



Enhancing the Resilience of Healthcare and Public Health Critical Infrastructure

A Workshop

AGENDA

Day 1: December 9, 2024 | 9:00 AM – 5:30 PM ET

Day 2: December 10, 2024 | 9:00 AM – 3:00 PM ET

BACKGROUND

When disaster strikes, critical infrastructure failures—from loss of power and water to failures of IT infrastructure and systems—can follow. Strengthening the resilience of healthcare and public health (HPH) critical infrastructure requires ongoing investment, innovation, and collaboration across all levels of government, the private sector, and civil society during steady state, and response, and recovery phases. HPH infrastructure, technology, and operations are rapidly changing and are increasingly interdependent and interconnected. Threats to the nation's critical social and physical infrastructure systems are also rapidly evolving and highly complex, posing potentially new or growing risks of disruption and challenging the assumptions used to design and protect these systems.

WORKSHOP OBJECTIVES

The National Academies [Forum on Medical and Public Health Preparedness for Disasters and Emergencies](#) has organized this workshop **to examine strategies, policies, and innovative actions to improve the resilience of HPH critical infrastructure to impacts from disasters and other emergencies.** Speakers and attendees will:

- Explore the evolution of the HPH critical infrastructure sector from infrastructure, technology, and operational perspectives.
- Assess the evolving threat landscape, including emerging risks and vulnerabilities specific to HPH critical infrastructure including the built environment, water and wastewater, energy, IT and communications, supply chain, and workforce.
- Evaluate strategies to enhance resilience, including risk reduction and mitigation strategies needed to address the changing infrastructure and threat landscapes.
- Define the characteristics of a resilient HPH critical infrastructure sector and outline the steps necessary to achieve this resilience.

MONDAY, DECEMBER 9, 2024

SESSION 1 Welcome Remarks and Fireside Chat

Catered breakfast provided at 8:30 a.m. ET

9:00 AM Welcome and Opening Remarks from the Workshop Chair (10 min)

Paul Biddinger, *Workshop Planning Committee Chair*
Chief Preparedness and Continuity Officer
Mass General Brigham

9:10 AM Welcome and Opening Remarks from the Co-Chairs of the Forum on Medical and Public Health Preparedness for Disasters and Emergencies (5 min)

Asha M. George
Executive Director
Bipartisan Commission on Biodefense

W. Craig Vanderwagen
Co-Founder and Director
East West Protection, LLC

9:15 AM Fireside Chat (60 min)

MODERATOR

Paul Biddinger, *Workshop Planning Committee Chair*
Chief Preparedness and Continuity Officer
Mass General Brigham

PANELISTS

Nathan Weed
Chief of Resiliency and Health Security
Washington State Department of Health

Peggy Duggan
Executive Vice President
Chief Physician Executive
Chief Medical Officer
Tampa General Hospital

Julie Hiromoto
Partner and Director of Integration
HKS

10:15 AM Break (15 min)

SESSION 2 Exploring How an Evolving Risk Landscape Necessitates an Evolved Response

This session will level-set the workshop by summarizing the U.S. HPH critical infrastructure landscape, reviewing past and current performances, and anticipating future threats.

10:30 AM Understanding Past and Current Performances (60 min)

MODERATOR

Andrew Pickett, *Planning Committee Member*

Director

Bureau of Emergency Preparedness and Response

Pennsylvania Department of Health

PANELISTS

TJ Christl

Director

Office of Critical Infrastructure Protection

Administration for Strategic Preparedness and Response (ASPR)

Melissa Harvey

Assistant Vice President for Enterprise Emergency Operations

HCA Healthcare

Theresa Cullen, *virtual*

Director

Pima County Health Department

11:30 AM Assessing Future Threats (60 min)

MODERATOR

Mahshid Abir, *Planning Committee Member*

Senior Physician Policy Researcher

RAND

PANELISTS

Trent Frazier

Assistant Director for Stakeholder Engagement

Cybersecurity and Infrastructure Security Agency (CISA)

Chas Eby

Deputy Secretary

Maryland Department of Emergency Management

Jeff Butler

Regional Emergency Management Officer

Illinois & Maryland

Medxcel

12:30 PM Catered Lunch (45 min)

SESSION 3 Examining High-Priority Vulnerabilities and Strategies for Resilience: Built Environment, Water and Wastewater, Energy

This session will examine HPH critical infrastructure including the built environment, water and wastewater, and energy. Panelists will summarize challenges, risks, and vulnerabilities; discuss practical, high-priority actions to enhance resilience, including strategies, models, regulatory mechanisms, policies, systems, partnerships, and incentives that could be leveraged; and review the state of emergent and critical opportunities.

1:15 PM Built Environment (60 min)

MODERATOR

Kirk R. Pawlowski, *Planning Committee Member*

Executive Director (Ret.)

Educational Service 112's Pacific Northwest Regional Construction Services Group

PANELISTS

William R. (Bill) Seed

Senior Vice President, Facilities Design and Construction

Jackson Health Systems

Therese P. McAllister, *virtual*

Deputy Chief of the Materials and Structural Systems Division

Community Resilience

National Institute of Standards and Technology (NIST)

Amber Wirth

Vice President and Director of Sustainability

HKS

2:15 PM Water and Wastewater (60 min)

MODERATOR

Kirk R. Pawlowski, *Planning Committee Member*

Executive Director (Ret.)

Educational Service 112's Pacific Northwest Regional Construction Services Group

PANELISTS

RADM (Ret.) Gary J. Hartz

Former Assistant Surgeon General

U.S. Public Health Service Commissioned Corps

Jake Marshall

Program Manager | Continuity of Operations

Special Operations Division

National Transportation Safety Board (NTSB)

water and transportation sector perspective

Chrissy Dangel, *virtual*
Environmental Scientist
Office of Water (OW)
Office of Ground Water and Drinking Water (OGWDW)
Water Infrastructure and Cyber Resilience Division (WICRD)
U.S. Environmental Protection Agency (EPA)

Joshua Corman, *virtual*
Executive in Residence for Public Safety & Resilience
Institute for Security and Technology (IST)

3:15 PM **Break (15 min)**

3:30 PM **Energy (60 min)**

MODERATOR

Get Moy, *Planning Committee Member*
Vice President and Senior Program Director for Federal Projects
AECOM

PANELISTS

Scott Aaronson
Senior Vice President, Security and Preparedness
Edison Electric Institute

Christopher Riccardi
Manager
Emergency Management & Business Continuity
Children's Health of Orange County (CHOC)

Patrick Murphy
Senior Scientist
PSE Healthy Energy

SESSION 4 Day 1 Roundtable

This roundtable will explore social components that support HPH critical infrastructure. Discussants will explore workforce, leadership, community, and equity considerations with the goal of building social resilience within the HPH critical infrastructure ecosystem.

4:30 PM **Social Infrastructure: Workforce, Leadership, and Culture (45 min)**

MODERATOR

Herminia Palacio, *Planning Committee Member*
President
NexusBridge Strategies, LLC

PANELISTS

Kelli Nations
American Group Chief Nurse Executive
HCA Healthcare

J.P. Leider

Associate Professor, Division of Health Policy and Management
Director, Center for Public Health Systems
University of Minnesota School of Public Health
PI, Public Health Workforce Research Center
Consortium for Workforce Research in Public Health (CWORPH)

Henry A. Garrido, virtual

Executive Director
NYC District Council 37, The American Federation of State, County and Municipal
Employees (AFSCME)

SESSION 5 Day 1 Closing

5:15 PM Day 1 Closing Remarks (15 min)

Paul Biddinger, Workshop Planning Committee Chair
Chief Preparedness and Continuity Officer
Mass General Brigham

5:30 PM Adjourn Day 1

*****Networking reception to be held for those attending in person*****

TUESDAY, DECEMBER 10, 2024

SESSION 6 DAY 2 OPENING SESSION

*****Catered breakfast provided at 8:30 a.m. ET*****

9:00 AM Welcome Remarks and Day 1 Recap

Paul Biddinger, Workshop Planning Committee Chair
Chief Preparedness and Continuity Officer
Mass General Brigham

SESSION 7 Examining High-Priority Vulnerabilities and Strategies for Resilience: IT Systems, Communications Systems, and Supply Chain

This session will examine HPH critical infrastructure including information technology (IT) systems, communications systems, and supply chain. Panelists will summarize challenges, risks, and vulnerabilities; discuss practical, high-priority actions to enhance resilience, including strategies, models, regulatory mechanisms, policies, systems, partnerships, and incentives that could be leveraged; and review the state of emergent and critical opportunities.

9:15 AM **IT Systems (60 min)**

MODERATOR

William Yurcik, *Planning Committee Member*
Federal Lead for Cybersecurity Threat Intelligence
CMS Medicare Headquarters

PANELISTS

Natalie Sullivan
MFA Site Director, DC VAMC ED
Asst Program Director, GW Disaster and Operational Medicine Fellowship
Assistant Professor, Emergency Medicine
George Washington University Hospital

Raj Ratwani
Vice President of Scientific Affairs, MedStar Health Research Institute
Director, MedStar Health National Center for Human Factors in Healthcare
Professor, Georgetown University School of Medicine

Gregory Pluta
Director of External Partnerships
Computer Science Department
University of Illinois at Urbana-Champaign

10:15 AM **Break (15 min)**

10:30 AM **Communications Systems (60 min)**

MODERATOR

Andrew Pickett, *Planning Committee Member*
Director
Bureau of Emergency Preparedness and Response
Pennsylvania Department of Health

PANELISTS

Sean Kice, *virtual*
Deputy Director | Emergency Services Coordinator
Emergency Preparedness Program
Tennessee Department of Health

Marcie Roth
Executive Director and Chief Executive Officer
World Institute on Disability

Cathy Junda
Principal and Digital Health Lead
Stantec

Kathryn Condello

Adjunct Professor, University of New Hampshire Cybersecurity Policy & Risk Management (CPRM) Program

Vice Chair, Communications Sector Coordinating Council

Senior Director, National Security/Emergency Preparedness, Lumen

11:30 AM Supply Chain (60 min)

MODERATOR

Nicolette A. Louissaint, *Planning Committee Member*

Senior Vice President for Policy and Strategic Planning

Healthcare Distribution Alliance

PANELISTS

Brooke Courtney

Senior Regulatory Counsel

Office of Counterterrorism and Emerging Threats (OCET)

Office of the Commissioner

U.S. Food and Drug Administration (FDA)

Anita Patel, *virtual*

Vice President Pharmacy Services Development

Walgreens

Wayland Coker

Chief Supply Chain Strategist

Director, Office of Supply Chain Optimization (SCO)

Center for Industrial Base Management & Supply Chain (IBMSC)

Administration for Strategic Preparedness and Response (ASPR)

12:30 PM Catered Lunch (60 min)

SESSION 8 Day 2 Roundtable

This roundtable will re-envision how the HPH critical infrastructure sector can be more resilient and prepared for 21st century threats. Discussants will explore how disaster resilience can become an integral element of strategic governance of our healthcare, life sciences research, and public health institutions including human resources, financial resources (capital and operating), and continuing education and training; identify key stakeholders to advance solutions and examine relevant roles and responsibilities; and explore how to ensure capabilities and resources are utilized in an equitable manner to support underserved populations.

1:30 PM Re-Envisioning a Resilient HPH Critical Infrastructure Sector (60 Min)

MODERATOR

Paul Biddinger, *Workshop Planning Committee Chair*

Chief Preparedness and Continuity Officer

Mass General Brigham

PANELISTS

Cole Roberts

Principle, Energy & Sustainability
ARUP

O. Sami Saydjari

Research Scientist, Analyst, and Engineer
Department of Computer Science
Dartmouth College

Mark Jarrett, *virtual*

Senior Health Advisor, Northwell Health
Professor of Medicine, Donald and Barbara Zucker School of
Medicine at Hofstra/Northwell
Chair, U.S. Healthcare and Public Health Sector Coordinating
Council

Monique K. Mansoura

Executive Director, Global Health Security and Biotechnology
The MITRE Corporation

SESSION 9 Workshop Closing

2:30 PM **Closing Remarks from the Co-Chairs of the Forum on Medical and Public Health Preparedness for Disasters and Emergencies (15 min)**

Asha M. George

Executive Director
Bipartisan Commission on Biodefense

W. Craig Vanderwagen

Co-Founder and Director
East West Protection, LLC

2:45 PM **Closing Remarks from the Workshop Chair (15 min)**

Paul Biddinger, *Workshop Planning Committee Chair*

Chief Preparedness and Continuity Officer
Mass General Brigham

3:00 PM **End Workshop**

****WORKSHOP ENDS****