Asthma and influenza

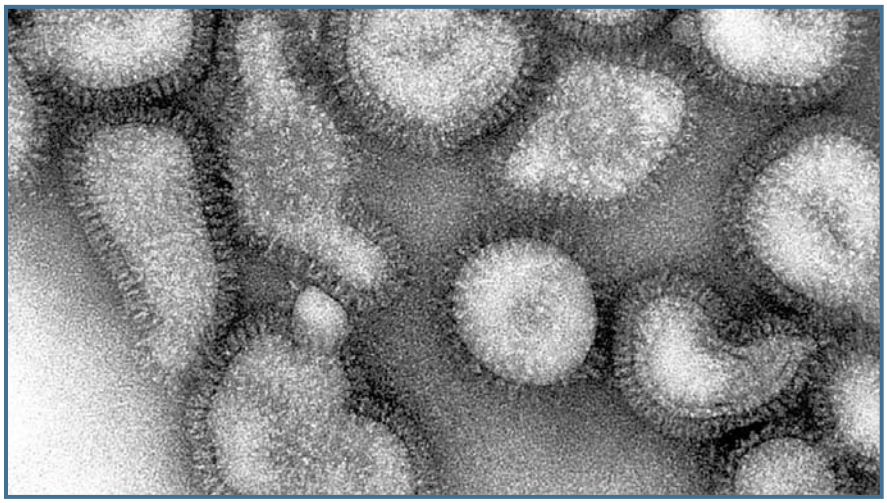
Severe asthmatics should be considered for yearly influenza immunisations

Influenza and asthma are commonly encountered in general practice. Influenza A and B exhibit frequent changes in surface antigen, which require the vaccine to be modified annually. Influenza immunisation is safe for asthmatics, but while evidence suggests that patients with chronic obstructive pulmonary disease have reduced exacerbations and hospital admissions from influenza if they receive vaccinations each year,[1] there is no similar evidence for asthmatics.[2]

The National Health and Medical Research Council *Immunisation handbook* and the National Asthma Council *Asthma management handbook 2006* suggest that severe persistent asthmatics, defined as those with multiple hospital admissions, be considered for annual immunisation. (See also the 'Assessment of severity' section in the *Asthma management handbook* for a useful guide in defining asthma severity.)

Immunisation remains the best prophylaxis for influenza. There may be a place for prophylactic therapy if one member of a family contracts the disease where there is an unimmunised high risk patient in that family. Zanamivir and oseltamivir are the two medications available, and have a 60 to 90 percent success rate in preventing influenza spreading within a family. Evidence for using these medications with children is not as strong.[2]

The prescribing information for Relenza (zanamivir) indicates that it has not been tested on severe asthmatics and there have been reports of bronchospasm after administration. The prescribing information states that it is not clear if this effect is due to the drug or the virus.



Influenza immunisation is contraindicated in patients with severe egg allergy, previous severe immunisation reaction, and history of Guillain-Barre syndrome.

Diagnosis and treatment

Serological confirmation is sometimes useful at the start of influenza outbreaks, but may take 1 to 2 days to complete. Rapid testing has been developed but may not be available to all GPs and may have up to 30 percent false negative results,[3] and up to 70 percent when influenza is not circulating in the community.

Treatment of established influenza with antivirals should be commenced within 48 hours of the onset of symptoms. Most studies suggest the effect is moderate, reducing the length of the illness by 1 to 3 days. It reduces complications such as otitis media in children and lower respiratory infections in adults by up to 43 percent.[4,5,2] It can be used in immunised patients where there is a high index of suspicion that they have contracted the disease.

The National Asthma Council is a not for profit body serving the community by creating awareness and providing information about asthma. For more information, or to obtain a copy of the Asthma management handbook 2006, visit www.nationalasthma.org.au ♦

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2. Cooper NJ, Sutton AJ, Abrams KR, Wailoo A, Turner D, Nicholson KG. Effectiveness of neuraminidase inhibitors in treatment and prevention of influenza A and B: systematic review and meta-analyses of randomised controlled trials. BMJ 2003;326:1235.
3. Centers For Disease Control And Prevention. Interim guidance for influenza testing during the 2004–5 influenza season. Washington DC: United States Department of Health and Human Services, 2004.
4. Whitley RJ, Hayden FG, Reisinger KS et al. Oral oseltamivir treatment of influenza in children. Pediatr Infect Dis J 2001;20:127–33.
5. Reduction of influenza complications following oseltamivir use. Presented 13 September, 2005 at the European Scientific Working Group on Influenza (ESWI) congress, Malta. Abstract number S18–2 cited in Influenza Specialist Group. Treatment of influenza in interpandemic periods, June 2006. Available at: www.influenzacentre.org/reports/ISG Antivirals Discussion Paper June 2006.pdf