

# WS405

DEALING WITH DISASTERS FAST AND SLOW: HEALTH SYSTEM RESILIENCE FOR COVID-19 AND CLIMATE CHANGE

### | BACKGROUND

The COVID-19 crisis has demonstrated that many Health Systems around the world are poorly prepared for the cooccurrence of acute and chronic stressors. What will it take to enhance the resilience of health systems?

One critical step will be to make better use of data and information on environmental drivers of health at a variety of time scales, from the immediate time scales required to manage increasingly severe extreme events, to the decadal time scale required to understand potential changes in diseases and other health threats related to climate change. Health systems need to have situational awareness of multiple co-occuring disasters, including weather-related disasters, while at the same time require improved anticipation of emerging risks and future stressors, like zoonotic disease spillover and food or water insecurity.

In addition to weather and climate data, climate resilient health systems will need to incorporate data on land use and land cover, demographics and migration, agricultural systems and nutrition, etc. Effective use of data on weather, climate and other environmental drivers will require enhanced collaboration between the various related scientific communities to improve mutual understanding of requirements and build capacity in all sectors. Moreover, the development of successful public health resilience will be aided by implementation and evaluative research analyzing the effectiveness of early warning systems and risk reductions measures.

### | OBJECTIVES

Participants in this webinar will be able to:

- Describe how health systems have dealt with co-occurrence of COVID -19 pandemic and climate-related disasters
- Identify key steps in operationalizing the WHO framework on Climate Resilient Health Systems
- Describe global efforts to enhance cooperation between health and hydrometeorological services and the provision of meteorological and climate services for health
- Describe approaches to developing rapid research responses to disasters



#### Panelist

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Dr. Aubrey K. Miller, MD, MPH, retired Captain USPHS, is board certified in Occupational and Environmental Medicine. He is currently the Senior Medical Advisor to the Director of the National Institute of Environmental Health Sciences (NIEHS), where he oversees legislative, policy, strategic planning, and coordination of environmental health issues and activities among U.S. federal agencies, congress, academia, and other stakeholders.

His experiences include numerous public health investigations and research studies involving a wide range of occupational and environmental health issues. He has contributed to the leadership and management of numerous disaster responses including the Libby, Montana, Public Health Emergency involving widespread asbestos contamination, major hurricanes, the H1N1 influenza, Ebola, and Zika outbreaks, the World Trade Center and anthrax attacks, and the Gulf Oil Spill. He currently leads the NIH Public Health Emergency and Disaster Research Response (DR2) Program which focuses on improving national and international disaster research capabilities through enhancing policies, infrastructure, training, and integration of stakeholders, especially academia and impacted communities. The DR2 Program currently serves as a repository for survey instruments for the National Institutes of Health COVID-19 research response efforts. He received a BS in biology, BA in political science, and MPH in environmental and occupational health at the University of Illinois, and his MD at Rush Medical College. His 29+ year career includes service as a CDC Epidemiology Intelligence Service (EIS) officer and senior medical officer positions with CDC/NIOSH, the HHS Office of the Secretary, EPA, and FDA.