



Message From The Co-Chairperson

There was considerable publicity surrounding the federal, provincial and territorial First Minister's Communiqué on Health (www.scics.gc.ca/cinfo00/800038004_e.html) in September 2000. A careful reading indicates that there are important implications for vital statistics.

A key component of the Communiqué was a commitment from all jurisdictions to report to their public on key health measures. Comparable indicators will address three broad areas: health status, health outcomes, and quality of service. In the category of health status only four specific indicators were mentioned. These were "life expectancy, infant mortality, low birth weight, and people reporting their health as excellent." The first three are based on the vital statistics information collected as part of the birth and death registration in each province/territory.

The inclusion of these three measures once again highlights the fact that provincial/territorial vital statistics organizations continue to be an important source of health data. While the mortality information is often criticized because it reflects information about "death" not health, it has important attributes that promote its continued use. These data provide comparable information internationally. In addition, they provide a long-time series allowing us to track progress over time. Finally, the systems that have been set up within provinces and territories to record the information are respected for their high quality.

The reporting on these indicators is scheduled for September 2002. There is currently a committee, led by Alberta Health, that is developing a plan for reporting and coordinating a framework that will encompass the three broad categories. One challenge for the vital statistics systems will be to ensure that the data available for September 2002 is the most relevant for reflecting the current situation across the provinces and territories. ♦

*Gary Catlin, Statistics Canada
Co-Chairperson, Vital Statistics Council for Canada*

Quality of Death Certification on Prince Edward Island

*Dr. Linda Van Til, Epidemiology Unit,
PEI Department of Health and Social Services
&
Thelma Johnston, Vital Statistics
PEI Department of Health and Social Services*

The Medical Certificate of Death is part of the death registration form and is an important legal document detailing the fact and circumstance of death. It is used to calculate death rates, life expectancy, population projections, disease-specific death rates, burden of disease, and health statistics used by health regions, provinces, the federal government, and international bodies such as the World Health Organization.

Prince Edward Island assessed the quality of cause-of-death data for all deaths over the two-year period 1996-1997. The process of death certification included the following steps:

- Either the physician attending the deceased during his or her last illness, or the coroner, is responsible for completing the Medical Certificate of Death section (immediate, antecedent, and other causes of death) of the Death Registration.
- If the attending physician did not pronounce death, the funeral director is responsible for completion of the demographic section on the Registration of Death, and ensures the attending physician or coroner receives the partially completed registration for completion of the Medical Certificate of Death.
- The completed Registration of Death is forwarded to Vital Statistics.
- On a daily basis, data from the Registrations of Death and the Medical Certificate of Death are

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entered into the computerized system by Vital Statistics staff. Automated edit checks for data entry errors are performed, including determining if the immediate cause-of-death field has been filled out. Cause-of-death information is typed verbatim into the system.

- Death Registrations, including the Medical Certificate of Death, are microfilmed and sent to Statistics Canada on a monthly basis. All death registrations for a completed calendar year must be submitted to Statistics Canada by June of the following year.
- Statistics Canada nosologists code the underlying cause of death to ICD9. If there are multiple causes of death, ICD rules are applied to select one cause as the underlying cause of death. ICD coding is achieved with the use of an automated coding system called "PC-MICAR/ACME," which was developed at the US National Centre for Health Statistics.

The database used for this review included all deaths occurring in PEI from January 1, 1996 to December 31, 1997, and registered by October 1999. Each record included text data on immediate, antecedent, and other causes of death, as well as date of death, age at death, and date of registration. This data was linked with the ICD9 codes for the underlying cause of death. Each record was assessed for one of three major errors:

- mechanism of death listed without an underlying cause;
- improper sequencing (underlying cause not listed as last antecedent cause); and
- competing causes (different diseases) listed as antecedent causes.

Preliminary Findings of The Review

In total, 2,286 deaths were registered from January 1, 1996 to December 31, 1997.

53% of the deaths were male, and 47% were female.

25% of the deaths were to individuals less than 70 years of age, and 75% were to individuals aged 70 or older.

Table 1 describes the lapse of time between the date of death and the date that the death registration was received and registered. Eighty-one percent of the death registrations were received within 60 days, with 3% taking more than 365 days to be received.

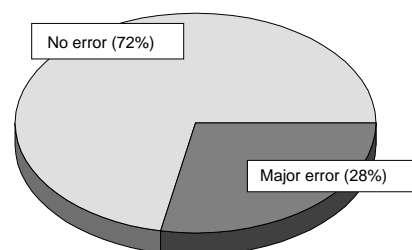
Table 1. Prince Edward Island Deaths, 1996-1997, by time to registration

Time from Death to Registration	Number of Deaths	Percent of Deaths
<31 days	1,459	64%
31 to 60 days	391	17%
61 to 120 days	189	8%
121 to 365 days	184	8%
>365 days	63	3%
TOTAL	2,286	100%

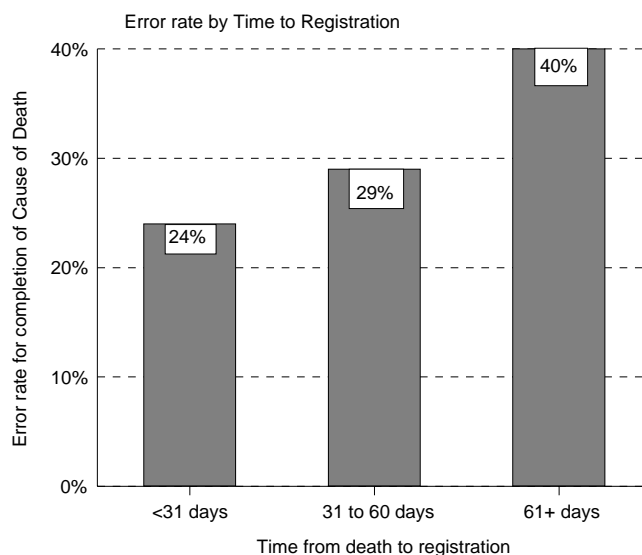
The pie graph shows that major errors, as described below, occurred in 28% of the Causes of Death as registered. Further analysis, as demonstrated in the bar graph, shows a significant rise in the error rate of Causes of Death as the length of time between the date of death and the date of registration increased.

Prince Edward Island Deaths, 1996-1997

Error rate for completion of Cause of Death



Cause of Death Errors, Prince Edward Island 1996-1997



Actions for Improvement

As a result of conducting an analysis of the death registration procedures, Vital Statistics was able to assess and take steps to improve our performance with regard to certifying the fact of death on Prince Edward Island. Seven initiatives are listed below, as well as a brief description of their current status.

- Burial permits are now used to follow-up on death registrations, thus improving the timeliness of registration, and reducing the likelihood of missed registrations. As of January 1999, burial permits are filed by month of receipt, and checked against the arrival of the Registration of Death. After 30 days, funeral directors and physicians are contacted to obtain death registrations that have not yet been received.
- In order to facilitate data analysis, the Vital Statistics System (VSS) will begin to import Statistics Canada coding for all causes of death. Upgrades to the VSS will be completed in April 2001.
- To improve on the timeliness of data transmission, the VSS will provide an electronic export of data to Statistics Canada for coding. This year will mark the first electronic submission of data to Statistics Canada (although microfilm is still required).
- There will now be regular provincial analysis and reporting of data (including data on completeness of fields) in order to detect errors, trends, and unusual events.
- In the future, modifications will be made to the VSS to allow for the entry of partially known death registration information and death registrations that are pending completion. Although the system is not currently capable of fulfilling this function, once implemented it will help to reduce the likelihood of missed registrations.
- Record linkage of vital statistics data to other provincial health registry data could be used to verify critical fields. The Common Client Registry Project is expected to electronically transmit hospital data to Vital Statistics in order to validate birth and death registration information. In turn, Vital Statistics will provide official birth and death information to the Medicare Registry for the validation of their data.

- Educating physicians/coroners on the proper completion of the Medical Certificate of Death should reduce cause-of-death errors. As a Health Roadmap initiative, Statistics Canada is developing an education package for physicians and other health professionals to improve certification of the cause of death. ♦

Historical Event Records Now Available on the Internet

*Bill Moncur, Regional Manager
British Columbia Vital Statistics Agency*

The British Columbia Vital Statistics Agency, in cooperation with BC Archives and Vital Chek Network, is pleased to announce that selected BC historical event records can now be purchased over the Internet using a credit card. This new feature is the “next step” in service offerings that started approximately two years ago with the introduction of Internet-based index searching for historical event records.

Under the historical index searching project, a new search engine was created on the BC Archives site that allows clients to search for birth records more than 100 years old, marriage records over 75 years old, and death records over 20 years old. The site is located at this Web address:

http://www.bcarchives.gov.bc.ca/textual/governmt/vstats/v_events.htm

Within this search engine clients can specify the level of detail for their search. For example, when searching death records, the fields that can be entered are illustrated on the following page.

Based on the information provided, the search engine will then check all historical records (in the case of death this would span the period 1872 to 1979). Matches to the criteria would then be displayed in either an unsorted or sorted basis, as determined by the user. The search engine can also be set to limit the number of entries it returns. When large numbers of matches are found, users will likely want to modify the search criteria to narrow the search parameters. An example of the return index information for death is shown on the following page.

Death Index Search Form

Enter Search Criteria In At Least One Of The Fields Below:			
Surname:	<input type="text" value="Jones"/>	Match Exactly ▾	Help
Given Name(s):	<input type="text"/>	Match Exactly ▾	Help
Gender:	<input type="text" value="Male"/>	Match Exactly ▾	Help
Age or Age Range: (e.g. 65 to 65 to 70)	<input type="text"/>	Match Exactly ▾	Help
Year or Year Range: (e.g. 1910 or 1873 to 1978)	<input type="text" value="1900 to 1910"/>	Match Exactly ▾	Help
Month: (e.g. 12)	<input type="text"/>	Match Exactly ▾	Help
Day: (e.g. 30)	<input type="text"/>	Match Exactly ▾	Help
Event Place:	<input type="text"/>	Match Exactly ▾	Help
Registration Number:	<input type="text"/>	Match Exactly ▾	Help
B.C. Archives Microfilm Number:	<input type="text"/>	Match Exactly ▾	Help
GSU Microfilm Number:	<input type="text"/>	Match Exactly ▾	Help

Sort Results By: Help

Limit Number of Matches to the First: Help

Return Index Information

[Return to the main Vital Events Index page](#)

Search Results for Death Index: 25 Record(s) Displayed

1

Name: CHARLES FREDERICK JONES
Event Date: 1900 1 11 (Yr/Mo/Day)
Age: 35
Gender: Male
Event Place: VICTORIA
Reg. Number: 1900-09-013916
B.C. Archives Microfilm Number: B15079 GSU Microfilm Number: 1927200

2

Name: HARRY JONES
Event Date: 1900 12 27 (Yr/Mo/Day)
Age: 55
Gender: Male
Event Place: NANAIMO

Clients are then able to take this information and can go to: one of the six public libraries in British Columbia that have purchased the microfilm records; to the BC Archives Reading Room in Victoria, B.C.; to the Family History Centres of the Genealogical Society of Utah (attached to the Church of Jesus Christ of Latter-Day Saints); or to the British Columbia Vital Statistics Agency. At each of these locations, clients can then arrange to access or purchase a paper copy of the actual

microfilm record of the vital event. In the case of BC Vital Statistics, the record is made available in the form of a Genealogy Certificate, which also includes a photocopy of the registration. The fee for this service is \$50 and the record is mailed to any location throughout the world. Each of the other organizations provides access to the microfilm/paper copy at a fee set by the individual organization, and most require the client to search the microfilm and print the paper copy themselves.

This new service not only represents a significant expansion of an important genealogical service, but has also been designed to allow customers to purchase images in a digital format. These fully automated purchases are done via the "shopping cart" methodology that has become standard on the Web.

At this time, death and marriage records (for the period 1872 to 1923) have been captured as digital images. Our credit card authorization partner, Vital Chek Network, has developed an e-commerce Web site (eNetWizard) which has an automatic link from the search records. When a digital image of a search record is available for sale, the resulting search output will resemble the example below.

Once you click-on the "Digital Image Available for Purchase" button, you are taken to the Vital Chek/eNetWizard site where you establish yourself as an account holder and then proceed to purchase the digital image of the record, at a cost of \$19.95. Throughout the transaction process, full security is

provided to the client through the use of encrypted data transmission and the use of VeriSign technology to ensure total client privacy.

Once a credit card has been authorized, the eNetWizard system automatically creates an electronic mail message and sends the digital image(s) to the client. The image(s) appears as attachments to the electronic mail message and in turn can be displayed (using existing browser plug-ins), printed, stored or forwarded using the electronic mail system of the client. Record searches and electronic image purchase can be done from anywhere in the world, on a seven-day per week, 24-hour per day basis.

Currently Vital Chek Network/eNetWizard is providing services to provincial, state, and county agencies from both Canada and the United States. Jurisdictions interested in utilizing this e-commerce service are invited to contact Vital Chek Network/eNetWizard directly at their Web site: http://www.enetwizard.com/shop/affiliate_partnerships.asp? ♦

Event Place: VICTORIA

Digital Image Available for Purchase

Reg. Number: 1900-09-013916

B.C. Archives Microfilm Number: B13079

GSU Microfilm Number: 1927289

2

Name: HARRY JONES

Event Date: 1900 12 27 (Yr/Mo/Day)

Age: 55

Gender: Male

Event Place: NANAIMO

Digital Image Available for Purchase

Reg. Number: 1900-09-046166

B.C. Archives Microfilm Number: B13085

GSU Microfilm Number: 1927113

3

Name: JOHN JONES

Event Date: 1900 8 8 (Yr/Mo/Day)

Age: 71

Gender: Male

Event Place: VANCOUVER

Digital Image Available for Purchase

Reg. Number: 1900-09-116959

A Regretful Farewell

It is with regret that the members of the Vital Statistics Council for Canada bid farewell to Alice Garner, the Registrar General of Vital Statistics for New Brunswick. Alice retired on January 26, 2001 and now begins another part of her life. Alice became the Registrar General of Vital Statistics in 1989, and experienced many changes during her tenure. Technological advancements and changes in societal issues have had a significant impact on vital statistics programs. Because of Alice's proactive approach, she recognized the opportunities that change provides; as a result she maintained a high level of integrity for the program, improved client services, and established partnerships with many stakeholders. The recognition of Alice's ability was evident when in 1998 she was invited to New York as part of an "expert group" convened by the United Nations to review a draft document discussing the Principles and Recommendations for developing a Vital Statistics system.

Alice has been an active member of the Vital Statistics Council for Canada, and was elected as Chairperson of Council from 1996 to 1998. She was actively involved in committee work: aside from chairing many committees she has always been key in coordinating the *Vital News*, the Council newsletter that was started in 1997. Alice's knowledge and dedication to the provincial and national system of

Vital Statistics made her a valuable asset to Council. She provided leadership, was a team player, and often acted as mentor to new registrars. She has not only been our colleague but has also been our friend.



Alice has a keen interest in genealogy, Scottish country dancing, and travel; we hope her retirement will allow her more time to devote to these interests. The Council would like to take this opportunity to wish Alice health, happiness, and success as she begins this new and exciting part of her life, in company with her beloved husband, Peter. ♦

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To submit articles or request information, contact Robert Moyes, telephone and fax: (250) 385-0876; address: 128 Superior Street, Victoria, BC V8V 1T1; or e-mail: robert.moyes@moh.hnet.bc.ca.