

**July/August/ September 2006 Volume 16(3)**

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**Inserts:**

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- Multiple Injection Poster
- Flu Vaccine Clinics in the Community

**DEAR COLLEAGUES,**

**UNIVERSAL INFLUENZA IMMUNIZATION**

A universal influenza immunization program (UIIP) was introduced in Ontario during the fall/winter of 2000/01. The chief goals of the continuing program are to reduce influenza related:

- morbidity and mortality,
- visits to emergency rooms and other health care facilities,
- workplace absenteeism and other societal costs.

**Has the UIIP Worked?**

Dr. Douglas Manuel et al. with the Institute for Clinical Evaluative Sciences (ICES) were awarded the research project entitled *Effect of Ontario's Universal Influenza Immunization Program (UIIP) on Influenza-related Health Care Outcomes*. The study is scheduled to be completed in November 2006.

At this stage, the preliminary conclusions seem to be:

- Prevention of influenza related health care outcomes is dependent upon predicting the antigenic match and obtaining vaccine uptake in the population, and
- UIIP can decrease adverse outcomes only when vaccination rates in the general population are increased, and
- Improved strategies are needed to increase vaccine uptake.

I think this will be a very interesting paper to read when it is published, and I hope these very preliminary results will encourage you to continue to vaccinate and recommend influenza vaccine to your patients.

### **How Are We Doing in Grey-Bruce?**

Below is a selection of results from a telephone survey conducted in Grey-Bruce during January-April 2006. Trained interviewers with the Institute for Social Research as part of the Rapid Risk Factor Surveillance Survey used random-digit dialing to target 100 respondents per month (n=409 with respondents  $\geq 18$  years of age) to obtain these interesting local statistics regarding the 2004/05 flu season:

45% of residents reported to have obtained a flu shot.

Where did they get it? (top 4 responses)

- Doctor's office (43%)
- Health Unit clinic (15%)
- Work (13%)
- School (7%)

Reasons for getting a flu shot? (top 4 responses)

- As a preventative measure (46%)
- Doctor/health care professional recommended it (14%)
- Other reasons (11%)
- Always get one each year/got one last year (7%)

Main reasons for NOT getting a flu shot:

- Do not need it/don't get sick/never get the flu (27%)
- Don't believe in it/does not work (23%)
- No time/too busy/not easy to get to a doctor or a clinic (14%)
- Other reasons (9%)
- General concern about negative side effects (7%)

Should you wish to offer comments or require additional clarification please call or e-mail using the information below.

Yours truly,

Hazel R. Lynn, M.D., FCFP, MHSc  
Medical Officer of Health  
519-376-9420 ext. 241  
[hlynn@publichealthgreybruce.on.ca](mailto:hlynn@publichealthgreybruce.on.ca)

Reference

Grey Bruce Health Unit. (2006). RRFSS: Summary of 2004/05 Influenza Telephone Survey Results for Grey-Bruce. A. Leffley.

## NEW VACCINES FOR PATIENTS TO PURCHASE

### **Gardasil™ Approved July 2006**

Gardasil is nearly 100% effective in preventing infection against human papillomavirus (HPV) types 6, 11, 16 and 18. Intended for females 9 to 26 years of age, 3 injections confer protection (0, 2 months, 6 months; cost  $\approx$  \$135/dose).

Oncogenic HPV types 16 and 18 cause 70% of cervical cancers and high grade cervical lesions. They are also associated with vulvar, vaginal, and anal cancers. Further, HPV types 6 and 11 cause 90% of genital warts, and 5-25% of low grade cervical cancers.

Gardasil is most effective before sexual debut and any exposure to HPV. Currently, it is not clear if Gardasil will protect sexually active women against existing HPV infection. Although Gardasil will significantly decrease precancerous cervical lesions and cervical cancer - routine Pap tests are still required.

Use during pregnancy has not been researched. A statement regarding its use in males is pending completion of research. Including Gardasil in the *Publicly Funded Immunization Schedules for Ontario – February 2005* (perhaps when the hepatitis B vaccine is administered in the schools) has yet to be decided.

### **RotaTeq™ Approved August 2006**

RotaTeq is a live, oral vaccine that protects against five serotypes of rotavirus responsible for 95% of rotavirus illness. Rotavirus infection is the most common cause of severe gastroenteritis in children aged 6 to 35 months. Subsequently, a child may receive the first dose at age 6-12 weeks, and additional doses at an interval of 4-10 weeks between each dose. (Use of a 2, 4 and 6 month schedule that coincides with the Pentacel™ primary series can be used.)

Research indicates that RotaTeq is 74% effective [95% CI (66.8, 79.9)] in preventing infection by the four serotypes in the vaccine; it is 98% efficacious [95% CI (88.3, 100)] in preventing severe gastroenteritis. A decreased number of visits related to rotavirus illness covered by RotaTeq was observed at clinics and emergency rooms (along with hospitalizations).

In 1999, Wyeth withdrew the rotavirus vaccine RotaShield™ from the United States market due to a suspected increased rate of intestinal intussusception associated with the vaccine. However, subsequent large trials did not confirm this risk with the new vaccine RotaTeq.

### **Menactra™ Approved May 2006**

Menactra is a tetravalent meningococcal polysaccharide-protein conjugate vaccine that protects against meningococcal disease from serogroups A, C, Y and W-135. It is intended for children  $\geq$  2 years of age, young adolescents (age 11-12 years), and adults - a single dose confers protection. The need for a booster(s) has yet to be determined.

Menactra may provide a more effective and longer lasting immune response and will likely replace Menomune™.

Currently, Menactra should be used in place of Menomune for the following groups:

- Persons who travel to or live in areas where meningococcal outbreaks are occurring or meningococcal is endemic;
- Laboratory workers who handle cultures of *Neisseria meningitidis*;
- Persons with anatomic or functional asplenia;
- Persons who have complement, properdin or factor D deficiencies;
- Close contacts of persons with meningococcal disease caused by serogroups A, Y or W-135.

It remains to be determined if Menactra will replace conjugate meningococcal C products (Meningitech™, Menjugate C®, and Neis-Vac®) for some age groups in Canadian publicly funded programs.

References

Primarily adapted from: Warshawsky, B., & Pollett, G. (2006). New Vaccines in Canada. Middlesex-London Health Unit.

**PNEUMOCOCCAL POLYSACCHARIDE REIMMUNIZATION**

*Cathy Coburn, Public Health Nurse  
Vaccine Preventable Diseases*

<b>Reimmunization with Pneumococcal Polysaccharide Vaccine (Pneu PS)</b>	
<b>Table 5 - Publicly Funded Immunization Schedules for Ontario – February 2005</b>	
<b>Criteria for Reimmunization</b>	<b>Timing</b>
<p>A single revaccination with Pneumococcal Polysaccharide vaccine is appropriate for those <math>\geq 2</math> years of age who have:</p> <ul style="list-style-type: none"> <li>• functional or anatomic asplenia or sickle cell disease</li> <li>• debilitating cardio-respiratory disease</li> <li>• hepatic cirrhosis</li> <li>• chronic renal failure or nephritic syndrome</li> <li>• HIV infection <b>and/or</b> immunosuppression related to disease or therapy</li> </ul>	<ul style="list-style-type: none"> <li>• 1 dose after 5 years for those <math>\geq 11</math> years of age at the time of re-vaccination</li> </ul> <p style="text-align: center;"><b>OR</b></p> <ul style="list-style-type: none"> <li>• 1 dose after 3 years for those <math>\leq 10</math> years of age at the time of revaccination</li> </ul>

Source:

Ontario Ministry of Health and Long-Term Care. (2005). Publicly Funded Immunization Schedules for Ontario - February 2005. Eligibility Criteria: Pneumococcal Vaccine High Risk Criteria, p 2; Reimmunization with Pneumococcal Polysaccharide vaccine, Table 5, corrected herein, p 3. Original available at <http://www.health.gov.on.ca/english/providers/program/immun/pdf/schedule.pdf#search=%22Publicly%20Funded%20immunization%20schedules%20for%20ontario%22>

**COLD CHAIN ORIENTATION FOR NEW STAFF**

*Kathryn Whitehouse, Public Health Nurse  
Vaccine Preventable Diseases Program*

Nurses with the Vaccine Preventable Diseases Program can assist new medical office staff with vaccine management protocols - including the cold chain requirements from the Ministry of Health and Long-Term Care. Please call 519-376-9420 or 519-881-1920 to arrange.

## TICK SAMPLE SUBMISSIONS

Bev Middleton, Public Health Inspector  
Communicable Diseases Team

The Communicable Disease Team occasionally receives calls concerning tick bites, removal of ticks, and how to identify a tick. In Ontario, *Ixodes scapularis*, also known as the black-legged tick, is associated with the transmission of Lyme disease, babesiosis, and human granulocytic ehrlichiosis. This species feeds on deer, livestock, dogs, and will readily feed on humans.

Ticks can be submitted for identification and tested for *Borrelia burgdorferi*:

- Package the tick in a sterile specimen container
- Notify Public Health to arrange for pickup
- Provide patient history including: date and location of bite, geographical location where the patient was bitten, travel history, symptoms, and on-set date.



Adult Female Black-legged Tick  
(Deer Tick) *Ixodes scapularis*  
Photo courtesy-  
Centers for Disease Control

## STOP SMOKING RESEARCH IN GREY-BRUCE

Lisa Prowd, Public Health Nurse  
Tobacco Treatment Team

Patients who want to quit smoking can be directed to the Smoking Treatment for Ontario Patients (STOP) research study. Public Health is a satellite research site. The study seeks to assess the effectiveness and the logistics of providing nicotine replacement therapy products, at no cost to smokers, through Ontario Health Units. STOP is sponsored by the Ontario Ministry of Health. The lead researcher is Dr. Peter Selby with the Centre for Addiction and Mental Health.

Patients will receive a 10-week supply of smoking cessation products (gum, inhaler, or nicotine patch) and can obtain individual counselling from a public health nurse. Enrollment is expected to continue until December 2006. Patients can call the Tobacco Treatment Team at 519-376-9420 (or 1-800-263-3456).

## **RECORD KEEPING AND HIGH RATE OF IMMUNIZATION IN GREY-BRUCE**

*Cathy Coburn, Public Health Nurse*

*Kathryn Whitehouse, Public Health Nurse*

*Vaccine Preventable Diseases*

Grey-Bruce has a 97% immunization coverage rate - the third highest in the Province of Ontario (Wilson et al., 2006). In part, this reflects the successful partnership between Grey-Bruce physicians and Public Health to maintain detailed immunization patient data. Thank you!

### **Documentation is Key**

Record these details to provide a complete record of immunization:

- Trade name of vaccine
- Disease(s) against which it protects
- Date given (day, month, year)
- Site and route of administration
- Manufacturer
- Lot number
- Name and title of provider

This is essential information in order to report an adverse vaccine reaction or manage patient reimmunization (due to a manufacturer recall or a cold chain failure).

Also, for day-to-day procedures, it can be extremely advantageous to place an immunization summary in a readily accessible section of a patient's medical record. Easily retrievable details can be quick to transmit especially when a child enters daycare/school or moves to a different school district.

#### References

Health Canada. (2002). Canadian Immunization Guide (6th ed.). Canadian Medical Association. Last retrieved during September 2006 at <http://www.phac-aspc.gc.ca/publicat/cig-gci/index.html>

Ontario Ministry of Health and Long-Term Care (2005). *Publicly Funded Immunization Schedules for Ontario – February 2005*. <http://www.health.gov.on.ca/english/providers/program/immun/pdf/schedule.pdf>

Public Health Agency of Canada (1997). Canadian Communicable Disease Report; Volume 23. *Guidelines for Childhood Immunization Practices*. <http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/97vol23/23sup/acs6.html>

Wilson, V., Michelin, L.R., & Stewart, M. (January-March, 2006). *Website Immunization Record Process 2004 Provincial Ontario Benchmarking Results*. Ontario Public Health Research, Education & Development.

## INFLUENZA VACCINE AVAILABILITY — FALL 2006

Date Available	Recipient	Nature of Risk
Mid-November	Long-term care facilities and hospitals	a) patients/residents at risk to develop influenza-related complications b) people/personnel who may transmit influenza to high risk patients/residents
Mid-November	Physicians	High risk patients as above - including children 6-23 months of age. Also recommended for people $\geq 65$ years of age.
Nov 16	Health Unit	Community Influenza Clinics – see schedule
Nov 27	Universal availability: nursing agencies, pharmacies, and workplace clinics.	Intended primarily for well individuals from 2-64 years of age.

### Influenza Vaccine<sup>^</sup> Dosage (2006-2007)\*

Age	Vaccine type	Dose (mL)	No. of Doses
6-35 months	split-virus	0.25	1 or 2*
3-8 years	split-virus	0.5	1 or 2*
$\geq 9$ years	split-virus	0.5	1
$\geq 18$ years	sub-unit/split virus	0.5	1

<sup>^</sup> Influenza vaccine should be administered intramuscularly. The deltoid muscle is the recommended site in adults and children  $\geq 12$  months of age. The anterolateral thigh is the recommended site for infants  $< 12$  months of age.

\* Previously unvaccinated children  $< 9$  years require two doses of the split-virus influenza vaccine, with an interval of 4 weeks.

### Influenza Vaccine: Pregnancy & Lactation

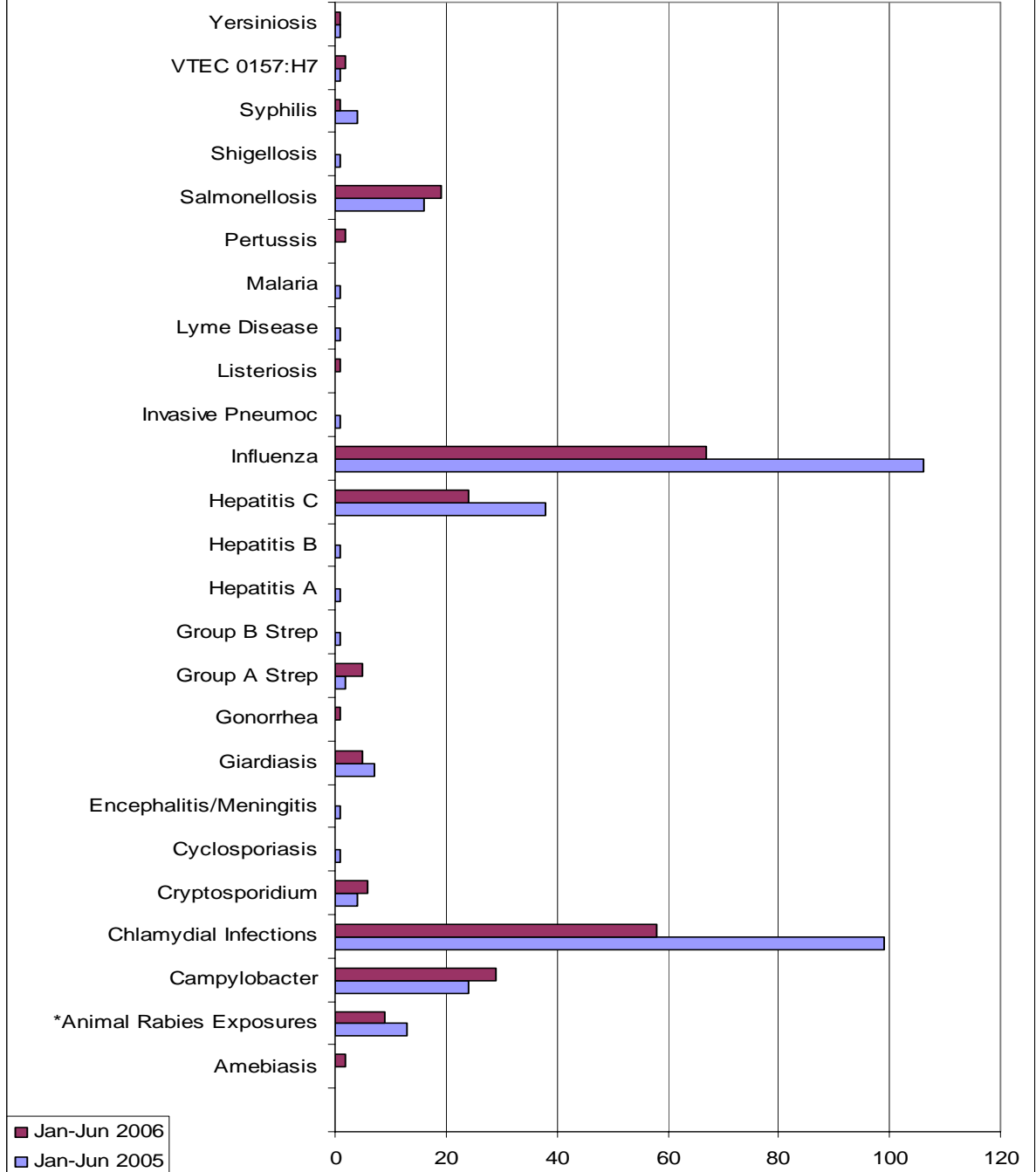
Influenza vaccination is recommended for pregnant women, especially those with chronic health conditions (cardiopulmonary disorders, diabetes mellitus, cancer, immunodeficiency, immunosuppression, renal disease, etc.). Influenza vaccine is also safe for breastfeeding women.

#### Reference

Adapted from: National Advisory Committee on Immunization. (2006). Statement on Influenza Vaccination for the 2006-2007 Season. *Canada Communicable Disease Report*, 32 [ACS-7 June 15]. Public Health Agency of Canada. Retrieved September 2006 from <http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/06pdf/acs-32-07.pdf>

## Grey Bruce Health Unit Reportable Disease Incidence

Comparison: January-June 2005 with January-June 2006



\*No. of people vaccinated

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# Remember to give all recommended vaccines at each visit

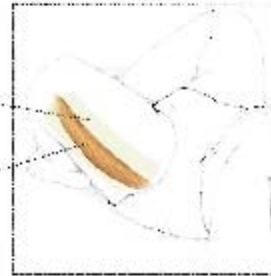
Insert name of vaccine next to corresponding injection site



## Infants - under 12 months

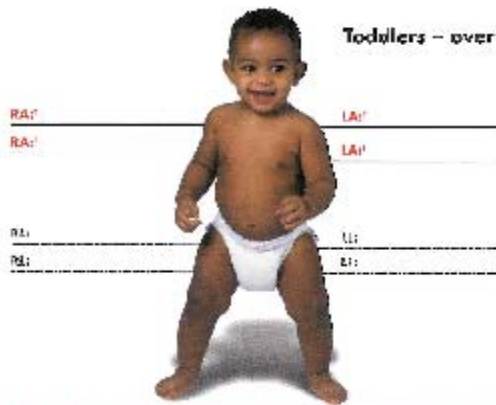
SC: Anterolateral Surface

IM: Vastus Lateralis



The vastus lateralis in the thigh is the preferred site for IM injections for children less than 12 months.

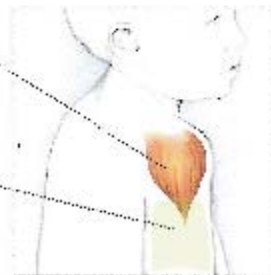
- Area for intramuscular injections (IM)
- Area for subcutaneous injections (SC)



## Toddlers - over 12 months

IM: Deltoid

SC: Outer Aspect



The deltoid is generally the preferred site for IM injections for children over 12 months, but the vastus lateralis may be used

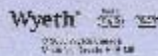
IM: Deltoid  
SC: Outer Aspect

### Preparing for multiple injections<sup>2,3</sup>

- All recommended vaccines should be given at the same visit
- Establish a consistent routine to administer multiple vaccinations
- Use separate needles and syringes for each injection
- Never mix different vaccines in a single syringe
- Consider using a needle organization tray, but always use vaccines immediately after reconstituting or drawing
- Two IM injections may be given into the same muscle if spaced approx. 1" (2.5 cm) apart
- Always record the vaccine given, lot number, dose, site, and route of administration on patient record

Always Thaw frozen Vaccines Gently before Administering. Do not shake. Do not use if cloudy or contains particles.

1. See package insert for each vaccine for complete information. 2. See package insert for each vaccine for complete information. 3. See package insert for each vaccine for complete information. 4. See package insert for each vaccine for complete information. 5. See package insert for each vaccine for complete information. 6. See package insert for each vaccine for complete information. 7. See package insert for each vaccine for complete information. 8. See package insert for each vaccine for complete information. 9. See package insert for each vaccine for complete information. 10. See package insert for each vaccine for complete information.



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# GREY BRUCE HEALTH UNIT

## COMMUNITY FLU CLINICS 2006

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Place	Location	Date		Time
Owen Sound Legion	Owen Sound	Thursday	NOV 16	1:00–8:00 p.m.
Georgian Bay S.S.	Meaford	Monday	NOV 20	4:00–8:00 p.m.
Walkerton District S.S.	Walkerton	Wednesday	NOV 22	4:00–8:00 p.m.
Saugeen District S.S.	Port Elgin	Thursday	NOV 23	4:00–8:00 p.m.
Peninsula Shores District School	Warton	Monday	NOV 27	4:00–8:00 p.m.
Chesley Community Centre	Chesley	Tuesday	NOV 28	4:00–8:00 p.m.
Owen Sound Legion	Owen Sound	Wednesday	NOV 29	4:00–8:00 p.m.
O.S.C.V.I.	Owen Sound	Monday	DEC 4	4:00–8:00 p.m.
Kincardine District S.S.	Kincardine	Tuesday	DEC 5	4:00–8:00 p.m.
Grey Highlands S.S.	Flesherton	Wednesday	DEC 6	4:00–8:00 p.m.

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