Inhaling Cationic Aerosols to Mitigate the Spread of Infectious Disease

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Humans and animals exhale tiny droplets of airway lining fluid via natural breathing processes, including normal mouth and nose breathing, coughing and sneezing. These droplets provide a natural vector for the spread of airborne infectious disease. Recent results from our laboratories have shown that pulmonary delivery of isotonic saline to man and animals can dramatically reduce the number of expired bioaerosols, thus providing a possible new mode of safe and inexpensive prevention of the spread of infectious diseases ranging from influenza to tuberculosis. In this presentation we review the background and data collected to date.