EPI NORTH

The Northwest Territories Epidemiology Newsletter

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In This Issue

Northwest Territories Health and Social Services

For the Sake of Our Children

By Dr. André Corriveau

Healthy child development is a fundamental determinant of a society's level of well-being. There is accumulated evidence that many factors acting during the period from conception to birth and in early childhood will have life-long effects on the overall health and wellness of a person, impacting on one's ability to lead a full and rewarding life.

In the Northwest Territories and Nunavut many changes now occurring in the family, the community, the economy and society can have significant influences on the health and well-being of children. On the one hand, investments made during the past few years in education and housing, as well as community empowerment initiatives and land claims settlements, have greatly improved overall living and social conditions and broadened opportunities for the future. On the other hand, available statistics tell us that the NWT still lags far behind the rest of the country when looking at levels of schooling, overcrowding, employment, poverty and many health status indicators like infant mortality or life expectancy.

A key prerequisite for healthy child development is a family setting where parents are capable of providing consistent caring and affection, good nutrition and a safe home environment, free of violence and of physical hazards. Any effective strategy to address determinants of healthy child development would therefore have to include enhancement of parental skills.

Too many NWT children continue to be exposed to the toxic effects of alcohol or of substances contained in tobacco smoke, even before being born. Health promotion efforts to decrease alcohol use in women of child bearing age, to prevent initiation of smoking in young people and foster the movement for more smoke free homes must therefore remain priorities.

Maternal and infant nutrition is another important cornerstone of healthy child development. Brain and immune system development are very sensitive to nutritional factors. For example, iron-deficiency anaemia during the first year of life can have lasting impacts on neurobehavioural development that remain measurable several years later. The Canadian Prenatal Nutrition Program, accessible to all communities, can be used as an opportunity to improve basic knowledge about nutrition at the community level.

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Children and Fire:

Each year in Canada fire continues to ravage the nation with an estimated yearly loss of 1.7 billion dollars.[1] While fires are dramatic and headline making, they continue to kill on average 555 Canadians each year and injure 3,856 persons.[2] While most people believe fires happen in the workplace or in public assembly areas such as churches, schools or arenas, up to 85% of fires occur in the home.[3]

Fire Deaths and Injuries in Canada		
	10 Year Average (1982-1991)	**1991**
Deaths	555	388
Injuries	3,856	3,476

While the causes of residential fires vary between jurisdictions, the most consistent cause is children playing with fire. In the Northwest Territories, children playing with matches and lighters are one of the most common ignition sources for residential fires.

Children and Fire in the NWT

Three factors influence the rate of children playing with fire in the NWT. The first factor is the relatively young nature of our population. Over one-third of the NWT's population is under age 15.[4] The second factor is that many children in the NWT are left unattended by parents and caregivers. Unattended and unsupervised children are dramatically linked with a higher rate of death due to fireplay.[5] The third factor is the availability and accessibility of smoking material in northern homes. Households with smokers are three to five times more likely to have a fire in their home than non-smoking households.

Between January 1, 1990 and July 31, 1997 there were 198 fires involving children 11 years of age and under.[6] These fires accounted for 12 fatalities, 28 injuries and over five and half million dollars in direct fire losses.[7] When a child dies in a fire in the NWT it is usually at their own hands due to fire play or because of another child in the home playing with fire.

NWT Child Fire Play — 1990-1997 (Age 11 and Under)				
Year	**Number of Incidents**	**$$ Loss**	**Injuries**	**Deaths**
1990	15	438,395	2	1
1991	42	1,853,243	8	6
1992	22	608,001	5	2
1993	39	1,124,645	6	0
1994	39	713,085	1	0
1995	16	385,960	3	0
1996	15	196,845	0	0
1997 (to July)	10	236,500	3	3
Total	**198**	**5,556,674**	**28**	**12**

Defining the Problem

Generally children that play with fire are split into two types. The first is the curiosity firesetter. This child is experimenting with fire out of an "innocent" interest. They find matches or lighters in a residential setting and play with the fire in or near the home. Most fires involving children are caused by innocent experimentation with fire or accidental fire play.[8]

The second type of firesetter is more serious. This involves children or juveniles that deliberately seek out matches and lighters and intentionally set fires. Defined as problem firesetters, these children can account for up to one-third of fires in a community.[9] Children in this category often have an underlying pathology that the fireplay is a sign or symptom of.

A Community Based Response to Child Fireplay

This year the Office of the Fire Marshal introduced a program to manage both curiosity and problem firesetters in NWT communities. Called the Juvenile Firesetters Intervention Program, it relies upon a community based approach to manage the incidence of child fireplay.

After a fire is extinguished and it is identified that a child set the fire, the local community fire department then approaches the parents/caregivers to have the child placed in the program. A trained member of the fire department administers a series of questionnaires to the child and the parents/caregivers. The evaluation identifies the risk that the child presents to the community from firesetting. This initial screening is critical to the placement of the child in a risk category that determines the level of intervention that is necessary.[10]

The fire department's initial screening process places the child in three risk and intervention categories:[11]

What a Community Can Do

Mike Lowing
Deputy Fire Chief
Yellowknife Fire Department

- Little Concern;
- Definite Concern; and
- Extreme Risk.

A child placed in the *Little Concern* category is considered a curiosity firesetter and receives educational intervention from the local fire department. The educational intervention utilizes a standardized and age appropriate curriculum to educate the child in the dangers of fire and to discourage further fireplay.

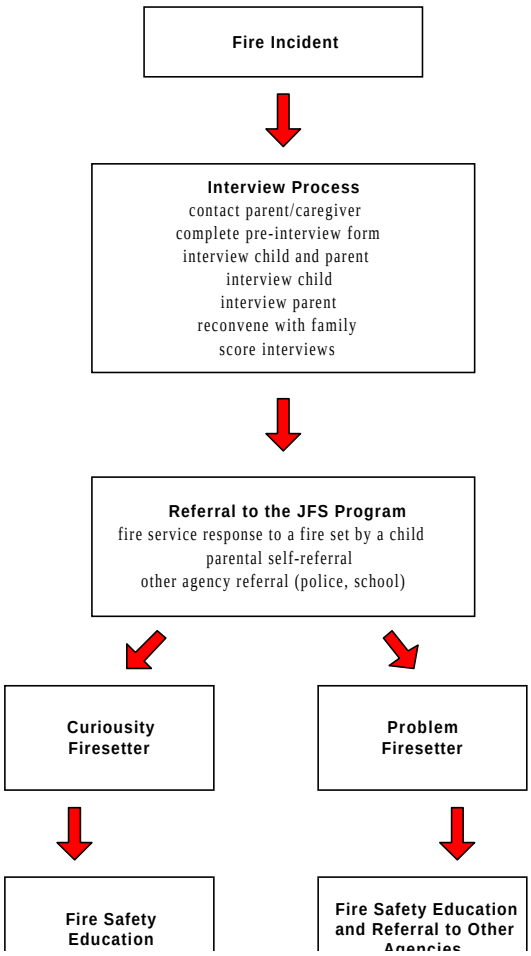
A child placed in the *Definite Concern* category receives the educational program from the fire department and is then referred to a mental health agency for psychological intervention. This process to manage a "problem firesetter" involves a community mental health group to provide counselling to treat the underlying pathology that is causing the child's fireplay.

The third category of *Extreme Risk* is a direct referral to a mental health agency for immediate psychological intervention. Fortunately this category is rarely used.

The Juvenile Firesetter's Intervention Program fits well into the community wellness model. It involves a community based approach to deal with the issue of children playing with fire. Whether a fire set by a curiosity or a problem firesetter, the spread and growth of the fire is the same. The Juvenile Firesetter's Intervention Program is a powerful tool for a community and its resources to protect its children from the dangers of fireplay.

For further information on the Juvenile Firesetter's Program contact, Kathryn Youngblut at the Office of the Fire Marshal at 867-873-7785.

Juvenile Firesetter Intervention Flow Chart



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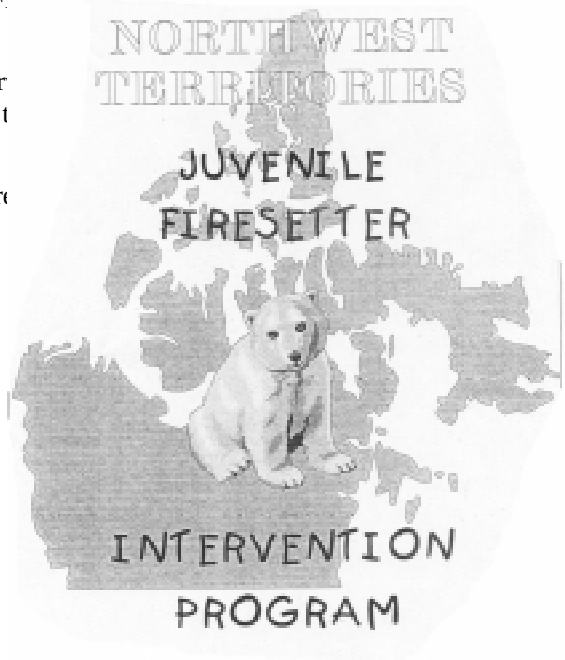
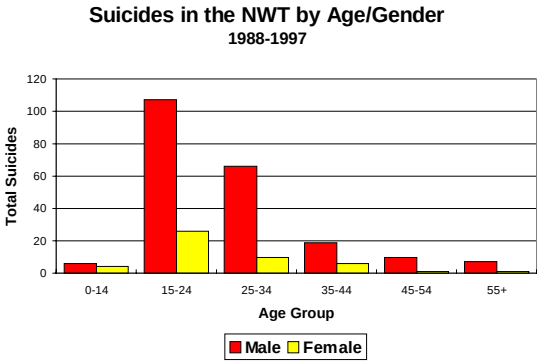


Description of Suicide in the NWT:

In 1974 suicide was recognized as a major public health problem in Canada. Suicide has consistently ranked within the top causes of death in Canada (*Suicide in Canada*, 1994). The current Canadian national suicide rate is 13/100,000 per year.

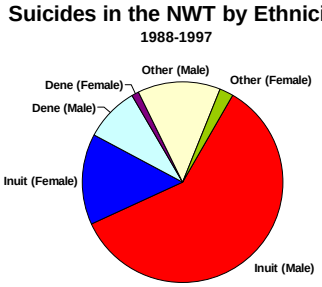
From 1994-1996 the NWT had a crude suicide rate of 3 times the current national rate. In Nunavut, with a population of approximately 25,000, the rate is 84/100,000 which is 6.5 times the national rate. The suicide rate in the Western NWT is comparable to the national rate at 12.5/100,000. It has been estimated that there may be up to 100 attempts for every completed suicide.



Prevention - High Risk Groups

A major concern is the increased number of suicides amongst the young, especially males in their teens and early twenties. Between 1988 and 1997 there were 263 suicides in the NWT. Of that total, 196 (74%) were Inuit;157 (60%) were Inuit males. Of the 263 suicides, 133 were aged 15-24, roughly 51% of the total suicides reported in the 10 year period. In terms of risk, male Inuit aged 15-24 are most at risk to commit suicide in the NWT.

Those individuals who have attempted suicide in the past or have held close relationships with others who have completed suicide are most vulnerable and are at high risk. Young people are especially suggestible. Previous suicides by significant others may model destructive behaviours in response to personal crises (Earl Grollman, 1988). Approximately 36% of a total of 78 suicides reported in the 3 year period 1994-1996 were precipitated by a breakup in the family or relationship within the past year. Twenty-one percent of individuals were facing criminal proceedings.



Warning Signs

Increasing the awareness of warning signs and developing appropriate ways of responding to those in distress can help prevent future suicides. Most individuals who have attempted or committed suicide gav significant cues as to their intention.

Fifty-six percent of suicides reported in the NWT in the three year period 1994-1996 had communicated their intent; 27% within 24 hours of suicide.

Warning signs demonstrated, may include:

- suicide threat;
- previous history of attempts;
- mental depression, emotional distress, signs of helplessness/hopelessness, withdrawal/ isolating self;
- marked changes in behavior or personality (i.e. aggression, truancy at work/school;
- making final arrangements (Will, saying goodbye); and
- alcohol use/abuse (however, 67% of suicides reported in the NWT from 1994-1996 indicated zero or below legal limit of drug/alcohol use).

Intervention

In Canada, historically, men have chosen more lethal means of suicide (e.g. hanging, shooting); whereas the majority of women chose more passive means of self-destruction (e.g. overdose, gas). Lethal means are chosen by both men and women in the NWT. In the three year period 1994-1996, 63% of suicides reported in the NWT chose hanging as a means of choice (60% of male deaths and 76% of female deaths). In this time period the majority of Caucasian or Dene individuals who committed suicide used firearms.

The family home, considered by many as a refuge, has been identified as the most common location for the suicide act. Seventy-four percent of deaths reported in the NWT between 1994-1996, were completed in the family home (9% in a friend's/alternative family home). The bedroom closet was used in 31% of these cases. Understanding the most likely location and means of suicide has significance when considering intervention (i.e.development of a safety plan).

If an individual is identified as exhibiting warning signs of suicidal behavior, the health care professional may help by:

1. Listening openly, calmly and without judgement.
2. Completing a suicide risk assessment.
3. Identifying available significant supports the client feels comfortable disclosing their suicidal feelings with, such as:
professional support, pastoral care, awareness groups, trained community care groups (*formal*); and
friends, family, elders (*informal*).

Intervention and Risk Assessment

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Mental Health Clinic

4. Limiting access to firearms and lethal medicines and ensuring a safe environment (do not leave suicidal individuals alone at home).
5. Encouraging supportive families (include significant others in the safety plan).
6. Developing a safety plan and contract with the suicidal individual.
7. Making yourself available (while making your limits known) and arranging for someone the suicidal person can call when necessary.
8. Treating affective disorders (e.g. depression and schizophrenia).
9. Eliminating alcohol and drug use (N.B. promote counseling or treatment).
10. Consulting community members (i.e. Elders) regarding traditional approaches to healing.

Postvention

"Studies show that survivors are apt to have a higher morbidity and mortality rate in the year following the death of their loved one" (Earl Grollman, 1988). The only cure for grief is to grieve. Individuals will approach the bereavement process in their own way, in their own time. However, the longer the delay, the more difficult the recovery.

- Accept grief, expect the physical and emotional consequences of suicide.
- Express feelings, do not ignore emotional needs ("Break the Silence").
- Maintain healthy behavior; monitor for signs and symptoms of depression, address basic needs, balance work with relaxation, exercise.
- One may seek solace with their faith (refer to pastoral care if indicated).
- Do what has to be done, but delay major decisions (minimize stress).
- Be patient, time heals.

Conclusion

The purpose of this article has been to give a brief description of suicide in the NWT in order to expand our knowledge on this human tragedy. By increasing our awareness of suicide prevention, intervention and postvention, lives **can** be saved.

(**Source:** Susan Keogh, Consultant, Community Mental Health, Health and Social Services).

Suicide Risk Assessment: The CPRSS Assessment Tool

These are the most important factors to consider when assessing how much an interviewee is at risk of committing suicide. They are listed in order of importance. When the first three factors are all present, the interviewee is at high risk.

Again, do not be afraid to ask the question "Are you thinking of suicide?" clearly and directly.

Current Plan

Does the person have a plan?

Does the person have a method in mind?

Are there available means?

Does the person have a location for the suicide?

Does the person have a time for the suicide?

Prior Suicidal Behaviour

Has the person attempted in the past?

If yes, how many times, where and how?

Has the person had past thoughts of suicide or threatened suicide before?

Have any family members attempted or committed suicide?

Resources, or Lack of

Is the person comfortable talking with anyone?

Does the person have a job or responsibilities?

Does the person have inner resources or strengths?

Stress

What are the losses or the stress that the person is experiencing at this moment of crisis?

How does the person perceive these stresses?

Symptoms

Is the person currently under the influence of any substance or medications?

What other warning signs and symptoms are the person exhibiting?

For more information:

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Mental Health
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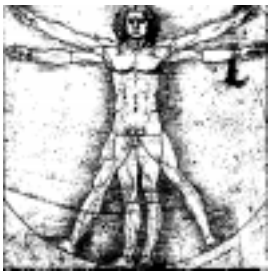
867-873-7926

or

Lynda Strakowski
Mental Health Centre
867-920-2001



Trauma Update: Diagnosis and Treatment of Penetrating Trauma

Trauma is the leading cause of death in the first four decades of life. Though penetrating trauma is uncommon in Canada, certain ideas are worth reviewing to optimize treatment.

The mechanism of injury is important in assessing a penetrating trauma. Knife wounds and small caliber handguns cause lacerations and direct injury along their tract. High velocity weapons can cause cavitation effects distant from their actual course.

Specific wounds are best considered in relation to anatomic areas:

Neck

Penetrating wounds of the neck can be extremely dangerous. A stable patient can quickly deteriorate if a latent injury is disturbed. Neck wounds penetrating the platysma **SHOULD NOT BE EXPLORED** in the Emergency Room. Every effort should be made to avoid causing the patient to strain or cough.

Chest

Wounds over the chest wall should not be probed due to the risk of causing a pneumothorax. A traumatic pneumothorax or haemothorax requires chest tube drainage. The chest tube should be inserted in a site remote from the injury. Significant bleeding from a chest tube or penetrating cardiac trauma requires thoracotomy.

Abdomen

Knife wounds are associated with a 30% incidence of significant injury. Therefore, most do not need to be explored. Patients should be observed in hospital for 12 - 24 hours. Development of peritoneal signs, blood from the NG tube or Foley, or hypotension require an operation. Gun shot wounds are associated with an 80-90% chance of surgical problems and deserve urgent laparotomy.

Extremities

Deep lacerations (past fascia) risk injury to underlying structures. Major lacerations should be explored with good lighting and anaesthesia. Tendon and nerve injuries should be ruled out and adequate debridement carried out. Any open wound in the same limb segment as a fracture is considered an open fracture and needs formal operative debridement.

Vascular wounds can be quite dramatic. Avoid the use of tourniquets or blind clamping; direct pressure works better and is safer.

This review should help familiarize primary care givers with the care of penetrating trauma. Despite its infrequent occurrence, a sound understanding of the treatment options is necessary to help reduce short term mortality and long term morbidity.

Dennis Desai, MD, FRCS
General Surgeon
Stanton Regional Hospital

Trauma Course for NWT Nurses

Twelve nurses from various units of Stanton Regional Health Board took an in-depth Trauma Nursing Core Course (TNCC) in April 1998. The course was arranged through the Emergency Department and co-funded by money received through participation in a drug study and through the education department. The need for the course was initiated by Registered Nurses in the Emergency Department in order to continue to improve the quality of care provided to all types of patients being treated. TNCC is a three day certification program which provides nurses with an opportunity to enhance their knowledge and refine trauma care skills. The course originated in the U.S. in 1986 and is now also recognized and being taught in Canada, the U.K., Australia and New Zealand. Instructors for the course were flown to Yellowknife from Calgary.

For more information contact: Susanne Wheeler at Stanton Emergency Department, 867-669-4100.

As the Smoke Clears...

Rick Tremblay
Consultant, Health Promotion
Health and Social Services

A meeting on contaminants in the Northern food chain has just ended. People have questioned the amount and kinds of food they can eat. But the smoke generated by the smokers at the meeting billows from the hall. They have been given a message but they are not hearing it.

One of the main sources of contaminants in the Northern environment is tobacco smoke and the amount is directly controlled by each individual at the meeting. This message is too close to home. This message, if listened to, means that I cannot pass the blame to some unknown company or group of people in the south. The buck stops in my hands. I have control over the amount of smoke in my environment, smoke that puts more than 400 chemicals in the air, chemicals that are known killers.

The wailing in the health centre is deafening, as family members patiently wait to see the nurse. Something is needed to dull the pain of young children who have middle ear infections that are painful and prevent youngsters from hearing properly. A whole generation of Northerners have grown up experiencing running ears and middle ear pain. Middle ear infections are as common and usual as other childhood diseases like colds, flus or chicken pox. Second-hand smoke has been identified as a contributing factor to ear infections as well as other childhood illnesses, such as chronic or acute respiratory problems.

Many children need to have tubes placed in their ears as part of treatment for complications from middle ear infections. The majority of children who get middle ear infections are children of smokers. In the North the majority of households have one or more smokers who affect the rest of the household. In a study done by Statistics Canada in 1994/95, it was found that smoking was more prevalent in the NWT than in any other province or territory. Nearly one-half (49%) of people aged 15 and over in the NWT were daily smokers.

Infants exposed to environmental tobacco smoke (ETS) have more frequent and more severe chest infections, often requiring medical evacuation. They are also at higher risk to die from Sudden Infant Death Syndrome(SIDS).

Elders are dying from complications of smoking and children are innocent victims of the pollution created by smoke inside the home.

There is some hope on the horizon. Many communities in the Kitikmeot region have recently promoted a smoke-free home policy. More and more families are declaring their homes smoke-free. This follows the example set by concerted efforts in the Keewatin in the early 1990s that saw an organized smoke-free home campaign throughout that region.

Second-hand smoke can kill. Second-hand smoke can cause harm to defenceless children.

You can take control. You can declare smoke-free spaces in your community. You can declare your home smoke-free and you can control where and how you smoke. You can control the impact that second-hand smoke has on your children. You can be considerate of others.

Nutrition and Children

Child hunger in Canada

- One in five Canadian children lives in poverty; many of these children do not get adequate and nutritious food every day
- Research tells us that there is a strong link between nutrition and learning. Kids who don't get enough to eat are tired, have a short attention span, and don't learn or solve problems as well as classmates who eat nutritious meals
- One in nine children depends on some type of charity for food.

Nutrition programs

- Breakfast, lunch, and snack programs are an effective response to child hunger at the community level
- Parents play a central role in setting up, managing, and maintaining nutrition programs. Even in communities where the need is greatest, parents fund up to 80% of the total cost of their program.
- A child can receive a nutritious meal through community-supported programs for as little as a dollar a day.

The information provided in this article is excerpted from the *Breakfast For Learning Program*:

Breakfast for Learning, Canadian Living Foundation, Information Kit, 25 Sheppard Avenue West, Suite 100, North York, Ontario, M2N 6S7, phone: 1-800-627-7922, email: clf@sympatico.ca

For more information....

Contact your Regional Nutritionist, Dietitian or the Consultant, Nutrition in the Department of Health and Social Services.

Promoting Breastfeeding:

"Our mothers or grandmothers used to prepare us by telling us to try and drink broth made from caribou, fish, ptarmigan or goose so that we would have enough milk after the baby arrives" — Mary Tagoona, elder, Baker Lake.[2]

Indisputable evidence clearly shows that breast–feeding is one of the healthiest ways for a baby to start life. Breastfed babies are healthier than formula-fed babies, have fewer allergies and infections and may be at reduced risk for Sudden Infant Death Syndrome (SIDS).[1] Breastfeeding is now being actively promoted in Canada, although in the NWT it has long been promoted by Elders and health workers at all levels as the traditional and healthiest way to get children off to the best start.

At a recent Canada Prenatal Nutrition Program (CPNP) workshop for CPNP program workers from across the NWT held February 10-12, 1998, Elders spoke about the benefits of breastfeeding and how new mothers were taught to eat healthy foods in order to breastfeed.

Positive traditional attitudes towards breastfeeding and the clear benefits of breastfeeding are factors that contribute to the relatively high rates of breastfeeding in the North compared to some other parts of Canada. A 1993-94 breastfeeding study[3] found that among Indian and Inuit women in Canada, breastfeeding rates were lowest in Nova Scotia/Newfoundland (24%) and highest in the Pacific Region (81%), the NWT (76%) and Alberta (74%). A summary of the NWT survey was printed in the May/June 1996 issue of *EpiNorth*.[4]

The Cost of Not Breastfeeding

INFACT Canada *(Infant Feeding Action Coalition Newsletter)* recently released information on a study done in 1997 across Canada to determine the percentage of income required to purchase formula.

Costs of artificiall feeding were found to be highest in the Northwest Territories and lowest in the western provinces. The other interesting information gained in this study was that in parts of the country where breastfeeding promotion and support programs are successfully increasing breastfeeding rates, formula costs have actually gone down. In addition, the study found that from 5 - 34% of social assistance income is needed just to purchase formula. The study notes that real costs in future health care and development are still to come as the babies grow (see Table 1).

INFACT Canada concludes by stating that it is clear that programs that enable vulnerable populations to breastfeed need to be given maximum priority. Research done in 1994-95 by Kaiser Permanente, a health maintenance organization (HMO), states that for each infant who was breastfed for a minimum of six months saved $1,435 (US funds) in health costs during the first year of life. Artificially fed infants averaged $448 in additional visits to doctors, $84 in additional prescription drugs and $903 in hospitalizations, primarily for the respiratory tract, urinary tract/gastrointestinal and other infections.[6]

Table 1: The High Cost of Formula in Canada

Location	Cost of Formula for Six Months	Max. Welfare Income for Single Parent with Two Children (6 Months)	Percent of Welfare Income for Formula
Vancouver, BC	$381-1247	$7050	5-18
St. John's NF	$401-1301	$5664	7-23
Federicton, NB	$401-1422	$4650	9-31
Edmonton, AB	$375-1301	$6102	6-21
Saskatoon, SK	$375-1301	$5760	7-23
Yellowknife, NT	$453-1476	$4500	10-33
Toronto, ON	$420-1422	$6516	6-22
Halifax, NS	$437-1985	$5898	7-34

Promoting Breastfeeding

Throughout Canada, there are initiatives to promote breastfeeding underway. Here are some examples, as well as where to get more information.

Breastfeeding Initiative of Canada

Health Canada and the La Leche League, as part of the Breastfeeding Committee for Canada, have developed a promotional campaign to make breastfeeding more socially acceptable and help create "breastfeeding friendly" places in communities across Canada.

Health Canada's research showed that most people *already know* the benefits of breastfeeding for mothers and babies. Therefore, the breastfeeding promotion campaign *challenges* the belief that breastfeeding is a lifestyle choice which takes place in private and is only appropriate for *certain women*. Instead, a new understanding needs to be created: breastfeeding is a healthy choice, appropriate for everyone....Anytime, anywhere.[1]

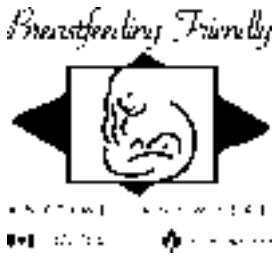
For the 400,000 new moms in Canada each year, juggling day-to-day living can be stressful. Health Canada has created an awareness campaign to make breastfeeding more socially comfortable. Be-

The Best Start for Children

Elsie DeRoose
Consultant, Nutrition Health and Social Services

cause breastfeeding can be difficult in public and for many other reasons, many mothers stop earlier than they would like. Only about 30 %of women continue to breastfeed for the recommended six months. The campaign wants to create a more welcoming, comfortable public environment so moms keep nursing, for the health of their children.

The campaign also encourages businesses to show their support for breastfeeding by posting stickers featuring the Breastfeeding Friendly logo, providing comfortable seating for moms, and promoting awareness among staff and customers.



Breastfeeding promotion kits can be ordered at no cost from: Publications, Health Canada, 613-954-5995, fax: 613-941-5366.

The Breastfeeding Committee for Canada

The Breastfeeding Committee for Canada (BCC) was established in 1991 as a Health Canada initiative following the World Summit for Children. BCC's goal is to establish breastfeeding as the cultural norm for infant feeding in Canada. The BCC identified the WHO/UNICEF Baby-Friendly Initiative as the primary strategy for the protection, promotion and support of breastfeeding. A survey done of hospitals in Canada revealed that not one Canadian hospital qualifies for "baby-friendly status." This is predominantly because hospitals willingly receive free formula from various companies.

At present, Canada is among the few industrialized countries that does not have a designated Baby Friendly Hospital Initiative according to the WHO and UNICEF criteria. The Breastfeeding Committee for Canada plans to coordinate the implementation and designation of Baby Friendly Health Care Facilities in Canada.

Direct marketing of breast milk substitutes to the public is not allowed under the WHO/UNICEF Code of Marketing Breast Milk Substitutes. Yet, direct marketing occurs in a number of venues: doctor's offices, newspapers, magazines, professional journals, delivery to individual residences and community groups. Hospitals have contracts with formula companies through which formula is supplied at no charge. Cutbacks in hospital funding make the money offered by formula companies very attractive.[7]

For more information on the Baby Friendly Hospital Initiative, contact:

The Breastfeeding Committee for Canada
PO Box 65114
Toronto, ON M4K 3Z2

Telephone: 416-465-7409
Fax: 416-465-8265

You may also contact your regional nutritionist or dietitian, or the Consultant, Nutrition in the Department of Health and Social Services' Population Health Division.

Upcoming Events:

World Breastfeeding Week in Canada (October 1-7 1998)

The theme this year is *Breastfeeding: The Best Investment*. The INFACT Canada action kit will be ready in early May. For more information contact Joy Noel-Weiss, Resource Coordinator, at 416-595-9819.

(Note: World Breastfeeding Week is celebrated August 1-7, 1998 elsewhere, but in Canada, October has been found to be a more successful time.)

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6. Web site http://www.winternet.com/~artmama/kaiser.htm
6. INFACT Canada, Winter 1998 Newsletter, p 4.

"The elders told us it was the most natural thing to do with a baby - just the way it was. One older lady reminded me that animals feed their babies and it was only natural that people would feed their babies too. Breastfed babies are more secure, more comfortable."— Jane Dragon, elder, Fort Smith [2]

To Screen or Not to Screen?

Whether in the popular media or in health journals, we are all subjected to a continuous torrent of information regarding the latest research on disease prevention, risk and early detection. Our bodies have been fragmented into parts, leaving both individuals and caregivers confused as to who should be screened for what, when and how often. Various health associations and groups publish their own guidelines or recommendations[1] in an attempt to make sense of the ever-developing research and technology. Territories and provinces in turn review and often make their own guidelines as well.

Screening—what it is and is not

Despite all these efforts, confusion often remains. This article attempts to clarify common questions regarding screening—what it is and is not.

Screening is not primary prevention

While screening is a valuable tool for *early detection* of disease (identifying asymptomatic disease, thus preventing morbidity/mortality), it is **not** primary prevention. Screening activities do however, prevent provide opportunities to promote primary prevention through education, to those who present for screening.

Screening is not diagnosis

Screening should never be confused with diagnosis. Screening is usually more rapid, less costly and less conclusive than diagnosis. With most screening, any suspected cases are further investigated to confirm diagnosis. Screening tests must lean towards "sensitivity," that is, should detect all those with the disease. This is often achieved at the expense of "specificity," that is, a significant number of people with a positive screening test will turn out to be disease-free.

Lack of a screening program does not mean lack of diagnostic services

For example, while there is not yet a full-scale territory-wide breast cancer screening mammography program in the NWT, all women should be taught how to screen themselves (BSE) and be screened by a healthcare provider annually (CBE). Those who exhibit any abnormalities (e.g. a lump) are then referred for **diagnostic** mammography in a centre where this is available.

Lack of population-wide screening does not preclude targeted screening

Because screening **all** of a certain group or population is not always cost-effective or feasible, identifying high risk groups or individuals is often the best approach to effective screening. It has been found that broad screening programs are often ineffective in reaching the highest risk or hard-to-reach groups and may be detrimental when the prevalence of the disease is too low, making targeted screening activities a much better approach.

The best strategy does not always include screening as a component

Screening is not always the best approach to a problem. For example, smoking is best approached by public education programs and policy changes. Lung cancer screening is ineffective, as prognosis is unchanged by early detection. Mass education programs which attempt to get those at-risk to seek medical care is more effective than over-screening those who are already in the system (such as annual pap smears on low risk women).

Barriers to screening

Even when screening is deemed appropriate, the recruitment and retention of individuals into screening programs is a problem. Many studies have identified a number of barriers to participation in screening. Examples of identified barriers to breast cancer screening include:

Fast Facts: Reducing Risks

Approximately 80% of all cancers are caused by "behavioural factors" (lifestyle).

Tobacco smoke and iet are responsible for two-thirds of all new cases of cancer.

Tobacco smoke is responsible for 80-90% of all cases of lung cancer.

Diet-associated cancers include colon, rectum, breast and stomach cancer.

Reduction of tobacco usage and adhering to a healthy diet will also reduce mortality and morbidity related to heart disease and diabetes, as well as other chronic illnesses (such as respiratory disease).

Some Facts to Consider

Lona Heinzig
Non-Communicable Diseases Consultant Health and Social Services

- cost;
- fear of radiation;
- embarrassment/fear of exam;
- fear of findings;
- time/inconvenience;
- fear of further testing or interventions; and
- confusion re: screening procedure or reason for screening.

These barriers must be considered when designing education and awareness campaigns. Consideration must also be given when targeting various groups in order to help overcome specific barriers.

Potential harms of screening

The potential physical harms of screening range from pain, possible infection or injury (e.g. perforated bowel) or even a permanent effect (such as impotence or even death). Other possible effects of screening identified by Marshall[3] include:

- Anticipated discomfort or perception of adverse effects resulting from preventive interventions;
- Unpleasant interactions with health care workers;
- Excessive overall awareness of health;
- Anxiety while anticipating the results of a screening tests;
- Anxiety induced by a positive screening test result;
- Distress from being labelled as "sick" or at "high risk;"
- Psychopathology directly caused by a therapeutic program (such as strict dieting); and
- False assurance of disease-free status as a result of a negative screening test

Early detection is an important approach to reducing disease mortality and morbidity. However, screening programs must be carefully considered and must not create further inequities. High risk and hard-to-reach populations need to be identified and targeted and screening programs must be evaluated to determine effectiveness. Finally, it should not be forgotten that *prevention* is **always** the most effective approach to disease reduction and health.

References

1 The Canadian Task Force on Periodic Health Examination (1994). The Canadian Guide to Clinical Preventive Health Care. Health Canada, Ottawa.

2 Braveman, P.A. & Tarimo, E. (1994). Screening in Primary Health Care: Setting Priorities with Limited Resources. WHO, Geneva.

3 Marshall, K.G. (1998). The Family Practice Source Book. *Screening: Deceptive Benefits & Hidden Risks*, Mosby-Year Book Inc. Toronto.

4 Thurston, W.E. & Scott, C.M. (1996). Barriers to Screening: A critical review of the literature (1990-1995). Health Canada, Ottawa.

5 Health Canada website (Chemical Carcinogens:Health Risks): www.hc-sc.gc.ca/datahpb/English/IYH/chemcarc.htm

Criteria for deciding whether or not to use health screening

The following criteria have been adapted from recommendations made by the World Health Organization (WHO) on screening programs [2].

- The condition must be of public health importance (consider the seriousness of the disease and the prevalence in the population).
- Preventive or curative measures must be available to deal with the condition when it is detected at an early stage (e.g. Must result in reduced morbidity and mortality).
- There must be a safe, ethical, and efficacious procedure for detecting the condition at a sufficiently early stage to permit effective intervention
- Screening procedures, definitive diagnosis, and appropriate interventions must be acceptable to the population.
- Population-based screening, diagnostic, and timely intervention must be obtainable with existing resources or with resources that could be obtained during the planning period (given sufficient political will).
- The costs of the screening and timely intervention efforts must be warranted, (given all the considerations above and in comparison with alternative uses of resources).

Food Safety Facts: Hamburger Disease

What is foodborne illness?

Foodborne illness occurs when a person gets sick by eating food that has been contaminated with an unwanted microorganism. This condition is often called "food poisoning." Bacteria, parasites and viruses are microorganisms that can cause foodborne illness. Microbes and pathogens also describe the microorganisms that cause foodborne illness.

Many cases of foodborne illness go unreported because their symptoms often resemble the stomach flu. The most common symptoms of foodborne illness include stomach cramps, nausea, vomiting, diarrhea and fever.

What are Escherichia coli 0157:H7 and hemolytic uremic syndrome?

E. coli 0157:H7 bacteria live in the intestines of such animals as cattle, pigs, sheep and poultry.

When these animals are butchered, the bacteria can spread to the outer surfaces of the meat.

E. coli 0157:H7 infection can be spread by hand-to-hand contact with an infected person or even surfaces he or she may have touched. It may cause an unusual type of kidney failure and blood disorder called hemolytic uremic syndrome (HUS).

There are other dangerous strains of E. coli.

What are the symptoms?

E. coli 0157:H7 produces a toxin in humans that can break down the lining of their intestines and damage their kidneys.

A small number of people who become infected with E. coli 0157:H7 do not get sick at all; some experience flu-like symptoms; others experience severe, even life-threatening symptoms.

People may develop stomach cramps, vomiting and a mild fever within two to ten days of eating food contaminated with E. coli 0157:H7. Some of them may experience bloody diarrhea (hemorrhagic colitis).

Most people recover within seven to ten days.

Roughly 10%, mostly children, develop HUS. Some HUS victims may require blood transfusions and kidney dialysis. Some may have seizures or strokes. Most people who develop HUS recover and need not continue dialysis. However, some people die, and others live with permanent kidney damage or other effects.

E. coli in the NWT

Year	Total
1989	1
1990	0
1991	186
1992	3
1993	3
1994	0
1995	0
1996	0
1997	7
1998	0 (ytd)

Where could I come in contact with E. coli 0157:H7?

Although HUS is commonly called "hamburger disease," other kinds of undercooked meat and poultry, unpasteurized milk, non-chlorinated water and raw apple juice contaminated with E. coli 0157:H7 have made people ill.

Ground beef may be easily contaminated by E. coli 0157:H7, due in part to its preparation. The grinding process spreads the bacteria, generally found on the surface, throughout the meat.

How can I protect myself and my family?

Always cook ground meats until they reach an internal temperature of 71°C (160°F), and juices run clear.

Never place cooked meat on the same plate used to carry raw meat. People often make this mistake when barbecuing.

Prepare extra marinade and set some aside so you can baste meat with marinade or sauce that has never touched raw meat.

Always marinate meats in the refrigerator, never on the counter.

What are producers and processors doing to protect consumers?

The beef industry is currently developing new post-slaughter technologies that could reduce or eliminate E. coli in beef.

From the farm to the retail store, efforts are being made to reduce the risks associated with E. coli 0157:H7 throughout the food production process.

What protection do consumers have in the NWT?

Environmental Health Officers (EHOs) administer and enforce the *Eating and Drinking Places Regulations* throughout the Northwest Territories.

EHOs provide safe food handling courses and educational materials to the food professionals and consumers.

The Department of Health and Social Services and the Department of Resources, Wildlife and Economic Development are working with the Canadian Food Inspection Agency to ensure that standards in theNorth will be harmonized with standards across Canada.

Food Safety Tips

Frank Hamilton
Consultant, Environmental Health (West) Health and Social Services

Bacteria multiply on food that is mishandled and some of these bacteria may cause disease. Follow these food safety tips to make sure the food you buy and prepare remains safe. You can play an important role in reducing the risks of foodborne illness.

Buyer be aware!

Examine food and its packaging at the store and again when you are ready to use it. Avoid swollen or leaking cans, or damaged packages — they may expose the contents to bacteria.

Select perishable foods last and put them away first — surface bacteria begin to multiply as soon as food surfaces warm.

Store it right!

Keep the refrigerator at 4°C (40°F) or less. Keep the freezer at -18°C (0°F) or less. ***Sixty-five percent of all food poisonings are the result of inadequate cooling and cold holding!***

Keep it clean!

Always clean your hands, utensils and cooking surfaces thoroughly. Wash your hands with soap and hot water before you handle food, repeatedly while you prepare it, and again when you've finished.

Sanitize countertops, cutting boards and utensils with a bleach solution (15 ml/1 tsp. bleach per 750 ml/3 cups water). This will kill surface bacteria.

When in doubt, throw it out!

Examine food carefully immediately before you use it. Look for damaged packaging, obvious mold growth, discolouration and unusual odours, feel and texture.

Make sure it's thawed right!

Thaw foods in the refrigerator. Thawing in cold running water or in a microwave oven is also acceptable. Thawing at room temperature is unsafe because surface bacteria begin to multiply as soon as the surface warms.

Cook foods right!

Prepare foods quickly, cook them thoroughly and serve them immediately. Don't let potentially unsafe foods linger at temperatures where bacteria can grow. The "danger zone" is between 4°C (40°F) and 60°C (140°F).

Don't spread it around!

Keep certain foods, like meats and their juices, separated from others during storage and preparation.

Clean (soap and hot water) and sanitize (bleach and water) cutting boards and utensils after each use.

Keep a separate cutting board for meat.

Keep foods covered. Flies, other insects or accidental splashing during preparation of other foods can introduce bacteria.

Food Safety Tips for the Barbecue

Handling and preparing food is always important in preventing foodborne illness, but when barbecue season rolls around, there are some additional steps to follow to ensure your food remains safe. Use the following tips to properly handle food when barbecuing.

Before Cooking

Keep meats, salads and other perishable foods in the refrigerator until you are ready to use them. If food is being stored in a cooler, pack the cooler with ice or freezer packs. If possible, keep the cooler in the shade.

After Cooking

Keep serving bowls covered

Eat food as soon as it is ready

Store leftovers in covered containers in the refrigerator and eat within two days. Keep the refrigerator at 4°C/40°F or less. When re-heating leftovers, heat to 74°C/165°F.

These tips were compiled by the Canadian Food Inspection Agency in consultation with Health Canada. For more information, visit the Canadian Food Inspection Agency website at www.cfia-acia.agr.ca or the Health Canada site at www.hc-sc.ga.ca

Please direct food safety questions or concerns to the Environmental Health Officer with your local health and social services board or to the Health Protection Unit, Department of Health and Social Services.

Reportable Diseases in the NWT:

Anthrax

The Wildlife Division of the Department of Resources, Wildlife and Economic Development (RWED) advises that hot dry conditions are ideal for an anthrax outbreak.

During the summer of 1993 an outbreak of anthrax in the Fort Providence area resulted in the deaths of 172 bison, three moose and three black bears. It is not known how anthrax was introduced into Northern Canada, however, there have been nine confirmed outbreaks in the bison population between 1962 and 1993.

Q. What is anthrax?

A. Anthrax is an acute bacterial disease usually affecting the skin but that can also involve the oropharynx, lower respiratory tract, mediastinum or intestinal tract. Anthrax spores are resistant to adverse environmental conditions and can remain in contaminated soil for many years. Coming in contact with infected animals is usually how humans get anthrax.

Q. Can I tell if an animal is infected?

A. No. It is difficult to tell for sure if an animal has anthrax, but if you notice animals like buffalo acting strangely, contact RWED immediately!

Q. What are the symptoms of anthrax?

A. Symptoms of disease vary depending on how the disease was contracted, but symptoms usually occur within seven days.

Cutaneous: Most anthrax infections occur when the bacterium enters a cut or abrasion on the skin, such as when handling contaminated wool, hides, leather or hair products (especially goat hair) of infected animals. Skin infection begins as a raised itchy bump that resembles an insect bite but within one to two days develops into a vesicle and then a painless ulcer, usually 1.3 cm in diameter, with a characteristic black necrotic (dying) area in the centre. Lymph glands in the adjacent area may swell. About 20% of untreated cases of cutaneous anthrax will result in death. Deaths are rare with appropriate antimicrobial therapy.

Inhalation: Initial symptoms may resemble a common cold. After several days, the symptoms may progress to severe breathing problems and shock. Inhalation anthrax usually results in death one to two days after onset of the acute symptoms.

Intestinal: The intestinal disease form of anthrax may follow the consumption of contaminated meat and is characterized by an acute inflammation of the intestinal tract. Initial signs of nausea, loss of appetite, vomiting and fever are followed by abdominal pain, vomiting of blood, and severe diarrhea. Intestinal anthrax results in death in 25-60% of cases.

Q. Can anthrax be treated?

A. Yes! Once a nurse or doctor knows that a person has anthrax, it can be treated easily with antibiotics.

Q. How is anthrax transmitted?

A. Humans can become infected with anthrax by handling animal products from infected animals or by inhaling anthrax spores from contaminated animal products. Anthrax can also be contracted by eating undercooked meat from infected animals.

Q. Can anthrax be spread from person-to-person?

A. Direct person-to-person spread of anthrax most likely does not occur.

Q. How is anthrax diagnosed?

A. Anthrax is diagnosed by isolating B. Anthracis from the blood, skin lesions, or respiratory secretions, or by measuring specific antibodies in the blood of suspected cases.

Q. What is the treatment of anthrax?

A. Doctors can prescribe effective antibiotics. Usually penicillin is preferred, but erythromycin, tetracycline or chloramphenicol can also be used. To be effective, treatment should be initiated early. If left untreated, the disease can be fatal.

Q. Is there an anthrax vaccine for humans?

A. A cell-free filtrate vaccine (which means dead bacteria is used as opposed to live bacteria) is available. The vaccine is reported to be 93% effective in protecting against cutaneous anthrax. The anthrax vaccine was developed and is manufactured and distributed by the Michigan Biologic Products Institute, Lansing, Michigan. Anthrax vaccine intended for use in animals should not be used in humans.

Anthrax Up Close

Q. Who should be vaccinated against anthrax?

A. Because anthrax is considered to be a potential agent for use in biological warfare, systematic vaccination of all Canadian military personnel that go to potential areas of exposure is already done. Anthrax vaccine may also be given to individuals who come in contact with imported animal hides, furs, bone, meat, wool, animal hair (especially goat hair), and bristles in the work place; and for individuals engaged in diagnostic or investigational activities which may bring them into contact with anthrax spores. The vaccine should only be administered to healthy men and women from 18 to 65 years of age since investigations to date have been conducted exclusively in that population. Because it is not known whether the anthrax vaccine can cause fetal harm, pregnant women should not be vaccinated.

Q. What is the protocol for anthrax vaccination?

A. The immunization consists of three subcutaneous injections given two weeks apart, followed by three additional subcutaneous injections given at 6, 12 and 18 months. Annual booster injections of the vaccine are required to maintain immunity.

Q. Are there adverse reactions to the Anthrax vaccine?

A. Mild local reactions occur in 30% of recipients and consist of slight tenderness and redness at the injection site. A moderate local reaction can occur if the vaccine is given to anyone with a past history of anthrax infection. Severe local reactions are very infrequent and consist of extensive swelling of the forearm in addition to the local reaction. Systemic reactions occur in fewer than 0.2% of recipients and are characterized by flu-like symptoms.

Q. If I think I might have anthrax, what should I do?

A. If you think you may have anthrax, contact your local nurse or doctor. They can check to see if you have it or not.

Q. Where can I get more information on anthrax?

A. **Dr. Brett Elkin**
Government of the Northwest Territories
Resources, Wildlife and Economic Development
Box 1320, Yellowknife NT X1A 2L9

Phone: 867-873-7761

or

Health Protection Unit
Government of the Northwest Territories
Department of Health and Social Services
Box 1320, Yellowknife NT X1A 2L9

Phone: 867-873-7721

3rd Canadian National Immunization Conference

Partnerships for Health through Immunization

The Calgary Convention Centre - Calgary, Alberta
December 6-9, 1998

Organized by: The Laboratory Centre for Disease Control, Health Canada and the Canadian Pediatric Society

Objectives: To present a forum for discussion and information exchange related to the practical aspects of immunization programs in Canada, and means of improving them. This will cover issues such as vaccine supply and delivery, education, assessment of vaccine programs, regulations and legislation, and global immunization efforts. The conference will look at both programmatic and disease-related issues, with primary focus being on programmatic issues. The main focus will be on childhood immunization. There will also be an examination of progress towards the achievement of established Canadian national goals for the reduction of vaccine-preventable diseases of infants and children.

To access conference information or to be put on the conference mailing list, check the conference website at: http://www.hc-sc.gc.ca/hpb/lcdc/events/cnic/index.html

or fax to:

Chuck E. Schouwerwou
Conference and Committee Coordinator
Division of Immunization
Fax: 613-952-7948

Reporting Adverse Drug Reactions — 1997 Update

The sources for reports of adverse drug reactions (ADRs) submitted to the Canadian Adverse Drug Reaction Monitoring Program (CADRMP) remained virtually the same as in 1996 (see table below). In most cases the people who initiate the reports are health professionals (physicians, pharmacists, nurses, dentists, coroners and others) who *suspect* that a drug has played a role in the adverse reaction and who voluntarily complete an ADR reporting form and forward it directly to the CADRMP or indirectly through one of the other sources.

Number (and %) of Reports Received		
Source	**1996**	**1997**
Manufacturer	1659 (39.5%)	1549 (38.7%)
Regional Centre	1052 (25.1%)	993 (24.8%)
Hospital	730 (17.4%)	671 (16.7%)
Pharmacist	293 (7.0%)	404 (10.1%)
Physician	212 (5.0%)	151 (3.8%)
Other *	252 (6.0%)	238 (5.9%)
Total	**4198 (100.0%)**	**4006 (100.0%)**

*Includes, but not limited to, professional associations, nursing homes, Health Protection Branch regional inspectors, coroners, nurses, dentists and patients.

More information is located on line under publications at the following address: www.hc-sc.gc.ca/hpb-dgps/therapeut.

Which Adverse Drug Reactions Should be Reported?

Causality or proof that a drug caused an undesirable patient effect is **not** a requirement for reporting an adverse drug reaction. Report if the event is suspected of being drug-related, particularly if the event is unusual in context of the illness.

You should report:

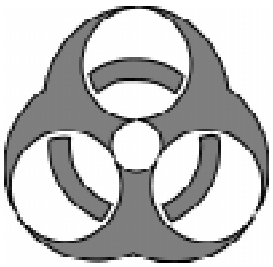
- **all suspected** adverse reactions to drugs which are **unexpected**, i.e. not consistent with product information or labelling.
- **all suspected** adverse reactions to drugs which are serious, i.e. death, reactions which contribute to significant disability or illness, result in hospitalization, prolong hospitalization or require significant medical intervention.
- **all suspected** adverse reactions to **recently marketed drugs** (on the market for less than five years) regardless of their nature or severity.

Spontaneous reporting of suspected adverse reactions is a critical ongoing source of drug-safety information. Health professionals should report any suspected ADRs to the following address:

Adverse Drug Reaction Reporting Unit
Continuing Assessment Division
Bureau of Drug Surveillance
Therapeutic Products Programme
AL 4103B1
Ottawa, ON K1A 1B9

tel: 613-957-0337
fax: 613-957-0335

Transportation of Dangerous Goods



Did you know that...?

All samples known to contain the following viruses: Hepatitis B, Hepatitis C and HIV are to always be transported as dangerous goods?

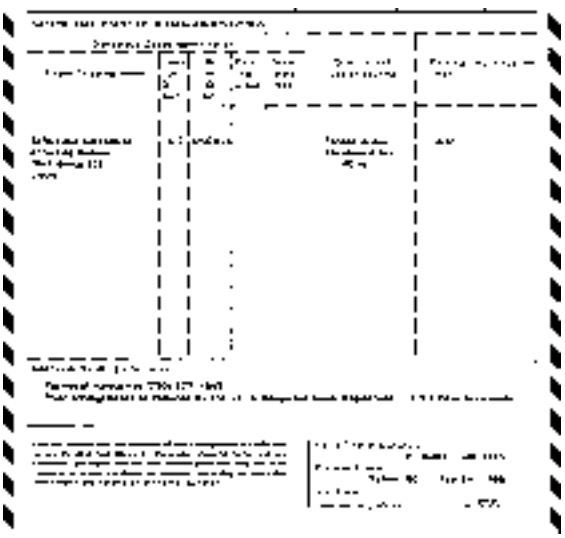
Did you know that: It is a violation to transport dangerous goods if the sender does not comply with the regulation for Transportation of Dangerous Goods (TDG)? In the last few years there have been documented incidents where healthcare personnel have failed to follow the TDG regulation, resulting in serious public health hazards. Airline workers have been directly exposed to broken test tubes and samples contaminated with HIV because of inadequate packaging. Incidents such as these have resulted in litigation against the health care employer and the airline company.

Did you know that: Every hospital and community health centre are responsible for ensuring that at least one person is trained for TDG? The designate must ensure all samples known to be a dangerous good are sent following the guidelines mentioned below. The guidelines are in compliance with the *Transportation of Dangerous Goods Regulations* (TDGR). TDG information sessions for road, rail and air are available through Aurora College. As well, your local airline should be able to recommend agencies to contact for information on the transportation of dangerous goods by air.

Assistance may also obtained from you regional Environmental Health Officer if they have received training in TDG.

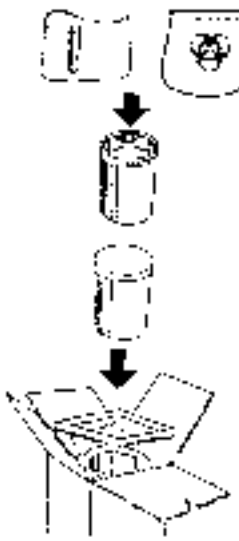
Recommended guidelines for air transportation of known dangerous goods

- Complete an *Infectious Substances, Air* form (below) with the full address of the sender and consignee. The example of this form shows how to complete the information required for "Nature and Quantity of Dangerous Goods."



- Ensure sample is tightly capped, wrap sample(s) in gauze, place in biohazard bag, repeat gauze wrap and place in a second biohazard bag.
- Place in plastic cylinder with tight cap (made specifically for TDG) and requisition with testing request.
- Place plastic cylinder in fibre board box (made specifically for TDG). Ensure the proper labels are placed on the side of the box.

Packaging Dangerous Goods



- Complete waybill indicating a dangerous goods shipment.
- Estimated cost to send the dangerous goods package: $90.00

General questions about packing, samples and form completion can be directed to laboratory staff in the following listing:

- Christine Goldsmith and Evelyn Smith:
  Stanton Regional Hospital
  Phone: 867-669-4163
- Carla Morran:
  Keewatin Health Board
  Phone: 867-645-2816.
- Nicholas Dibden:
  Baffin Regional Health Board
  Phone: 867-979-7317

Notifiable Diseases by Region: January-March 1998

	Disease	Month	Cumulative		Regions (YTD - 1998)				
		Jan-Mar 1998	1997 YTD	1998 YTD	Baffin	Ft. Smith/ Mackenzie	Inuvik	Keewatin	Kitikmeot
Vaccine Preventable Diseases	H. influenzae B	0	0	0	0	0	0	0	0
	Hepatitis B	1	0	1	0	1	0	0	0
	Influenzae	6	10	6	6	0	0	0	0
	Measles	0	0	0	0	0	0	0	0
	Mumps	0	0	0	0	0	0	0	0
	Pertussis	1	5	1	0	0	0	1	0
	Rubella	0	0	0	0	0	0	0	0
Sexually Transmitted/ Bloodborne Diseases	Chlamydia	289	205	289	95	75	42	52	25
	Gonorrhea	35	41	35	16	11	3	3	2
	Hepatitis C	10	5	10	0	7	2	0	1
	Hepatitis, Other	0	0	0	0	0	0	0	0
	Syphillis	0	0	0	0	0	0	0	0
Diseases by Direct Contact/ Respiratory Route	Chicken Pox	194	84	194	33	61	80	20	0
	Group A Strep	1	0	1	0	0	0	0	1
	Legionellosis	1	0	1	0	1	0	0	0
	Meningitis, Pneumococcal	0	0	0	0	0	0	0	0
	Meningitis, Other Bacterial	2	1	2	1	0	0	1	0
	Meningitis, Viral	0	0	0	0	0	0	0	0
	Meningococcal Infections	0	0	0	0	0	0	0	0
	Tuberculosis	12	7	12	9	2	0	1	0
Enteric, Food and Waterborne Diseases	Botulism	0	1	0	0	0	0	0	0
	Campylobacteriosis	3	1	3	0	2	1	0	0
	Cryptospridiosis	0	6	0	0	0	0	0	0
	E.Coli 0157:H7	0	2	0	0	0	0	0	0
	Food Poisoning	0	2	0	0	0	0	0	0
	Giardiasis	6	2	6	0	3	0	1	2
	Hepatitis A	5	0	5	0	5	0	0	0
	Salmonellosis	5	2	5	1	3	1	0	0
	Shigellosis	1	0	1	0	0	1	0	0
	Tapeworm Infestation	0	1	0	0	0	0	0	0
	Trichinosis	3	0	3	0	0	0	3	0
Vectorborne/Other Zoonotic Diseases	Brucellosis	0	0	0	0	0	0	0	0
	Malaria	1	0	1	0	0	0	1	0
	Rabies Exposure	65	0	65	0	0	48	0	17

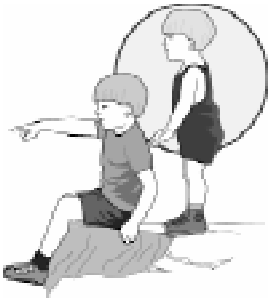
HIV Infections by Year Seen in NWT Residents

Year	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Number/Year	3	2	2	3	3	8	4	2	0	2	1	
Cumulative	3	5	7	10	13	21	25	27	27	29	30	

Notifiable Diseases Reported by Community

January 1998	February 1998	March 1998	
NWT 2: Yellowknife, 1; Fort MacPherson, 1.		**NWT 1:** Yellowknife.	**Campylobacteriosis**
NWT 40: Fort Liard, 14; Wha Ti, 10; Sanikiluaq, 5; Pangnirtung, 3; Fort Providence, 2; Grise Fiord, 2; Arviat, 1; Fort Rae, 1; Inuvik, 1; Tsiigehtchic, 1.	**NWT 100:** Inuvik, 38; Pangnirtung, 28; Wha Ti, 25; Rankin Inlet, 6; Arviat, 1; Fort Rae, 1; Igloolik, 1.	**NWT 54:** Inuvik, 35; Rae Edzo, 7; Rankin Inlet, 7; Aklavik, 2; Fort MacPherson 2; Wha Ti, 1.	**Chicken Pox**
NWT 97: Iqaluit, 19; Arviat, 8; Inuvik, 7; Yellowknife, 7; Cape Dorset, 6; Kugluktuk, 6; Rankin Inlet, 5; Broughton Island, 4; Fort Smith, 3; Igloolik, 3; Pond Inlet, 3; Rae Edzo, 3; Arctic Bay, 2; Baker Lake, 2; Deline, 2; Hay River, 2; Pangnirtung, 2; Sanikiluaq, 2; Aklavik, 1; Cambridge Bay, 1; Clyde River, 1; Fort Resolution, 1; Fort Simpson, 1; Grise Fiord, 1; Kimmirut, 1; Pelly Bay, 1; Repulse Bay, 1; Tuktoyaktuk, 1; Wrigley, 1.	**NWT 116**: Iqaluit, 16; Yellowknife, 13; Igloolik, 12; Arviat, 10; Inuvik, 7; Rankin Inlet, 7; Rae Edzo, 6; Pangnirtung, 5; Hay River, 4; Pelly Bay, 4; Wha Ti, 4; Kugluktuk, 3; Pond Inlet, 3; Sanikiluaq, 3; Cambridge Bay 2; Cape Dorset, 2; Coral Harbour, 2; Fort Smith, 2; Kimmirut, 2; Aklavik, 1; Clyde River, 1; Fort Liard, 1; Fort Providence, 1; Fort Simpson, 1; Holman, Island, 1; Rae Lakes, 1; Tuktoyaktuk, 1; Whale Cove, 1.	**NWT 76:** Inuvik, 10, Rankin Inlet, 10; Yellowknife, 8; Tuktoyaktuk, 7; Iqaluit, 5; Rae Edzo, 5; Sachs Harbour, 4; Fort Liard, 3; Igloolik, 3; Kugluktuk, 3; Wha Ti, 3; Cambridge Bay, 2; Cape Dorset, 2; Fort McPherson, 2; Taloyoak, 2; Arctic Bay, 1; Coral Harbour, 1; Fort Providence, 1; Fort Simpson, 1; Fort Smith, 1; Norman Wells, 1; Resolute Bay, 1.	**Chlamydia**
NWT 1: Fort Resolution		**NWT 5:** Taloyoak, 2; Fort Simpson, 1; Yellowknife, 1; Repulse Bay, 1.	**Giardiasis**
NWT 16: Cape Dorset, 3; Iqaluit, 3; Grise Fiord, 2; Yellowknife, 2; Fort Resolution, 1; Fort Smith, 1; Kugluktuk, 1; Pond Inlet, 1; Rae Edzo, 1; Wha Ti, 1.	**NWT 9:** Iqaluit, 3; Pangnirtung, 2; Arviat, 1; Coral Harbour, 1; Kugluktuk, 1; Sanikiluaq, 1.	**NWT 10:** Wha Ti, 3; Sachs Harbour, 2; Broughton Island, 1; Inuvik, 1; Iqaluit, 1; Tulita, 1; Yellowknife, 1.	**Gonorrhea**
		NWT 1: Gjoa Haven	**Group A Strep**
	NWT 1: Yellowknife.	**NWT 4:** Rae Edzo, 2; Yellowknife, 1; Rae Lakes, 1.	**Hepatitis A**
		NWT 1: Wha Ti.	**Hepatitis B**
NWT 3: Yellowknife, 1; Tulita, 1; Fort Smith, 1.	**NWT 5:** Yellowknife, 3; Fort Smith, 1; Inuvik, 1.	**NWT 2:** Inuvik, 1; Gjoa Haven, 1.	**Hepatitis C**
		NWT 6: Iqaluit, 3; Cape Dorset, 2; Pond Inlet, 1.	**Influenza A**
		NWT 1: Yellowknife.	**Legionellosis**
NWT 1: Baker Lake.			**Malaria**
		NWT 2: Arctic Bay, 1; Whale Cove, 1.	**Meningitis**
NWT 1: Arviat.			**Pertussis**
NWT 8: Gjoa Haven	**NWT 48:** Tuktoyaktuk, 45; Inuvik, 3.	**NWT 9:** Gjoa Haven	**Rabies Exposure**
NWT 3: Yellowknife, 2; Igloolik, 1.		**NWT 2:** Hay River, 1; Inuvik, 1.	**Salmonellosis**
		NWT 1: Norman Wells	**Shigellosis**
NWT 1: Sanikiluaq.	**NWT 2:** Coral Harbour.		**Trichinosis**
NWT 5: Cape Dorset, 3; Pond Inlet, 1; Yellowknife, 1.	**NWT 6:** Cape Dorset, 4; Baker Lake, 1; Lutselk'e, 1.	**NWT 1:** Cape Dorset.	**Tuberculosis**

Notifiable disease information reported in *EpiNorth* on a monthly basis reflects reports **received** in the Health Protection Unit during the current month, not the month in which the cases occurred. Health professionals who suspect or diagnose a Notifiable Disease are required to report it to their **Regional Medical Health Office**r within the time frame legislated in the *Public Health Act*/*Communicable Disease Regulations*.



For the Sake of Our Children (continued from page 1)

As injuries continue to be the leading cause of preventable deaths and morbidity in the NWT, health professionals must work more closely with political leaders and other interested groups at the community, regional and territorial levels to better identify risk factors and develop solutions that will protect children from being killed or maimed for life, or from losing their parents and being orphaned prematurely. Unaddressed mental health problems, particularly in teenagers, are commonly at the source of delinquent behaviours, the development of addictions and of suicides. Better screening and the availability of peer and professional support can make a dramatic difference in this area.

In a recently released document titled: *Building a National Strategy for Healthy Child Development*[1] , the Federal/Provincial/Territorial Advisory Committee on Population Health proposes a number of priorities and directions, and outlines the following achievable goals for healthy child and youth development:

- valuing all children and youth and sharing responsibility for their healthy development;
- supporting families in their role as primary caregivers of children;
- making health promotion and prevention of disease, disability and injury among children and youth a priority of health public policies;
- reducing child and family poverty;
- protecting children and youth from abuse, violence, inequity and discrimination;
- ensuring that young people have opportunities to participate in decisions about their healthy development and enabling them to make healthy life choices;
- strengthening the capacity of communities to promote and improve healthy child and youth development; and,
- developing collaborative, cost-effective strategies to achieve measurable improvements in health outcomes for children and youth.

Much remains to be done, but there are many signs that governments have become more attuned to these needs and are becoming more supportive of these priorities. Multi-sectoral involvement and collaboration will be essential for success, but the path is now set. Let us *all* become involved.

1 Working Group on the National Strategy on Healthy Child Development, ACPH. *Building a National Strategy for Healthy Child Development.* (1998) Published by Health Canada and available through the Minister of Public Works and Government Services Canada, Catalogue # H39-424/1998E.

Kudos for the NWT Cancer Registry

At a recent conference in Vancouver, BC, the NWT was awarded the North American Association on Central Cancer Registries (NAACCR) Gold Standard Award for Quality, Completeness and Timeliness of 1995 data. Special congratulations go to Marilyn Kenny of the Health Protection Unit, who maintains the NWT Cancer Registry. Keep up the good work!

(A reminder to everyone that cancer is a reportable disease in the NWT. For questions regarding reporting of cases call: 867-920-8646.)

Nutrition News: Dietary Recommendations, Second Report Released

In the September/October 1997 issue of *EpiNorth*, highlights of the first report on Dietary Reference Intakes by the National Academy of Sciences, were provided.

On April 7, 1998 the National Academy of Sciences released the second of a series of dietary recommendations: *Report on Dietary Reference Intakes for Thiamin, Riboflavin, Niacin, Vitamin B_6, Panthothinic Acid, Biotin and Choline.*

Highlights of the Second Dietary Recommendations report:

- ***Folic acid***: the National Academy of Sciences recommends that women capable of becoming pregnant take 400 micrograms of synthetic folic acid from fortified foods and/or a supplement in addition to food folate that is naturally present in a varied diet.
- ***Vitamin B_{12}:*** The report recommends that adults 14 and over obtain 2.4 micrograms of Vitamin B_{12} per day.

As with the release of the first report on calcium and other nutrients, Health Canada will be reviewing this report in consultation with the Canadian nutrition community, but ultimately, the report's new information will affect current nutrition recommendations.

For more information:

Contact your local nutritionist or dietitian or the Consultant, Nutrition, Department of Health and Social Services. They can give you additional information.