

# Global Congress 2012

**“Best Practices in Responding to Travel  
Disruptions, Including  
Contagious Diseases and Other Hazards.”**

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## **Biographies**

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Robert Quigley, M.D., D.Phil, Professor of Surgery, Regional Medical Director, is responsible for leading the delivery of high quality medical assistance, healthcare management and medical transportation services.

Prior to joining International SOS, Dr. Quigley was a board-certified cardiovascular and thoracic surgeon who directed two open heart programs within the Jefferson Health System in Philadelphia where he was a professor of surgery at Jefferson Medical College. He is also board certified in general surgery and critical care.

Dr. Quigley has authored more than 100 clinical and basic science articles in peer-reviewed journals and has been an invited guest lecturer globally throughout his career. After 25 years in the clinical arena where he pioneered multiple surgical procedures/techniques, he worked as a healthcare consultant, Key Opinion Leader (KOL), offering medical expertise in the medical device and infectious disease areas. Most recently, Dr. Quigley has been appointed to the Circulatory System Devices Panel and the Medical Devices Advisory Committee at the Center for Devices and Radiological Health for the FDA.

Dr. Quigley received his Medical Degree, with distinction, from the University of Toronto, his post graduate training at Duke University Medical Center and completed a Doctorate in Philosophy (D.Phil) in immunology at the University of Oxford. He has been awarded multiple research grants including two from the Medical Research Council of Canada, one from the Committee of Vice-Chancellors and Principals of the Universities of the United Kingdom as well as from the American College of Surgeons.

### **John S. Brownstein, Ph.D.**

John Brownstein, Ph.D. is an Associate Professor at Harvard Medical School and directs the Computational Epidemiology Group at the Children's Hospital Informatics Program in Boston. He was trained as an epidemiologist at Yale University. Overall, his research agenda aims to have translation impact on the surveillance, control and prevention of disease. He has been at the forefront of the development and application of public health surveillance including HealthMap.org, an internet-based global infectious disease intelligence system. The system is in use by over a million people a year including the CDC, WHO, DHS, DOD, HHS, and EU, and has been recognized by the National Library of Congress and the Smithsonian. Dr. Brownstein has advised the World Health Organization, Institute of Medicine, the US Department of Health and Human Services, and the White House on real-time public health surveillance. He plays a leading role in a number of international committees including Board Member of the International Society for Disease Surveillance. He recently was awarded the Presidential Early Career Award for Scientists and Engineers, the highest honor bestowed by the United States government to outstanding scientists and engineers. He has authored over sixty peer-reviewed articles on epidemiology and public health. This work has been reported on widely including

pieces in the New England Journal of Medicine, Science, Nature, New York Times, The Wall Street Journal, CNN, National Public Radio and the BBC.

Summary by Dr. Robert Quigley, M.D., D.Phil, Professor of Surgery:

Although the economic recession has had a negative impact on business travel to developed nations, we have observed an increase in travel to the underdeveloped countries. Business in such destinations has created new health and security challenges for the traveler. Recent polls indicate that more than one-third of those travelling to “high-risk” countries never do any research prior to departure.

Travel disruptions can be due to either disasters (natural/man-made) or injury/illness. Although disasters typically result in inconvenient time delays for the traveler, an injury/illness may require exposure to the local healthcare system which may be of much lower standard than that seen in Western environments. The three most common diagnoses in business travelers requiring air ambulance medevacs from developing countries, in our experience, are trauma, circulatory system conditions (i.e. heart attack/stroke) and infectious diseases.

Review of global mobility trends indicates that almost 20 million international business travelers entered the United States in 2011. Almost 2 million Americans visited China/India in that same time frame. Increasing employee movement cross borders increases the risk of acquisition of infectious disease endemic to the destination region. Workplace infections are subsequently on the rise, which can negatively impact productivity - and even threaten the company image/brand particularly if it includes a reportable disease (ie TB). Management of workplace infections is a corporate responsibility particularly in the spirit of Duty of Care. Such management includes the development and implementation of health incident plans (HIP) and employee education on best practices. Such plans should be part of the organization’s overall crisis management. Based on recent events the HIP should not only involve a pandemic plan but an infectious disease plan, and even chemical, biological, radiological and nuclear plans.

All corporations, in an effort to mitigate travel disruptions, need to prepare, track, inform, advise, and respond to any perceived or real health threat to their business travelers. Business travel should not be “at your own risk.”

Summary by John S. Brownstein, Ph.D:

**Digital Disease Detection:**

*Current capabilities and future directions in the use of the non-traditional data sources for public health surveillance and rapid detection of emerging infectious diseases*

Over the past fifteen years, Internet technology has significantly changed the landscape of public health surveillance and epidemic intelligence gathering. Disease and outbreak data is disseminated not only through formal online announcements by government agencies, but also through informal channels such as social networking sites, blogs, chat rooms, Web searches, local news media and crowdsourcing platforms. These data streams have been credited with decreasing the time between an outbreak and formal recognition of an outbreak, allowing for an expedited response to the public health threat. Collectively, these online sources create an image of global public health that is fundamentally different from the one produced by traditional public health surveillance infrastructure. Dr. Brownstein will discuss the current capabilities and future directions in the use of the non-traditional data sources for the purposes of public health surveillance and rapid detection of emerging infectious diseases.