

# Asthma and the school-age child: the 6 year old



**ASSIGN  
BUSTER**

Lorna V. Tablazon

Karen Rouleau

Asthma is a chronic (long-term) disease that makes it hard to breathe. Asthma can't be cured, but it can be managed. With proper treatment, people with asthma can lead normal, active lives (Canadian Lung Association, 2014). There can be many causes for asthma, it may run in the family through genetics or might be from air pollutants in the outside environment. The one point to remember is that even when symptoms are mild, asthma should not be ignored. Untreated or under treated, asthma can lead to severe respiratory distress and in rare cases, sudden death. This paper will be discussing about dealing with a child with asthma. The main focus will be on school-age children, specifically, a 6 year old child.

Pathophysiology

Signs and Symptoms of Asthma

According to Wicks (2006), early signs and symptoms of asthma include stuffy nose with congestion, irritating cough, sneezing bouts, headache, face becoming pale or flushed, and fever (p. 27-28). With mild persistent asthma, symptoms of cough, wheezing, chest tightness, or difficulty breather occur (Rosto, 2009).

Course of Illness

In response to contact with a triggering substance or mechanism, mast cells of the immune system, which are found in loose connective tissue, are

responsible for releasing vasoactive (action on vessels) chemical mediators, including histamine, bradykinin, leukotrienes, cytokines and prostaglandins. Chemotactic (produces specific cell movement) chemical mediators released from the mast cells cause neutrophils, lymphocytes and eosinophils to infiltrate the cells of the bronchial lining. These target the respiratory system and cause bronchoconstriction, vascular congestion, vasodilation, increases in capillary permeability, mucosal edema, impaired mucociliary action (removal of mucus and contaminants within the bronchial tree by movement of the cilia inside the bronchioles), and increased mucus production, which leads to an increase in airway resistance. Mucus plugging may also occur in the smaller bronchioles. These pathophysiologic factors produce the typical clinical presentation of asthma, including wheezing and respiratory distress (Limmer et al., 2004)

### Prognosis

According to some studies, asthma disappears in 30 to 50 per cent of children at puberty, but often reappears in adult life. Up to two-thirds of children with asthma continue to suffer from the disorder from puberty and adulthood. Moreover, even when asthma has clinically disappeared, the lung function of the patient frequently remains altered, or airway hyper-responsiveness or cough may persist. Children with mild asthma are likely to have good prognosis, but children with moderate or severe persistent asthma probably continue to have some degree of airway hyper-responsiveness and will be at risk of having asthma throughout life (Gupta et al., 2001).

## Admission to the Hospital

### Safety Concerns

Children with asthma that are hospitalized are vulnerable to pathogens and allergens that are present in the new environment. There are safety concerns that a nurse must be aware of when caring for a child with asthma. First, check for the oxygen saturation of the child. Children with life-threatening asthma or SpO<sub>2</sub> <92% should receive high flow oxygen via facemask or nasal cannula (Borton, 2010). Another one is to know what allergens might trigger the child's asthma attack. The hospital is an open environment where people come and go, therefore, contaminants and allergens from the outside environment may possibly be present in the hospital setting. Lastly, is the child's risk for falls. Falls account for 35% to 40% of injuries (Warda, 2004).

### Age Appropriate Toys

Play activities in the school-age child involves increased physical and intellectual skills and some fantasy (Leifer, 2011). Toys such as construction sets, help develop hand control. School-age children prefer a wide range of art materials, such as sparkles, fine brushes, hole-punchers, and tape dispensers. A wide variety of different artistic mediums also encourage children to be creative and use their imagination. Lastly, choose challenging board games, since children are now able to understand rules and interact with their peers (NYCDS, n. d). Rituals such as collecting items and playing board games are also enjoyable quiet activities for the school-age child (Leifer, 2011).

<https://assignbuster.com/asthma-and-the-school-age-child-the-6-year-old/>

## Impact of Hospitalization

Being hospitalized due to asthma can have a huge impact, not only to the child, but also toward the family. Asthma is a leading cause of absenteeism in school students, which in severe cases can cause them to fall behind in their work (Asthma Australia, n. d.). Another thing to note is that when hospitalized, some children can regress in behavior and become overly dependent on their parents (PICS, n. d). Lastly, if the hospitalized child has siblings, they may get affected too. When one child in a family has to receive medical care, the experience can be upsetting to his/her siblings. Some emotional responses of these siblings may include: feelings of abandonment, rejection and isolation (Children's Specialized Hospital, 2014).

## Communication Techniques

Communicating with a 6 year old does present some challenges. They tend to be bossy, are sometimes rude, and experiment with language, but they are very sensitive to criticism (Leifer, 2011). One method for successful communication with school age children is to start and agreement, not an argument (PBSparents, 2014). This can be done by asking the child something where the final answer would be an agreement. For example, asking the child which arm they would prefer when starting an intravenous line instead of saying that it should only be done in the right arm. The hospitalization of children can have an impact on parents too. To communicate better with the parents, the nurse can provide an advice page, covering topics such as how to explain to kids what will happen in the hospital and how to comfort their children (Blackstone & Pressman, n. d.).

Lastly, School-age children can handle more pieces of information at the same time (Gable, 2003). To effectively make the child understand what is happening, the nurse can describe the illness using simple concepts (Goldman, & Mathews, n. d.). For example, explain to the child that he is being admitted to the hospital not because he is being a bad child, but because of his illness.

### Baseline Data

To better aid in diagnosing or rendering care for a child with asthma, certain baseline data has to be taken during the child's assessment. First is to check for known allergies. In many cases, allergy information helps medical personnel discover a cause for problems like swelling or difficulty breathing. Second is to check for pre-existing illnesses or conditions. Pre-existing illnesses or conditions can have a great impact on the kinds of tests or treatments administered during an emergency. Third is to check for immunizations done. Lastly, check for previous hospitalizations and operations. This information may help during and following an emergency situation (Dowshen, 2013).

### Conclusion

School-age children, especially the 6 year old, do present challenges when it comes to rendering care. According to Leifer (2011), children may be unable to verbalize their needs (p. 436), therefore the nurse in collaboration with the parents and the rest of the health care team must work together in coming up with techniques and strategies to be able to render the best means of care for a school-age child.

## References

Asthma Australia. (n. d.). *Asthma in school-aged children*. Retrieved from [http://www.asthmaaustralia.org.au/asthma\\_in\\_school\\_aged\\_children.aspx](http://www.asthmaaustralia.org.au/asthma_in_school_aged_children.aspx)

Blackstone, S., & Pressman, H., (n. d.). *Effective communication in children's hospitals*. Retrieved from <http://www.patientprovidercommunication.org/pdf/25.pdf>

Borton, C. (2010). *Management of childhood asthma*. Retrieved from <http://www.patient.co.uk/doctor/management-of-childhood-asthma>

Canadian Lung Association. (2014). *Asthma*. Retrieved from [https://www.lung.ca/diseases-maladies/asthma-asthme/what-quoi/index\\_e.php](https://www.lung.ca/diseases-maladies/asthma-asthme/what-quoi/index_e.php)

Children's Specialized Hospital. (2014). *Effects of hospitalization on siblings*. Retrieved from <http://www.childrens-specialized.org/Programs-Services/Specialty-Programs/Recreational-Therapy-and-Child-Life/About-Child-Life/Sibling-Support/Effect-of-Hospitalization-on-Siblings.aspx>

Dowshen, S. (2013). *Knowing your child's medical history*. Retrieved from <https://www.akronchildrens.org/cms/kidshealth/2104a0fe743eca5e/>

Goldman, S., & Mathews, M., (n. d.). *Parenting strategies*. Retrieved from [http://www.pbs.org/opb/childrenshospital/parents/pop/pop-ts\\_communicate.htm?500](http://www.pbs.org/opb/childrenshospital/parents/pop/pop-ts_communicate.htm?500)

<https://assignbuster.com/asthma-and-the-school-age-child-the-6-year-old/>

Gupta, A., Gupta, R., Kushwaka, KP., & Bansal, H. (2001). *Asthma care and management, guidelines for doctors*. India: Jaypee Brothers Publisher

Liefer, G. (2011). *Introduction to maternity and pediatric nursing 6<sup>th</sup> ed.*

USA: Elsevier Limmer, D., Mistovich, J. J., Krost, W. S. (2004).

*Pathophysiology of asthma*. Retrieved from <http://www.emsworld.com/article/10324789/pathophysiology-of-asthma>

NYCDS. (n. d.). *You and your family: childcare and parenting*. Retrieved from [http://www.nebenefit.com/nycds/resource\\_ctr/index.aspx?thePage=ynyr\\_family/childcare/play/choose\\_toys.ascx&nav=rc&sidenav=rc](http://www.nebenefit.com/nycds/resource_ctr/index.aspx?thePage=ynyr_family/childcare/play/choose_toys.ascx&nav=rc&sidenav=rc)

PBSparents. (n. d.). *Strategies for working out*. Retrieved from [http://www.pbs.org/parents/talkingwithkids/negotiate\\_2.html](http://www.pbs.org/parents/talkingwithkids/negotiate_2.html)

Pediatric Integrated Cancer Service. (n. d.). *Impact of hospitalization on children and adolescents*. Retrieved from <http://www.pics.org.au/Impactofhospitalisationonchildreandadolescents>

Rosto, E. (2009). *Pathophysiology made incredibly easy*. USA: Lippincott Williams & Wilkins

Warda, L. (2004). *Is your hospital safe for children? Applying home safety principles to the hospital setting*. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2721182/#>

Wicks, S. (2006). *All about asthma: what you need to know*. USA: eFortune US

<https://assignbuster.com/asthma-and-the-school-age-child-the-6-year-old/>