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# Why are people with asthma more susceptible to influenza?

Peter A.B. Wark 

**Affiliation:** Centre for Healthy Lungs, Hunter Medical Research Institute, University of Newcastle, New Lambton, Australia.

**Correspondence:** Peter A.B. Wark, University of Newcastle, Centre for Asthma and Respiratory Disease, Dept of Respiratory and Sleep Medicine, John Hunter Hospital, Lookout Rd, New Lambton, New South Wales, 2305, Australia. E-mail: Peter.wark@newcastle.edu.au

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**The effect of viruses such as influenza on asthma exacerbations is not the result of either exaggerated type 1 or 2 immune responses in those with asthma.** <http://bit.ly/2maJHVV>

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In 1860, Henry Hyde Salter characterised the important association between virus infection and acute asthma. He understood viruses caused severe exacerbations: “The asthma consequent on cold on the chest (bronchitis) is of a most painful and distressing kind; unlike that produced by cold directly, it often lasts for days.” He also realised that viral infections worsened airway inflammation and bronchial hyperresponsiveness: “I myself have no doubt that in ordinary acute bronchitis a good deal of the dyspnoea ... is due not only to the mucous membrane being tumid from inflammation and so narrowing the calibre of the tubes, but to active contraction from the irritation and exalted sensibility that the inflammation gives rise to” [1]. While an appreciation of the importance of airway inflammation in asthma evolved throughout the 1980s, molecular diagnostics were required to prove the dominant role virus infection played as the trigger of acute asthma [2]. Virus infections have been consistently demonstrated as the most prevalent trigger of acute severe asthma, for children and adults [3]. This susceptibility was demonstrated during the influenza pandemic of 2009, where asthma was repeatedly demonstrated as one of the most prevalent risk factors for hospitalisation [4, 5]. The reason asthmatics are susceptible to the effects of virus infections, though, remains elusive and our understanding is confounded by a number of paradoxes.