

January/February 2005 Volume 15 (1)

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incidence is 0.92 for 1999 and 1.04 for 2000. This incidence rate is comparable with international incidence rates of 0.5 to 1/million of population.

Of the 290 referrals, we have been able to obtain genetic sequencing on 86. As a result of this information we have assisted in the diagnosis of 10 familial CJD cases including six GSS. Since we began doing the 14-3-3 testing on CSF in our laboratory in 1998 there have been 110 specimens processed. We feel we have been effective in assisting physicians in diagnosing patients with probable CJD. This successful recruitment rate for the CJD Surveillance System is due to the overwhelming support from physicians caring for patients with CJD as well as families affected by this devastating disease.

DEAR COLLEAGUES,

The BSE cases in Alberta and subsequent trade problems for Canadian beef have adversely affected the cattle and dairy farmers of our area. The issue has also made us more aware of Transmissible Spongiform Encephalopathies or TSE. These are reportable diseases and a federal registry of CJD has been kept since 1998 by the CJD Surveillance System. This group is now operating under the new Public Health Agency of Canada.

**CJD Surveillance System Update**

As of December 31, 2001, we have had 290 referrals to the CJD-SS (Creutzfeldt-Jakob Disease Surveillance System) with 121 cases of definite (proven by pathology) CJD.

As reflected in Figure A, there has been an ever-increasing number of referrals to the System since its inception in 1998. We believe this is attributable to increasing public awareness of this disease as well as increased reporting by physicians to CJD-SS.

As seen in Figure B, 1999 and 2000 are the years for which we have the most complete data thus far. The

Figure A

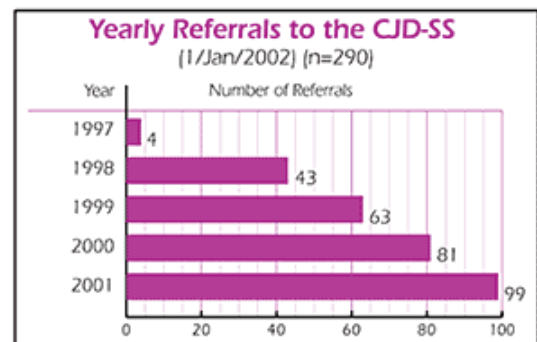
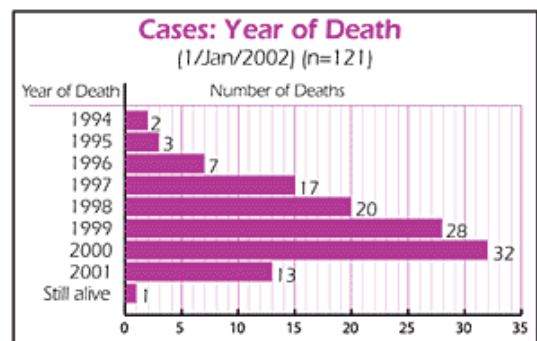


Figure B



## Classical CJD and Variant CJD: Similar names, different conditions

As there seems to be some difficulty with the diagnosis of CJD versus vCJD we have decided to highlight, in this issue, the differences between CJD and vCJD as they relate to signs, symptoms and investigations.

	Classical CJD	Variant CJD (vCJD)
<b>Age Range</b>	onset 45 - 75 years of age	onset 12 - 74 years of age
<b>Average Age</b>	60 years of age	28 years of age
<b>Average Duration</b>	4 - 6 months	8 - 38 months
<b>Symptoms (in order of progression)</b>	1 - rapid progressive dementia 2 - involuntary movements (myoclonus, chorea, dystonia) 3 - akinetic mutism 4 - extrapyramidal symptoms 5 - ataxia 6 - pyramidal signs 7 - cortical blindness	1 - psychological symptoms (anxiety, depression, withdrawal) 2 - ataxia (with persistent dysesthesia) 3 - involuntary movements (myoclonus, chorea, dystonia) 4 - dementia 5 - akinetic mutism
<b>CT</b>	cerebral/cerebellar atrophy	usually normal
<b>MRI</b>	putamen and caudate hyperintensity	bilateral pulvinar signal (77%)
<b>CSF</b>	normal	normal (can have high protein)
<b>14-3-3 (CSF)</b>	positive (>80%)	positive (50%)
<b>EEG</b>	pseudoperiodic sharp waves (50-70%)	normal (or non-specific low waves)
<b>DNA (at codon 129)</b>	met/met 71% met/val 13% val/val 16%	met/met 100%
<b>Pathology - brain</b>	Both classical and variant CJD: Spongiform changes, neuronal loss, astrocytosis, protease resistant PrP	
	PrP amyloid plaques NOT seen	amyloid plaques
<b>Pathology - tonsil</b>	normal	positive immunocytochemistry for PrPsc

There have been several cases of sporadic CJD in our area in the past 3 years and one case of GSS. It is important to recognize and report suspect cases as there may be some risk to health care and laboratory workers particularly if surgery is done. It is suspected that vCJD may have been transmitted by blood transfusion. sCJD has been transmitted by neural tissue grafts and cadaver-derived HGH. The CJD ss will cover the cost of post-mortem pathological examination if it is deemed

necessary for diagnosis. There have been two cases of vCJD in Canadians but both victims had spent significant time living in Great Britain and it is thought that the disease was contracted there. Although the number of reported BSE-affected cattle is very low in Canada, it should be remembered that, in the past, sick cattle did not always get tested.

Information is available on the Public Health Agency of Canada Web site

<http://www.phac-aspc.gc.ca>. Follow the links or go to 'surveillance' and CJD

## Chief Dental Officer for Health Canada

Dr. Peter Cooney has recently been appointed as the Chief Dental Officer for Health Canada. Dr. Cooney's primary responsibilities will be to increase awareness about preventing oral diseases and to improve the oral health status of Canadians.

Oral health is acknowledged to be an important, but often neglected, part of the health system. And yet, it can have a significant impact on Canadians' daily functioning and quality of life. As Health Canada works to incorporate health promotion, disease prevention and health surveillance within the larger health agenda, oral health issues must be recognized and included.

Health Canada's goal in creating this new position is to increase awareness of good oral habits. This will be achieved by providing evidence-based advice on oral health policy and program development, working to ensure oral health is included in the wider health agenda, and recommending that partners in oral health work together to prevent and control oral and associated diseases.

Dr. Cooney's office will also assist in gathering epidemiological information to help establish priorities for research, and will work with expert bodies at all levels of government to move these objectives forward.

The health of our teeth and gums provides a "window" into the state of the health of our bodies. Increasing awareness of good oral habits will benefit all Canadians.

## Biography

Having spent a number of years in private dental practice, Dr. Peter Cooney completed his Specialty, Masters and Fellowship in Community Dentistry. He joined Health Canada in 1991 and worked with the First Nations and Inuit Health Branch in Manitoba Region.

In 1997, he moved with his wife and three children to Ottawa to further his career as the National Dental Officer of the Medical Services Branch (now the First Nations and Inuit Health Branch or FNIHB). He was later appointed the Director General of the Non-Insured Health Benefits Division of FNIHB, from 1999 to 2003.

Dr. Cooney is a former President of the Canadian Association of Public Health Dentistry and is currently the Chief Examiner for the specialty of Dental Public Health with the Royal College of Dentists of Canada.

Dr. Cooney will lead the newly created Office of the Chief Dental Officer (OCDO) and will report to the Assistant Deputy Minister of the First Nations and Inuit Health Branch. Since the activities of the OCDO will be directed at the Canadian population, Dr. Cooney will also have functional responsibility to provide advice directly to the Deputy Minister of Health Canada.

Yours truly,

**Hazel Lynn, MD, CCFP, FCFP, MHSc**  
Medical Officer of Health

### Upcoming Events:

#### February

Eating Disorder Awareness Week	Feb 6-12
Sexual Health Week	Feb 13-19
National Heart Month	

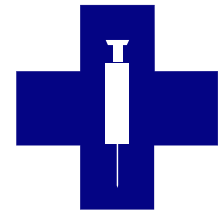
#### March

National Pharmacist Awareness Week	Mar 7-13
International Women's Week	Mar 6-12
Poison Prevention Week	Mar 20-26
World Tuberculosis Day	Mar 24

### Vacc Facts

*Sylvia Brooks, Public Health Nurse  
Vaccine Preventable Diseases Program*

#### When is the tetanus/diphtheria/ pertussis, or Adacel® given?



The product Adacel® is licensed for use in individuals between 11 and 54 years of age. It is publicly funded for those receiving their 10-year adolescent booster dose, which is usually given between the ages of 14 and 16. This replaces the tetanus/diphtheria/polio booster previously given at that time.

Adacel® is indicated as a single 0.5ml dose IM. It is licensed in Canada as a reinforcing dose only. For individuals between the ages 11 and 18 who have not been immunized in infancy, one single dose of publicly-funded Adacel® plus one injection of IPV should replace one of the three primary doses of tetanus/diphtheria and polio in that series.

### Fluoride Supplements

*Donna Clark, Dental Hygienist  
Dental Program*

Children are exposed to various sources of fluoride: water (municipal and private systems), fluoridated toothpaste, and commercial foods and beverages. With the increasing consumption of fluoride-containing products, there is an increased risk of dental fluorosis. Because of the wide variety of products containing fluoride and the variable amounts of fluoride in each product, it is impossible to predict accurately the fluoride intake of any individual. This makes prescribing an appropriate dosage of fluoride supplement complicated. Therefore, fluoride supplementation should be the exception, not the rule.



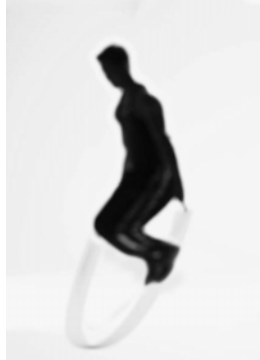
If a supplement is given, the family dentist should make the decision. This decision is based on an estimate of daily intake of fluoride per kilogram of body weight. A supplement may be recommended by the family dentist if a clinical examination and caries risk assessment determine a high caries risk, and if the family dentist feels the benefit of supplemental fluoride outweighs the risk of fluorosis.

## Healthy Weight, Healthy Lives: 2004 Chief Medical Officer of Health Report

Lynda Bumstead, Acting Nutritionist

The Public Health Unit applauds Dr. Sheela Basrur, Chief Medical Officer of Health for Ontario, on the release of her report *Healthy Weights, Healthy Lives* (November, 2004). The report succinctly captures the link between unhealthy weights and chronic disease.

For Grey-Bruce our wake up call came last year. According to Epidemiologist Alanna Leffley, the number of people within Grey and Bruce counties who are now above a healthy weight range has reached 57% (CCHS, 2000/01). Also in a sample of Grey-Bruce school-aged children the rate of children above a healthy weight was higher than what would have been expected. Our children have poor diets and are not active enough!



Dr. Basrur's report addresses the many social, environmental, economic and cultural factors that influence weight. The report illustrates how complex this issue is and how we need everyone working together in order to create environments that promote healthy weights.

What are we doing?

In December 2003, the Public Health Unit initiated a task force "The Grey Bruce Prevention of Obesity Workgroup" with representation from both local school boards, municipalities, early childhood education, recreational facilities, the private sector, local agencies and the medical community. The first "Prevention of Obesity" conference was held on October 28, 2004. A draft action plan for 2005 was developed.

The Public Health Unit is presently involved in a number of projects related to the promotion of healthy weights, including advocating for quality daily physical activity and the creation of a healthy school nutrition environment; promoting active living through active transportation and trail development; providing skill building educational opportunities for early childhood educators, local health care professionals and the public; implementing the Eat Smart restaurant program and breastfeeding promotion.

Resources are being reviewed and organized in a way to help develop and sustain a strategy that addresses educational, skill building and environmental ideas for creating communities that promote healthy lifestyles.

The overweight and obesity epidemic is one of the biggest public health challenges facing us today. We need to change this trend by changing Grey-Bruce's "obesogenic" environment, from a place that promotes or encourages obesity to one that promotes healthy weights. The Public Health Unit provides leadership in promoting healthy weights, healthy lives. If you are interested in being part of the action plan, contact Lynda Bumstead, RD at 376-9420.

## Public Health Meningococcal Vaccine Clinics

Sylvia Brooks, Public Health Nurse  
Vaccine Preventable Diseases Program

Since 1992, invasive type C meningococcal disease has resulted in two deaths in Grey and Bruce counties. The affected individuals were 12 and 15 years old. As of January 2005, children 12 years of age and youth 15-19 years of age are eligible to receive the publicly funded meningococcal - C vaccine.



The expansion of the Ontario's publicly-funded immunization program means that over 11,000 students in Grey and Bruce counties are eligible to receive the publicly-funded meningococcal vaccine. In order to ensure area-wide accessibility, the Public Health Unit will be offering school-based clinics.

The meningococcal vaccine clinic for Georgian College students will be held in early February. One-day clinics will be held in the secondary schools commencing in April and May and elementary school clinics will be held in May and June. The meningococcal clinics will be held separately from the secondary school tetanus/diphtheria/pertussis and Grade 7 hepatitis B clinics. This is a voluntary program.

## Healthy Pregnancy and Growth and Development Project

Submitted by: Marilyn Lemon, Lisa Prowd & Doris Galbraith, Public Health Nurses

In 2002, the Ministry of Health and Long-Term Care established the *Healthy Pregnancy and Early Childhood Development Project* to create a 4-year plan for ensuring healthy pregnancies and child development, beginning prior to pregnancy and continuing through the vital early years of childhood.

The goals of the project are twofold:

1. To increase the awareness of the importance of healthy living prior to conception and to ensure that newborns are as healthy as possible.
2. To provide a comprehensive and collaborative approach to healthy child growth and development.

The target audiences for this project are high-risk families and/or aboriginal people in Grey and Bruce counties with a child aged 0-6 years. The 4-year project builds upon existing resources and services, and supports sustainable initiatives, to promote positive lifestyle and behavior changes.

### What has been done?

Positive change in the local population has been facilitated through various methods including awareness campaigns, skill building workshops for service providers, health education for the target population, and policy development strategies.



For example,

1. Healthy Pregnancy Initiatives
  - Preconception awareness campaign - posters, fact cards, radio ads, billboard, display materials and Galaxy theatre ads

- Workshop on physical activity and pregnancy with Dr. M. Mottola Ph.D., Director of the Exercise and Pregnancy Laboratory at the University of Western Ontario
- Presentation by the Best Start Resource Center on preconception health
- Preconception/early prenatal health teaching and counselling clinic offered in the spring of 2004 at Saugeen Health Center, one day per month

### 2. Early Childhood Development Initiatives

- Positive parenting behaviour campaign (focused on attachment, self-esteem, brain development and the importance of play) - posters, fact cards, radio ads, billboard, display materials and Galaxy theatre ads.
- Training days on child-caregiver attachment with facilitator Dr. D. Benoit M.D. FRCPC and the *Right From the Start Program* from Hamilton Health Sciences and McMaster University
- Follow-up workshop by Dr. Benoit, on Modified Interaction Guidance (an evidence-based intervention to improve sensitivity and responsiveness in the caregiver, and promote secure attachment in the child)

### Upcoming Initiatives:

1. In 2005, the *Healthy Pregnancy and Early Childhood Development Project* will work on strategies to support policy development. Already, a draft policy and procedure has been developed for workplaces, for educating employees about their environment and potential risks during pregnancy.
2. Activities in 2005 will also focus on the development of evaluation tools for measuring the outcomes of the project activities and encouraging sustainable initiatives.
3. This coming year, staff on the Family Health Team at Public Health Unit will begin the process of implementing the Modified Interaction Guidance tool with their high-risk clients.

Grey Bruce Health Unit

PUBLIC HEALTH  **notes**

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