

September Asthma Peak Fact Sheet

- With the start of a new school year, kids are in close contact with each other and germs, like the common cold. Colds are the most frequent asthma triggers in young children, causing up to 85 per cent of exacerbations.¹
- Low use of appropriate asthma medications may fuel what is known as the “September Asthma Peak,” the spike in children’s hospital admissions due to serious asthma attacks aggravated by colds. Low use of medications or sub-optimal control of underlying inflammation can also increase asthma attacks throughout the school year.
- Epidemics of asthma exacerbations requiring hospital treatment occur annually during back-to-school in both the Northern and Southern Hemispheres²
- Compliance and filling of asthma controller medications decreases during the summer months³ causing airway inflammation to return. Even when children with asthma display no symptoms, they must continue their medication to avoid inflammation.⁴
- The viruses responsible for the majority of “September Asthma Peak” asthma exacerbations include the rhinovirus, coronavirus, influenza virus, parainfluenza virus and respiratory syncytial virus (RSV).⁵
- School-aged children have on average eight colds per year, which can translate into about one asthma flare-up per month if a child’s asthma is not well-controlled.⁶
- Approximately 20 to 25 per cent of annual hospital admissions for asthma of children in Canada occur in September.¹
- On average, the hospitalization rate for school-age children peaks 17.7 days after Labour Day – around week 38.⁷ (Preschool kids peak 1.7 days later)
- Because the cold season can last for several months, parents should be extra diligent about adhering to an asthma management plan throughout the year.

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For more information, please contact:

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References

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- ¹ Johnston SL et al. BMJ 1995; Johnston et al. Am J Resp Crit Care Med 1996; Pattermore PK et al. Clin Exp Allergy 1992.
² Neil W. Johnston, MSc, Piush J. Mandhane, MD, Jennifer Dai, MSc, Joanne M. Duncan, BSc, Justina M. Greene, DipCompSys, Kim Lambert, RN, MSc, Malcolm R. Sears, MB, ChB Firestone Institute for Respiratory Health, St Joseph’s Healthcare and McMaster

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³ Johnston NW, Johnston SL, Duncan JM et al. The September epidemic of asthma exacerbations in children: A search for etiology. *J Allergy Clin Immunol*. 2005;112: 132-138.

⁴ www.asthma.ca/adults/treatment

⁵ Johnston SL, Pattemore PK, Sanderson G, et al. Community study of role of viral infections in exacerbations of asthma in 9-11 year old children. *BMJ*. 1995;310:1225-1229.

⁶ Healthy Ontario. Flu and Cold: Tips on Prevention. Available at:

http://www.healthyonario.com/FeatureDetails.aspx?feature_id=4024. Accessed July 23, 2008.

⁷ Johnston NW, Johnston SL, Norman GR et al. The September epidemic of asthma hospitalization: School children as disease vectors. *J Allergy Clin Immunol*. 2006; 117: 557-562.