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HALDIMAND-NORFOLK HEALTH UNIT

# PHYSICIANS' NEWSLETTER

## Pneumonia in Infants

Most infants will experience a few episodes of lower respiratory tract illness (LRTI) each year. Approximately 30% of these children will visit a health care provider's office for their symptoms and of these, 2% will be hospitalized. Identifying bacterial pneumonia from other viral respiratory infections, continues to be the ultimate goal of physical assessment.

Although the "gold standard" for diagnosis of pneumonia continues to be an aspirate from the lower respiratory tract, this is obviously inappropriate and unnecessary in primary care practices. Chest x-rays are still commonly used for diagnostic purposes, identifying the characteristic lobar consolidation of bacterial pneumonia.

In infants, chest x-rays are not always good indicators of pneumonia in early infection. For this reason history and physical exam are critical for early and appropriate diagnosis and intervention.

### What to Look for on the Physical Exam

Initial observations may be the most important part of the physical assessment!

The best individual finding in ruling OUT pneumonia is the absence of tachypnea. Respiratory rates should be counted for a full minute. Infants under two months should have a respiratory rate less than 60 breaths per minute, two to 12 months less than 50 breaths



per minute, and over 12 months less than 40 breaths per minute. Signs of increased work of breathing – chest in-drawing, nostril flaring or tracheal tugging – as well as fever, play important roles in confirming the diagnosis.

### First Line Therapy (Anti-infective Guidelines 2005)

- Amoxicillin - 80 mg/kg/day divided TID for seven to 10 days.
- Erythromycin estolate - 40 mg/kg/day divided QID for seven to 10 days.
- Clarithromycin - 15 mg/kg/day divided BID for seven to 10 days.
- Azithromycin - 10 mg/kg/day on day one, then five mg/kg/day for four days.

### References:

- Margolis P. et al, Does this infant have pneumonia? JAMA 1998; 279[4]: 308-313.

- Anti-infective guidelines for community acquired infections, 2005 Edition, P 30.

*Submitted by Peggy Carter-Arrowsmith, RN (EC), Nurse Practitioner, 519-875-4937.*

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### Inserts with this edition:

- Predict and Prevent Injury
- The Health Effects of Woman Abuse

## Let's Grow Community Resource Packages

*Let's Grow* is the title of an age-paced, mail-out package designed to provide parenting support information to all families with children from birth to five and a half years of age.

This mail-out package consists of a series of 12 user friendly newsletters, each accompanied by supplemental inserts on various topics. The content of each issue corresponds to developmental stages and includes 13 Nipissing District Developmental Screens and suggestions on interactive parent-child activities. Each issue contains information about children's growth and development, speech, hearing, vision and self-esteem. The timing of the mail-out aims to deliver exactly the information that is needed by parents, right when it is needed. Enrolment in the program is offered to all parents of newborn children at the time of birth. The program is free-of-charge. The *Let's Grow* newsletter, which is aimed at a Grade 3-5 literacy level, was developed by an interdisciplinary team working in partnership with the Grey Bruce Health Unit. The goals of the *Let's Grow* Newsletter are:

1. To promote the earlier identification of speech and language delays in children aged zero to eight years.
2. To coordinate access to community resources and services for parents and children.
3. To provide parents with information relating to healthy child growth and development.

The Healthy Babies Healthy Children (HBHC) program of the Haldimand-Norfolk Health Unit purchases copies of the newsletter from the Grey Bruce program and has been enrolling families since February 2006. For those clients who accept home visits on 48-hour contact with Public Health Nurses, Public Health Nurses take the first two issues with them on a home visit and explain the program to them. The client will be asked at that point if they wish to continue receiving more issues. If the client agrees, the form will be filled out by the Public Health Nurse and returned to HBHC support staff for entry into the database program. If the client is unsure at that time, the Public Health Nurse leaves the *Let's Grow* subscription card so that the client can mail it back to the Health Unit

whenever the client decides to do so.

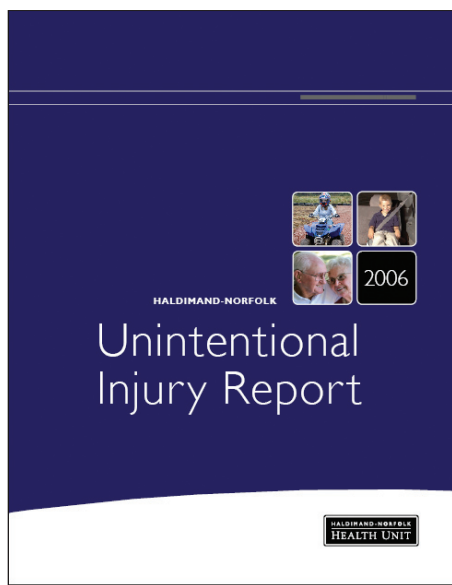
The *Let's Grow* program will be especially useful to parents in the following situations:

- New to town, without relatives nearby.
- First-time parent.
- Parents of a special-needs child.
- Parents concerned about their child's speech, hearing or vision.
- Parents looking for childcare services in the area.
- Parents looking for information about their child's growth and development.

Response to the *Let's Grow* Newsletters has been very positive and parents have found the *Let's Grow* Issues a valuable resource. A number of evaluation components have been incorporated into the *Let's Grow* System of Care. Evaluation results relating to the *Let's Grow* Mail-out Program are available upon request by contacting the Grey Bruce Health Unit.

*Submitted by Lina Hassen, Health Promoter, Healthy Babies, Healthy Children Program, 905-318-5367 Ext. 304.*

## Haldimand-Norfolk Unintentional Injury Report (2006)



In 2006, the Haldimand-Norfolk Health Unit developed and completed an Unintentional Injury Report. The report consists of four chapters:

Injury Prevention Programs, Unintentional Injury Hospitalizations, Unintentional Injury Mortality (Deaths) and Unintentional Emergency Room Visits.

Unintentional injuries examined in the report include the following:

- All unintentional injuries.
- Motor vehicle traffic crashes.
- Pedestrian (traffic-related).
- Off-road motor vehicle crashes.
- Falls.
- External causes of burns.
- Poisonings.
- Sports injuries.

The Predict and Prevent Injury flyer inserted with this newsletter contains statistics and information from the Unintentional Injury Report, as well as other research articles.

The complete report can be downloaded from the Health Unit's website [www.hnhu.org](http://www.hnhu.org).

For a free, hard copy of the report, contact Deanna Tries, Epidemiologist, Haldimand-Norfolk Health Unit at 519-426-6170 Ext. 3215.

## Answer Your Patients' Questions Concerning Tooth Whiteners

Given the choice, most people would prefer a whiter smile. This trend within society is evident with the growing number of whitening toothpastes, overnight kits and advertisements for teeth bleaching. The concern lies in how well these various methods work in getting teeth whiter, and keeping them that way.

### Do Whitening Toothpastes Work?

Whitening toothpastes do not work very well because the chemicals are only in contact with your teeth for a short period of time. Add to that the diluting effect of saliva and water, and these whitening agents are only in contact with the teeth for about a minute. It would take a long time to see any real effects of whitening toothpaste.

### How Home Kits Work?

Most home kits produce modest results at best. There are many ways to whiten your teeth yourself, including whitening strips, gels, pens and even tray-based systems. Whether you use the strips for an hour a day, apply the gel to your teeth twice daily or apply the tray-based chemical to your teeth, don't expect incredible results. All of these methods will whiten enamel somewhat, but they can also irritate your gums.

### What About Professional Whitening?

Dental professionals apply a stronger solution of peroxide than home whitening kits and sometimes they may use a special light to hasten tooth whitening. A customized mouth guard will help protect the gingival tissues. This is probably the safest and most effective way to bleach, but it is more expensive. The price for professional whitening varies, but it usually around \$500.

Lasers are used to enhance the action of whitening agents and can be costly, approximately \$1,000.

### Does the Effect Last?

The whiter gleam will start to fade within a month, even quicker, depending on factors such as coffee/red wine consumption or eating foods that stain teeth. Smokers will quickly lose the nicer colour in their teeth.



### What Are the Risks?

Bleaching does temporarily increase tooth sensitivity as peroxide can irritate the gingival tissue. Because of this and other potential risks, people with very sensitive teeth or periodontal disease, worn cavities or worn tooth enamel should not bleach.

### Who Should Not Bleach?

People with sensitive teeth, grayish discolorations, prior bonding or certain types of fillings in their front teeth are not good candidates for bleaching. If a client has cavities, they should be filled before bleaching. Otherwise, the whitener can penetrate cavities and cause pain. Tooth-whitening products are not recommended for pregnant women or women who are breastfeeding, or for people with a peroxide allergy, gum disease or worn tooth enamel.

### What About children?

Since children have more sensitive teeth than adults, dental experts do not recommend whitening until after age 16, when the tooth's pulp is fully formed.

*This article was adapted from: Research and Product News For Dental Hygienists, October 2006, Volume 6 Number 3.*

*Submitted by Kim Casier, Dental Hygienist, 519-426-6170 Ext. 3249.*

## Responding to Parental Refusals of Immunization of Children

The immunization of children against a multitude of infectious diseases has been hailed as one of the most important health interventions of the 20th century. Immunizations have eliminated smallpox infection worldwide, driven polio from the western world and made formerly common infections like diphtheria, tetanus, measles and *Haemophilus influenzae* infections rare occurrences.

By one account, paediatric immunizations are responsible for preventing three million deaths in children each year worldwide.

Despite this success, some parents continue to refuse immunizations for their children. Most parents have no memory of the devastating effects of illnesses such as poliomyelitis, measles and other vaccine-preventable diseases, making it more difficult for them to appreciate the benefits of immunization. Parents may have many reasons for refusing immunization. Some parents may object to immunization on religious or philosophical grounds; some may object to what seems to be a painful assault on their

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child; and others may believe the benefits of immunization do not justify the risks to their child.

Many commonly held beliefs about the risks of immunization are not supported by available data, and they frequently originate from the unsupported claims of organizations that are critical of immunization. These anti-vaccine information sources not only propagate unproven claims against vaccines but also undermine the physician-family relationship by challenging the parents' trust of the medical profession.

How does one handle parents who refuse immunization? Listen carefully and respectfully to the parents' concerns, recognizing that some parents may not use the same decision criteria as the physician. Assist the parents in understanding that the risks of any vaccines must be compared to the risks of remaining non-immunized.

Parents may also have concerns about administering multiple vaccines to a child in a single visit. In some cases, taking steps to reduce the pain of injection may be sufficient. In other cases, a parent may be agreeable to a schedule that does not require multiple injections at a single visit. Many parents have concerns

related to one or two specific vaccines. Discuss each vaccine separately since benefits and risks of vaccines differ. A parent who is reluctant to accept the administration of one vaccine may be willing to allow others.



For all cases in which parents refuse vaccine administration, physicians should take advantage of their ongoing relationship with the family and revisit the immunization discussion on each subsequent visit. As respect, communication and information build over time in a professional relationship, parents may be willing to reconsider previous vaccine refusals.

Families with doubts about immunization should still have access to good medical care. Maintaining the relationship in the face of disagreement conveys respect and at the same time allows the child access to medical care. Furthermore, a continuing relationship allows additional opportunity to discuss the issue of immunization over time.

*Source: Diekema, D. (2005). Responding to Parental Refusals of Immunization of Children. Pediatrics. 115(5), 1428-1431.*

*Submitted by Joan Beckett, Registered Nurse, 519-426-6170 / 905-318-6623 Ext. 3222.*

## Earn Mainpro M2 ® Credits as a Flu Watch Sentinel

Despite continued effort, influenza persists as a major cause of serious illness and even death for Canadians. The average influenza season will see between 10-25% of Canadians being affected. Influenza surveillance provides practical applications for controlling the spread and the severity of epidemic episodes.

In Canada, influenza surveillance is a collaborative effort between the National Research system (NaRes) of The College of Family Physicians of Canada, Immunization and Respiratory Infections Division of the Public Health Agency of Canada, provincial and territorial ministries of health, laboratories and sentinel practitioners.

Data collected from these surveillance activities is used to produce weekly FluWatch reports (available online at <http://www.phac-aspc.gc.ca/fluwatch/index.html>) to monitor the incidence of influenza, predict outbreaks of influenza in communities and institutions, provide estimates of the burden of illness caused by influenza and obtain crude estimates of vaccine effectiveness.

CFPC-NaReS is currently recruiting sentinels for year-round surveillance in Ontario. Sentinels may be family physicians, nurse practitioners or nurses. The time commitment is minimal and benefits include receiving regular regional and national reports on influenza activity and the ability to claim MAINPRO M2 credits for sentinel participation.

Last year 96.1% of reporting sentinels felt the time needed to participate was acceptable and that the weekly report form was easy to complete.

For more information on the FluWatch program or if you are interested in becoming a FluWatch sentinel, please contact Jamie Jensen, CFPC-NaReS FluWatch sentinel coordinator at 905-629-0900 Ext. 426 (toll free at 1-800-387-6197 Ext. 426) or email [jjensen@cfpc.ca](mailto:jjensen@cfpc.ca).

*Submitted by Deanna Tries, Epidemiologist, Haldimand-Norfolk Health Unit at 519-426-6170 Ext. 3215 or email [deanna.tries@hnhu.org](mailto:deanna.tries@hnhu.org).*

### HALDIMAND-NORFOLK HEALTH UNIT

#### Simcoe

P.O. Box 247, 12 Gilbertson Drive  
Simcoe, ON N3Y 4L1  
519.426.6170 / 905.318.6623

#### Caledonia

282 Argyle Street South  
Caledonia, ON N3W 1K7  
905.318.5367

**Web:** [www.hnhu.org](http://www.hnhu.org)  
**Email:** [info@hnhu.org](mailto:info@hnhu.org)