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When "B" becomes "A": the emerging threat of influenza B virus

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Influenza virus (flu) caused the worst disease mediated devastation in recorded human history in 1918, when global death was estimated to be between 50 and 100 million people [1]. Flu continues to kill more people every year with no apparent decrease in its pathogenicity despite advancement in our understanding of the disease and with the availability of vaccines and antiviral agents. Last year, the death toll of influenza was estimated to be 80 000 in the USA alone, making it the most lethal infectious disease [2]. One apparent change that occurred in the influenza virus is the emergence of influenza B strain as a significant contributor to the annual disease over the years. The origin of influenza B is unclear but was first isolated around 1940 and later separated into two clear lineages by 1983, the Yamagata-like and Victoria-like strains [3]. The scientific and healthcare community has been underplaying this important event and influenza B has been labelled as the "B" team compared to influenza A. Influenza B is believed to be a milder virus compared to some strains of influenza A, such as H3N2, but more potent than the influenza A strains like H1N1 [4]. In fact, multiple studies have suggested increased potency of influenza B virus in causing severe disease and mortality. Influenza B is the most prominent circulating strain of influenza every four to five years. Furthermore, influenza B infections carried higher risks of hospitalisations compared to influenza A infections in HIV patients [5]. Similarly, influenza B has been described to have significantly higher mortality rates compared to influenza A strains. For example, during the flu season in 2010–2011, influenza B was responsible for 38% of deaths in the paediatric population. National Respiratory and Enteric Virus Surveillance System collaborating laboratories indicated that only 26% of circulating strains of flu were influenza B viruses during this period [6]. Similarly, a Canadian study from 2004 to 2013 found significantly higher mortality rates due to influenza B compared to influenza A in children younger than 16 years of age [7]. These data strongly refute the claims that influenza B is the milder version of the flu. In this issue of the *European Respiratory Journal*, the study by Bui *et al.* [8] sheds light on influenza B interactions within the human respiratory tract and lung to demonstrate its pathogenicity and its potential to spread and cause severe lung infections.