the CDC reform that they are attempting to do that is deeply discussed by this committee. As part of that, looking at not just the infrastructure but the culture. In academic research, institute culture is very much needed. We rely on that for the kind of information retrospective that we use on the front lines, but it is different than front-lines response.

So I would say bullet two would be an intelligence infrastructure, real-time data shared with all the nodes on the front lines so we

can make decisions.

And number three, an operational infrastructure. We already do this. We call each other and ask for help. We back each other up. Let's formalize that into a structure, where someone really is coming to save us when we need it.

Those would be my three.

Mrs. Cammack. And as a followup to that, we are concerned about Federal authority that undermines the mayors, the Governors, and other local elected officials that are on the front lines. If the Federal Government can demand data and there is no need to work cooperatively with the States and local governments, what kind of data, then, do we need to be pinpointing that is going to be beneficial for the State and local responders?

Dr. Dean. On the front lines, as a local health officer, we already call each other. We share information. We are calling firefighters and EMS. I am calling my colleagues in other States. So that kind

of intelligence sharing is happening right now.

Mrs. CAMMACK. Is it everything, though, from predictive data, or is it more of, "Hey, this is the PPE that we have in stock, and we are moving things around"? What—

Dr. DEAN. It is all of it. It is all of it. Because what we are trying

to do is gain situational awareness.

So when talking about data sharing, the point I would make is it is really important that it doesn't just go to one place where it is held, that it is immediately shared out to everyone on the front lines. And this is far beyond public health. My colleagues in EMS. those that run supply chain, we all need that real-time, situational awareness. We live in a data-rich but intelligence-poor system in the U.S. And let's fix that.

Mrs. Cammack. I like the way you phrased that, thank you.

OK, Dr.—I am going to mess this up.

Dr. HøEG. Høeg.

Mrs. CAMMACK. Høeg, got it, OK. Many of the COVID-19 mandates, particularly the national mandates, have done tremendous harm to our country: people who have lost their jobs, communities'—children's development was impaired. There is truly an extensive list of the harms that have been created, many of which were not science-based. National mandates undermine the public's trust in public health because it is not something that the Federal Government has done or done well. It

is inconsistent, quite frankly, with our constitutional system.

The national COVID-19 mandates were made worse by the fact that they were put in place despite conflicting scientific evidence. Now, in your testimony you noted that the CDC often cherry picks what scientific data they find relevant. For example, the mask mandate that was implemented here on the—on Capitol Hill for Members and staff was based on a peer-reviewed study that had failed peer review and had been tested on a sample size that was not an American population. So if that is happening here on Capitol Hill, how can we be sure that the decisions at the highest level of government are not based on incomplete, conflicting science like what we saw during the pandemic?

Dr. HøEG. Yes, thanks for that question. So I guess I would say, you know, we-just to get to the vaccine issue first, I mean, we have talked about this distrust in public health and vaccine hesitancy. And I am actually concerned that a lot of that came from making extrapolations from the initial data, and sort of telling the American people that these vaccines were going to be stopping infection, all infection. We really only knew about the 94 to 95 percent efficacy against symptomatic infection from the initial trials. We didn't know how long it would last. We didn't know if it was going to prevent transmission.

And so—and then, you know, the mandates were sort of instituted—based on, like, incomplete data. And then people ended up losing their jobs because they felt uncomfortable taking the vac-cine. They didn't feel like they had enough information. And that has been devastating.

And then we find out, you know, as we gather more data, the vaccines were not effective at preventing transmission, especially not long term, maybe a few-month period that they can decrease infection risk, but they don't decrease transmission risk. And so I feel like people lost trust because they were told that, for sure, that the vaccines did something, and then we found out that that wasn't true, and they were coerced to get a vaccine. And so that has fueled some distrust.

And I know I am, like, running out of time here, but I wanted to get to that point. I am sorry I didn't answer-

Mrs. Cammack. No, I appreciate that. And thank you for the chairman's grace, andMr. Griffith. Yes, the gentlelady yields back time.

Mrs. CAMMACK [continuing]. Time, thank you.

Mr. Griffith. I now recognize Mr. Peters for his 6 minutes or so.

[Laughter.]

Mr. Griffith. For his 5 minutes of questioning.

Mr. Peters. All right, thank you very much, Mr. Chairman. I do appreciate you having this hearing. I think anything like this deserves an after-action report. And we ought to be looking, honestly, at what we got right and what we got wrong, and we should not expect that we would have gotten everything right.

expect that we would have gotten everything right.

I would just say, on behalf of President Trump, Project Warp Speed was great. I think getting a vaccine in a year is something that is—deserves a lot of credit and is something we can replicate for other things here too. On the other hand, you know, suggesting on TV that you inject bleach, that probably wasn't a good idea.

And there was—now there is politics around vaccines that the very people who did all the work to do vaccines don't even want to admit that they took the vaccine, because that has become politicized. So we could use some help across the board of getting really honest after action on vaccines.

And I would say about Dr. Høeg, yes, it didn't transmit—it didn't prevent transmission, but we prevented people from dying, in general, which was really the objective, I think, as we started. And I

think that is good.

I do agree with you that schools—school closures was wrong. It was a—it was—kind of ended up being a disaster, I think. Going into it, we didn't know that, but once we had vaccines that would keep teachers alive, we should have gotten those schools back open again. You have made a very serious charge that I am not going to adjudicate here that it was the teachers unions that drove that decision, but I think that CDC should answer for that. How did that factor in? I think we should understand that, because we don't want it to be politicized. We want it to be factual going forward.

On that topic, though, something that I have been trying to talk about forever since the beginning of this is the terrible data system that we have here. On—you know, I am not an advocate of having a national health system like England, but they have the same data on every patient. And we don't. We have different hospitals in different States collecting and reporting different data. And we are asked, as policymakers, to make policy judgments based on, basically, a lot of guesswork. There is a lot of holes in that data. And I am going to ask the epidemiologist something about that in a second.

But if—you know, we heard rumors that it was type O blood that had an effect, or vitamin D. I mean, great, that might be true, we had no way to really figure that out without data.

And then looking backwards, you know, learning loss, mask efficacy, community spread around schools. I don't know that we have the data that we need for that, even, tragically, now that this is—at least this phase of it has passed us by.

So, Dr. Høeg, what would you advise us, as Members of Congress, to ask for from the CDC or DHS or the Department of Health in terms of data? What do we need to concentrate on, and

what do we need to have before us, what do we need to be col-

lecting that we are not doing now?

Dr. Høeg. Yes. I mean, in terms of looking back, I mean, we should—you know, I want to say that I am concerned about the role that the teachers unions played, just so—I think we do need more——

Mr. Peters. Like——

Dr. HøEG [continuing]. On that.

Mr. Peters. So, well, let's take that up.

Dr. HøEG. In terms of the data, I think that we have a problem that we have not—we don't have a culture here of running high-quality randomized trials of the efficacy of different interventions, like, promptly, so that we can get real answers about how well things work, like masks, like school closures.

Even for—currently, the bivalent booster—and the boosters, we didn't have large-enough randomized trials in young people. So I think that we need to have a culture where we quickly are able to run randomized studies to get real answers, because right now with the MMWR, as we saw over and over again, they are publishing observational studies which have very low-quality data. I mean, they are publishing, you know, studies about—

Mr. Peters. Let us take a step back from that, though, because I am going to run out of time. What is it we should be collecting? What should we be getting from patients that we need to make

judgments about?

Dr. Høeg. So, I mean, I think that I would bring up just one of my studies in terms of, you know, what data we should be collecting, is we do need accurate death rates, actually, from—is one of the studies that we did showing that, you know, the CDC was repeatedly reporting inaccurate data based on the COVID-19 tracker, which doesn't use death certificates, overestimating the death rates, the true death rates in children. And so I think that that is one of the things, is we need to have a better data system that is reliable, so that we know that the data that we are getting is accurately representing—

Mr. Peters. I am going to run out of time, and I ask—invite any of you, if you have thoughts about that, to let us know in writing

how you would improve Federal data.

I would just say this, though, on—you know, look, I feel a little bit like I am getting two sides of a message. One is that we should have really good information, but the other is we have to act based on the information we had. And at the time I think we had these vaccines, I think it was very prudent to require the military to get them, people over 18, and to ask teachers to do that too. And so I am not going to fault anyone for that.

I hope we learn from this experience so that we do it better when we face it again. But I really do appreciate your thoughts, and I

yield back.

Mr. GRIFFITH. I thank the gentleman for yielding back, and now recognize Mrs. Miller-Meeks for her 5 minutes of questioning as a waive-on.

Mrs. MILLER-MEEKS. Thank you very much, Mr. Chair, and I want to thank all of our witnesses who are here today.

As many of you know, I am a physician and a former director of the Department of Public Health. And so I take public health very seriously, and I recognize the important role. And for me, the CDC, prior to the pandemic, was the premier institution. But I also recognize the important role of State health departments and local public health agencies in keeping Americans safe.

In April of this year, I released a CDC RFI, request for information, to hundreds of stakeholders requesting feedback on how to sensibly and effectively reform America's top communicable diseases agency. And I want to address and clarify some comments

made by Representative Dr. Ruiz.

First, this was an RFI that my office sent publicly to stake-holders and constituents to seek feedback and input on CDC reform as a result of the CDC's many failures. This was not a letter sent to the CDC, though I would also welcome their feedback and input. And in fact, to this end, I met privately with Dr. Walensky and a staff member.

It sounds like there are many opportunities for improvement based upon the discussion today, and I thank you for that. And I welcome additional conversations with Dr. Ruiz and his staff as to constructive and thoughtful ways to reform the CDC.

Not surprisingly, public trust in the CDC is at an all-time low, and health experts across the Nation have presented many sugges-

tions on how to rebuild that trust.

During the pandemic, much of the CDC's guidance did not appear to emanate from data and scientific evidence, and they certainly weren't able to incorporate real-world evidence that was occurring, and data and research occurring in other countries. Rather, the data seemed to come from political interests, such as the clear coordination between the CDC and the American Federation of Teachers Unions on school closures, despite clear evidence that children did not transmit the virus and they were not super spreader organizations. And we, in fact, opened our schools in Iowa in April of 2020.

To the CDC's credit, however, they recognized the declining public trust, which led Dr. Walensky to launching the Moving Forward initiative. This effort included reorganization and potential requests for new authorities from Congress. As part of the initiative, CDC acknowledges that the agency faces significant structural and systematic operational challenges. One of those was just discussed, and that is data. And it indicates a central goal to create new internal processes, systems, and governance to empower leaders, align

incentives, and hold CDC accountable.

Dr. Høeg, in your written testimony you highlight the confusing and backward school closure guidance, stating that the recommendation to keep schools shut down was unthinkable. And I asked Dr. Walensky in testimony if she had contacted the State of Iowa or the State of Iowa's Department of Education for their experiences with opening schools. Can you detail what you believe the science behind Dr. Walensky's school closure recommendations—why it was so flawed, and what guidance reforms the Moving Forward initiative should include?

Dr. Høeg. Yes. So we had data at the time of the—that—the winter of 2021, the February of 2021 guidance from, essentially, all

over the world of schools reopening safely, successfully. And I think most of the world recognized that schools should be open by de-

fault, and that closing schools is an emergency measure.

And so also in our own country we had private schools, public schools in many States, often depending on political affiliation, that were already open, had data. It wasn't just my Wisconsin study, it was the diocese, very diverse diocese that I am medical advisor for, that we had successfully reopened with very simple, straightforward mitigation strategies, that—there was a total lack of sort of commitment and creativity and willingness to get these kids back into school and then, you know, figure out, you know, how to make it as safe as possible.

And so I do think it is unthinkable what happened, the way the data were ignored from, really, all over the world and our own country about how schools could be reopened safely, considering the enormous damage from prolonged school closures that we all knew

was coming and we see the effects of now.

Mrs. MILLER-MEEKS. Thank you. As a first-term congresswoman, my first markup hearing on Education and Labor Committee brought up school closures, the rate of youth suicide, the rate of mental health and depression and anxiety, and what that has done. So not only the learning loss, but the obesity, the physical effects, and also the tremendous mental effects that closing schools had on our children and a generation that may be lost and difficult to recover. So thank you so much for your testimony.

Thank you for, despite all of the pushback—I have been part of that—that you were willing to continue to publish and to make

known your findings. Thank you.

I yield back, Mr. Chair.

Mr. GRIFFITH. The gentlelady yields back. I now recognize Ms. Castor for a unanimous consent request.

Ms. Castor. Thank you, Mr. Chairman.

I would like to ask unanimous consent to submit for the record just some context regarding the Dr. Fauci February 2020 email in the early days of the pandemic response regarding his mask suggestions.

As we all know, the understanding about the effectiveness of masks and guidance about wearing them evolved during the pandemic, as did Dr. Fauci's position on their use.

So I will ask a UC.

Mr. GRIFFITH. The gentlelady has requested unanimous consent. We would also—during this hearing we have had unanimous consent requests both from Ms. Castor, but also Dr. Burgess, Mr. Armstrong, and Mr. Ruiz—Dr. Ruiz, excuse me. And have I missed any? I think that has got all of them, but—and also any documents that have been included in the staff hearing documents list.

Any objection to any of those documents being submitted to the record?

Hearing none, the documents are—

Ms. CASTOR. Thank you.

Mr. GRIFFITH [continuing]. Agreed to be put in as a part of the record.

[The information appears at the conclusion of the hearing.]

Mr. Griffith. Seeing that there are no further Members wishing to ask questions, I would like to thank our witnesses again for being here today. Thank you. This has been very informative.

In pursuance of the committee rules, I remind Members they have 10 business days to submit additional questions for the record, and I have already got a few, so I will be sending those along. And I ask that witnesses submit their response within 10 business days upon receipt of those questions.

Without objection, the subcommittee is adjourned.

[Whereupon, at 12:37 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

Documents for the Record 6.7.2023

Energy and Commerce Committee

Subcommittee on Oversight and Investigations

- 1. Ranking Member Castor Letter from HHS to E&C Oversight Subcommittee responding to our letter regarding CDC Reorganization.
- 2. Dr. Burgess Article from Washington Post regarding Zika Testing
- 3. Mr. Armstrong CDC uses report
- 4. Dr. Ruiz Letter from Miller Meeks on CDC reform
- 5. Ranking Member Castor Fact Check Article from USA Today

1) Ranking Member Castor - Letter from HHS to E&C Oversight Subcommittee responding to our letter regarding CDC Reorganization.

June 6, 2023

The Honorable Cathy McMorris Rodgers Chair Committee on Energy and Commerce U.S. House of Representatives Washington, DC 20515

Dear Chair Rodgers:

Thank you for your May 5, 2023, letter to Dr. Rochelle Walensky, MD, MPH, regarding the Centers for Disease Control and Prevention's (CDC) Moving Forward Initiative. I am pleased to respond on the Director's behalf.

CDC works 24/7 to protect America from health threats and increase the health security of our nation. To accomplish its mission, CDC conducts critical scientific work and provides health information that protects our nation against dangerous health threats and responds when these threats arise.

As CDC has publicly recognized, the COVID-19 pandemic exacerbated many existing structural and systemic operational challenges across the U.S. public health system. CDC is committed to using lessons learned from the COVID-19 pandemic to ensure the agency is better prepared to lead the country through the next pandemic.

To this end, beginning in spring 2022, the CDC Director launched an extensive review of the agency's organizational structures, systems, and processes to strengthen its ability to deliver on its core mission. There were two components to this review:

- 1. Scientific and Programmatic Review: To identify ways to improve and institutionalize how CDC develops and deploys its science, both in pandemic and non-emergency times. To accomplish the Scientific and Programmatic Review, approximately 120 interviews were conducted from April through June 2022 with CDC leadership, staff, and external partners (e.g., those from academic, jurisdictional public health, and former CDC employees and leaders). A final report was provided to the CDC Director capturing findings and recommendations to identify ways to improve and institutionalize how CDC develops and deploys its science. The full report can be found online.1
- 2. Structural Review: To gather feedback on the agency's current processes, systems, and structure and solicit suggestions for strategic change, with a strong focus on the agency's core capabilities a diverse public health workforce, data modernization, laboratory capacity, rapid response to disease outbreaks, and preparedness within the United States 1 https://www.cdc.gov/about/organization/cdc-moving-forward-summary-report.html

Page 2

and around the world. This review included over 50 interviews, including the entire CDC leadership team and others who are intimately familiar with how CDC operates. The final summary of the Director's recommendations from this effort can also be found online.2 In August 2022, based on this review along with substantial internal and external input, the CDC Director launched the Moving Forward initiative,3 which focuses on the following top improvement areas:

- Share scientific findings and data faster
- · Translate science into practical, easy to understand policy
- · Prioritize public health communications
- Develop a workforce prepared for future emergencies
- Promote results-based partnerships

CDC leadership established working groups to develop concrete implementation steps to address lessons learned from the Scientific and Programmatic Review, and to enable the agency to function more effectively. These working groups – referred to as priority action teams – included over 320 staff and leaders from across CDC. Their charge was to develop internal, implementable actions that would strengthen how CDC delivers science for action. As a result of this work, over 100 recommendations were developed for current and future implementation within CDC. Of note, some recommendations require increased resources, which the agency does not currently have. Implementation of other recommendations are either completed or already well underway.

Following the release of the report related to the Structural Review, which drove specific internal structural recommendations, ten working groups of more than 180 CDC staff – led by members of the agency's leadership team – were formed, each focused on a priority operational area. These priority areas were a direct result of input gathered during the Structural Review and the Director's recommendations regarding where to first focus realignment efforts. The focus of the working groups – referred to as "strike teams" – included areas such as science, policy, laboratory capacity, communications, public health data, and external affairs. Strike team leads presented their recommendations to the senior leadership team over several meetings and gathered thorough input. Ultimately, the CDC Director made the final decision on what aspects would move forward as part of the initial CDC reorganization.

CDC leadership heard both internal and external feedback and swiftly acted upon it. On January 24, 2023, the CDC Director announced a CDC reorganization, one of several foundational steps to achieve progress in the improvement areas outlined above. This reorganization aimed to eliminate bureaucratic reporting layers, break down silos in the agency, promote foundational public health capabilities, and improve accountability with the goal of creating a CDC that swiftly responds to public health challenges facing the nation, while prioritizing clear external communication to ensure everyone in America understands its guidance and decisions. 2 https://www.cdc.gov/about/organization/cdc-moving-forward-summary-report.html 3 https://www.cdc.gov/about/organization/cdc-moving-forward.html

Page 3

To be clear, this was not a "large-scale reorganization," but rather a first step toward making CDC more action-oriented and accountable. At a high level, the reorganization 1) removed a

reporting layer to increase accountability, enabling direct reporting of core functions into the CDC Immediate Office of the Director, and 2) combined two organizations that were doing similar work. In doing so, CDC aims to improve management, reduce bureaucracy, strengthen its emergency readiness and response, and elevate some of the agency's most important enterprisewidefunctions. These steps are designed to strengthen how CDC operates, orienting it toward timely action and ensuring CDC's science reaches the public in an understandable, accessible, and implementable manner. CDC publicly released this new structure4 and leadership team5 immediately following its establishment.

As is reflected in publicly released materials, no functions or authorities were moved out of any of CDC's National Centers. Your letter incorrectly states that the reorganization "appears to expand greatly the size and power of the Office of the Director at the expense of the agency's national centers." The activities that were shifted as part of the reorganization were primarily between existing offices and what were referred to previously as cross-cutting centers that support work across CDC. One example of such a move is the Community Guide activity, which shifted from the policy to science office. The only example in which a "National Center" was impacted during this reorganization was the moving of CDC's genomics activities from the Office of Science to the National Center for Birth Defects and Developmental Disabilities — a shift that actually moved additional responsibilities to this Center.

As the summary of activities above makes clear, this effort was not executed behind closed doors. CDC leadership communicated directly with staff - the Director held a total of 13 all-staff meetings since her arrival - and provided information on the agency's internal website throughout the process. In addition to the more than 170 interviews conducted during the spring and early summer of 2022, over 420 CDC staff and leaders were involved with taking the findings of these reviews and driving the agency toward concrete actions through the strike teams and priority action teams. The reorganization - along with the changes from the priority action teams - were designed in partnership between the agency's senior leaders and CDC staff. In addition to the extensive internal engagement of CDC staff, allowing them to be part of the solution to improve CDC operations, the agency kept key stakeholders updated along the way. CDC followed all necessary reorganization steps, including Congressional Notification to the House and Senate Appropriations Committees, as well as briefing Congressional Members and their staff on more than 50 occasions and testifying publicly on the findings and recommendations during four congressional hearings. Other examples of external engagements include updates to public health partners who work most closely with CDC, engagement with the agency's Advisory Committee to the Director (which includes a public facing component and opportunity for feedback), and proactively publishing the entire report, organizational chart, and leadership team. CDC also provided updates to the media, including findings, recommendations, and actionable next steps. Throughout this process, CDC has demonstrated its commitment to 4 https://www.cdc.gov/about/pdf/organization/cdc-org-chart.pdf 5 https://www.cdc.gov/about/leadership htm

Page 4

transparency so, as a country, we are better prepared for the next large-scale infectious disease outbreak.

Despite these efforts, CDC alone cannot make all the necessary changes to be better prepared. New authorities and flexibilities, along with increased public health funding for core capabilities (e.g., data, laboratory capacity, readiness, etc.), will be required to support the necessary changes within the agency. The request for new authorities was also considered as a part of the reviews and recommendations. For example, CDC has been forced to rely on time-consuming processes within its existing authorities to meet operational and programmatic needs when time is of the utmost essence. The COVID-19 pandemic and other outbreaks have underscored how much these challenges have hampered the agency and continue to do so. Data is the foundation for everything CDC does, particularly in the context of a public health emergency response where critical decisions on where and how to target interventions must be made quickly. Having timely access to high-quality data on where a disease is spreading, the severity of illness, and the populations most impacted is a critical element of operational readiness. It allows state and local public health and other health care professionals, as well as policy makers, to target resources to mitigate an outbreak and predict future spread. The authorities CDC has requested are consistent with the authorities that other Federal agencies already have and exercise when needed. Additionally, CDC has been openly discussing these challenges for years and engaged with Congress on potential solutions, as appropriate.

In closing, CDC has worked to identify challenges and implement solutions to improve CDC's ability to effectively deliver on its mission all while continuing the critical work of responding to COVID-19 and other infectious disease outbreaks (e.g., Ebola and Marburg in Africa). This work has been transparent, and CDC staff have worked tirelessly to rebuild trust in public health and the agency. The need for new authorities and the changes that are underway have been validated by outside independent organizations, and with the help of Congress, these changes can improve the agency's operations and better prepare this nation for the next pandemic. Thank you again for your interest in this issue. CDC remains committed to leading with science and protecting the American public. If you or your staff have any questions, please feel free to contact the Office of the Assistant Secretary for Legislation at (202) 690-7627.

Sincerely, Melanie Anne Egorin, PhD Assistant Secretary for Legislation

cc:

The Honorable Frank Pallone Jr. Ranking Member Committee on Energy and Commerce Dr. Burgess – Article entitled, "Lessons unlearned: Four years before the CDC fumbled coronavirus testing, the agency made some of the same mistakes with Zika" from the Washington Post. Published July 4, 2020.

Four years before the federal Centers for Disease Control and Prevention fumbled the nation's chance to begin effective early testing for the novel <u>coronavirus</u>, the agency similarly mishandled its efforts to detect another dreaded pathogen.

Amid a feared outbreak of the newly emerged Zika virus, senior CDC officials in 2016 sidelined an effective test for it — and instead directed public health laboratories nationwide to use a more complicated test that failed about one-third of the time.

The agency's response to Zika now stands as an unheeded prequel for how the CDC stumbled this year as it confronted the coronavirus pandemic, which has claimed more than 125,000 lives nationwide.

Both Zika and the coronavirus originated overseas and became American health emergencies that have challenged the CDC's ability to carry out its fundamental mission to rapidly identify and contain newly arrived pathogens.

In both emergencies, the CDC pressured the public health labs to shelve the effective tests and to use less reliable kits manufactured by the agency that sought to detect multiple pathogens. The agency stood behind the troubled test kits despite internal data indicating they were flawed. Ultimately, the CDC notified the public lab officials that they could switch to more effective tests.

With Zika, the CDC took nearly a year to change course. With the coronavirus, the agency took more than a month, delaying a nationwide rollout of effective testing as the malady it causes, covid-19, erupted into the nation's most deadly infectious disease in a century. Clinicians and public health officials say the delay caused additional deaths, although the total number is uncertain.

The component of the CDC's coronavirus test kits that was designed to detect strains other than SARS-CoV-2 became contaminated during manufacturing at the agency in January, causing false-positive results at 24 of 26 labs that first tried out the kits, The CDC waited until Feb. 28 before dropping the problematic "pan-coronavirus" segment from the kit — while the public labs were precluded from using other options, such as an effective test made available in mid-January by the World Health Organization.

The parallels in how the CDC responded to the two health crises emerge from a Washington Post examination of federal investigative and regulatory records, congressional testimony, CDC emails and documents, and interviews with scientists and other technical experts.

"It's painful to watch the same challenges again and again," said Timothy M. Persons, who has reviewed the efforts to counter Zika and the coronavirus as chief scientist of the U.S. Government Accountability Office. "As I think we saw with Zika, we need to apply lessons learned to definitely try and respond better."

An <u>audit that Persons led</u> three years ago for the government faulted CDC leaders for not being more rigorous in evaluating the troubled test for Zika.

Reliable early testing "is a critical piece of the overall preparedness and response system," Persons said in an interview.

President Trump and his appointees have generally praised the administration's response to the coronavirus. But a review released on June 19 by the Department of Health and Human Services said that CDC officials — despite seeing worrisome "anomalies" — skipped standard quality control checks before distributing the test kits for detecting the nation's earliest cases of the virus. The review also confirmed that the kits were "likely" contaminated during the CDC's manufacturing.

CDC coronavirus test kits were likely contaminated, federal review confirms

Robert S. Lanciotti, a virologist who headed the CDC's diagnostic efforts with Zika until May 2016 — when the agency stripped him of his leadership role after he warned against distributing the deficient test kits — said the decision-making with the coronavirus mirrored what he witnessed.

"This is exactly the same mistake I saw during Zika," Lanciotti said in interviews with The Post.

Lanciotti said that by shelving effective tests in favor of less reliable approaches, CDC officials "slowed things down and screwed things up."

As <u>reported in The Post in 2016</u>, Lanciotti had raised concerns then that the CDC's preferred Zika test missed infections and that the agency withheld information about its deficiencies from local lab officials.

CDC officials did not respond to questions for this article.

On Saturday, an HHS spokeswoman, Caitlin Oakley, said the government at no point blocked the public health labs "from using any other" available test for the coronavirus. Representatives of the labs, however, have complained that then-existing regulations tethered them to the CDC's troubled test.

Former CDC Director Tom Frieden, who led the agency's efforts against Zika in 2016, praised its overall performance with that virus and defended the decisions made with the Zika test.

"Any test can get improved with time," Frieden said. "And any action can be looked back on. . . . In the course of refining the test, you expect it to get better with time."

Not 'taken by surprise'

Researchers discovered the virus that came to be called Zika in 1947 in the blood of a rhesus monkey in Uganda's Zika Forest. Initially, the virus posed little threat to humans: Over the next three decades, fewer than 20 Zika infections would be diagnosed from Africa to Southeast Asia, and the reported symptoms were nonexistent or mild — occasional fever, headache and malaise. No deaths or other severe outcomes emerged.

In June 2007, the CDC first dealt with Zika when the agency's diagnostic lab in Fort Collins, Colo., received blood samples from physicians in Yap state, a cluster of tiny Pacific islands about 500 miles east of the Philippines in the Federated States of Micronesia. The island doctors suspected that an epidemic of rashes, eye redness and joint pain had been touched off by disease-carrying mosquitoes.

At the time, Lanciotti was chief of the lab, which specialized in diseases spread by mosquitoes and ticks.

Using a well-established molecular testing technique called polymerase chain reaction, or PCR, Lanciotti and his colleagues discovered that the epidemic in Yap was caused by the Zika virus. Lanciotti also developed a separate enzyme-based test, which showed whether a person's blood carried Zika antibodies, another sign of infection.

His lab continued to use those tests on Zika samples as small outbreaks emerged in the coming years elsewhere in the Pacific, still thousands of miles from the U.S. mainland.

The CDC's concern rose by late 2015, after Zika infections were detected widely along the northern coast of Brazil. This marked Zika's first confirmed appearance in the Western Hemisphere — and the stakes were made more urgent by mysterious clusters of microcephaly, a birth defect that left newborns with tiny heads.

In December 2015, Lanciotti began distributing instructions for how to conduct the molecular test, which his team was already using, to public health labs in 21 states and the District of Columbia, along with several counties, records

A top priority, Lanciotti recalled during recent interviews, was to prevent Zika's spread in the United States by likely hosts — including infected airline passengers returning from the 2016 Summer Olympics in Rio de Janeiro. If an infected person were bitten by a mosquito, Zika might spread to whomever the insect next found. Zika, he knew, could also be transmitted sexually.

"When this hit in 2015, we weren't taken by surprise," Lanciotti recalled. "We had testing in place. . . . We knew there would be travelers returning, potentially infected with Zika."

Lanciotti's approach was informed by his CDC experience with West Nile disease, another mosquito-spread virus: Using molecular and antibody testing, he and his colleagues had been the first to confirm that an outbreak in 1999 of human encephalitis in New York City was caused by West Nile.

Lanciotti said the CDC did not manufacture the Zika test kits but told others how to build them.

The Zika molecular testing protocol that Lanciotti distributed instructed the local labs where to purchase chemical mixtures necessary for the tests and specified the temperatures and durations at which blood samples, along with the mixtures, should be heated, cooled and reheated during testing.

Lanciotti also sent a "proficiency panel," which each lab could use to verify whether it was generating reliable results with the test, called "Singleplex." The panels included small tubes of inactivated Zika virus and a non-viral substance to verify accuracy.

Within two weeks of receiving Lanciotti's testing instructions, public labs in Florida, Texas, California, New York and Maryland were analyzing samples, interviews and CDC records show.

"The approach that my lab took was, we want to develop a very rapid way for state public health partners detecting these viruses," Lanciotti said. "We want to know right away if a traveler has Zika."

Rapid detection would enable health authorities to isolate an infected person and, if a cluster of cases emerged, the affected neighborhoods could be promptly sprayed with insecticide. If a pregnant woman were diagnosed with Zika, she would be informed immediately.

More elaborate testing

By early 2016, CDC scientists based in Puerto Rico and at agency headquarters in Atlanta saw the emerging Zika crisis as an opportunity to deploy a new — and more elaborate — approach to detecting the virus.

Instead of using the molecular test to look only for Zika, they would also target five additional pathogens: chikungunya virus and four strains of dengue fever. The new test, referred to by scientists as an "assay," was called

"Trioplex" and was intended to provide convenience for labs that wanted to look simultaneously for Zika and the other pathogens.

The portion of the Trioplex test targeting the four strains of dengue fever was known as the "pan-dengue" component. Four years later, the CDC would complicate its SARS-CoV-2 test with the "pan-coronavirus" component, designed to search for additional coronavirus strains.

All of the viral strains targeted in the new test were transmitted by mosquitoes, but only Zika posed an imminent threat to the continental United States. Even if Trioplex detected a case of dengue or chikungunya, no effective medical treatments existed for their often mild symptoms, and neither dengue nor chikungunya was associated with birth defects.

Unlike Lanciotti's test, the CDC would manufacture and distribute the Trioplex test kits, each with 41 pages of instructions, versus two for Lanciotti's concise protocol.

The expanded diagnostic approach, however, introduced a challenge: Targeting multiple pathogens typically reduces a test's sensitivity, according to scientific experts.

"You always are careful about sacrificing sensitivity," said Richard Meyer, a microbiologist who designed and conducted molecular tests before retiring as chief of the CDC's rapid response lab for bioterrorism.

Lanciotti said he worried about the change because he knew from his work during the Yap outbreak that, with Zika, only a relatively small amount of the virus could be detected in a person's blood. Because of Zika's low viral load, detecting it required a test with great sensitivity.

"A small reduction in analytical sensitivity leads to a big problem because most of the Zika cases had low levels of" virus in the blood, Lanciotti said.

But Lanciotti did not oppose developing Trioplex — as long as it was not distributed until its sensitivity was upgraded, CDC records show.

Lanciotti said he remained confident in the Zika test already in use, Singleplex.

His work with Zika and other viruses drew accolades from the CDC. On Feb. 16, 2016, the agency gave Lanciotti a "Director's Recognition Award," noting his "timely development of diagnostic tests that provided the first . . . evidence of a linkage between microcephaly and Zika virus."

By early that month, the testing had confirmed 50 cases of Zika infection among returned U.S. travelers, according to CDC documentation provided to the White House. President Barack Obama cited the cases in a letter on Feb. 22, 2016, when he asked Congress for a \$1.9 billion emergency appropriation to counter Zika. Nearly half, \$828 million, was intended for the CDC's efforts.

At about the same time, the CDC began manufacturing the new Trioplex test kits in Atlanta.

In a briefing with reporters on March 10, 2016, CDC Director Frieden said the "new PCR test [Trioplex] will be particularly helpful" in combating Zika. The emergency funding, he said, "is crucially important and urgently needed."

"The sooner we're able to get a robust program up and running, the more we can reduce the risk to pregnant women," Frieden said.

On March 17, 2016, the Food and Drug Administration, which regulates some disease tests, granted the CDC an emergency use authorization for Trioplex, signifying it "may be effective." The CDC then directed public health labs to use the test for Zika, records show.

Six days later, Frieden told a House appropriations subcommittee that the agency had already "produced more than half a million" Zika test kits. At least 13 states, he said, were at "high risk" of Zika being spread by the Aedes aegypti mosquito. In Puerto Rico alone, "we could see thousands of affected pregnancies," he said.

Missed infections

Health officials had another concern: that Zika could be transmitted through blood transfusions involving an infected donor.

Because of that, in early 2016, the nonprofit Blood Systems Research Institute began to assess the reliability of the Trioplex test. The work was performed under a long-standing contract with the National Institutes of Health.

The blood organization, based in San Francisco, quickly found trouble with Trioplex.

On April 13, 2016, Michael P. Busch, the institute's director, sent an email to a senior CDC official: Testing over the previous two months had generated "disturbing" results. The data, Busch said, showed that Trioplex had missed 18 of 48, or 37.5 percent, of Zika infections it should have detected.

Trioplex appeared to be "less sensitive than . . . Lanciotti's assays," Busch wrote in the email to Lyle R. Petersen, a division director at the CDC, along with three other officials at both the CDC and the FDA.

Busch's email asked the officials "to support rapid publication" of the test data that his institute had analyzed.

One of the FDA officials, Jay Epstein, its director of blood research, responded to Busch on April 15: "I support publication," and "Re lower sensitivity . . . it seems to me that users need to shift to better assays."

"There was a lot of controversy over the accuracy of that [Trioplex] test and performance," Busch recently told The Post, adding that it reminded him of "the current situation with" the coronavirus.

A senior CDC official who was involved with the Zika response from the outset said the agency did not take "enough time to evaluate" Trioplex before distributing it.

"We made a bad decision with this Trioplex," said the official, who spoke on the condition of anonymity because they were not authorized to comment publicly. "We already knew how to diagnose for Zika virus. We already had the tests, which were developed in Rob Lanciotti's lab."

Lanciotti, meanwhile, was conducting his own studies in early 2016 on the reliability of Trioplex.

In mid-April, Lanciotti sent emails to a handful of senior CDC colleagues, reporting that analyses performed on patient samples in his lab found that "Trio misses 30-39% of the Zika positives."

One of the email recipients, Ronald M. Rosenberg, the CDC's associate director of vector-borne diseases, suggested informing the state labs.

"The simplest solution might be to convey this information to the states and let them decide" which test to use, Rosenberg wrote in an email on April 18 to Lanciotti and four other CDC scientists. "But whatever they decide . . . it might be unwise to abandon the singleplex."

As concerns mounted over the accuracy of Trioplex, its lead designer, Jorge L. Munoz, chief of the CDC's dengue virus lab in Puerto Rico, told colleagues he saw no deficit in sensitivity, records show.

Also on April 18, Frieden touted Trioplex to more than 1,500 health officials invited to a "Zika Action Plan Summit" at the agency's headquarters. Frieden said CDC scientists had "done a phenomenal job" developing Trioplex and the antibody tests. He again called for the emergency funding from Congress.

Two days later, Lanciotti voiced his growing concerns over Trioplex with Petersen, who had been detailed from Fort Collins to Atlanta to manage the CDC's response to Zika. Lanciotti said the state labs "that have validated and are using the singleplex should be encouraged to make no changes until they hear from us about the revised trioplex." Lanciotti also sent the email to 11 other senior CDC scientists.

Petersen did not respond to Lanciotti, according to documents gathered by a subsequent CDC review.

The next afternoon, on April 21, Lanciotti went a step further and emailed officials at 29 state labs that were using or had qualified to use Singleplex: "We want to inform you that in the Fort Collins laboratory we are continuing to use the Zika singleplex due to its greater relative sensitivity (that we have just established/become aware of through comparative analyses in several laboratories)."

Another senior CDC official, virologist Ann Powers, admonished Lanciotti for his email.

"While I certainly appreciate that you are wanting to make sure states are doing top quality testing, this email has created more trouble and confusion than it clarified," Powers wrote on April 25.

Two days later, CDC officials in Atlanta notified more than 100 public health labs that Trioplex was "recommended for use in the current Zika response."

The email made no mention of the Singleplex test or the data reflecting Trioplex's inferior sensitivity.

Some CDC officials had hoped that even if Trioplex failed to detect a Zika infection in pregnant women, those false negatives would be caught through later antibody tests.

But because of Zika's low viral load, that was not a reliable alternative: Antibodies in patients' blood typically are not seen during the first few days of infection and are never present in samples of urine or amniotic fluid. Of 13 patients with Zika that Trioplex had failed to detect, four were also missed by the antibody test, according to analyses done by Lapriotti's lab.

If those samples had not been subjected to the Singleplex test, "4 confirmed cases would have gone undetected," Lanciotti wrote in an April 28 email to CDC officials Petersen, Powers and Rosenberg. The scientists were usually based in Fort Collins, and Lanciotti reported to both Powers and her superiors, Rosenberg and Petersen.

In a reply to the group titled, "trioplex sensitivity," Rosenberg wrote: "Shouldn't CDC officially communicate this limitation to users?"

On May 2, Trioplex's sensitivity was discussed during a conference call involving Lanciotti, Powers, Munoz and Julie M. Villanueva, a senior CDC scientist put in charge of the new Zika Emergency Operations Center. Villanueva this year co-developed the CDC's test for the novel coronavirus, according to a scientific journal article she co-wrote.

Two days later, according to the CDC's subsequent review, "potential enhancements to the Trioplex" were also discussed with Frieden during a "daily update call" that included Munoz. Frieden said he did not remember the call.

Munoz, Petersen, Rosenberg, Powers and Villanueva did not answer written questions from The Post.

"What bothered me the most was, we were telling our state public health lab partners to use a test that we weren't fully convinced was ready for prime time," Lanciotti recalled. "There was no question in my mind that we were going to be missing cases."

Lab chief blows whistle

On May 17, 2016, Rosenberg informed Lanciotti that the agency was stripping him of his duties as lab chief, but Rosenberg relayed no reason for the demotion, according to Lanciotti.

Within days, Lanciotti filed a <u>whistleblower complaint</u> with the U.S. Office of Special Counsel. In his complaint, Lanciotti alleged that the CDC had endangered public health by withholding the data about Trioplex's sensitivity. He spoke recently about the issue with the Project on Government Oversight.

On July 1, 2016, the special counsel's office, which protects federal employees who reveal potential wrongdoing, determined there was a "substantial likelihood" that Lanciotti's allegations were credible.

Special Counsel Carolyn N. Lerner contacted the CDC to recommend Lanciotti's reinstatement as lab chief, according to people familiar with the matter. The CDC promptly restored Lanciotti's title — but continued to exclude him from the agency's response to Zika.

Lerner also referred Lanciotti's allegations to then-Health and Human Services Secretary Sylvia M. Burwell for further investigation.

That type of referral typically would have been assigned to the HHS Inspector General, experts said. Instead, Burwell sent the matter to Frieden, who assigned it to the CDC's associate director for laboratory science and safety, Stephan Monroe. His review, released on Sept. 2, concluded that Trioplex had posed no danger and that agency officials acted prudently.

Monroe's review cited the favorable conclusion about sensitivity reached by Trioplex's designer, Munoz, and described the available data for comparing the two tests as "inconclusive and contradictory." His review also said, "It was reasonable to not share this information with external public health laboratories, as it did not provide any meaningful information for laboratories to act upon."

Lerner, the special counsel whose initial investigation won Lanciotti's reinstatement, closed her office's file on the case in a letter to the White House on Sept. 27, concluding that Monroe's findings "appear reasonable."

A later Government Accountability Office report in May 2017 would find that Monroe's review did not conduct "a comprehensive comparison of Trioplex and Singleplex."

Monroe did not respond to written questions from The Post. Frieden, to whom Monroe had reported directly, said he viewed the report as an independent review. It established to his satisfaction, Frieden said, that the CDC acted correctly with Trioplex, including the decision to withhold the test data from the public health labs and other users.

"I think it's very important in public health to share more rather than less," Frieden said in an interview. "But that doesn't necessarily mean that you share the results of evaluations that have not been done in a systematic way, that may not be accurate."

President Trump speaks during a tour of the Centers for Disease Control and Prevention in Atlanta on March 6, flanked by Health and Human Services Secretary Alex Azar, left, CDC Director Robert Redfield, second from right, and Stephan Monroe, the CDC's associate director for laboratory science and safety. Monroe reviewed the CDC's handling of a test for the Zika virus and concluded in September 2016 that the agency had acted prudently and that "it was reasonable" not to share data with public health labs that raised questions about the test's accuracy. (Jim Watson/AFP/Getty Images)

At least seven state and local public labs defied the CDC's original directive and continued to use Singleplex, according to scientists familiar with the matter and CDC records. Among them were the central labs for the states of New York, Maryland, Florida, Massachusetts and New Jersey.

Burwell, now the president of American University, declined through a spokeswoman to be interviewed.

The CDC eventually tried to improve Trioplex's sensitivity.

On Sept. 21, 2016, the FDA approved a CDC-requested change to Trioplex, telling lab officials nationwide that they could try to boost its sensitivity by first extracting higher volumes of genetic material from samples of blood or urine. The samples would then be analyzed in the PCR machines.

But few of the labs had the specialized instruments necessary for the larger extractions, according to scientists familiar with the matter, including Busch, who had warned in April about Trioplex's sensitivity.

The CDC's modification of Trioplex, Busch said, "didn't really fix the problem."

Within days of the change to Trioplex, the CDC's request for emergency funding to counter Zika was granted: On Sept. 28, 2016, Congress passed a spending measure that included \$1.1 billion of the \$1.9 billion that Frieden had for months sought on the Obama administration's behalf. A total of \$394 million wound up going to the CDC.

Meanwhile, in a dynamic that would be repeated this year with the coronavirus, many state lab officials privately fumed over the CDC's handling of Trioplex, afraid to speak out because their operations depended on funding from the agency.

But in an extraordinary plea on Oct. 14, 2016, the presidents of three organizations representing government and commercial scientists urged the CDC to release data that would illuminate Trioplex's "performance characteristics." The presidents, PhD scientists Susan E. Sharp, Charles E. Hill and Alexandra Valsamakis, represented the American Society for Microbiology, the Association for Molecular Pathology and the Pan American Society for Clinical Virology, respectively.

<u>Their letter</u> noted that "comparative studies of the Trioplex and Singleplex . . . suggest that Trioplex is significantly less sensitive than the Singleplex assay."

"The lack of access to all data regarding test performance of these assays prevents laboratory professionals from making informed decisions about which test to adopt or recommend. Access to these data would provide transparency and allow for optimal patient care."

On Jan. 12, 2017, 10 months after the rollout of Trioplex, the CDC informed users of the test that they could discard the non-Zika components of Trioplex. This essentially reduced Trioplex to the original Singleplex test.

In the end, Zika did not inflict widespread harm within the United States.

Reported Zika infections — mostly among returned travelers — totaled 5,168 in 2016 before declining to 452 in 2017, 74 in 2018 and just 22 last year, according to CDC records and interviews.

Lanciotti retired in December 2018, after 29 years with the CDC.

This story has been updated to include comment from HHS.

Alice Crites contributed to this report.

3) Mr. Armstrong – CDC uses report

C.6 Potential CDC Use Cases for Data:

- 1. Implementation and cancellation of community mitigation measures and its impact on case and fatality
- 2. Impact of state limitations on close person-to-person contacts outside the household: comparing gathering density in 2019 and 2020.
- The effect of large-scale anti-contagion policies on the COVID-19 pandemic

 Analysis of bar and restaurant closure dataset compared to COVID-19 incidence and death rates
- Examination of volume of mobile phones grouped in proximity each month and compare 2019 to 2020 data to see the impact of these orders. Project how much worse things would have been without the bans.
- to see the impact of inese orders. Project now much worse unique when the control to the comparing a clearer picture of IHE openings on mobility and COVID-19 case incidence, e.g. comparing areas with and without college campuses before and after re-openings.

 7. Follow shifts in school decisions over time and its potential on student mobility and potential illness.

 8. Track patterns of those visiting K-12 schools by the school and compare to 2019; compare with epi metrics

- Hot spot detection counties with more mobile residents more likely to be detected as hotspot counties

 Prediction of hot spot counties due to influx of persons from nearby hot spots

- 10. Prediction of not spot counties and to minus of persons from nearby not spots

 11. Monitoring adherence to state-level policies to quarantie after arrival from another state

 12. Examination of the effectiveness of public policy on Navajo nation.

 13. Examination of COVID-19 vaccination rates, mobility, and incidence/seroprevalence/% positivity, etc. at the county or sub-county level (this could also be applied to flu and mask use).

 14. Examination of the correlation of mobility patterns data and rise in COVID-19 cases:

 a. Schools (K-12) opening/closing/re-opening

 b. Shelter in Place Orders
- - Schools (K-12) opening-rosmig/ro-opening
 Scheltre in Place Orders
 Social distancing measures (local/regional)
 Mass gatherings (Concerts, Games, Places of worship etc.)
 Public transit stations
 Major destinations (retail, grocery stores, parks etc.) correlated with COVID infection waves (2nd, and are a contraction of the contraction o
- f. Major destinations (retail, grocery stores, parks etc.) correlated with COVID infection waves (2nd, 3rd, etc.).

 Autional Shelter Data for disasters
 h. Movement restrictions (Border closures, inter-regional and nigh curfews) and patterns
 i. Movement restrictions (Border closures, inter-regional and nigh curfews) to show compliance

 15. Examination of mobility data for tracking school closures such as school bus routes and cell phone data around institutes of higher education around events like spring break.
 a. County, weekly number of visits to K to 12 schools as a dataset that could feed into other reports
 b. Compare with previous year as baseline
 c. Could help supplement the situation awareness data for K-12 and IHE

 16. Assess movement in and out of counties during periods of natural disasters to assist with planning and distribution of COVID resources to evacuation areas

 17. Research points of interest such as visits to pharmacies in a vaccine distribution plan or grocery stores

 18. Exposure to place-based environmental exposures, like places with high air pollution and area-level incidence of pollution-related outcomes like asthma

 19. Research points of interest for physical activity and chronic disease prevention such as visits to parks,

- incidence of pollution-related outcomes like asthma

 19. Research points of interest for physical activity and chronic disease prevention such as visits to parks, gyms, or weight management businesses

 20. Creation of user-defined queries and metrics of population mobility such as inferring mode of transport (e.g. walking, biking)

 21. Exposure to certain building types, urban areas, and violence.

C.5 IT Security and Privacy Considerations:

A. Baseline Security Requirements

4) Dr. Ruiz – Letter from Miller Meeks on CDC reform

April 5, 2023

To all Interested Parties,

I write today seeking your insights and perspective to inform Congressional efforts to reform and improve upon the Centers for Disease Control and Prevention (CDC). As our nation's preeminent public health agency, my constituents expected more of CDC during the COVID-19 pandemic and were thoroughly disappointed.

In place of clear, reasonable guidance backed by the best scientific evidence available at the time, my constituents were faced with confusing inconsistencies at best, and clear political bias at worst. Politics aside, there is a near collective recognition that the CDC failed to execute its primary mission of "protect[ing] America from health, safety and security threats" by "conduct[ing] critical science and provid[ing] health information that protects our nation against expensive and dangerous health threats, and respond[ing] when these arise." This included numerous core operational failures, as well as total lapses in reliable communication. The CDC's sprawling bureaucracy of siloed and uncoordinated administrative, academic, and disease, condition, or issue-specific programs was also put on full display. As a result, public trust and faith in our public health agencies and leaders has been decimated. To its credit, the CDC has also recognized the internal and external breakdowns and has started to begin down a path of reform through its own "Moving Forward" initiative. Unfortunately, I am concerned this will be insufficient to remedy the concerns of my constituents and the healthcare community.

I am seeking specific guidance, feedback, and information from stakeholders in the public and private sectors on how best to reform, improve, and authorize the CDC and its programs to rebuild trust and ensure the agency is nimble in addressing public health threats. My goal is to ensure a productive discussion and examination regarding the inadequacies and failures of the CDC's response to the COVID-19 pandemic and to better prevent, prepare for, and respond to future public health threats. My hope is that will serve as an opportunity for robust, honest, and comprehensive reflection, discussion, and action.

I thank you in advance for your time and consideration in sharing your specific thoughts, expertise, and perspective on these issues. Responses are due April 23, 2023. Please submit responses to at CDC.Reform@mail.house.gov. Most gratefully,

Mariannette Jane Miller-Meeks, M.D. Member of Congress

5) Ranking Member Castor – Fact Check Article from USA Today

"Fact check: Missing context in claim about emails, Fauci's position on masks"

The claim: An email from Dr. Anthony Fauci proves he knew masks were ineffective at mitigating the spread of COVID-19

More than a month before the World Health Organization labeled the COVID-19 outbreak a global pandemic, Dr. Anthony Fauci received an email asking whether the writer should wear a face mask while traveling.

"Masks are really for infected people to prevent them from spreading infection to people who are not infected rather than protecting uninfected people from acquiring infection," Fauci wrote back in a Feb. 5 message. "The typical mask you buy in the drug store is not really effective in keeping out virus, which is small enough to pass through the material."

The country's leading infectious disease expert went on to say he would not recommend the writer wear a mask during travel to a "very low risk location."

Fauci's response was among thousands of pages of emails released to media outlets under the Freedom of Information Act. Buzzfeed News and The Washington Post used the emails to paint a picture about the early days of the pandemic response, but some of the messages also have spread rapidly as misinformation on social media platforms.

Fact check: False claims about Fauci email 'leak' mischaracterize FIOA requests and release

More: How Dr. Anthony Fauci's private comments in newly released emails stack up with what he said in public Anthony Fauci Add Topic

6/7/23, 12:18 PM Fact check: Missing context in claim about mask emails, Fauci

For example, Fauci's response about masks has been held up as evidence that he knew early on that masks were ineffective. One commenter on a June 2 Instagram post wrote that Fauci "sat back and watched as we put face diapers on our children."

Different versions of the post have been shared thousands of times, but this line of thinking ignores the evolution of understanding about the effectiveness of masks and guidance about wearing them.

Responding to questions about the Feb. 5 email during a June 3 appearance on CNN, Fauci said his understanding changed as more information became available about asymptomatic transmission of the virus and the effectiveness of masks outside of hospitals.

"If we realized all of those things back then, of course, you're asking the question would you have done something different if you knew what you know now, of course people would have done that. It's so obvious," he said on CNN.

The Instagram user who shared the post on June 2 did not respond to a request for comment.

Evolving guidance

Fauci and public health agencies have updated their guidance on masks and other mitigation measures as scientists learned more about how COVID-19 works and spreads.

Public officials initially discouraged masks over fears of shortages for health care providers.

Fact check: No, email to Fauci doesn't contain origin of a 'coronavirus bioweapon'

Then-U.S. Surgeon General Dr. Jerome Adams tweeted in all caps on Feb. 29, 2020, that people should "STOP BUYING MASKS!" He said in the since-deleted tweet that masks were ineffective and widespread use could lead to shortages.

Fauci said during a March 8 interview on "60 Minutes" that "there's no reason to be walking around with a mask."

But on April 3, 2020, the Centers for Disease Control and Prevention began urging people to wear masks in public. That was nearly a month after the WHO labeled the COVID-19 outbreak as a pandemic.

Fauci's position changed, too. The same day the CDC released its new guidelines, Fauci said during an appearance on "Fox & Friends" people should wear masks when they can't social https://www.usatoday.com/story/news/factcheck/2021/06/03/fact-check-missing-context-claim-mask-emails-fauci/7531267002/ 2/4

6/7/23, 12:18 PM Fact check: Missing context in claim about mask emails, Fauci

distance.

Since then, Fauci has explained his recommendation on masks changed as more information became available about the way COVID-19 spreads and the effectiveness of masks outside of hospitals.

The WHO changed its mask recommendation in June 2020. In July 2020 the CDC said, "cloth face coverings are a critical tool in the fight against COVID-19 that could reduce the spread of the disease, particularly when used universally within communities."

Fact check: What's true and what's false about face masks?

In March, the CDC released new guidelines for people vaccinated against COVID-19. Those included guidance that vaccinated people could resume activities without wearing a mask.

Our ruling: Missingcontext

The claim that an email from Fauci proves he knew masks were ineffective at mitigating the spread of COVID-19 is MISSING CONTEXT, based on our research. Fauci sent the email on Feb. 5, 2020, more than a month before the World Health Organization declared COVID-19 a worldwide pandemic. The understanding about the effectiveness of masks and guidance about wearing them evolved during the pandemic, as did Fauci's position on their use.

Our fact-check sources:

The Washington Post, June 1, Anthony Fauci's pandemic emails: 'All is well despite some crazy people in this world'

Buzzfeed News, June 1, Anthony Fauci's Emails Reveal The Pressure That Fell On One Man

The Centers for Disease Control and Prevention, July 14, CDC calls on Americans to wear masks to prevent COVID-19 spread

The World Health Organization, June 5, WHO Director-General's opening remarks at the media briefing on COVID-19 - 5 June 2020

Forbes, Oct. 20, Is Trump Right That Fauci Discouraged Wearing Masks? Yes—But Early On And Not For Long The New York Times, April 27, How Mask Guidelines Have Evolved

YouTube, March 8, 2020, Dr. Anthony Fauci talks with Dr. Jon LaPook about Covid-19 CNN, June 3, Berman reads Dr. Fauci some of his released emails. Hear his response

https://www.usatoday.com/story/news/factcheck/2021/06/03/fact-check-missing-context-claim-mask-emails-fauci/7531267002/3/4

6/7/23, 12:18 PM Fact check: Missing context in claim about mask emails, Fauci https://www.usatoday.com/story/news/factcheck/2021/06/03/fact-check-missing-context-claim-mask-emails-fauci/7531267002/ 4/4 USA TODAY, Feb. 17, Fact check: Trump surgeon general initially dismissed mask-

wearing, but then endorsed

The New York Times, April 3, 2020, A Debate Over Masks Uncovers Deep White House Divisions

The World Health Organization, March 11, 2020, WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020

Fox News, April 3, 2020, White House coronavirus task force to announce face covering guidance

The Washington Post, July 24, Fauci on how his thinking has evolved on masks, asymptomatic transmission

The Centers for Disease Control and Prevention, accessed June 3, When You've Been Fully Vaccinated How to Protect Yourself and Others

Thank you for supporting our journalism. You can subscribe to our print edition, ad-free app or electronic newspaper replica here.

Our fact check work is supported in part by a grant from Facebook.

Additional Questions for the Record Mary Denigan-Macauley, PhD, Director of Public Health, U.S. Government Accountability Office

The Honorable Michael Burgess

- Ms. Denigan-Macauley, in your written testimony, you mentioned that the lack of clearly defined roles within our public health agencies lead to putting more communities at risk during the COVID-19 pandemic, specifically.
- Has this been a common theme you have seen throughout your analysis of different emergency health events?

The lack of clear roles and responsibilities within the Department of Health and Human Services (HHS) and between it and its key partners has been a longstanding concern that we have identified not just with the COVID-19 pandemic, but also during past events. For example, in August 2007, we reported that federal leadership roles and responsibilities, including HHS's, needed to be rigorously and robustly tested as they evolve to ensure clarity in how relationships should work during emergencies. We also reported that because initial actions may help limit the spread of a virus, such as influenza, the effective exercise of shared leadership roles and responsibilities could substantially shape the outcome of a pandemic.

The unprecedented scale of the COVID-19 pandemic, and the whole-of-nation response required to address it, highlight the critical importance of clearly defining the roles and responsibilities for the wide range of federal departments and other key partners involved when preparing for pandemics and addressing unforeseen emergencies. For example, in April 2021, we reported that when HHS helped repatriate U.S. citizens from abroad and quarantine them domestically at the beginning of the COVID-19 pandemic to prevent the spread of the virus, significant confusion ensued. As a result, HHS put repatriates, its own personnel, and nearby communities at risk due to a lack of clarity as to which HHS agency was in charge, including which HHS agency was responsible for managing infection prevention.

2. What are your suggestions to make our public health agencies' roles more clearly defined?

Regularly exercising preparedness plans with all response partners is a key practice. Response partners can include not only other federal agencies, but tribal, state, local, territorial and private sector, depending on the type of response. It allows all involved parties to practice operationalizing the plans to help identify any gaps in procedures or barriers to plan implementation so that these can be addressed and plans revised before an actual event occurs. For example, in April 2021, we recommended that HHS agencies—Administration for Strategic Preparedness and Response (ASPR), Centers for Disease Control and Prevention (CDC), and the Administration for Children and Families—revise or develop new plans that clarify agency roles and responsibilities during a pandemic, and regularly exercise these plans with key partners.

You also mentioned the limitations of ASPR, the Administration for Strategic Preparedness and Response, and its limited response activities.

3. What advantage would an increase of public-private partnerships within ASPR have to ensure advanced readiness for any future pandemic?

A whole-of-nation multidisciplinary approach to preparedness and response is essential. HHS partnership and engagement with nonfederal entities, including tribal, state, local, and territorial governments, and the private sector are key elements of this approach. It has the potential to enhance capacity and capabilities to help move more expediently during emergencies. Operation Warp Speed and HHS efforts to work with pharmaceutical companies to accelerate the development of COVID-19 therapeutics and vaccines are examples of federal collaboration with the private sector. In addition, with HHS support, groups of health care and response organizations—known as health care coalitions—partner to prepare health care systems to respond to emergencies and disasters in order to increase local and regional resilience. Given the many public and private entities that must come together to ensure community preparedness, HHS-supported health care coalitions serve an important mechanism for communicating and coordinating during emergencies and disasters.

While such partnerships can be beneficial, we found that HHS can be challenged incentivizing private sector involvement and maintaining a state of readiness. For example, we reported in February 2023 the reluctance of the private sector to get involved with medical countermeasure development and the subsequent challenges this resulted in during the COVID-19 pandemic. Specifically, we reported that one reason manufacturing sites in one program faced challenges reliably producing products during the pandemic was that they lacked regular manufacturing work leading up to pandemic, in part because they faced challenges attracting private sector partners. We concluded that, looking ahead, if HHS does not develop an effective program model for medical countermeasure development, it may not secure the private sector partnerships necessary to provide countermeasure surge manufacturing capacity and capability during future public health emergencies. We recommended that HHS systematically assess and respond to known challenges and future risks associated with advanced development and manufacturing of countermeasures. Such an approach should clearly document program risks, ensure that progress in addressing risks is tracked, estimate needed program resources, and communicate this information to key decision makers so that HHS is better prepared for future events. By implementing our recommendation, HHS would be better positioned to ensure advanced readiness of its partnership programs for future public health threats.

The Honorable Miller-Meeks

- During the Public Health Emergency, the CDC set up processes to ensure patient access to COVID vaccinations quickly following the recommendation by the Advisory Committee on Immunization Practices (ACIP).
 - a. Can the CDC also set up the appropriate strategy to ensure patient access isn't impeded for new vaccines by developing and implementing processes to allow for rapid publication of the MMWR shortly after ACIP votes and recommends a new vaccine? Publication in the MMWR occurred only hours after the ACIP recommendation but can otherwise take months. This coordination would be beneficial to ensure patients have access to new vaccines, especially those that have an epidemiological seasonality. It would directly support the implementation of the CDC's Moving Forward Project and Data Modernization Initiative (DMI) with one of the focuses being timeliness of policy guidance.

GAO response: ACIP recommendations are reviewed by the CDC Director, and if adopted, are published as official CDC recommendations in the Morbidity and Mortality Weekly Report (MMWR). However, our previous work on COVID-19 vaccinations has shown that CDC can adopt ACIP's recommendations prior to publication in the MMWR. In particular, our November 2021 report on COVID-19 Vaccine Distribution and Communication (https://www.gao.gov/products/gao-22-104457) includes a timeline of key events for COVID-19 vaccine implementation, with examples of when CDC adopted ACIP's recommendations before MMWR publication. For example, ACIP made recommendations for COVID-19 booster doses on October 21, 2021. On the same day, CDC adopted these recommendations and issued a public statement with information about them. The recommendations were later posted online as an MMWR Early Release on October 29, 2021 and published in the November 5 issue of the MMWR. See https://www.cdc.gov/mmwr/volumes/70/wr/mm7044e2.htm.

More recently, CDC has also followed this practice for other vaccines. For example, on June 27, 2023, the CDC Director reviewed and adopted ACIP's recommendations from its June 21-23 meeting, and these recommendations are now official, according to CDC's website (https://www.cdc.gov/vaccines/acip/recommendations.html). The website includes details on the

recommendations—which relate to RSV (Respiratory Syncytial Virus), Polio, Influenza, and Pneumococcal vaccines—and states (as of June 30) that they will be published in the MMWR in the coming months. In addition to sharing information on the website and through the MMWR, ACIP also includes non-voting representatives of liaison organizations, such as American Medical Association and the Association of State and Territorial Health Officials, who help to disseminate ACIP's recommendations to their membership (https://www.cdc.gov/vaccines/acip/members/index.html).

The Honorable Jan Schakowsky

- The U.S Government Accountability Office has done extensive work assessing COVID-19 in nursing home facilities. Since the start of the pandemic, over 200,000 residents and staff in long-term care facilities have died from COVID-19.
 - a. What recommendations has the Government Accountability Office made in response to this issue?

GAO Response: GAO has examined COVID-19 in nursing homes in multiple studies from 2020 through 2022 and made 11 recommendations. Please see the table below for an overview of these studies.

Table 1: Description of Selected GAO Reports on COVID-19 in Nursing Homes with Recommendations, September 2020 through September 2022

Date	Title	Recommendation	Status
September 2022	COVID-19 in Nursing Homes: CMS Needs to Continue to Strengthen Oversight of Infection Prevention and Control (GAO-22-105133)	The Administrator of the Centers for Medicare & Medicaid Services (CMS) should establish minimum infection preventionist training standards. (Recommendation 1)	Open.
		The Administrator of CMS should collect infection preventionist staffing data and use these data to determine whether the current infection preventionist staffing requirement is sufficient. (Recommendation 2)	Open.
		The Administrator of CMS should provide additional guidance in the State Operations Manual on making scope and severity determinations for infection prevention and control (IPC)-related deficiencies. (Recommendation 3)	Open.
July 2021	COVID-19: VA Should Assess Its Oversight of Infection Prevention and Control in Community Living Centers (GAO-21-559)	The Department of Veterans Affairs (VA) Under Secretary for Health should conduct a retrospective assessment of VA's oversight of infection prevention and control in Community Living Centers (CLC) during the COVID-19 pandemic to identify lessons learned and be better prepared for future infectious disease outbreaks. (Recommendation 1)	Closed – implemented.
June 2021	VA Health Care: Additional Data Needed to Inform the COVID- 19 Response in Community Living Centers (GAO-21-369r)	The VA Under Secretary for Health should compile and review facility-specific COVID-19 data on CLC staff cases and deaths on a regular basis to inform the agency's response to the pandemic or future infectious disease outbreaks. (Recommendation 1)	Open.
March 2021	COVID-19: Sustained Federal Action is Crucial as Pandemic Enters Its Second Year (GAO-21- 387)	The Secretary of the Department of Health and Human Services (HHS) should ensure that the Director of the Centers for Disease Control and Prevention (CDC) collects data specific to the COVID-19 vaccination rates in nursing homes and makes these data publicly available to better ensure transparency and that the necessary information is available to improve ongoing and future vaccination efforts for nursing home residents and staff. See Nursing Homes enclosure. (Recommendation 3)	Closed – implemented.
		The Secretary of HHS should ensure that the Administrator of CMS, in consultation with CDC, requires nursing homes to offer COVID-19 vaccinations to residents and staff and design and implement associated quality measures. See Nursing Homes enclosure. (Recommendation 4)	Open – partially addressed.
November 2020	COVID-19: Urgent Actions Needed to Better Ensure an Effective Federal Response (GAO-21-191)	The Administrator of CMS should quickly develop a plan that further details how the agency intends to respond to and implement, as appropriate, the 27 recommendations in the final report of the Coronavirus Commission on Safety and Quality in Nursing Homes, which the Centers for Medicare & Medicaid Services released on September 16, 2020. Such a plan should	Closed – implemented.

		include milestones that allow the agency to track and report on the status of each recommendation; identify actions taken and planned, including areas where CMS determined not to take action; and identify areas where the agency could coordinate with other federal and nonfederal entities. (Recommendation 2)	
		The VA Under Secretary for Health should develop a plan to ensure inspections of state veterans homes occur during the COVID-19 pandemic—which may include using in-person, a mix of virtual and in-person, or fully virtual inspections. (Recommendation 3)	Closed – implemented.
		The VA Under Secretary for Health should collect timely data on COVID-19 cases and deaths in each state veterans home, which may include using data already collected by CMS. (Recommendation 4)	Closed – implemented.
September 2020	COVID-19: Federal Efforts Could Be Strengthened by Timely and Concerted Actions (GAO-20-701)	The Secretary of HHS, in consultation with CMS and CDC, should develop a strategy to capture more complete data on confirmed COVID-19 cases and deaths in nursing homes retroactively back to January 1, 2020, and to clarify the extent to which nursing homes have reported data before May 8, 2020. To the extent feasible, this strategy to capture more complete data should incorporate information nursing homes previously reported to CDC or to state or local public health offices. (Recommendation 15)	Open.

Source: GAC

 $Note: The \ hyperlinks \ provide \ additional \ details \ about \ the \ report \ findings \ and \ recommendations.$

b. What else is needed to protect nursing home residents and staff?

GAO response: A growing body of work shows that the COVID-19 pandemic exposed and worsened longstanding infection control problems in nursing homes. As the nation moves forward, proper infection prevention and control procedures will remain critical to protecting residents against not only the threat of COVID-19, but also other infectious diseases. In April 2022, GAO convened a roundtable of infectious disease specialists, nursing home staff, advocates, and other experts to examine infection control practices in nursing homes. These experts identified 14 actions for the Department of Health and Human Services (HHS) to continue, enhance, or discontinue—some of which are consistent with GAO's prior recommendations, including developing solutions to ensure adequate staffing. HHS's continued leadership in prioritizing infection prevention and control—in coordination with other federal, state, and private entities—is critical to better protecting nursing home residents from the enduring risks of declining health and premature death posed by infections.



The Public Health Company Palo Alto, CA phc.health

August 16, 2023

To: United States House of Representatives Committee on Energy and Commerce Subcommittee on Oversight and Investigations Washington, DC 20515-6115

From: Dr. Charity Dean, MD, MPH & TM Chief Executive Officer The Public Health Company Group, Inc.

RE: Response to Request for Additional Questions for the Record

Dear Chairman Griffith, Representative Castor, and Representative Burgess,

Thank you for the opportunity to respond to follow-up questions posed by Representative Burgess regarding CDC's testing failures and the effectiveness of public-private partnerships to create testing infrastructure solutions during the COVID-19 pandemic.

From the front lines to the state lines, I've experienced our complex public health system testing capabilities first hand. As the Public Health Officer for Santa Barbara County, I had broad oversight and authority over public health policies and implementation. I also simultaneously served as the Medical Director for the Santa Barbara County Public Health Laboratory. In this role, I spent countless hours at the laboratory bench, personally examining cultures and slides. The study of such samples—i.e., testing—is critical because it provides the earliest warning of a public health threat within a community. In my subsequent roles as the California Department of Public Health Assistant Director and Acting State Health Officer, I interacted on a daily and often hourly basis with the State Public Health Laboratory as well as myriad local public health laboratories across a state of 40 million inhabitants. I am no stranger, in other words, to the macro-level complexities and micro-level necessities of massive public health testing.

The CDC's failure to develop and scale a COVID-19 testing regime in the early days of the pandemic was frustrating. It was also not surprising. The CDC is designed and incentivized to function as a peacetime research institution. It excels at scientific rigor and analysis, serving an important, albeit somewhat academic, function. But the CDC lacks wartime responsiveness: it is not capable of scaling biotechnology solutions to provide for the common biodefense in the face of imminent and massive public health threats. Its failure to implement a coherent testing regime in our recent hour of need is emblematic of this limitation.

By contrast, those of us experienced in local and state public health began preparing for alternative approaches to testing early on in the pandemic. What concerned me most regarding testing in the early days of COVID-19 was twofold: (1) without testing, we were flying blind, and had to implement broad measures rather than operate with surgical precision; and (2) the United States had to rely on *other countries* to tell us about the

novel pathogen, because we couldn't track or characterize it ourselves. These two factors intertwined and threatened our country's economic security and health security.

In March 2020 I was asked to co-found and co-lead the COVID-19 Testing Task Force for California, which was in partnership with the private sector. The biggest challenge in March 2020 was that nothing existed; we had no visibility into what machines, robots, supplies, and personnel could be leveraged. Our goal was to rapidly scale up diagnostic COVID-19 testing for all Californians by creating a unique public-private framework that would harness ingenuity and resources across government, academia, philanthropy, industry, and private citizen volunteers. Effectuating this mission required (1) identifying existing assets across varied stakeholders, (2) determining which such assets were fit for for our purpose, (3) actively seeking participation, (4) crafting a scalable, state-wide testing operation, and (5) tracking and publishing-on a daily basis—our progress against testing number goals. We leveraged public health laboratory capabilities, informal networks, and the goodwill of the private sector to solve the testing crisis in a matter of months. And, by leveraging these resources across public and private stakeholders, we accomplished the collective mission.

This effort succeeded not in spite of, but *because* of, the voluntary participation by thousands of decision-makers who absolutely wanted to participate in a collective public-private partnership response to a shared biological threat. To put it bluntly, the private sector ran to the fight; it enthusiastically leveraged resources, often at its own cost. I have personally been involved with numerous other public-private partnerships in the COVID-19 response since that time, which have also demonstrated the success of such an approach.

My experiences of the last three years, as well as my 24 years in public health, led me to conclude that a public-private testing infrastructure is critical to biosecurity. However, to be most effective and battle-ready, it must sit within a larger systems solution. I believe the contours of such a national-level biosecurity systems architecture would include the following guiding principles:

- Speed: Intelligence that goes viral faster than the virus and enables rapid operational activation within
 minutes or hours
- Scale: Situational awareness and operational response scaled across thousands of nodes in near realtime that empowers activation of an entire network or specific nodes in unified alignment with one another
- · Autonomy: Stand-alone, politically agnostic, not beholden to political interests at any level
- Whole-of-Society Response: Enables a whole-of-enterprise, whole-of-government, whole-of-society
 coordinated response, via networked intelligence and distributed operations
- Courage: Empowers leaders to make fast decisions amid uncertainty, when every minute matters. The
 systems architecture is designed to function amid the fog of war and not solely during peacetime
- Trust: Trust is the currency of public health. Fairly or unfairly, there is now an absence of trust by the
 American people in our government's ability to manage large-scale risks such as COVID-19. In
 developing and maintaining this solution, great care should be taken to earn Americans' trust by
 involving a diverse coalition in a public-private partnership effort

Outline of a National Biosecurity Systems Architecture

Intelligence Infrastructure

This intelligence infrastructure enables one shared reality, real-time situational awareness, and a coordinated scaled operational response from local to regional to national nodes. It provides this intelligence to all nodes in the network by coalescing disparate data streams, across diverse data, into one shared reality. Built upon a threat-agnostic architecture, every node contributes to and benefits from a multi-dimensional network effect. Pre-determined threat levels correlate with controls, decisions, and actions which are triggered automatically,

by design, by specific threat levels. This enables real-time threat characterization, shared visibility of threat levels and control activations implemented across a large geographic footprint. This intelligence infrastructure is analogous to the use of fire maps in firefighting, which reflect a threat perimeter, hot spots, forecasted spread based on wind patterns, and active containment efforts in play.

Operational Infrastructure

This operational infrastructure is a national biosecurity entity which does not need to be assembled amid a crisis, but rather is maintained during peacetime, and designed to activate scalable capabilities and controls during wartime. With federal leadership, it would build and maintain wartime public-private coalitions, capabilities, and controls that are practical, tactical, and fully operational. It would capitalize on public-private partnerships, escalate mutual aid to any node, activate medical countermeasures and their supply chains, coordinate a unified command for whole-of-society response, and balance public health requirements with practical and social issues. During an activation, it would choreograph the operational response across thousands of nodes and the whole of society, leveraging the intelligence infrastructure as a source of truth and shared visibility. An analogue to this is fire response. From city fire departments to county and state fire agencies, to the national forest service, there is much biosecurity can learn from their successful model. Firefighters developed the Incident Command System and continue to be one of my inspirations.

The Testing Infrastructure component of the larger infrastructure is critical. Unlike a fire we can see and smell, biological threats only become visible through microbiological testing. Without testing, we are blind. A baseline, national, scalable diagnostic testing infrastructure would be established and maintained, becoming a quietly humming machine during peacetime which can be operationally activated and scaled during wartime. The foundation of this testing infrastructure is public-private partnerships, as the commercial resources already exist within industry. This will require ongoing, base-level federal funding to enable the maintenance of industry-developed, commercial-grade capabilities because though they may be revenue generating for industry, market forces alone are unlikely to sustain this capability.

Given the national security importance of this infrastructure and participation across industry, academia, philanthropy, and the private sector, it should exist within a federal entity responsible for the larger operational infrastructure. That is to say, it should *not* be developed or maintained in any one federal department, including the CDC. When activated, these operational capabilities are critical to all federal agencies and bodies, and should be housed appropriately.

Diagnostic Testing Infrastructure

I am not in a position to comment on the ability to mandate participation in a peacetime/wartime testing infrastructure for entities that receive federal funding. However, a promising alternative (or parallel) approach exists, and in fact we have already used it during COVID-19: establishing voluntary opt-in participation across the vast ecosystem of bioresearch, life sciences industry, academic and philanthropic institutions, and government. This would create a visible, national network of assets and personnel which can be activated under specific operational responses. Instead of doing this on the fly in the midst of a crisis, as we did in March 2020, it would become a pre-existing and scalable "national guard" of testing capabilities. When activated, whether a regional or national activation, the laboratories and assets would be pre-validated for the right equipment and expertise.

A shared database of these assets would exist within the intelligence infrastructure, empowering the operational infrastructure to make fast decisions and escalate response in coordination across large geographies. Every colleague I have spoken with over the past three years would sign up again to participate in an approach like this. Indeed, they signed up in March 2020 amid total mayhem; the thought of an organized,

pre-planned "national guard" of peacetime/wartime testing infrastructure was met with enthusiasm. I believe there will be support among private-sector leadership to participate in providing for the national biodefense by opting in to this approach.

Pathogen Genomic-Clinical Characterization Infrastructure

A critical component of both biosecurity intelligence and operational response is the ability to characterize a novel pathogen in near real-time. The ability to test—to capture it—is not enough. We must be able to quickly study it, and answer key questions that inform how we contain and treat the disease. What is the attack rate, mode of transmission, incubation period, infectious period, Ro, case fatality rate, hospitalization rate? What demographics of Americans are at higher risk? What about children?

Key clinical and epidemiological questions can be quickly answered, even early on in an emerging biological threat, by combining pathogen genomic sequencing data with diagnostic testing data and clinical outcomes data. Instead of waiting for academic journals to publish retrospective studies, this platform would characterize the pathogen in near real-time and serve as a critical component of both the intelligence and operational infrastructure. Similar to diagnostic testing capabilities, it would be developed and maintained in peacetime by a public-private partnership including commercial-grade technology developed by industry. In peacetime, this pathogen genomic sequencing capability and data integration platform would continue to operate for known pathogens we contend with on a regular basis across the healthcare and public health ecosystems. In wartime, it scales up and is able to focus on characterizing a novel emerging pathogen. The output of this platform feeds back into our intelligence infrastructure, allowing shared visibility on what medical countermeasures (vaccines, prophylaxis, medications) are working in the field.

It is notable that industry has already begun building capabilities in this realm over the past few years, and they are now at risk of shutting down without ongoing sustainable funding. The cost of maintaining the equipment, processes, and personnel during peacetime is a fraction of the cost to acquire it during an emergency situation. Flipping a switch to activate capabilities is a fraction of the time it takes to build them from scratch. We learned these painful lessons during COVID-19 that both time and money are critical during an emergency.

Authority Infrastructure

The authority infrastructure of this solution includes the right decisional authority, at the right level, under the right conditions. In the current public health system in the United States, the layered jurisdictional authorities form a patch-work quilt of confusing and sometimes contradictory authorities as a relic from past centuries. Under a 21st century system, these authorities would be aligned around predetermined threat levels and a shared operational response.

As our democracy approaches its 250th birthday, I believe the United States is still capable of solving hard problems. We eliminated smallpox. And polio. We put a man on the moon and architected the interstate highway system. We stood up Homeland Security after 9/11. Surely we do not become shrinking violets in the face of a need for a national biosecurity architecture solution to provide for the common biodefense. I have dedicated my own life to building solutions, and am grateful for the opportunity to share my thoughts with this Committee.

Sincerely,

4

Charity Dean, MD, MPH & TM Chief Executive Officer & Board Chair The Public Health Company Group, Inc.

5



July 17, 2023

Dear Washington Chair Cathy McMorris Rodgers and Ranking Member Frank Pallone, Jr.,

Thank you so much for the opportunity to appear before the Subcommittee on Oversight and Investigations on Wednesday, June 7^{th} , 2023, at the hearing entitled, "Looking Back Before Moving Forward: Assessing CDC's Failures in Fulfilling its Mission."

Below you will find my responses to the questions sent to me June 29th, 2023.

Sincerely,

Tracy Hoeg

Tracy Beth Høeg, MD, PhD
Department of Epidemiology and Biostatistics, University of California-San Francisco
550 16th St 2nd floor, San Francisco, CA 94158
Telephone: (415) 476-2300

Email: tracy.hoeg@ucsf.edu

Responses to Congressional Questions From Tracy Beth Høeg, MD, PhD 7/12/2023

1. During the hearing, you mentioned that there was no correlation between opening schools

and an increase in community spread in Sweden. Is there any data on how many children who attended school in Sweden died due to COVID-19?

The most recent data from the Swedish Folkhälsomyndigheten estimate of deaths due to COVID-19 in children and young people ages 0-19 through June 5th of 2023 is 23.

I do not have data on whether these children were attending school however school is compulsory in Sweden for 10 years starting at age 6.

The link can be found here(https://www.socialstyrelsen.se/statistik-och-data/statistik/statistik-om-covid-19/)

The spreadsheet with the Swedish COVID-19 mortality data is available here:

https://docs.google.com/spreadsheets/d/1paQdbXSniVAGkDbcnbuYZCSqJ0u_w9Pr/edit#gid=18484990

"Antal avlidna i covid-19"= number dead from covid-19

a. If yes, is this data comparable to school aged children in the United States who died from COVID-19?

The best estimate we have comes from CDC Wonder data (1). This database is able to separate out deaths where COVID-19 is listed as the underlying cause of death. In other words, it can crudely differentiate deaths "from" rather than "with" COVID-19 based on the listed underlying cause of death on the death certificate. They list a total of 1476 deaths attributable to COVID-19 through June 17th, 2023 for 0-19-year-olds. This database relies on death certificates from NCHS (National Center for Health Statistics).

Looking at the 0–17-year age group (children only) there were **1124 deaths total** listed as having COVID-19 as "underlying cause of death" in the United States through June 17th, 2023.

302 of there were in infants < 1 year meaning there have been 822 total deaths in 1–17-year-olds. In summary:

Ages 0-17: 1124 deaths due to* COVID-19

1-17:822 deaths due to* COVID-19

*This is with the caveat that there is room for error in how death certificates are completed.

CDC Wonder estimated that for the 1476 0–19-year-olds had COVID-19 listed as the underlying cause of death. The numbers by age group and multiple vs underlying causes of death can be found here (compiled by Kelley Krohnert):

https://docs.google.com/spreadsheets/d/1gFgF AMYLEpwP6L KwA3S 3qDJ3dUxx5OReQVgKijmM/edit #gid=0

The age group of 0-19 was used for ease of comparison with Sweden. $\label{eq:comparison}$

For comparison with Sweden, there are about 2.2 million children in Sweden with 23 deaths and 74.4 million in the US and 1476 COVID-19 deaths for 0-19-year-olds is 64x higher than the # in Sweden for 0-

19-year-olds but Sweden is only 34x smaller in terms of population. The 1476 statistic is 64x what was reported in Sweden so our COVID-19 death rate was approximately 1.9-fold higher in the US than in Sweden. Thus, the US had almost a 2-fold higher COVID-19 death rate in 0–19-year-olds than Sweden based on the estimates above. It is unknown if this is due to differences in underlying health or reporting.

2. Does the United States have an accurate death count of deaths related to COVID-19? If so, what is the accurate number?

The estimate we have from the CDC Wonder dataset where COVID-19 is the underlying cause of death is **980,643** deaths through 6/17/2023 (https://wonder.cdc.gov/mcd-icd10-provisional.html)

There are 1,133,517 death certificates for all ages where COVID-19 is listed anywhere on the death certificate.

The 908,643 can be viewed as the number of deaths "from" COVID-19.

However, the use of CDC Wonder has some limitations because the causes of death have not been verified but are based on search term match with the listed underlying cause of death on the official death certificate.

The US could obtain a more accurate estimate of deaths due to COVID-19 by individually evaluating and validating death certificates as countries like Finland and Denmark have done. Denmark has a peer-reviewed publication (2) explaining their results.

Denmark found that 45% of their total COVID-19 deaths were "with" rather than "from" COVID-19 over the course of 2020-2022. Contrast this with the current US estimate based only on searching for COVID-19 as a term in the "underlying cause of death" on the death certificate where only 13% of total COVID-19 deaths were incidental. In 2022, incidental deaths rose to 75% in Denmark.

If we performed individual evaluation and validation of death certificates in the US were done, the current death count of 908,643 deaths might decrease substantially, perhaps by over 30% (45% of their deaths were incidental after their validation compared with 15% of our deaths being incidental before death certificate validation, so 45-15=30%) based on the data from Denmark described above (2).

a. If not, why do you think we do not have an accurate death count from COVID- 19?

See above.

3. Are there any studies that analyzed the transmission rate for teachers in Sweden when they kept their schools open? I am not aware of specific Swedish data about transmission to teachers, but a Correspondence (3) published in the *New England Journal of Medicine* explained a total of 20 school teachers in Sweden were treated in the intensive care unit (ICU) for COVID-19 with no deaths through June 30th 2020. School teachers were found to have a significantly lower relative risk of ICU admission compared with other occupations of 0.43 or 43% the risk (95% CI, 0.28-0.68).

Another peer-reviewed publication from Norway (4) looked at two counties (Oslo and Viken with 1.8 million inhabitants combined) where schools were fully open between the 28th of August and 11th of November 2020 and found only one teacher was infected in school. They looked at grade schools with children up to age 14 and clarified in the study "use of facemasks is not recommended in schools in Norway" (for children or adults).

a. Did the teachers get more infected on average than nonteachers?

To my knowledge, this particular question about infection rate has not been described but in terms of severe disease, I detailed above that in Sweden school teachers were less likely to have severe COVID-19 than other professions even with health care providers excluded (3).

Data from the United Kingdom (5) found regarding COVID-19 death rates that schoolteachers were at lower risk of death from COVID-19 than non-teachers of the same age and sex, specifically 41% lower for males and 42% lower for females.

Whether these teachers were infected in school or outside of school was not described.

4. Is there data on how many teachers died due to COVID-19?

The NCHS and CDC Wonder databases do not provide information on causes of death by occupation. To my knowledge, there is no reliable dataset with this information for the United States. Lists published online (6) using newspapers and social media accounts are of unknown validity if death certificates are not used.

It is also important to note that three large US studies looking at in-school transmission (from North Carolina (7), Wisconsin (8) and Utah (9)) in Fall of 2020 (with the Utah study extending through January of 2021), identified only **one** instance of school-associated transmission to a teacher/staff member in all three studies which included over 100,000 students and staff. These findings suggested together that, at least through January of 2021, teachers were substantially more likely to be infected outside of school than inside school. One of the studies published in the CDC's journal (8) found infections were over 25x more likely to occur outside of school than inside of school. In other words, the teachers who unfortunately did die were more likely to have caught COVID-19 in the community or at home than at school, at least through January of 2021.

References

- Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics System, Provisional Mortality on CDC WONDER Online Database. Data are from the final Multiple Cause of Death Files, 2018-2021, and from provisional data for years 2022-2023, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/mcd-icd10-provisional.html on Jul 11, 2023 7:44:44 PM
- Friis NU, Martin-Bertelsen T, Pedersen RK, Nielsen J, Krause TG, Andreasen V, Vestergaard LS. COVID-19 mortality attenuated during widespread Omicron transmission, Denmark, 2020 to 2022. Euro Surveill. 2023 Jan;28(3):2200547. doi: 10.2807/1560-7917.ES.2023.28.3.2200547. PMID: 36695485; PMCID: PMC9853946
- Ludvigsson JF, Engerström L, Nordenhäll C, Larsson E. Open Schools, Covid-19, and Child and Teacher Morbidity in Sweden. N Engl J Med. 2021 Feb 18;384(7):669-671. doi: 10.1056/NEJMc2026670. Epub 2021 Jan 6. PMID: 33406327; PMCID: PMC7821981.
- Brandal LT, Ofitserova TS, Meijerink H, Rykkvin R, Lund HM, Hungnes O, Greve-Isdahl M, Bragstad K, Nygård K, Winje BA. Minimal transmission of SARS-CoV-2 from paediatric COVID-19 cases in primary schools, Norway, August to November 2020. Euro Surveill. 2021 Jan;26(1):2002011. doi: 10.2807/1560-7917.ES.2020.26.1.2002011. PMID: 33413743; PMCID: PMC7791599.
- Office of National Statistics. Teacher Deaths from COVID-19 by age and gender from September 2020 to January 2021. Published February 8th, 2021. https://www.ons.gov.uk/aboutus/transparencyandgovernance/freedomofinformationfoi/teacherdeathsfromcovid19byeageandgenderfromseptember2020tojanuary2021
- Mawell L. Over 1000 educators died from Covid. Here's the story of one. Published December 19th 2022. https://www.edweek.org/teaching-learning/over-1-000-educators-died-from-covid-heres-the-story-of-one/2022/12
- Zimmerman KO, Akinboyo IC, Brookhart MA, Boutzoukas AE, McGann KA, Smith MJ, Maradiaga Panayotti G, Armstrong SC, Bristow H, Parker D, Zadrozny S, Weber DJ, Benjamin DK Jr; ABC SCIENCE COLLABORATIVE. Incidence and Secondary Transmission of SARS-CoV-2 Infections in Schools. Pediatrics. 2021 Apr;147(4):e2020048090. doi: 10.1542/peds.2020-048090. Epub 2021 Jan 8. PMID: 33419869; PMCID: PMC8015158.
- Falk A, Benda A, Falk P, Steffen S, Wallace Z, Høeg TB. COVID-19 Cases and Transmission in 17 K– 12 Schools — Wood County, Wisconsin, August 31–November 29, 2020. MMWR Morb Mortal Wkly Rep 2021;70:136–140. DOI: http://dx.doi.org/10.15585/mmwr.mm7004e3.
- Hershow RB, Wu K, Lewis NM, et al. Low SARS-CoV-2 Transmission in Elementary Schools Salt Lake County, Utah, December 3, 2020–January 31, 2021. MMWR Morb Mortal Wkly Rep 2021;70:442–448.



July 13, 2023

The Honorable Morgan Griffith Chair Subcommittee on Oversight and Investigations House Energy and Commerce Committee Washington, DC 20515 The Honorable Kathy Castor Ranking Member Subcommittee on Oversight and Investigations House Energy and Commerce Committee Washington, DC 20515

Dear Chair Griffith and Ranking Member Castor:

Thank you again for the opportunity to participate in the June 7 hearing before the Subcommittee on Oversight and Investigations entitled, "Looking Back Before Moving Forward: Assessing CDC's Failures in Fulfilling its Mission Safety."

I am pleased to provide my response to Rep. Schakowsky's question for the hearing record. In addition, I would like to reiterate my strong support for CDC and to encourage Congress to address the areas I outlined in my testimony that APHA believes are critical to strengthening and improving CDC and our state and local health department efforts to protect the public from the many health threats we face as a nation.

I look forward to working with you and other members of Congress to ensure we move in a positive direction to improve our nation's public health infrastructure.

Below is my response to Rep. Schakowsky's question:

Question:

In my home state of Illinois, 46% of all COVID-19 related deaths occurred in long-term care facilities in 2020. The CDC issued guidance for infection prevention and control training for nursing home personnel. Yet, little is known on how this guidance was communicated nor implemented across local and State levels.

What recommendations does the American Public Health Association have to successfully implement and disseminate COVID-19 guidance?

APHA response:

It would be helpful to study how the various levels of guidance are produced and disseminated. It would also be helpful to better understand what health practitioners actually do with this guidance and what dissemination methods give the best results. In general, we do know that CDC gives public health education and clinical guidance over a broad range of health issues. This guidance includes administrative, procedural and clinical advice on how to manage specific diseases as well as broader health threats. They create this guidance using the best medical and scientific knowledge available. In most cases the guidance is routine and consistent with well-established health and medical knowledge

and practice. In this situation CDC is ensuring practitioners and health administrators have the most up up-to to-date guidance by dissemination of state-of-the-art knowledge. CDC uses dissemination tools including the Health Alert Network, press releases, fact sheets, social media and its web site. It has strong partnerships with state, local and territorial and tribal governmental public health agencies as well as private sector health care, long long-term care and nonprofit organizations to assist with its dissemination efforts.

In some cases where a disease is uncommon, rare or new, the broad health practice and administrative community may not be as knowledgeable about the disease management. In this case CDC serves a vital role of consolidating and disseminating their consensus of the best practice to address the threat as it is understood at that time. During the COVID-19 pandemic several situations occurred where the scientific understanding evolved over time or was unclear and decisions needed to be made on the best preventive nonpharmacological interventions (e.g., masking, social distancing, handwashing), clinical and therapeutics (vaccination frequency, use of antivirals and monoclonal antibodies, etc.) and programmatic approach (infection prevention and control training, etc.). Some of this complex decision making occurred via a public process - the best example is vaccine recommendations which benefited from the FDAs public process via their advisory committee followed by the CDC public process via the ACIP.

Recommendation: Developing new skills and practices under emergency conditions is exceedingly difficult and burdensome. Best practice is to have continuous training of all appropriate personnel in health settings to ensure people can perform in an emergency. Just in time refresher training can be used to augment competency but it is always best to have the basic knowledge in place before it is needed. Ensuring this training is occurring is the responsibility of the organizational board and management with oversight by the state regulatory agency, national accrediting bodies and CMS. CDC can also play a role in ensuring it is providing timely guidance over time and in emergency situations.

Much of the routine clinical guidance for established practice does not require a more elaborate process and the dissemination process is adequate, however, there is an opportunity to improve transparency for new, emerging or complex guidance through a more public process. For example, having a public process utilizing one of CDC's existing advisory bodies to publicly discuss and debate masking guidance would have allowed for more transparency and increased understanding into the decision-making process that goes into these kinds of recommendations. Recognizing that in emergency conditions timely guidance is essential a pre-established authority and a group of experts needs to be empowered to do this. This process could utilize the current CDC director's advisory committee or similarly charted group.

Thank you again for the opportunity to testify before the subcommittee.

Sincerely.

Georges C. Benjamin, MD Executive Director

0