

Best Practices in Assessing Mortality and Significant Morbidity Following Large-Scale Disasters

Committee

Ellen J. MacKenzie

Chair

Ellen J. MacKenzie, Ph.D., ScM, is the 11th dean of the Johns Hopkins Bloomberg School of Public Health. An expert on improving trauma care systems and policy, a nationally renowned researcher and a respected academic leader, MacKenzie brings wide experience to her role as dean. After earning graduate degrees from the Bloomberg School, MacKenzie joined the School's Health Policy and Management faculty in 1980, with a joint appointment in the Department of Biostatistics. A Bloomberg Distinguished Professor, she holds faculty appointments in the School of Medicine's departments of Orthopaedic Surgery, Emergency Medicine and Physical Medicine and Rehabilitation. In 2018, she was elected to the National Academy of Medicine. MacKenzie founded and leads the Major Extremity Trauma Research Consortium, a collaboration of more than 50 U.S. trauma centers and military treatment facilities. A former director of the Johns Hopkins Center for Injury Research and Policy, she has shaped the field of trauma services and outcomes research, leading to improved quality of life for trauma survivors. As a professor, department chair and senior associate dean for academic affairs at the Bloomberg School, MacKenzie has distinguished herself as an inspired leader. As HPM chair, MacKenzie enhanced practice as a part of the department's mission, established a faculty development program that has served as a model for other departments and facilitated the development of a core curriculum in policy. She also helped establish the DrPH cohort programs in Taiwan, Abu Dhabi, the Pacific Rim, UAE and China.

Sue Anne Bell

Member

Sue Anne Bell, Ph.D., FNP-BC, NDHP-BC is a nurse scientist with expertise in disaster response and emergency care. Her program of research examines the health effects of disasters and the impact of climate change on human health within a health equity framework. She is particularly interested in the long-term impact of disasters on human's health, in developing policy that protects and promotes health throughout the disaster management cycle, and in the relationship between community resilience, health disparities and disasters. She is clinically active in disaster response through the U.S. Department of Health and Human Service's National Disaster Medical System with recent deployments to Hurricane Irma, Hurricane Maria and the California wildfires.

H. Russell Bernard

Member

H. Russell Bernard, Ph.D., is a cultural anthropologist specializing in technology and social change; language death; and social network analysis. He is a research professor in the ASU School of Human Evolution and Social Change, the director of ASU's Institute for Social Science Research and an Emeritus Professor of the University of Florida. Bernard has taught or done research at universities in the U.S., Greece, Japan and Germany. Since 1987, he has participated in National Science Foundation-sponsored summer courses on research methods and design. He is former editor of *Human Organization* and the *American Anthropologist* and is the current editor of *Field Methods*. Bernard's books include "Research Methods in Anthropology: Qualitative and Quantitative Approaches;" "Social Research Methods;" "Analyzing Qualitative Data: Systematic Approaches," with Gery Ryan; and "Native Ethnography," with Jesús Salinas Pedraza. Bernard was the 2003 recipient of the Franz Boas Award from the American Anthropological Association and is a member of the National Academy of Sciences.

Aram Dobalian

Member

Aram Dobalian, PhD, JD, MPH is Professor and Director of the Division of Health Systems Management and Policy. His research and consulting focus on access and quality of care during disasters and other crises, including work on community health resilience, crisis leadership, inpatient and outpatient quality metrics, healthcare facility evacuation, information technology in disasters, disaster behavioral health, and workforce readiness. He is a member of the "Standing Committee on Medical and Public Health Research During Large-Scale Emergency Events" of the National Academies of Sciences, Engineering, and Medicine. Dr. Dobalian led the development of the first U.S. Department of Veterans Affairs (VA) Comprehensive Emergency Management Program Evaluation and Research agenda in 2007-08. In 2010, he became the Founding Director of the Veterans Emergency Management Evaluation Center (VEMEC), the only national research center focused on VA's emergency management responsibilities - to ensure timely access to high-quality care for veterans during crises, and to improve the Nation's health preparedness for response to national emergencies, natural disasters, and terrorism. Dr. Dobalian has also examined end of life decision making and resource use in nursing homes, the role of pain in healthcare utilization, nursing home malpractice, the Nationwide Health Information Network Trial Implementation, veteran reintegration into civilian life, IRB quality, and nursing education. He led the national program evaluation of the VA Nursing Academy (VANA), a 5-year program consisting of 15 partnerships between VA hospitals and nursing schools. VANA, now named the Enhancing Academic Partnerships Program, promotes innovations in clinical nursing education and practice. He has taught classes on the U.S. healthcare system, health law, health policy, and health ethics, and is a member of the State Bar of California.

Marcella F. Fierro

Member

Marcella F. Fierro, M.D., F.C.A.P., is the retired Chief Medical Examiner of the Commonwealth of Virginia. Recognized as a pre-eminent authority on forensic pathology, she consults to local governments, Federal, State, and local law enforcement agencies, and private individuals.

Elizabeth Frankenberg

Member

Elizabeth Frankenberg, Ph.D., is the Director of the Carolina Population Center. Dr. Frankenberg's research focuses on individual and family response to change and the role of community, broadly construed, in individual behaviors and outcomes. In addition to these substantive interests, two cross-cutting themes are inherent in her research: health status as a critical dimension of well-being and the close integration of methods and data. She has invested heavily in developing and implementing innovative and ambitious designs for data collection to support her own research and that of the scientific and policy communities more broadly. These investments center on three projects: the Indonesia Family Life Survey (IFLS), The Worker Iron Status Evaluation (WISE), and the Study of the Tsunami Aftermath and Recovery (STAR). The STAR project, which assesses the social, economic, demographic, and health impacts of the December 26, 2004 earthquake and tsunami in Indonesia, has been hailed as the strongest large-scale study ever done to measure population-level response to a disaster over a long period of time. Dr. Frankenberg's connection to Indonesia dates back to her days as a geography major at UNC, where she received her Bachelor's degree. She spent the summer before her senior year in Indonesia collecting data for her honors thesis on transmigration. She went on to complete an M.P.A. in Public Affairs from Princeton University, and a PhD in Sociology and Demography from the University of Pennsylvania, where her doctoral dissertation focused on infant and childhood mortality in Indonesia. She has held social science staff positions at RAND, faculty appointments in the Departments of Sociology and Community Health Sciences at UCLA, and faculty appointments in the Sanford School of Public Policy and in Sociology at Duke.

Dr. Frankenberg has played a central role in the population research community. Her work intersects with scholars across a number of disciplines, including demography, sociology, economics, geography, and public health. She has served in various leadership roles in the Population Association of America and was elected to the Board of Directors, the Publications Committee, and to serve as Vice-President. She has also served as a study section member on the Population Sciences Subcommittee at NICHD and is in her second stint on the Editorial Board of Demography.

John L. Hick

Member

John L. Hick, M.D., is a faculty emergency physician at Hennepin Healthcare and a Professor of Emergency Medicine at the University of Minnesota. He serves as the deputy medical director for Hennepin County Emergency Medical Services and Medical Director for Emergency Preparedness at HCMC. He is also the Vice-Chair of the Clinical Council for Life Link III helicopter service and medical director for MN TF-1 state US&R team. He served the Minnesota Department of Health as the medical director for the Office of Emergency Preparedness until becoming an Advisor to the Director of OEM at ASPR/HHS where he is the lead editor for the TRACIE healthcare disaster preparedness website. He is the founder and past chair of the Minneapolis/St. Paul Metropolitan Hospital Compact, a 32-hospital mutual aid and planning group active since 2002. He is a national speaker on hospital preparedness issues and has published numerous papers dealing with hospital preparedness for contaminated casualties, personal protective equipment, crisis standards of care, and surge capacity and was honored to serve the Institute of Medicine / National Academies of Medicine on their Crisis Standards of Care projects as well as the Forum on Medical and Public Health Preparedness for Disasters and Emergencies.

Ali S. Kahn

Member

Ali S. Khan, M.D., M.P.H., Dean, College of Public Health, University of Nebraska Medical Center came to Nebraska in 2014, renown as a Retired Assistant Surgeon General, and as CDC's Director of the Office of Public Health Preparedness and Response. He has served on several key leadership positions overseeing programs under the National Center for Zoonotic, Vector-borne, and Enteric Diseases [NCZVED]; Pandemic Influenza, Special Pathogens, and other infectious diseases. Dr. Khan was the inventor and director of BioPHusion, an innovative CDC pilot project to fuse multiple sources of information for improved situation awareness and timely sharing of actionable information. He has had extensive national and global public emergency response leadership experience for Hurricane Katrina, the Asian Tsunami, anthrax, Rift Valley Fever, and influenza. Dean Khan has served on White House committees on food safety and health security and serves on the Steering Committee for the WHO Global Outbreak Alert and Response Network. As part of that network he most recently was called upon help Sierra Leone improve its national surveillance and response activities after the West African Ebola outbreak and to assist with establishing a public health detection and response system to address the Rohingya humanitarian crisis in Bangladesh. Apart from being an author of over 100 scientific articles, many policy briefs, Dr. Khan is known to the public for his recent book "The Next Pandemic" where he describes his firsthand experience with deadly infectious disease. He is an expert on health systems and politics surrounding these systems and on anticipating prevention and treatment of emerging and re-emerging infectious disease.

Maureen Lichtveld

Member

Maureen Lichtveld, M.D., M.P.H., a member of the National Academy of Medicine, has more than 35 years environmental public health experience and is chair of department of global environmental health sciences at Tulane University School of Public Health and Tropical Medicine. She is the Freeport McMoran Endowed Chair in environmental policy and director of the Center for Gulf Coast Environmental Health Research, Leadership, and Strategic Initiatives. Her national and global environmental health research examines the cumulative impact of chemical and non-chemical stressors on communities facing environmental health threats, disasters and health disparities. Lichtveld is a member, National Advisory Environmental Health Sciences Council, NIH/ NIEHS; EPA Scientific Advisory Board; NAS Roundtable on Environmental Health Sciences, Research, and Medicine; NAS Board on Global Health; NAS Climate Communications Initiative Advisory Board; Health Disparities Subcommittee, CDC; Past Chair, Editorial Board, American Journal of Public Health; Past President, Hispanic Serving Health Professions Schools. Other recognitions: Johns Hopkins University Society of Scholars, CDC's Environmental Health Scientist of the Year, Woman of the Year, New Orleans. Courses: graduate and undergraduate health and environmental policy.

Charles Rothwell

Member

Charles Rothwell, M.S., M.B.A., (retired) formerly served as the Director for the National Center for Health Statistics (NCHS). He came to Federal government service in 1987 as Associate Director of NCHS responsible for IT and information services of the Center and in 2003, he became the Center's Director of Vital Statistics. Before entering Federal service, Mr. Rothwell spent thirteen years in the State Health Department in North Carolina and while there developed the position and became the first director of the State Center for Health Statistics. He was responsible for health statistics, public health IT and statewide public health planning activities, and served as an adjunct assistant professor of biostatistics at the University of North Carolina, School of Public Health, and the University of North Carolina's Health Services Research Center. Over the years he has been involved with health statistics and IT activities of Agency for the International Development (AID), the United Nations, Robert Wood Johnson Foundation, the National Science Foundation and National Institute of Standards and Technology. He also served as a legislative assistant for Senator Lieberman, working health and education issues. Mr. Rothwell served as an officer in the U.S. Marine Corps, reaching the rank of captain. He received his B.S. in Physics from the Virginia Military Institute, a master of science in operations research and systems analysis, from the University of North Carolina at Chapel Hill and a master of business administration from the University of Maryland. Mr. Rothwell is a Fellow of the American Statistical Association and in February, 2013, was selected as one of the five Top Leaders in Federal Service.

Richard Serino

Member

Richard Serino, former Deputy Administrator of FEMA and Chief of Boston EMS, has joined the Harvard NPLI faculty as a Distinguished Senior Fellow. In this role he participates in the NPLI's education and research initiatives. Mr. Serino also serves as a Senior Advisor at MIT Urban Risk Lab. Serino brings more than 40 years of experience in disaster preparedness, response, and recovery as well as mass casualty incidents and leadership and innovation in government. He has received more than thirty-five local, national, and international awards for public service and innovation, including the NPLI's Meta-Leader of the Year Award for his work in the response to Super Storm Sandy. At the Federal Emergency Management Agency, Serino worked directly with Administrator Craig Fugate to build, sustain, and improve the Department's capacity to prepare for, protect against, respond to, recover from, and mitigate all hazards. Serino has more than 35 years of state and local emergency management and emergency medical services experience. Prior to his appointment to FEMA, he served as Chief of Boston EMS and Assistant Director of the Boston Public Health Commission. In that role, he bolstered the city's response plans for major emergencies, including chemical, biological, and radiological attacks. He also led citywide planning for H1N1 influenza. Serino has served as an Incident Commander for over 35 mass casualty incidents and for all of Boston's major planned events, including the Boston Marathon, Boston's Fourth of July celebration, First Night, and the 2004 Democratic National Convention, a National Special Security Event. Serino began working for Boston EMS in 1973; over the years he rose through the ranks and in 1999 became Chief of Department. During his tenure as Chief, he has seen the agency expand and improve to become nationally recognized for the first rate services provided by the agency's EMTs and Paramedics. Since 1998, Serino has been a National Faculty member for the Domestic Preparedness Program. He was an original contributing member for the Defense Department's Domestic Preparedness Training Program and Metropolitan Medical Response System. Serino has been involved, since its inception, with the Lessons Learned Information Sharing www.llis.gov network for emergency responders. As a consultant to the Pentagon and the Defense Department, Serino served on the 9/11 after-action team to assess medical consequence management policies and procedures. Serino attended Harvard University's Kennedy School of Government Senior Executives in State and Local Government program in 2000, completed the Kennedy School's National Preparedness Leadership Initiative in 2005, and graduated from the Executive Leadership Program, Center for Homeland Defense and Security at the Naval Postgraduate School.

Michael A. Stoto

Member

Michael A. Stoto, Ph.D., a Professor of Health Systems Administration and Population Health at Georgetown University, is a statistician, epidemiologist, and health services researcher. He also holds adjunct faculty appointments in the Department of Family Medicine, the Georgetown University Law Center, and the Harvard T.H. Chan School of Public Health. Dr. Stoto's research includes methodological topics in epidemiology and statistics including systematic reviews/meta-analysis and other analytical methods for comparative effectiveness research, community health assessment, evaluation methods, and performance measurement. His substantive research interests include public health practice, especially with regard to emergency preparedness; drug and vaccine safety; infectious disease policy; and ethical issues in research and public health practice. Dr. Stoto is an expert on population health and public health assessment, and the associate director of the population health scholars program in the Georgetown University School of Medicine. His work in this area has included systems-oriented evaluations of public health surveillance systems at the local to global level, addressing both statistical methods and public health practice issues. Dr. Stoto has developed methods for evaluating community health assessments and performance measures and helped to develop Community Health Needs Assessments (CHNAs) in MedStar Georgetown University Hospital and the other hospitals in the MedStar system as well as state and local health departments in the Washington DC metropolitan area. Dr. Stoto is currently working on a national study to identify best practices for hospital and community CHNAs. Dr. Stoto is also an expert in public health systems research (PHSR), focusing on applying and developing rigorous mixed-methods approaches to studying and evaluating federal, state, and local public health systems. Much of Dr. Stoto's recent PHSR work has focused on public health emergency preparedness, and he was the co-Principal Investigator of the CDC-funded Preparedness and Emergency Response Research Center based at the Harvard T.H. Chan School of Public Health. Dr. Stoto's work in this area has focused on regionalization in public health, the evaluation of biosurveillance methods, and the development of methods for assessing emergency preparedness capabilities based on exercises and actual events. Dr. Stoto is currently working with the European Centre for Disease Prevention and Control (ECDC) and the University of Bologna to develop a competency-based training program for public health emergency preparedness in the European Union.

W. Craig Vanderwagen

Member

W. Craig Vanderwagen, M.D., is a member, as well as a manager, of EWP. Dr. Vanderwagen served 28 years as a uniformed officer in the U.S. Public Health Service, retiring with the rank of Rear Admiral (upper half). He served 25 years in the Indian Health Service. His last assignment was as the Presidentially-appointed and Senate confirmed Assistant Secretary for Preparedness and Response (ASPR) at the U.S. Department of Health and Human Services. He also serves as a senior partner with Martin, Blanck and Associates, a professional consulting firm located in Alexandria, Virginia. As the founding ASPR, he implemented federal legislation that established the ASPR as the principal leader for all federal public health and medical response activities to any deliberate or natural disasters in the U.S. The legislation established a federal role in the development and utilization of human and other material assets in preparedness and response, and systems for deploying and managing these assets in emergency situations. His position also gave him authority and oversight of the federal effort to develop and support a wide range of medical countermeasures (diagnostics, vaccines, therapeutic drugs and biologics) against CBRN and pandemic influenza threats. This oversight responsibility included scientific discovery, product development, licensure, acquisition, and deployment. Dr. Vanderwagen was responsible for the creation of operational plans to address 15 national threats (including biological threats such as anthrax, smallpox, and plague, as well as threats from nuclear, radiation, and chemical devices, and natural disasters such as hurricanes and earthquakes) supported by appropriate situational awareness, logistics, planning, training and exercises coordinated through the Secretary's Command Center, an emergency operations center (EOC) linked to all other federal, state, and local command centers. Dr. Vanderwagen received his Doctor of Medicine degree from Michigan State University College of Human Medicine. He completed his residency in family medicine at the University of New Mexico and is Board Certified in Family Practice Medicine. He received his Bachelor's degree from Calvin College.

Daniel Wall

Member

Daniel P. Wall, RN, M.P.P.A., B.S.N. currently works at the Ventura County Public Health Department where he has been a Manager for the last 11 years. Daniel recently finished a Masters Degree in Public Policy and Administration. He has been a Registered Nurse for 15 years and has been working in the Medical Field for over 30 years. He is a veteran of the US Army and was a combat medic. Dan's primary career experience has been in the field of Emergency Medicine as a Nurse.

Matthew K. Wynia

Member

Matthew Wynia, M.D., M.P.H. is the Director of the University of Colorado Center for Bioethics and Humanities. His career has included developing a research institute and training programs focusing on bioethics, professionalism and policy issues (the AMA Institute for Ethics) and founding the AMA's Center for Patient Safety. His research has focused on novel uses of survey data to inform and improve the practical management of ethical issues in health care and public policy. He has led projects on a wide variety of topics related to ethics and professionalism, including understanding and measuring the ethical climate of health care organizations and systems; ethics and quality improvement; communication, team-based care and engaging patients as members of the team; defining physician professionalism; public health and disaster ethics; medicine and the Holocaust (with the US Holocaust Memorial Museum); and inequities in health and health care. He has served on committees, expert panels and as a reviewer for the National Academies, The Joint Commission, the Hastings Center, the American Board of Medical Specialties, federal agencies, and other organizations. Dr. Wynia is the author of more than 150 published articles, chapters and essays, co-editor of several books, and co-author of a book on fairness in health care benefit design. He is a past president of the American Society for Bioethics and Humanities (ASBH), and has chaired the Ethics Forum of the American Public Health Association (APHA) and the Ethics Committee of the Society for General Internal Medicine (SGIM).