

## **Respiratory disease transmission: insights from sneezing and coughing**

Lydia Bourouiba

MIT

### **ABSTRACT:**

Coughing and sneezing are important means of spread and transmission of respiratory diseases. The dynamics of coughs and sneezes is key in determining the nature of the contact between infectious and susceptible individuals. Such contacts shape the outcome of a disease epidemic. Despite the ubiquity of these phenomena and their importance in epidemiological modeling, little attention has been paid to their dynamics. Here we examine the manner in which the dynamics of multiphase flows can assist in our understanding of contact and transmission of respiratory diseases.