

Anthony Szema, MD, FCCP, FACAIA, FAAAAI, FACP, ATSF, was invited to participate in a briefing at the Pentagon on September 9, 2024. Convened by Denis McDonough, Secretary of the Department of Veterans Affairs, with the Department of Defense, this briefing discussed approximately 15,000 U.S. Veterans getting sick post deployment to Karshi Khannand or K2 airbase in Uzbekistan, which is a Soviet-era airbase used by American soldiers to enter Afghanistan during the war on terror. Dr. Szema, who coined the term Iraq Afghanistan War Lung Injury (IAW-LI), helped write the PACT ACT law, which provides medical care for Veterans exposed to burning trash with jet fuel in burn pits. Trash was also burned with jet fuel at K2 in burn pits, yet these soldiers are reporting different diseases than elsewhere. These diseases are not currently covered by the PACT ACT. Veterans and colleague Dr. Robert Miller from Vanderbilt University attended, as well as advocate Jon Stewart via conference call. Their consensus was that the DOD's concern about potential exposures should be sufficient evidence for the VA to proceed with providing medical care for these ailing Veterans.

Dr. Szema is Director of the International Center of Excellence in Deployment Health and Medical Geosciences, Northwell Health, and Clinical Professor of Medicine and Occupational Medicine, Epidemiology and Prevention, Donald and Barbara Zucker School of Medicine at Hofstra/Northwell. Szema, a pulmonologist and immunologist with an engineering degree from Rensselaer Polytechnic Institute (RPI), noted that his multi-center interdisciplinary medical geosciences team, including Stony Brook geologist Professor Timothy Glotch, has the knowledge regarding how to associate deployment location, medical records, and remote sensing satellite infrared spectroscopy and drone-mounted gamma ray spectroscopy to detect radiation safely. If a project were to be funded, Szema is proposing a big data artificial intelligence (AI) approach with computer science colleague and Chair of Technology & Society Klaus Mueller from Stony Brook University to make mathematical predictive models, so the DOD can avoid future inhalational disasters. Szema is also research assistant professor in the College of Engineering, Department of Technology & Society at Stony Brook University. As Co-Chair of the Section on Terrorism and Inhalational Disasters for the American Thoracic Society (ATS), he and Chair George Anesi, MD, MSCE, MBE from the University of Pennsylvania, support inhalation disaster preparedness, response and research. The major goals of this section are the advancement of current research efforts to improve our understanding of the pathophysiology and management of inhalational injuries, severe outbreaks of infectious disease and their impact on respiratory and critical care management, and to maximize disaster preparedness.