

# Physicians' Newsletter



Leeds, Grenville & Lanark District

## HEALTH UNIT

From the  
Medical Officer  
of Health

July 2004 - Oct. 2004

## Interesting Times for Public Health

Submitted by Dr. Charles Gardner,  
Medical Officer of Health and Chief Executive Officer

These are interesting times for public health. In May the Expert Panel on SARS released its final report and the Campbell Commission released its interim report, both making recommendations for extensive changes to Ontario's public health system (see the enclosed article on these reports for more information). On June 22 the provincial government released its three-year plan in response to these reports, entitled Operation Health Protection (see the report at [www.health.gov.on.ca](http://www.health.gov.on.ca)). The plan specifies a series of actions to be taken under the following six headings:

- Creation of a Health Protection and Promotion Agency
- Public Health Renewal
- Health Emergency Management
- Infection Control and Communicable Disease Capacity
- Health Human Resources
- Infrastructure for Health System Preparedness



Both Chief Medical Officer of Health Dr. Sheila Basrur, and Minister of Health George Smitherman have indicated that childhood vaccination is among the health priorities of the province. Thus the provincial government announced in its budget in May that they will be initiating universal programs for varicella, conjugated pneumococcal, and infant meningococcal C vaccination. We will ensure that you receive information on the details of these new programs once they are provided to the health units by the province.

This issue of the *Physicians' Newsletter* also includes articles on adolescent pertussis vaccination, syphilis, childhood dental health, healthy nutrition (looking at "low carb diets"), and our pilot project on colorectal cancer screening. Much is happening in public health provincially and here in Leeds, Grenville and Lanark.

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## Adacel™ (Diphtheria – Tetanus – Acellular – Pertussis) Vaccine (dTap)

*Submitted by Margaret Hendriks, Public Health Nurse, Department of Clinical Services*

Pertussis (whooping cough) is a highly communicable bacterial disease caused by *Bordetella pertussis*. The incidence of pertussis has declined by over 90% during the last 40 years due to universal childhood immunization programs using whole-cell pertussis combination vaccines. However, outbreaks of pertussis continue to occur. Adults and adolescents are a primary factor in the resurgence of pertussis because immunity decreases over time. Pertussis often goes unrecognized and is difficult to diagnose in adults since cultures are often negative and asymptomatic infections are common. As a result, adults and adolescents easily spread the disease to unimmunized or inadequately immunized infants.

Adacel™ is a new acellular pertussis, tetanus and diphtheria combination vaccine. It is indicated as a single 0.5 ml dose intramuscularly for adolescents and adults aged 11 – 54 years of age. Adacel™ vaccine is publicly funded and licensed in Canada as a reinforcing dose only; there is no approved schedule for the use of Adacel™ vaccine in the primary series. The Adacel™ vaccine is immunogenic after one dose as a pertussis booster. The duration of protection from this booster is currently unknown and there are no recommendations in place yet as to when/if a subsequent booster should be given.

According to the National Advisory Committee on Immunization (NACI) “All preadolescents and adolescents who have not received a dose of acellular vaccine should receive

a single dose of the adolescent adult formulation of acellular pertussis vaccine. dTap (diphtheria – tetanus – acellular pertussis) should replace Td (Tetanus – diphtheria) for the routine adolescent booster program”.

The Canadian Immunization Guide (Sixth Edition 2002) states that “The combined adolescent/adult formulation of dTap should be used to replace the adolescent booster of Td”.

The polio component of the adolescent booster is no longer required under certain circumstances. There has been a legislature amendment to the Immunization of School Pupils Act to support this change. The requirement for a ten-year reinforcing dose of the polio vaccine has been removed for those adolescents who have completed their primary series of polio vaccine. The reinforcing dose of Td is still required. This amendment is consistent with the current recommendations of the National Advisory Committee on Immunization (NACI). The amendment has been in effect since January 03, 2004.

As a result of this amendment the recommendation for those who have completed the primary series of diphtheria, pertussis, tetanus and polio can receive the Adacel™ vaccine (dTap) provided through the publicly-funded program or Td.

Individuals who have not completed their primary series of polio can receive Td and polio (IPV) or Adacel™ and polio (IPV) separately. At this time Td Polio (Element) has been discontinued.

### Prescription for Prenatal Classes

Please find enclosed with this newsletter, a ‘prescription pad’ of tear-off sheets for your prenatal patients, to inform them about prenatal classes. There is information for them to register for classes at the nearest Health Unit location across Leeds, Grenville & Lanark. As in the past, in order to lessen the likelihood of low birth weight & preterm labour, we recommend that patients register for classes early in their pregnancy.

To order additional pads, please contact the Health Unit.

## ***First in Canada:*** **Screening Program for Colorectal Cancer**

*Submitted by Claire Farella, Public Health Nurse*

The Ontario Ministry of Health and Long-Term Care (MOHLTC), the Division of Preventive Oncology of Cancer Care Ontario (CCO), and the Institute for Clinical Evaluative Services in Ontario (ICES), has undertaken a pilot project comparing two methods of recruitment for colorectal screening in asymptomatic average risk 50 to 75 year old individuals in Ontario. The project is based on Fecal Occult Blood Test (FOBT) as the screening modality, in keeping with the recommendation of the Canadian Task Force on Preventive HealthCare. While FOBT is the screening test with the most complete randomized trial evidence of mortality reduction, there is low use of this screening method among the target population.

The main objective is to compare rates of participation of eligible individuals in FOBT screening when it is promoted through two different approaches: through the primary care providers compared to a broader public health strategy. The recruitment intervention will take place over a period of 12 months, beginning March 1, 2004 to February 28, 2005. The project proposes to include approximately 220,000 patients in each of the two recruitment groups, or 440,000 in total. Approximately 450 primary care physicians and six public health units will participate in the pilot project.

Leeds Grenville and Lanark District Health Unit have utilized existing community networks, including primary care physicians, prevention advocacy groups, service clubs and community cultural and social organizations, to educate the community and promote colorectal screening by FOBT. The networks will help facilitate publicity, recruitment, and compliance in our area.

Recruited participants will receive a guaic-based FOBT collecting kit, instructions on collection and diet restrictions to reduce false positives. Once kits are completed patients will take their requisition forms and consent to the participating laboratories or physician office. In situations where the participant does not have a family physician, community physi-

cians and nurse practitioners have been recruited by the health unit to participate in providing follow-up for those study participants that test positive on the FOBT screen. All FOBT results will be sent to the primary care physician or nurse practitioner. Searching billing claims for related procedures in the ICES databases will monitor the rate of compliance for follow-up.

The participating laboratories will return all submitted consent forms and all FOBT test results to the study office. All data will be held at ICES. A secure database will be constructed based on the encrypted Ontario Health Insurance Numbers of all participants with a positive FOBT. Follow-up procedures that are carried out following the completion of the FOBT will be identified by linkage of this secure database with the OHIP billing and hospitalization files held at ICES.

**Are you age 50 or older?**

Colorectal cancer occurs most often in men and women age 50 and older. It is the second leading cause of cancer deaths in Ontario. There is a very simple screening test for colorectal cancer called a Fecal Occult Blood Test (FOBT). You do the test yourself at home and take it to a laboratory for analysis. Having a Fecal Occult Blood Test every one to two years is a proven way to reduce the risk of disease or find cancer early when treatment works best.

**Ask your physician for a colorectal cancer test  
It could save your life!**

For more information about colorectal cancer, call the Health Unit: 1-800-660-5853 or 345-5685

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### **Key Outcomes**

- Screening participation rates in each arm of the project.
- Compliance with follow-up procedures in those who have a positive FOBT result.
- Relative frequency of use of each of the diagnostic medical procedures that are utilized in the follow-up of a positive FOBT result.
- Time period to complete a diagnostic procedure from the time of the positive FOBT result.
- Perceptions and experiences of participating physicians with regard to FOBT, other screening modalities, and access to diagnostic procedures.
- Perceptions and attitudes of individuals about FOBT before and after they have completed the test.

### **Secondary Outcomes**

- Assessment of the feasibility of various public health strategies to promote colorectal screening and how this differs in different settings in Ontario.
- Cost implications of recruitment strategies and their impact on service utilization.

The complete pilot project document can be located at [www.cancercare.on.ca-pdf](http://www.cancercare.on.ca-pdf)

# Provincial and National Reports on SARS and Public Health

Submitted by Patricia Huston MD, Associate Medical Officer of Health, Ottawa Public Health

## The Issue:

Two provincial Reports were released at the end of April 2004 that analyzed the “lessons learned” from SARS and made recommendations for strengthening public health in Ontario: The **Campbell Report** (interim) and The **Walker Report** (final). Both call for a major overhaul of public health in Ontario. This is bound to have an impact on public health at the municipal level in the near future.

## Background:

SARS has been a major “wake-up” call that has led to the growing consensus on the need to increase capacity in public health.

## National developments

- ▶ In October 2003 the **Naylor Report** was released with recommendations to strengthen public health at the federal level. Consistent with these recommendations, Health Canada has announced:
  - A Minister of State for Public Health
  - The formation of a Public Health Agency of Canada.
  - A Chief Public Health Officer for Canada
  - \$665 million in the last federal budget to strengthen public health

## Provincial developments

- ▶ The **Walker Report**: In May 2003, the Ministry of Health and Long Term Care established the Expert Panel on SARS and Infectious Disease Control with a mandate to identify the key lessons learned from SARS and to provide recommendations regarding Ontario’s capacity to manage public health emergencies and infectious Disease threats in the future.
  - The Initial Report was released in December 2003 and identified 53 recommendations requiring “urgent action”
- ▶ The **Campbell Report**: In June 2003, the Ministry of Health and Long Term care appointed Justice Archie Campbell to conduct an independent investigation into the introduction and spread of SARS.
  - The interim report begins by noting, “The SARS crisis exposed deep fault lines in the structure and capacity of Ontario’s public health system” and that “these problems need urgently to be fixed.”
  - The Report identifies 21 principles of public health reform, the first one being “Public Health in Ontario requires a new mandate, new leadership and new resources.”

The Reports are remarkably consistent; this briefing note focuses on the Walker Report as it is now completed.

## Summary of Walker Report Recommendations:

The Walker Report offers a blueprint on how to better bridge federal, provincial and local public health efforts. It includes 103 recommendations, some highlights of which include:

- ▶ The establishment of an **Ontario Health Protection and Promotion Agency**
- ▶ Independence of the **Chief Medical Officer of Health**
- ▶ The establishment of **Regional Infection Control Networks**, including hospitals, public health, labs and others to improve coordination of infection control.
- ▶ **Public Health revitalization**, including
  - Reviews of local Public Health Units to ensure compliance with Mandatory Programs and Services Guidelines
  - Enhanced public health capacity in emergency preparedness
  - Identification of health and risk communication as a core public health activity.
  - Restructuring of the present municipal-provincial cost-sharing agreement to reflect between 75-100% provincial funding of public health

## Provincial Reaction to the Reports:

The Minister of Health, The Honourable **George Smitherman** noted he was “very supportive and committed to revitalizing the province’s public health system,” and committed to responding to the Report within 60 days with an Action Plan. The Chief Medical Officer of Health for Ontario, **Sheila Basrur**, has stated, “We will rebuild the capacity of the public health system and improve its effectiveness in the face of future health emergencies.”

## Next steps:

The provincial government will be tabling its 2004 budget on May 18, 2004. It is expected that the province will begin to increase funding for public health, especially in the area of infectious disease. The Ontario Action Plan in response to the Walker Report should be tabled by the end of June.

## "The Low Carb Diet"

*Submitted by Julie Lenk, Public Health Dietitian*

"Low carb" is everywhere! Whether it's Atkins, South Beach or The Zone, people are embracing low carbohydrate diets. With the alarming increase in obesity prevalence in Canada, people are interested in finding quick, effortless solutions to weight loss. Low carbohydrate diets restrict carbohydrate-containing foods such as grain products, fruits and vegetables, legumes, milk, yogurt, and foods with added sugar. The result is an inadequate diet that is high in protein and fat and low in vitamins, minerals, antioxidants and dietary fibre. The bottom line is low carb diets are lower in calories compared to an individual's usual intake. This is what leads to weight loss.

Should we be recommending these diets to our patients? The following article reviews current research and provides a summary of what dietitians are saying about low carbohydrate eating.

### What Does The Research Say?

A recent systematic review published in the Journal of the American Medical Association by Dr. Dena Bravata and associates examined existing research on low carbohydrate diets published from January 1, 1966 to February 15, 2003. The review evaluated changes in weight, serum lipids, fasting serum glucose, fasting serum insulin levels, and blood pressure among adults using low carbohydrate diets in outpatient settings. MEDLINE and bibliographic articles describing adult, outpatient recipients of low carbohydrate diets of 4 days or more in duration and 500 calories/day or more were eligible for inclusion. Carbohydrate content and total calories consumed must have also been reported to be included in the review. Out of the 2609 potentially relevant articles, 107 were included, describing 94 dietary interventions. Data was reported for 3268 participants. Six hundred and sixty three participants received low carbohydrate diets of 60 grams/day or less of carbohydrate and 71 of these participants received 20 grams/day or less of carbohydrates.

The studies included in the review were highly heterogeneous with respect to design, carbohydrate content, total caloric content, diet duration and participant characteristics such as baseline weight range. Important to note is that low carbohydrate diets of 60 grams/day or less were not evaluated on participants with a mean age older than 53.1 years and only 5 studies evaluated these diets for more than 90 days.

The systematic review illustrated that among obese patients, weight loss was associated with increased diet duration and decreased caloric intake, but not with reduced carbohydrate content. It was also reported that low carbohydrate diets had no significant adverse effects on serum lipid, fasting serum glucose, and fasting serum insulin levels, or blood pres-



sure. Bravata and associates concluded "there is insufficient evidence to make recommendations for or against the use of low carbohydrate diets, particularly among participants older than age 50 years, for use longer than 90 days, or for diets of 20grams/day or less of carbohydrates."<sup>(1)</sup>

### What Does The Research Mean?

Current nutrition guidelines are based on years of scientific evidence and research. We can't ignore the plethora of studies that demonstrate the inclusion of whole grain foods, vegetables and fruit reduce the risk of heart disease, cancer, obesity, stroke and diabetes. Diets that are higher in fat, especially those higher in saturated and trans fat, increase the risk of these chronic diseases. Typically, low carbohydrate diets are higher in dietary fat and cholesterol and low in dietary fibre.

Until we can make recommendations to our patients, more studies of a larger size, longer duration and more homogeneous design are required to determine the long-term efficacy and safety of low carbohydrate diets. These must be done before we dismiss long-standing nutrition recommendations. We also need to remember that obesity is multifaceted and not just about food choices and diet, but also physical activity.

### What Are Dietitians Recommending?

Dietitians and nutritionists across the province encourage Canadians to adopt a general healthy lifestyle approach to achieving a healthy weight by following Canada's Food Guide to Healthy Eating and Canada's Physical Activity Guide to Healthy Active Living. This means choosing the appropriate portion sizes and numbers of servings from each food group and being physically active for at least 30 minutes every day.

Encourage your patients to choose healthier foods like whole grain breads, pasta and high fibre cereals, colourful fruits and vegetables, lower fat milk products and leaner meats, fish, poultry and meat alternatives. Include healthier kinds of fat

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such as canola and olive oils and soft non-hydrogenated margarine. Lastly, warn consumers to be aware of “portion distortion”.

Portion sizes of popular foods have dramatically increased over the last 20 years. Years ago, a standard bagel was two servings of grain products. Today, a standard bagel has expanded and can be up to four to five servings of grain products. It is not carbohydrates that are expanding the waistlines of Canadians, but the larger quantities of food available and consumed.

Following Canada’s Food Guide to Healthy Eating may not provide the quick and effortless weight loss results of low carbohydrate diets, but it is the foundation for healthy eating for Canadians, it is safe and it works for the long term!

Adapted from: OSNPPH Media Release May 14, 2004  
Dietitians of Canada News Release April 28, 2004

#### Reference:

1.Bravata DM, Sanders L, Huang J, Krumholz HM, Olkin I, Gardner CD, Bravata DM. Efficacy and safety of low-carbohydrate diets: a systematic review. JAMA. 2003;289:1837-1850.



## Early Childhood Caries

*Submitted by Penny White, Registered Dental Hygienist*

The primary dentition is essential for the healthy growth and development of children and is necessary

for proper speech development, adequate nutrition, sufficient spacing for permanent teeth, socialization and self-esteem.

Tooth decay is largely preventable and yet it is one of the most common diseases in childhood. It is 5 times as common as asthma and 7 times as common as hay fever in children 5 – 17 years of age.

Dental decay is a multifactorial disease in which there are four overlapping factors: a susceptible host, a cariogenic oral flora, and a suitable substrate, all present for a sufficient length of time.

Early Childhood Caries (ECC) is a rapid form of the disease with devastating effects. In a recent Canadian study of preschoolers with ECC, 48% complained of pain, 61% ate sparingly or did not finish, 35% had problems sleeping and 5% had behaviour problems.

Severe dental decay can also be a contributing factor for children who demonstrate a failure to thrive, and children with ECC often show clinical signs of infection in their mouths.

Due to the extensive degree of damage to the dentition, and the difficulty in treating preschool children in a regular dental practice, treatment often requires the use of general anaesthesia in hospital. Average treatment costs range from \$700 - \$3000 per child.

The etiology of ECC is complex but some studies indicate that inappropriate feeding practices, lack of proper oral hygiene, cross contamination of oral bacteria from parent to infant, and lack of knowledge, are contributing factors.

#### **Preventing tooth decay is based on attempts:**

- to increase the resistance of the host with fluoride and pit and fissure sealants
- to reduce the number of microorganisms through plaque control and avoiding oral cross contamination
- to modify the substrate by limiting cariogenic foods
- to limit the frequency and reduce the amount of time the substrate is in the mouth

All parents, expectant or with children, should be advised of the risk factors for tooth decay and how to modify those risk factors for themselves and their children.

Parents should also provide daily mouth care for their children and be advised to “lift the lip” to check for early signs of ECC.

All children should have an examination by their family dentist, or dental screening by a Health Unit Registered Dental Hygienist by the age of two. Education and early identification is the key to preventing this devastating dental disease.

For more information regarding Early Childhood Caries, contact the Health Unit Dental Program .

## Increasing Syphilis Cases in Ontario

Submitted by Jane Fitcher, Director of Clinical Services

The number of infectious syphilis cases reported in Ontario has been rising since 2001. The majority of these cases have been identified in Toronto and Ottawa and the primary risk factor is men having sex with men (MSM). This pattern is consistent with reports from other Canadian cities including Vancouver and Montreal as well as several cities in the United States.

A preliminary review of Ontario's Reportable Disease System (RDIS) identified 212 cases of Primary, Secondary and Early Latent syphilis in 2002 and 346 in 2003. This compares to 50 and 51 cases in 2000 and 2001. Contact in bathhouses is a risk factor in the majority of cases.

The Toronto and Ottawa health departments have implemented several strategies to address this increase of syphilis in the defined population of MSM, which include:

- Offering testing in bathhouses
- Outreach to gay men's organizations
- Flyer placement in bathhouses
- Advertisements in gay community newspapers
- Internet advertising on websites frequented by MSM
- Syphilis educational video for use in bathhouses and Pride TV
- Partner notification of contacts of identified cases.

One of the concerns associated with this outbreak, is the occurrence of undetected, undiagnosed syphilis. There is more evidence of increasing oral transmission.

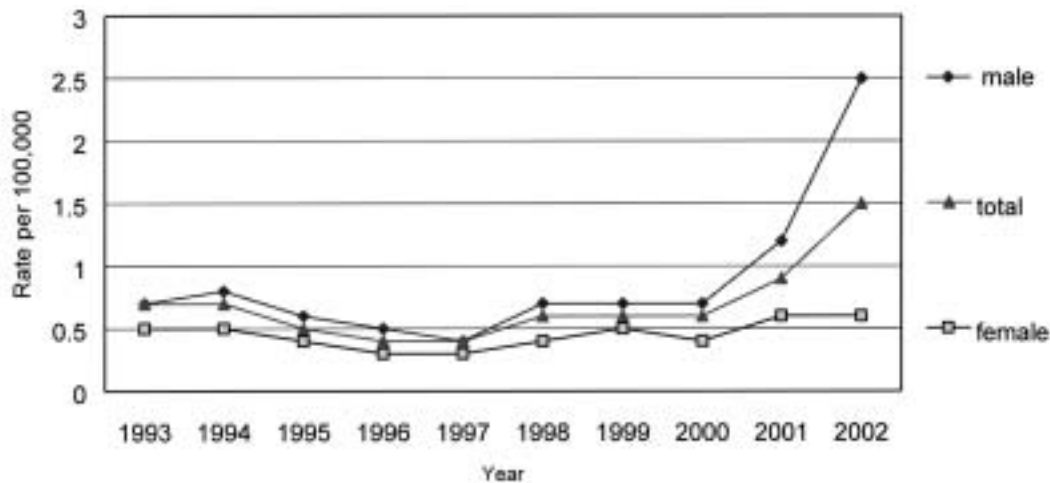
As physicians in rural areas, you may not have been aware of the resurgence of this disease so, we are asking that you consider syphilis in the differential diagnosis and that appropriate screening be done. We have had two cases of primary syphilis identified in the tri-county since the beginning of the year.

One of the major concerns with this increase in syphilis cases and corresponding rise in the incidence of chlamydia and gonorrhoea since 1997, will be an increase in the rate of HIV.

The reasons for these increases are believed to be:

- "safe sex" burn-out/condom fatigue
- availability of "quick" diagnostic tests and post exposure prophylaxis
- younger generation did not witness the AIDS devastation of the 1980s
- belief that AIDS is a treatable and non-fatal disease
- internet facilitates high risk partnering and behaviours.

**Reported Syphilis Rates in Canada, by sex\***



\*Source Sexual Health and STI Division, Health Canada 2004

The rates for 2003 have not been finalized, but according to Dr. Thomas Wong, MD MPH FRCPC, Community Acquired Infections Division, Health Canada (18.05.04) the projected rate for men will be greater than 6/100,000 and the increase is driven in the most part by MSM.

Please contact Dr. Charles Gardner or Jane Fitcher if you would like more information about this issue.