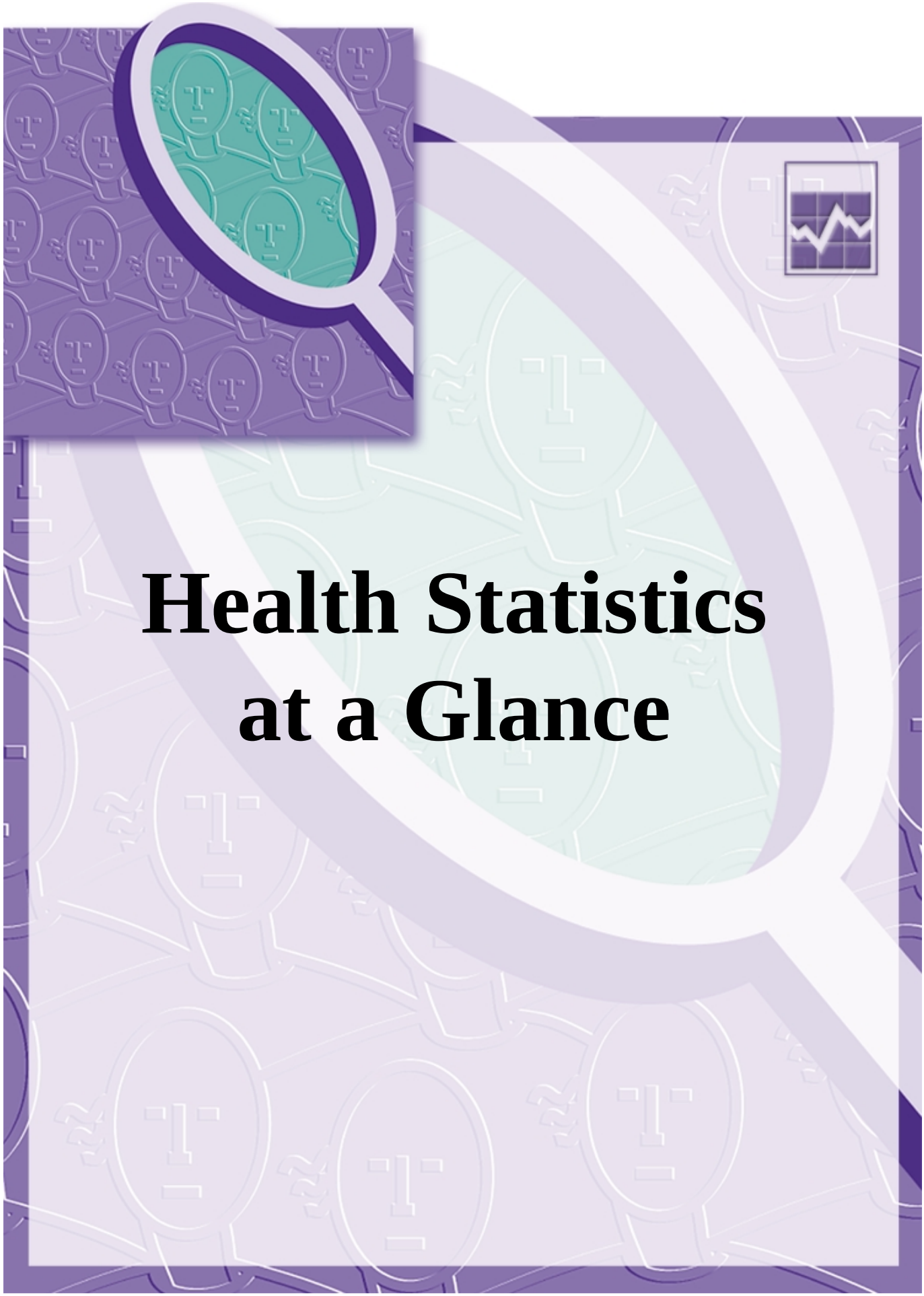

Health Statistics at a Glance

Table of Contents

Overview of Health Statistics at a Glance

Introduction

Health Statistics Division provides data to clients requesting health information from Statistics Canada in many formats. These include publications such as *Health Reports*, custom tabulations, micro-data files and integrated data products.

Health Statistics at a Glance tables contains information on socio-economic risk factors or determinants of health, health status, new information on health outcomes and expanded information on utilization of the health care system. The aim of *Health Statistics at a Glance* tables is to present a core data set using the most recent information available.

The indicator tables show extended time series for Canada, provinces and territorial levels of geography. Depending on the indicator, cross-classifications are by age and sex, and, in some cases by education. Due to the large amount of sample survey data used to construct the indicators, many tables cannot be produced for sub-provincial areas.

What is *Health Statistics at a Glance?*

Health Statistics at a Glance is an integrated information product. Its content reflects the growing demand for analysis of many current health issues supplemented by the underlying data. Within this CD-ROM there are three major components: the *Statistical Report on the Health of Canadians*, 17 *Health Reports* articles cited in the Statistical Report, and all of the components of *Health Indicators,* including Causes of Death.

To assist the user in the transition between analysis and data tables, some 54 links are present between the *Statistical Report* and the *Health Indicators* tables, between the *Statistical Report* and the *Health Reports* articles. This documentation is not linked to any of the other components.

Users access the data as tabulations that they can display in various formats according to their own needs.

The *Health Statistics at a Glance* CD-ROM contains the entire database of over 100 indicators and the software to access the information on a personal computer. The database can be accessed on the mainframe computer by using Statistics Canada's CANSIM cross-classified database.

Continued on next page

Overview of Health Statistics at a Glance, Continued

What types of indicators are included in *Health Statistics at a Glance*?

The indicators are grouped into four categories.

1. Determinants
   - Demography
   - Environment
   - Socio-economic conditions
   - Lifestyle

2. Health status
   - Levels of health and well-being perceived or diagnosed

3. Resources
   - Human
   - Physical
   - Financial
   - Organizational

4. Utilization
   - Health resources used

Where do the data files used to produce *Health Statistics at a Glance* come from?

Data files used to produce the *B20/20 tables* come from the following sources:

- Health Statistics Division, Statistics Canada
- other divisions of Statistics Canada
- Health Canada
- Laboratory Centre for Disease Control of Health Canada
- Canadian Institute for Health Information

Overview of Health Statistics at a Glance

Objective of the *Health Statistics at a Glance* documentation

The objective of the documentation is to provide the user with the most clear, comprehensive information currently available for each component included in the production of the *B20/20 tables*.

Extensive information is available for surveys conducted by Health Statistics Division. For more information on either surveys conducted by Statistics Canada—other than Health Statistics Division—or on surveys conducted by departments or organizations other than Statistics Canada, a list of contacts is provided.

Overview of Health Statistics at a Glance

What data files are included in the *Health Statistics at a Glance* database?

- Vital Statistics
  - Birth
  - Death
  - Stillbirth
- National Population Health Survey
- Canadian Cancer Registry
- Therapeutic Abortions
- Hospital Morbidity and Surgical Procedures
- Annual Hospital Statistics
- Residential Care Facilities
- General Social Survey
- Health and Activity Limitation Survey
- Labour Force Survey
- Census
- Survey of Consumer Finance
- Community College Enrolment and Graduates
- University Health Discipline Enrolment and Graduates
- Health Expenditures
- Health Personnel
- Payment for Medical Services
- Sexually Transmitted Diseases
- Notifiable Diseases

Overview of Health Statistics at a Glance

What information elements are included in the documentation?

The information currently available is included in the documentation, as applicable:

- Statistical Activity or Survey Name

- General Information
  - Characteristic
  - Purpose
  - Clients
  - Type of statistical activity
  - Type of survey
  - Reference period
  - Frequency of statistical activity
  - Target population
  - Population size
  - Statistical units
  - Sample size
  - Geographic coverage
  - Coverage in terms of standard classifications

- Main Topics and Definitions
  - Main Topics and variables available
  - Definitions
  - Collection definitions

- Collection—General
  - Survey frame or frame sources
  - Collection methods used
  - Collection period

- Collection Using Questionnaires
  - Questions asked (questionnaires)
  - Collection method

Overview of Health Statistics at a Glance

What information elements are included in the documentation? (continued)

- Processing Methods
  - General overview of processing system
  - Cleaning operations (edit and manipulation)
  - Weighting procedures
  - Standard classifications used for coding
  - Coding documentation used

- Data Quality
  - Response rates
  - Response rate units
  - Response rate weighting
  - Estimation procedures
  - Sampling errors
  - Coverage errors
  - Non-response errors
  - Response errors
  - Processing errors
  - Other non-sampling errors
  - Confidentiality restrictions or practices
  - Coefficients of variation

Overview of Vital Statistics

Overview of vital statistics

In 1918, the Dominion Bureau of Statistics (DBS; now Statistics Canada) was established by the *Statistics Act*. Two Dominion-Provincial Conferences held in the same year established the mechanism for the DBS and the provincial vital statistics offices to produce national vital statistics. In this co-operative arrangement, DBS would supply the standard registration forms for births, stillbirths, deaths and marriages, while the provinces would forward copies of the completed forms. Initially, eight provinces entered into the co-operativ system leading to publication of the first annual report for Canada in 1921. Quebec entered in 1926 and Newfoundland in 1949. Data from the territories were first included in the regular publications in 1950

An agreement between the Government of Canada and governments of the provinces and territories guides the operation of the Canadian System of Vital Statistics. The Vital Statistics Council for Canada oversees policy and operational matters. All provincial and territorial jurisdictions and Statistics Canada are represented on the Vital Statistics Council Under the agreement, all registrars have agreed to collect certain specific information, but any of them may decide to collect additional information.

The complete and accurate registration of all “vital” events in Canada is the main objective of this collaborative effort among the provinces, territories and Statistics Canada. Under a federal–provincial agreement, the registration of births, stillbirths, deaths and marriages is the responsibility of the provinces and territories.

The form for the registration of a live birth or stillbirth is usually completed by the parents who are responsible for filing it with the local registrar. In most provinces the physician or birth attendant is also responsible for filing a report, called a Notice of Birth, with the local registrar. Stillbirth registrations requires part of the information to be completed by a physician or coroner. Local registrars are not used in Quebec, where the hospital or birth attendant, rather than the parent is responsible for filing the registration documents directly with the provincial registrar.

Overview of Vital Statistics

Overview of vital statistics (continued)

The form for the registration of a death consists of two parts, personal and medical. An informant, usually a relative of the deceased, supplies personal data to the undertaker. The part of the form comprising the medical certificate of death is completed by the medical practitioner last in attendance or by a coroner, if an inquest or enquiry was held. The undertaker, or person acting as the undertaker, enters details on burial or other disposition of the body on the death registration form, and is responsible for filing the completed form with the local registrar, who then issues the burial permit.

The central Vital Statistics Registry in each province and territory provides copies of the registration documents and extracts of data from birth, death, stillbirth and marriage registration forms to Statistics Canada.

Birth

The following table provides the information elements and descriptions of the items included in the birth component of the *Health Indicators* database. This component includes live births and stillbirths.

Item	Description
Statistical activity or survey name	Vital Statistics—Birth Database.
Characteristic	This is an administrative survey that collects information continuously fro all provincial and territorial vital statistics registries on all live births and stillbirths (late fetal deaths) in Canada.
Purpose	In Canada, the primary use of the data is statistical, such as in population estimates and projections, demographic trend analyses, health surveillance and epidemiological research. The data are used extensively by the research community and other health professionals. The main uses of outputs of the survey are the monitoring of trends in population and population health factors, as well as the planning, implementation and evaluation of various health and social programs.
Clients	The major clients for vital statistics birth data are: • Health Canada • provincial, regional and local health departments • statistical departments • education departments • employment and labour departments • research organizations • universities • Demography Division of Statistics Canada • manufacturers and retailers
Type of statistical activity	This is an administrative survey.

Birth

Item	Description
Type of survey	This is a cross-sectional survey.
Reference period	The reference period is the calendar year. The survey started in 1921.
Frequency of the survey	The data are collected continuously but are published by Statistics Canada on an annual basis.
Target population	All births of Canadian residents in Canada and the United States. The Canadian vital statistics registration system covers all births occurring in Canada but the tables in *Health Indicators* exclude those of non-Canadian residents. Births to Canadian residents occurring in the United States are also included, being reported under a reciprocal agreement. However, no births of Canadian residents occurring in countries other than Canada and the United States are reported regardless of citizenship.
Population size	The population of Canada.
Statistical units	Individuals.
Sample size	N/A
Geographic coverage	All Canadian provinces and territories are included by place of birth and place of residence.
Coverage—Standard classification	Standard Geographical Code (SGC), consisting of Census Division and Census Sub-division. International Classification of Diseases, 9th Revision (ICD-9): Stillbirths only.

Birth

Item	Description
Main topics and variables	The main topic is all births to residents of Canada with details about the birth. All jurisdictions report the following variables to the Canadian vital statistics registration system: • date and place of birth • sex, birth weight and duration of gestation of the newborn • age and birthplace of each parent • parity and marital status of the mother • place of residence of the mother • type of birth (single or multiple) • birth order (if multiple birth) If stillborn: • cause of death • whether death occurred before or during labour • whether labour was induced (except in Quebec)

Birth

The definitions listed below are use to produce the statistical tables. They are based on those recommended by the World Health Organization (ICD-9, 1975) and the United Nations (Principles and Recommendations for a Vital Statistics System, 1973).

Item	Definitions
Live birth	The complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which, after such separation, breathes or shows any other evidence of life.
Stillbirth	A product of conception which has issued forth from its mother and did not at any time after birth breathe or show other signs of life. In 1975, the World Health Organization recommended that "national perinatal statistics (which comprise stillbirths plus early neonatal deaths) should include all fetuses and infants delivered weighing at least 500 g (or, when birth weight is unavailable, the corresponding gestational age [22 weeks] or body length [f 25 cm crown-heel]), whether alive or dead." However, four different definitions were used in Canada in 1992, based either on birth weight (for example, 500 g), gestational age (for example, 20 weeks) or a combination of both. By 1996, all provinces and territories except Quebec and Saskatchewan required reporting of any stillbirth of 20 or more weeks' gestation or with a birth weight of at least 500 g. Quebec and Saskatchewan only required reporting stillbirths with a birth weight of at least 500 g, which excludes many stillbirths of 20 to 25 weeks gestation that would be reportable elsewhere in Canada. In the statistical tables, periods of gestation of 20 or more weeks and 28 or more weeks were used. Only the latter are comparable over all jurisdictions.

Birth

Item	Definition
Total births	The total number of live births and stillbirths.
Age	The age at the last birthday preceding the event In most cases, age is reported in completed years, but in the case of infant deaths this may be the completed number of days, hours, minutes or months since birth.
Marital status	The legal marital status at the time of the event. Common-law union is not regarded as a legal marital status.
• **Single**	A person who has never been married, or a person whose marriage has been annulled and who has not remarried.
• **Married**	A person who is legally married and who is not separated.
• **Widowed**	A person whose spouse has died and who has not remarried.
• **Divorced**	A person who has obtained a legal divorce and who has not remarried.
• **Separated**	A person who is legally married, who is not living with his or her spouse because the couple no longer wants to live together, but who has not obtained a divorce.
Collection definitions	N/A

Birth

Item	Definition
Crude birth rates	The number of live births per 1,000 population.
Age-specific fertility rate	The number of live births per 1,000 women in a specific age interval. Five-year age groups are usually used (for example, from 15 to 19, to 45 to 49 years of age). The *age-specific marital fertility rate* is the number of live births per 1,000 married women in a specific age interval.
Total fertility rate	The average number of children a woman can expect to have in her lifetime, based on the age-specific fertility rates of a given year. It is equal to the su of the age-specific fertility rates.
Live birth parity	The number of children born live to the mother, including the current birth.

Birth

Item	Definition
Birth weight	The first weight of the fetus or newborn obtained after birth, expressed in grams as defined below: • *Extremely low birth weight*: less than 1,000 grams • *Very low birth weight:* less than 1,500 grams • *Low birth weight:* less than 2,500 grams • *Normal birth weight:* 2,500 or more grams
Multiple birth	Total number of children born to the mother in the same birth event, including live births and stillbirths.
Period of gestation	The interval, in completed weeks, between the first day of the last menstrual period of the mother and the day of delivery. Also, any estimate of that interval, based on ultrasound, physical examination, or other method. The method of calculation of duration of gestation is not specified in Canadian birth registration documents. *Pre-term* defines a duration of gestation of less than 37 completed weeks; *term,* 37 through 41 completed weeks; and *post-term,* 42 or more completed weeks.
Teenage pregnancy rate	Approximated by dividing the sum of live births, stillbirths and therapeutic abortions performed in hospitals to the female population aged 15 to 19. This underestimates the "true" pregnancy rate as abortions performed in clinics or in the United States, pregnancies resulting in miscarriage, and possible unreported or late-reported live births or stillbirths, are missing from the numerator.
Mean and median	The arithmetic mean (average) and the median are measures of central tendency. The *mean* is calculated by summing observations weighted by their relative frequency. The *median* is the point in a frequency distribution where half of the observations fall above it and half below it.

Birth

Item	Description
Survey frame or frame sources	Birth registrations
Collection methods	Under a federal–provincial agreement, the registration of births is the responsibility of the provinces and territories. In most provinces, the registration form for a live birth is completed by the parents who are responsible for filing it with the local registrar. In most provinces, the physician or the birth attendant is also responsible for filing a Notice of Birth with the local registrar. The central vital statistics registry in each province and territory provides copies of the registration document and data from birth registration forms to Statistics Canada.
Collection period	Continuous, January to December.
Overview of processing system	All provinces supply microfilm copies or optical images of registration forms to Statistics Canada. In addition, Newfoundland, Nova Scotia, New Brunswick, Quebec, Ontario and the western provinces supply machine-readable abstracts of registrations, containing the required standard information. For Prince Edward Island and the territories, the required standard information on microfilm is converted to machine-readable format at Statistics Canada. Subsequent changes to registrations due to errors or omissions are transmitted to Statistics Canada as the information becomes available. Statistics Canada codes geographic information for Yukon as well as for all births to Canadians occurring in the United States or in a province other than the province of residence of the mother. Machine-readable files provided by provinces are converted to a standard format at Statistics Canada

Birth

Item	Description
Cleaning operations (edits)	The provinces that supply data in machine-readable form also carry out edits before sending them. Editing varies by province but usually includes checks for the presence of data, validation of code ranges for coded information and consistency between related data items, such as birth weight and period of gestation, and marital status and age. The data from all provinces then undergo more extensive edit routines to ascertain the completeness and quality of the data. Most errors and omissions detected during processing are corrected by referring to the microfilmed registrations or optical images, or by consulting with the provinces and territories. Since 1990, Ontario has used optical imaging technology for storing copies of registration documents, so microfilm copies are no longer being produced. Transfer of optical images from Ontario to Statistics Canada is currently in progress. For events mainly for years 1990 to 1995 however, it was not possible to completely edit vital statistics data reported by Ontario. Invalid codes were changed to the "not stated" category, and unlikely situations were accepted as reported.
Weighting procedures	Unweighted
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC). International Classification of Diseases, 9th Revision (ICD-9) for coding causes of death in stillbirth registration.
Coding documentation used	Vital Registries use the Standard Geographical Classification (SGC) manuals supplied by Statistics Canada to promote data reliability and consistency. International Classification of Diseases, 9th Revision (ICD-9).

Birth

Item	Description
Response rate	Response rate for birth registrations is nearly 100%. Registration is considered to be virtually complete because of legal reporting requirements that match with physician's notices of birth, as well as comparisons with hospital records.
Response rate unit	Births to Canadian residents.
Response rate weighting	Unweighted.
Variable response rate	For live births, the reporting of core statistical data has a response rate that varies by item, province and year. In 1996, the rate for most variables was close to 100%. In some provinces, it was below 90% for questions on marital status of the mother and the birthplace and age of father. In Ontario, however, the dates of birth of both parents were missing from the machine-readable file provided to Statistics Canada. Users are advised to note the size of the non-response or the not-stated category when analysing data. When it is relatively large, results derived for the variable may be biased by differences in the characteristics of individuals with not-stated and valid responses for a given variable.
Estimation procedures	N/A
Sampling errors	N/A
Coverage errors	Records received after the cut-off date and births of Canadians in countries other than Canada or the United States are missing. These exclusions result in some undercoverage. Beginning with 1996 data, late-reported events were to be included in the database, but this has not yet been implemented.
Non-response errors	N/A

Birth

Item	Description
Response errors	Under-coverage might occur, for example, when parents of newborns that die within days of birth do not register the birth. However, in provinces with a Physician Notice of Birth or similar documents, births would still have been reported to the registrar (and to Statistics Canada). There is also thought to be some under-reporting and/or late reporting of births in remote areas.
Processing errors	A process has been designed to measure data coding and to capture errors. A sample of records is to be recaptured, recoded and matched against th records on the Canadian database. The data elements under review for births include date of birth, kind of birth (single or multiple), duration of gestation, sex and birth weight of child, as well as age, parity, marital status and usual place of residence of the mother. The process has not yet been implemented.
Other non-sampling errors	In calculating rates, the definitions of the numerator and the denominator do not always match perfectly.
Suppression and other confidentiality restrictions	For current and future vital statistics tables there is no suppression of data. A Release Order has been obtained from the Chief Statistician to allow the release of unsupressed vital statistics data. The Order must be renewed annually and confirmed by the vital statistics registrars every three years.
Coefficients of variations	**N/A**

Death

The following table provides the information elements and descriptions of the items included in the death component of the *Health Indicators* database.

Item	Description
Statistical activity or survey name	Vital Statistics—Death Database.
Characteristic	This survey continuously collects information from all provincial and territorial vital statistics registries on all deaths of residents in Canada.
Purpose	In Canada, the primary use of the data is statistical, such as in population estimates and projections, demographic trend analyses, health surveillance and epidemiological research. The data are used extensively by the research community and other health professionals. The main uses of outputs of the survey are the monitoring of trends in the population, and population health status, as well as the planning, implementation and evaluation of various social and health programs.
Name of sponsors	N/A
Clients	The major clients for vital statistics death data are: • Health Canada • provincial, regional and local health departments • statistical departments • education departments • employment and labour departments • research organizations • universities • Demography Division of Statistics Canada
Type of statistical activity	This is an administrative survey.

Death

Item	Description
Type of survey	This is a cross-sectional survey.
Reference period	The reference period is the calendar year. The survey started in 1921.
Frequency of the survey	The data are collected continuously but are published by Statistics Canada on an annual basis.
Target population	All deaths of Canadian residents in Canada and the United States. The Canadian vital statistics registration system covers all deaths occurring in Canada but most of the tables in *Health Indicators* exclude those of non-Canadian residents. Deaths of Canadian residents occurring in the United States are also included, being reported under a reciprocal agreement. However, no deaths of Canadian residents occurring in countries other than Canada and the United States are reported.
Population size	Total population of Canada.
Statistical units	Individuals.
Sample size	N/A
Geographic coverage	All Canadian provinces and territories are included by place of death and place of residence.
Coverage—Standard classification	Standard Geographical Code (SGC): Province, Census Division, Censu Sub-division, with minor modifications. International Classification of Diseases, 9th Revision (ICD-9): four-digit code for underlying cause of death, including external cause of death and nature of injury.

Death

Item	Description
Main topics and variables	The main topic is all deaths of residents of Canada with detail pertaining to the death. The following variables are reported by all jurisdictions to the Canadian vital statistics death registration system: • age and sex of the deceased • marital status of the deceased • residence of the deceased • birthplace of the deceased • date of death • underlying cause of death • place of death • place of accident (for most non-transport accidental deaths) • autopsy (whether one was held, and, if so, whether the results were taken into account in establishing the cause of death)

Death

The definitions listed below used for the production of the statistical tables are based on those recommended by the World Health Organization (ICD-9, 1975) and the United Nations (Principles and Recommendations for a Vital Statistics System, 1973).

Item	Definitions
Death	The permanent disappearance of all evidence of life at any time after live birth has taken place. Stillbirths are excluded from death statistics unless otherwise indicated (for example, perinatal death).
Stillbirth	A product of conception which has issued forth from its mother and did not at any time after birth breathe or show other signs of life. The World Health Organization recommended that "national perinatal statistics (which comprise stillbirths plus early neonatal deaths) should include all fetuses and infants delivered weighing at least 500 g (or, when birth weight is unavailable, the corresponding gestational age [for example, 22 weeks] or body length [for example, 25 cm crown-heel]), whether alive or dead." However, four different definitions were in use in Canada in 1992, based either on birth weight (for example, 500 g or more), gestational age (for example, 20 weeks or more) or a combination of both. By 1996, all provinces and territories except Quebec and Saskatchewan required reporting of all stillbirths of 20 or more weeks gestation or with a birth weight of at least 500 g. Quebec and Saskatchewan required only reporting of stillbirths with a birth weight of at least 500 g, which excludes many stillbirths of 20 to 25 weeks gestation which would have been reportable elsewhere in Canada. In the statistical tables, periods of gestation of 20 or more weeks and 28 or more weeks were used. Only the latter are comparable over all jurisdictions.

Death

Item	Definition
Age	The age at the last birthday preceding the event In most cases, age is reported in completed years. In the case of infant deaths it may be the completed number of days, or hours, minutes or months since birth.
Marital status	The legal marital status at the time of the event. Common-law union is not regarded as a legal marital status.
• **Single**	A person who has never been married, or a person whose marriage has been annulled and who has not remarried.
• **Married**	A person who is legally married and who is not separated.
• **Widowed**	A person whose spouse has died and who has not remarried.
• **Divorced**	A person who has obtained a legal divorce and who has not remarried.
• **Separated**	A person who is legally married, who is not living with his or her spouse because the couple no longer wants to live together, but who has not obtained a divorce.
Collection definitions	N/A

Death

Item	Definition
Crude death rates	The number of deaths per 1,000 population.
Age-specific death rate	The number of deaths in a given age group divided by the population in that age group.
Infant death	Death of a child under one year of age.
Infant death rate	The number of infant deaths per 1,000 live births. The same denominator is used for *post-neonatal* and *neonatal* deaths.
Perinatal deat	Death to a child under one week (<7 days) of age or a stillbirth of 28 weeks or more gestation.
Perinatal deat rate	Perinatal deaths per 1,000 total births (live births plus stillbirths).
Stillbirth	Late fetal death (according to provincial/territorial reporting requirements). In *Health Indicators* tables, stillbirths are shown for 20 or more weeks gestation, or for 28 or more weeks gestation, as specified.
Neonatal deat	Death to a child under four weeks of age (<28 days).

Death

Item	Definition
Post-neonatal death	The death of a child between four weeks and one year (28 to 364 days).
Maternal death	The death of a mother due to complications during pregnancy, childbirth or puerperium.
Age-standardized death rate	The rate that results when the age-specific death rates are weighted by standard age distribution. The standard age distribution used here was derived from July 1, 1998 census population for Canada, both sexes together.
Life expectancy	A statistic included in life tables, it is the average number of years remaining to be lived, at birth or other ages, based on a set of age-specific mortality rates for a given year.
Mean and median	The arithmetic mean (average) and the median are measures of central tendency. The *mean* is calculated by summing observations weighted their relative frequency. The *median* is the point in a frequency distribution where half of the observations fall above it and half below it.

Death

Item	Definition
Adjusted population estimates	Statistics Canada introduced new population estimates in 1993 and 1998. They differ from the previous ones by: • including adjustments for net census undercoverage • including estimates for non-permanent residents • establishing the reference date for the annual estimates at July 1 These adjusted population estimates are now used as denominators in the calculation of all the population-based rates presented, but not for infant mortality rates, etc.
Net census undercoverage	Net census undercoverage is the difference between census undercoverage and census overcoverage. The former refers to persons not enumerated in the census but who were part of the census universe, the latter to persons either enumerated more than once or enumerated but not part of the census universe.

Death

Item	Description
Non-permanent residents	Non-permanent residents are persons who: • claim refugee status • hold a student authorization • hold an employment authorization • hold a minister's permit • are non-Canadian-born dependants of the above individuals
Data affected by population adjustments	The population estimates series for provinces and territories comprises annual population estimates by single year of age, sex and marital status going back to 1971. For census divisions, census subdivisions, census metropolitan areas, and census agglomerations, annual estimates by age group and sex are available back to 1986. **Note that the adjustments to the population data are provided by Statistics Canada's population estimation program only. Census data are not adjusted.** Thus two types of population counts are available for census years: adjusted population estimates as of July 1 and unadjusted census counts as of the census reference date.
Impact of adjustments	The impact of the adjustment varies by year, province and territory, and demographic characteristic. In 1991 for instance, these adjustments altogether added about one million individuals to the postcensal estimates based on the 1986 census. The increase in the estimate for young adult males was higher than for other age–sex categories. Therefore, rates involving this group were affected more than others. In general, the rates decrease with adjustment but the underlying trends remain very similar.
Heath Statistics Division policy on the population estimates	The policy of the Health Statistics Division is to use the adjusted population estimates for its standard data products and publications.

Death

Item	Description
Survey frame or frame sources	Death registrations
Collection methods	Under a federal–provincial agreement, the registration of deaths is the responsibility of the provinces and territories. The form for the registration of a death consists of two parts: personal and medical. An informant, usually a relative of the deceased, supplies personal data to the undertaker. The part of the form comprising the medical certificate of death is completed by the medical practitioner last in attendance or by a coroner, if an inquest or enquiry was held. The undertaker, or person acting as the undertaker, enters details on burial or other disposition of the body on the death registration form, and is responsible for filing the completed form with the local registrar, who then issues the burial permit. The central vital statistics registry in each province and territory provides copies of the registration documents and data from death registration forms to Statistics Canada.
Collection period	Continuous, fro January to December

Death

Item	Description
Overview of processing system	All provinces supply microfilm copies or optical images of registration forms to Statistics Canada. In addition, Nova Scotia, New Brunswick, Quebec, Ontario and the western provinces supply machine-readabl abstracts of registrations, containing of the required standard information. For Newfoundland, Prince Edward Island and the territories, the required standard information on microfilm is converted to machine-readable format at Statistics Canada. Subsequent changes to registrations due to errors or omissions are transmitted to Statistics Canada as the information becomes available. For the Atlantic provinces, Alberta and the territories, the cause of death was coded at Statistics Canada. Geographic information was coded at Statistics Canada for Yukon as well as for all deaths of non-residents of the province of occurrence. For deaths of Canadian residents reported by the United States, both nosological and geographic information are coded at Statistic Canada. Machine-readable files provided by provinces are converted to a standard format at Statistics Canada.

Death

Item	Description
Cleaning operations (edits)	The provinces that supply data in machine-readable form also carry out edits before sending them. Editing varies by province but usually includes checks for the presence of data, validation of code ranges for coded information and consistency between related data items, such as cause of death and sex (for sex-specific causes), and marital status and age. The data from all provinces then undergo more extensive edits to ascertain the completeness and quality of the data. Most errors and omissions detected during processing are corrected by referring to the microfilmed registrations or by consulting with the provinces and territories. Since 1990, Ontario has used optical imaging technology for storing copies of registration documents, so microfilm copies are no longer being produced. Transfer of optical images from Ontario to Statistics Canada is currently in progress. For events mainly for years 1990–1995 however, it was not possible to completely edit vital statistics data reported by Ontario. Invalid codes were changed to the "not stated" category, and unlikely situations were accepted as reported.
Weighting procedures	N/A
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC). International Classification of Diseases, 9th Revision (ICD-9).
Coding documentation used	Statistics Canada provides provinces with training and consultation for cause of death coding and supplies manuals, such as the International Classification of Diseases (ICD) and the Standard Geographical Classification (SGC), to promote data reliability and consistency.

Death

Item	Description
Response rate	The response rate for death registrations is nearly 100%. Thanks to legal reporting requirements prior to disposition of a body, registration of deaths is be virtually complete.
Response rate unit	Deaths of residents of Canada.
Response rate weighting	Unweighted.
Variable response rate	The response rate for reporting core statistical data varies by item, province and year. In 1996, the rate for most variables was close to 100%. For birthplace of deceased, it was less than 90% in Quebec. The postal code of the deceased was almost always reported in Quebec and British Columbia, but was frequently missing in all other jurisdictions. Users are advised to note the size of the "non-response" or the "not-stated" category when analysing data. When it is relatively large, results derived for the variable may be biased by differences in the characteristics of individuals with not-stated and valid responses for a given variable.
Estimation procedures	N/A
Sampling errors	N/A
Coverage errors	Records received after the cut-off date and deaths occurring to Canadian residents in countries other than Canada or the United States are missing. These exclusions result in some undercoverage. Beginning with the 1996 data, late reported deaths were to be included in the database, but this has not yet been implemented.
Non-response errors	N/A
Response errors	N/A

Death

Item	Description
Processing errors	A process has been designed to measure data coding and capture errors. A sample of records is to be recaptured, recoded and matched against the records on the Canadian Vital Statistics database. The data elements under review for deaths include date, location, nature and cause of death, and the following characteristics of the deceased: sex, date of birth, age at death, usual place of residence, birthplace, parents birthplace and marital status. This process has not yet been implemented.
Other non-sampling errors	In calculating rates, the definitions of the numerator and the denominator do not always match perfectly.
Suppression and other confidentiality restrictions	A Release Order has been obtained from the Chief Statistician to allow the release of unsuppressed vital statistics data. The Order must be renewed annually and confirmed by the vital statistics registrars every three years.
Coefficients of variations	N/A

Life Tables

Overview of life tables

A life table represents a universally accepted demographic or actuarial model that portrays in a clear and comprehensive manner a synthesis of the mortality experience of a population and permits one to derive comparative measures of expected longevity. In the construction of these tables, it is customary to assume that a hypothetical cohort of 100,000 individuals born at the same moment in time is subject to age–sex–specific mortality rates actually experienced by a population at a specified period of time.

The life tables appearing in *Health Indicators* were generated on the basis of age–sex–specific mortality rates for Canada and the provinces prevailing in the three year periods encompassing the census from the years 1920 to 1922 and 1990 to 1992.

The methodology for the production of life tables for 1985 to 1987 and 1990 to 1992 is explained in the document Life Tables, Canada and the Provinces, 1990-1992: Statistics Canada Catalogue no. (84-537-XPB).

The methodology for the production of life tables for 1920 to 1922 through 1980 to 1982 is explained in the document Longevity and Historical Life Tables 1921-1981 (Abridged): Canada and the Provinces, Statistics Canad Catalogue no. (89-506-XPB).

Life Tables

Introduction

The publication Life Tables, Canada and the Provinces, 1990-1992: Statistics Canada Catalogue no. (84-537-XPB) contains the tables generated on the basis of age–sex–specific mortality rates for Canada and the provinces prevailing in the period 1990 to 1992. Life tables for the first year of life have been produced separately by sex for Canada as a whole. Detailed life tables by single years of age, for males and females, have been produced for Canada and all the provinces except Prince Edward Island because of its small population and number of deaths.

Abridged life tables using five-year groupings have been produced for males, for females and for both sexes combined, for Canada and all the provinces. These tables are available on the *Health Indicators*. Because of the small sizes of their populations, life tables were not constructed for Yukon and Northwest Territories. Their populations and deaths were included in the calculation of life tables for Canada.

This document explains the methods used to produce the 1990 to 1992 life tables. Data sources and data files that were created during the construction of the life tables will be described more extensively in a user guide to the computer programs that will be available later from the authors of this document.

Life Tables

1. Input Data

Three major steps were needed to produce the life tables: the gathering of data, the calculation of mortality rates and the calculation of other life table functions. This section deals with the first step: the data (separate for males and females, and for Canada and the provinces) required for input. Section 2 on methodology will provide some explanations about the uses of such data.

For the detailed life tables the following was required:

- the number of births betwee 1984 and 1992
- the number of deaths between 1984 and 1992, by year of birth, year of death and by year of age for ages 0 to 5
- the number of deaths observed between 1990 and 1992, by five-year age groups from 0 to 4 through 85 to 89 years, plus a final age group for persons aged 90 years and over;
- the population count on July 1, 1991, by five year age groups from 0 to 4 through 85 to 89 years, with the final age group being 90 years and over
- the separation factors at ages 0 to 4

For the abridged life tables:

- the total number of births between 1989 and 1991
- the total number of births between 1990 and 1992
- the number of deaths observed during the 1990 to 1992 period, for age 0, for ages 1 to 4, by five-year age groups from 5 to 9 through 85 to 89 years, with a final group for persons aged 90 and over
- the population count on July 1, 1991, for age 0, grouped from 1 to 4 years, by five-year age groups from 5 to 9 through 85 to 89 years, with the final age group being 90 years and over
- the separation factor at age 0

Life Tables

1. Input data (continued)

For the life tables for the first year of life:

- the number of births betwee 1990 and 1991
- the number of births for 1989 and 1992, by month of the year
- the number of infant deaths observed between 1990 and 1992, by subdivisions of the first year of life (first seven days, weeks 2 to 4, and months 2 to 12)
- the value of T_1 from the corresponding detailed life table (male or female at the national level)

For the separation factors:

- the number of deaths observed between 1990 and 1992 at ages 0 to 4 by death group. The term death group refers to a dichotomous variable derived from the year of death, year of birth and age at death. The death group indicates whether or not individuals had a birthday or were born, as in the case of infant deaths, in the calendar year during which the death occurred.

The population counts are census estimates of the population on July 1, 1991. These counts now include non-permanent residents, and the estimates have also been adjusted for undercoverage of the population. This marks a departure from previous life tables, which used population counts for June 1 of the census year, did not include non-permanent residents and were not adjusted for undercoverage. The Health Statistics Division of Statistics Canada provided data relating to births and deaths. The Demography Division of Statistics Canada produced population counts.

Life Tables

2. Methodology

The methodology followed in constructing the 1990 to 1992 tables is the same as that employed previously in producing the set of tables for the years 1980 to 1982 and 1985 to 1987, except for the few points listed below.[1] A minor modification that was introduced in the previous set of tables is the truncation of the upper age limit of the detailed tables by fixing the last pivotal value to be incorporated at the age of 102. The same has been continued for this set; that is the last pivotal value used was 102. In addition, mortality rates were extrapolated up to age 105 and q_{106} was set to 1.

All of the calculations involved were carried out using the Statistical Analysis System (SAS). Full decimal precision was used throughout until a rounding procedure was applied to the data at the end of the routines.

For this set of tables, a different rounding procedure was used for the number of deaths (d_x) and for the stationary population counts (L_x). In the past, those two variables were rounded independently; now, Sirken's rounding procedure, in use in U.S. Decennial Life Tables for 1979–1981, is used.[2] It sets values of d_x and L_x equal to the difference between two consecutive rounded values of l_x and T_x, respectively. This way, the two following basic relationships are preserved in the published tables: $l_x - d_x = l_{x+1}$ and $T_x - L_x = T_{x+1}$.

Life Tables

The following sections describe methodological issues specific to each set of tables.

2.1 Detailed Life Tables

The procedure employed in the construction of the detailed tables is basically the one given in United States Life Tables and Actuarial Tables by Thomas N.E. Greville.[3] This is the same methodology that was employed for the earlier sets of tables beginning with the years 1970 to 1972.

The principal values of all life tables are the ${}_nq_x$ values. They represent the probability of dying within the span from the beginning of ag "x" to the beginning of age "x+n", conditional on living to exact age x. In other words, ${}_nq_x$ is the mortality rate in the age interval [x, x+n). For the detailed life tables, the age interval is one year, that is n=1. In this case, the left-hand-side subscript is sometimes omitted and the mortality rate is simply referred to as q_x.

2.2 Abridged Life Tables

Because of the smaller population and consequently of smaller frequencies, the detailed life tables for the province of Prince Edward Island could not meaningfully be constructed. Hence, the abriged tables were constructed—separately for males and females as well as for both sexes combined—based on the procedure adopted for the 1970 to 1972 life tables.. The methodology has been explained in a technical paper by J. Silins and W. Zayachkowski.[7] Except for the programming language used and for the rounding method mentioned at the end of this section, the procedure employed in deriving the values for the 1990 to 1992 tables was exactly the same as was employed previously.

Life Tables

2.3 Infant Life Tables

This is the fifth time that the sets of life tables for the subdivisions of the first year of life have been produced for Canada. As was the case for the 1985 to 1987 life tables, the method described in detail by Monroe G. Sirken was employed in constructing these tables.[8] The basic underlying assumption in the production of these tables is that a closed cohort of l00,000 live births is subject to the mortality rates of subdivisions of a year of age, but for the first year of life only.

Vital statistics files of deaths (from 1990 to 1992) and births (fro 1989 to 1992) were used to produce infant life tables. The age at death was calculated in number of completed days or months. For deaths occuring within 24 hours of birth, the age on the death files is reported in number of minutes or hours lived. For those deaths, age was coded as 0 days or less than one day lived. Other infant deaths were coded as the number of days or months lived as reported on the death files.

The following 21 subdivisions of the first year of life were used to calculat mortality rates in infant life tables: the first seven days, weeks 2 to 4, and months 2 to 12. In addition to those subdivisions, infant life tables include two more rows: one for the first week (summing deaths from the first seven days) and one for the first month (summing deaths from the first four weeks).

Life Tables

2.3.1 Mortality Rates for the first year of life

The mortality rates for the 21 subdivisions of the first year of life were calculated in two steps.

For each of the 21 subdivisions of the first year of life, $ß_s$, the number of births in subdivisions that were exposed to the risk of death, was calculated fro formulas attributable to M.G. Sirken and are expressed differently but equivalently by other authors.[1,5,8]

Table 2. Subdivisions of the First Year of Life

Subdivision number	Age interval	Subdivision number	Age interval
1	≥0 and <1 day	12	≥2 and <3 months
2	≥1 and <2 days	13	≥3 and <4 months
3	≥2 and <3 days	14	≥4 and <5 months
4	≥3 and <4 days	15	≥5 and <6 months
5	≥4 and <5 days	16	≥6 and <7 months
6	≥5 and <6 days	17	≥7 and <8 months
7	≥6 and <7 days	18	≥8 and <9 months
8	≥1 and <2 weeks	19	≥9 and <10 months
9	≥2 and <3 weeks	20	≥10 and <11 months
10	≥3 and <4 weeks	21	≥11 and <12 months
11	≥4 weeks and <2 months		

3. Explanation of the Columns of the Life Tables

Column 1; Age interval

In the case of detailed life tables, there is only one age per line. For example, age "30" connotes the interval of one year starting with the 30th birthday and ending with the 31st birthday. In this case, death at age 30 means that the death occurred after completing 30 years of life and before reaching 31 years of age.

Age intervals in infant life tables are of the form [x, x+n], that is, the first age, x, is included in the interval while the second age, x+n, is excluded. For example, the interval "0 to 1 day" refers to deaths that occur in the 24-hour interval starting at birth and ending at the end of day 1 (24 hours after birth). The interval "1 to 2 days" is the second 24-hour period from birth, or the interval from the beginning of the second day to the end of the second day. It comprises deaths of infants who completed one day of life and died before completing a second day. In other words, the first age indicates the number of *completed* units (here days or months).

In abridged life tables, age intervals are of the form [x, x+n], that is, both ages x and x+n are included in the interval. For example, age interval [40, 44] comprises deaths occurring within the interval 40 to 44 years. Except for the first two rows and the last row of the table, the interval width is five years. The first row has a one-year interval. The second row has a four-year interval. The last row, where the age interval is denoted 90+, comprises all deaths occurring at age 90 or above.

Column l_x; Number surviving

This column represents the number of persons of the initial cohort of 100,000 births surviving to the exact age marking the beginning of each age interval. The progressive values of l_x were derived by the successive application of ${}_np_x$ values to the remainder of the original cohort of 100,000 live births still alive at the beginning of each interval.

Column ${}_nd_x$; Number dying

This column shows the number dying in each successive age interval out of the number alive at the beginning of the interval. This was first obtained by multiplying the corresponding l_x by the corresponding ${}_nq_x$, that is, ${}_nd_x = l_x\ {}_nq_x$. Then, after calculating all life table functions using the full decimal precision provided by SAS, l_x values were rounded to the nearest integer, and ${}_nd_x$ values were set equal to the difference between consecutive rounded values of l_x: ${}_nd_x = l_x - l_{x+n}$.

Life Tables

3. Explanation of the Columns of the Life Tables, continued

Column $_nP_x$; Proportion surviving

This column represents the proportion of the survivors who are alive at the beginning of the age interval who will survive to the beginning of the next age interval. This is the complement of $_nq_x$, the proportion dying, that is, $_np_x = 1 - _nq_x$

Column $_nq_x$; Proportion dying

This column represents the proportion of those alive at the beginning of the corresponding age interval who will die before reaching the end of the interval. This is the most important column of the life table and is the basis for the entire table structure. This is also the initial column in the generation of a life table from which other columns are derived on the basis of interdependent relationships.

Column $_nL_x$; Stationary population

If one assumes that the cohort of 100,000 persons is being born every year, that this continues for a long time, that the proportion dying in each age interval throughout their life span is fixed as determined by the values of $_nq_x$, and that the deaths are evenly distributed over time within the age intervals, then the survivors of these successive cohorts constitute what could be viewed as a "stationary population." The situation of being stationary arises because the number living in any given age group for any year will not change, and the number entering any age group will exactly equal the number leaving the group due to death or aging. The number of deaths each year equals the number of births, which equals 100,000. In other words, the assumptions involved render column $_nL_x$ unchanging and thus stationary. The derivation of the values of $_nL_x$ does vary at young ages because of the unevenness of the distribution of deaths over time within the age intervals; th risk of death decreases during the interval.

Life Tables

3. Explanation of the Columns of the Life Tables, continued

Column T_x, cumulative stationary population

T_x shows the number of life years lived by persons in the stationary population in the indicated age interval and all subsequent age intervals.

Column $\mathring{e}_x$, average remaining years of life

The expectation of life or the average remaining years of life at any given age is the mean number of years remaining to be lived by those surviving to that age on the basis of a given set of mortality rates. The values are obtained simply by dividing the T_x value by the corresponding l_x value:

For example, in the 1990 to 1992 detailed life table, the average number of years of life remaining for 60-year-old Canadian males is 19.35 years, and the average age of death of this group is 79.35.

Life Tables

4. Limitations and Adjustments

4.1 Population Adjustment

Results of an evaluation of the 1991 Census indicated that a number of groups in the population were under-enumerated. This set of life tables is based on the adjusted census population as of July 1, 1991. To assess the impact of the use of the adjusted population, two sets of life tables were constructed. The first set was based on the unadjusted census population as of June 1, 1991 and the official set is based on the adjusted population as of July 1, 1991.

Adjusted population estimates are generally higher than the unadjusted ones. Hence, the use of the adjusted population estimates results in slightly higher denominators in mortality rates, which generate slightly higher life expectancy values in Canada and in the provinces.

4.2 Age Limitation

Population and death data tend to be less accurate at older ages because of errors in age reporting and because of coverage in census or death statistics. In this series of life tables, the actual data were used up to age 90. For Canada as a whole, the detailed life table functions are shown up to age 106, and mortality rates at pivotal ages 92 to 102 were derived from the previous four pivotal values instead of using the conventional procedure as outlined in section 2.1. Hence, the life table functions at ages beyond 90 should be interpreted with caution. For the provinces, the detailed tables were truncated at age 85 with an open ended category for ages 86 and over.

Life Tables

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Cancer

Overview of the cancer database

The National Cancer Incidence Reporting System (NCIRS) system was established in 1969 at Statistics Canada in co-operation with the National Cancer Institute of Canada and nine of the ten existing provincial cancer registries. The primary objective was to provide a large database to study cancer patterns and trends and to monitor differences in cancer risks among different populations. The tenth registry, Ontario, joined the national system in 1981.

The patient-oriented Canadian Cancer Registry (CCR) evolved from the event-oriented NCIRS. Beginning with cases diagnosed as early as 1992, incidence figures collected by provincial and territorial cancer registries were reported to the CCR, which is maintained by Statistics Canada. Established as a person-oriented database, the CCR includes mechanisms for updating and clearing death records and is linked to provincial databases to help track patients across Canada who have been diagnosed with tumours.

Cancer

The following table provides the information elements and descriptions of the items included in the cancer component of the *Health Indicators* database.

Item	Description
Statistical activity or survey name	Canadian Cancer Registry (CCR)—Cancer Database.
Characteristic	This is an administrative survey that collects information continuously fro all provincial and territorial Canadian Cancer Registries on cancer incidence in Canada.
Purpose	The CCR has been developed to provide Canadian incidence and survival information required for cancer control from a standardized, patient-oriented database. The primary use of the data is statistical, such as in cancer incidence and projections, demographic trend analyses, cancer surveillance and epidemiological research. The data are used extensively by the research community and other health professionals. Data are collected for a variety of purposes within each province, such as to monitor trends and plan operations for the cancer clinics at which the majority of cancer patients are treated, or to use in research studies aimed at improving treatment methods or identifying risk factors for cancer.
Name of sponsors	N/A
Clients	The major clients for cancer data are: • Health Canada • provincial health departments • provincial statistical departments • National Cancer Institute of Canada • The Canadian Cancer Society • research organizations • pharmaceutical companies
Type of statistical activity	This is an administrative survey.

Cancer

Item	Description
Type of survey	This is a longitudinal survey.
Reference period	The reference period is the calendar year. The CCR started in 1992; the NCIRS started in 1969.
Frequency of the survey	The data are collected continuously but are submitted to Statistics Canada on an annual basis.
Target population	Persons whose usual place of residence is Canada or who are non-permanent residents.
Population size	Canadian population.
Statistical units	Events from 1969 to 1991. Individuals from 1992 onwards.
Sample size	N/A
Geographic coverage	All Canadian provinces and territories are included.
Coverage—Standard classification	Standard Geographical Code (SGC), census division, census sub-division.

Cancer

Item	Description
Main topics and variables	The main topic is all new cases of primary malignant neoplasms in Canada. The CCR Patient Record contains the following variables: • reporting province • patient identification number • patient record type • patient name • sex • date of birth • province/country of birth • birth/maiden name • date of death • province/country of death • death registration number • underlying cause of death • autopsy confirming death • date of transmission

Cancer

Item	Description
Main topics and variables (continued)	The CCR Tumour Record contains the following variables: • reporting province • patient identification number • tumour reference number • CCR identification number • tumour record type • place of residence at time of diagnosis • postal code • coded place of residence at diagnosis • census tract • health insurance number • method of diagnosis • date of diagnosis • ICD-9 • ICD-O-2 (International Classification of Diseases for Oncology, 2nd Edition) topography • ICD-O-2 morphology • ICD-O-2 M behaviour code • ICD-10 (International Classification of Diseases, 10th Revision) • laterality • multifocal tumour

Cancer

Item	Definition
Province of residence	For cancer incidence and mortality data, this is the province or territory of the individual's permanent residence at time of diagnosis or death, which may or may not be identical to the province in which the new malignant neoplasm or the cancer death was registered.
Age	The age of the patient (in completed years) at the time of diagnosis or death.
Cancer incidence	The number of new cases of primary malignant neoplasms diagnosed during the year. The basic unit of reporting is a new primary malignant neoplas rather than an individual person. The incidence figures should be considered **provisional** as some cases diagnosed in one year will be registered an reported in subsequent years.
Malignant neoplasms (Cancers)	Tumours characterized by unrestrained growth of cells that invade local tissues and may spread (metastasize) to other parts of the body through the blood or lymph system.
Primary malignant site	The tissue or organ in which a malignant neoplasm originates.
Secondary site	The site at which a malignant neoplasm develops as a result of metastatic extension from a primary site. Data for newly diagnosed secondary sites or for deaths due to a malignant neoplasm at a secondary site (ICD-9, codes 196 to 198) are included only if the primary site of the malignant neoplasms is unknown.
Carcinoma in situ	A neoplasm confined to the site of origin without the invasion of neighbouring tissues.
Cause of death	This is based on the concept of the underlying cause of death; the disease or injury which initiated the sequence of events leading to death.

Cancer

Item	Definition
Method of diagnosis	For most registries this represents the **most confirmed method** which was used to diagnose the reported malignant neoplasm. Exceptions are Manitoba and Quebec where this is the **first** method.
• **Micro-scopically confirmed**	A diagnosis based on microscopic examination of tissues to determin abnormalities in their structure, composition and function. Autopsies, histopathological, and cytological diagnoses are included in this category.
• **Radiological**	A diagnosis made using X-rays, or other investigations involving radioactive materials.
• **Clinical**	A diagnosis based on symptoms shown, irrespective of morbid changes producing them.
• **Surgical**	Diagnosis during or by surgery.
• **Death certificate only (DCO)**	As of 1986, all registries except Quebec and Yukon use this data source to ensure complete registration, since a proportion of persons with cancer are not diagnosed during their lifetime or if diagnosed, are not reported to the registry and are therefore discovered only from this source.

Cancer

Item	Definition
Crude rates	The number of new cases of cancer or cancer deaths during the year expressed as a rate per 100,000 population. This rate includes those persons whose age is unknown.
Age–specific rates	The number of new cases of cancer or cancer deaths during the year expressed as a rate per 100,000 persons in a given age group.
Age-standardized rates	The number of new cases of cancer or cancer deaths that would have occurred during the year in a given province if the actual age-specific rates observed in the province had prevailed in a standard population. This rate is based only on cases whose age is known and has not been adjusted for persons of unknown age.
Mean and median	The arithmetic mean (average) and the median are measures of central tendency. The *mean* is calculated by summing observations weighted by their relative frequency. The *median* is the point in a frequency distribution where half of the observations fall above it and half below it.
Adjusted population estimates	New population estimates were introduced by Statistics Canada in 1993. They differ from the previous ones by: • including adjustments for net census undercoverage • including estimates for non-permanent residents • establishing the reference date for the annual estimates at July 1 These adjusted population estimates are used as denominators in the calculation of all the rates presented since data years 1992.
Net census undercoverage	Net census undercoverage is the difference between census undercoverage and census overcoverage. The former refers to persons not enumerated in the census but who were part of the census universe, the latter to persons either enumerated more than once or enumerated but not part of the census universe.

Item	Description
Non-permanent residents	Non-permanent residents are persons who: • claim refugee status • hold a student authorization • hold an employment authorization • hold a minister's permit • are non-Canadian-born dependants of the above individuals
Data affected by population adjustments	The new population estimates series for provinces and territories comprises annual population estimates by single year of age, sex and marital status going back to 1971. For census divisions and census metropolitan areas, annual estimates by age group and sex are available as of 1986. **Note that the adjustments to the census data are provided only by Statistics Canada's population estimation program. Census data are not adjusted.** Thus, for census years, two types of population counts are available: adjusted population estimates as of July 1, and unadjusted census counts as of the census reference date.
Impact of adjustments	The impact of the adjustment varies by year, province and territory, and by demographic characteristic. In 1991 for instance, these adjustments altogether added about one million individuals to the postcensal estimates based on the 1986 census. The increase in the estimate for young adult males is higher than for other age–sex categories. Therefore, rates involving this group will be affected more than others. In general, the rates decrease with adjustment, but the underlying trends remain valid.
Heath Statistics Division policy on the population estimates	The policy of the Health Statistics Division is to use the adjusted population estimates for its standard data products and publications.

Cancer

Item	Description
Survey frame or frame sources	Canadian Cancer Registry, new primary cancer registrations.
Collection methods	Under a federal–provincial agreement, the registration of cancer cases is the responsibility of the provinces and territories. Sources of data include pathology, radiology and cytology reports, death certificates, autopsy reports, hospital separation records, out-patient records, and cancer treatment centre files.
Collection period	Continuous, January to December
Overview of processing system	The provincial–territorial cancer registries provide data to Statistics Canada. Subsequent changes to registrations due to errors or omissions are transmitted to Statistics Canada as the information becomes available. From 1969 to 1992 provincial–territorial cancer registries sent Statistics Canada a notification for each newly diagnosed case of cancer. As of 1992, each registry supplies this information for each new patient and each new tumor in a standard, pre-edited format, on magnetic tape or diskette. Revised data for previous years are periodically provided by registries to replace data on the NCRS (1969 to 1991). Also late registration for cases diagnosed in previous years have been added from time to time. The CCR can be updated with new records or changes to previous records, as part of regular submissions from registries to Statistics Canada; but most versions are now complete Data for all reported carcinomas in situ (ICD-9, codes 230 to 234) are not included with malignant neoplasms for the same site.

Cancer

Item	Description
Cleaning operations (edit and imputation)	Records are loaded onto a patient oriented database and those failing edits are rejected and returned to the province for verification or correction. Begun in 1992, an internal record linkage is done annually and regular national death clearances are planned.
Weighting procedures	Unweighted
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC).
Coding documentation used	Malignant neoplasms are classified according to the International Classification of Diseases, 9th Revision (ICD-9) which came into effect in Canada in 1979. In the case of diagnoses for new cases of cancer, which were for the most part reported in the more detailed International Classification of Diseases for Oncology (ICD-O-2), the tabulated ICD-9 codes are based on a conversion from the ICD-O-2 for most provinces. The Standard Geographical Classification (SGC) is used for geographical classification.

Cancer

Item	Description
Response rate	Coverage of registration at the Canada level is currently thought to be at or above 95%.
Response rate unit	New primary cancers.
Response rate weighting	Unweighted.
Variable response rate	The response rate of reporting core statistical data items varies by item, reporting province and year.
Estimation procedures	N/A
Sampling errors	N/A
Coverage errors	Comparability of data are affected by both under- and over-registration. Sources of under-registration include: not using important sources such as death certificates, cytology reports, or other health records; not reporting cancer cases treated in a province other than the province or territory of residence; and not reporting late registrations (or cases diagnosed after a registry has already reported that year's cases to Statistics Canada). Over-registration can result from several factors including: presence of duplicate records for the same case of cancer; and inconsistent definitions for multiple primary cancers. For example, a patient resident in one province but treated in another could be reported by both. Duplicates may also appear within a provincial registry if records are not examined regularly for records pertaining to the same person. An internal record linkage process removes duplicate records.
Non-response errors	N/A
Response errors	N/A
Processing errors	All data are edited by computer to ensure validity of each field and to check on the compatibility of different data elements within a record. Queries are resolved by consulting the reporting provinces. In general the proportions of records queried in any one province is 2% or less.

Cancer

Item	Description
Other non-sampling errors	N/A
Suppression and other confidentiality restrictions	Occurrences of less than three are suppressed when tables on the number of deaths due to cancer are run. There is no suppression for tables on new primary sites of cancer, age-standardized rates of death due to cancer and ratio of deaths due to cancer.
Coefficients of variations	N/A
More information on definitions	More information on definitions used, coding instructions and procedures is available from the CCR Procedures Manual upon request from Statistics Canada.
More information on data quality	More information on data quality and completeness is available from Statistics Canada. In particular, “item-by-item” tables of availability have been prepared, while a comprehensive examination of major quality indicators has also been undertaken. Data quality indicators over time are included in “The Making of the Canadian Cancer Registry.”

Therapeutic Abortion

Overview of the therapeutic abortion database

Statistics Canada began collecting therapeutic abortion statistics in 1970 to monitor the effects of the 1969 amendments to the *Criminal Code of Canada*, which permitted therapeutic abortions under specific circumstances.

The province of Prince Edward Island has not furnished reports on therapeutic abortions since 1983, though some residents of this province have been reported to have obtained abortions in other provinces.

Between 1970 and 1988—when the Supreme Court struck down the 1969 abortion law—hospitals were required to report abortions they performed. Beginning in 1988, some hospitals did not provide Statistics Canada with information about the demographic and medical characteristics of women who obtained abortions. A number of hospitals in Quebec and British Columbia stopped filing the therapeutic abortion individual case report form prescribed by Statistics Canada. Lack of information, such as gestation period at the time of abortion, previous deliveries and abortions, abortion complication(s) seriously affects the data quality, analysis and use of this information in planning and evaluation of abortion services.

In 1993, British Columbia discontinued supplying therapeutic abortion individual case reports for all hospitals. However, they continue to provide counts of therapeutic abortions by five-year age groups of women at the time of abortion and by procedure(s) used for induced abortions.

For the two territories and the remaining seven provinces, the coverage pertaining to selected demographic and medical items of information has been almost complete.

Therapeutic Abortion

Overview of the therapeutic abortion database (continued)

Before the January 1988 Supreme Court decision, abortion clinics operated only in Quebec. In response to users' requests, data collection was extended to abortion clinics beginning in 1990, though this information for Quebec has been available since 1978.

By the end of 1994, abortion clinics were operating in every province excep Prince Edward Island and Saskatchewan and the two territories. While the number of abortions performed in clinics increased rapidly, demographic and medical data were available for only about half of those persons using Canadian abortion clinics, and none was available from those persons using facilities in the United States.

Starting with the 1995 data year, responsibility for the collection and processing of Therapeutic Abortion data was transferred to the Canadian Institute for Health Information (CIHI). Statistics Canada will receive the clean data file and continue to analyse the data and produce the annual publication, Therapeutic Abortions, 82-219-XPB.

Therapeutic Abortion

The following table provides the information elements and descriptions of the items included in the therapeutic abortion component of the *Health Indicators* database.

Item	Description
Statistical activity or survey name	Therapeutic Abortion Database.
Characteristic	This is an administrative survey that collects and compiles the numbers and rates of therapeutic abortions as well as selected demographic and medical information about women obtaining therapeutic abortions performed in hospitals in Canada. Counts of abortions performed in clinics in the 10 provinces and states along the Canada-United States border are also available.
Purpose	In Canada, the primary use of the data is statistical, such as in examining trends in abortion numbers and rates. Data are collected for a variety of purposes within each province such as for payment to doctors and hospitals, and to monitor trends in abortion rates, or to use in research studies.
Name of sponsors	N/A
Clients	The major clients for abortion data are: • Health Canada • provincial health departments • statistical departments • research organizations • pro-choice and anti-abortion groups • national and provincial legislators • schools and universities

Therapeutic Abortion

Item	Description
Type of statistical activity	This is an administrative survey.
Type of survey	This is a cross-sectional survey.
Reference period	The reference period is the calendar year. The survey started in 1970.
Frequency of the survey	The data are collected continuously but are submitted to Statistics Canada on an annual basis.
Target population	Women whose usual place of residence is in Canada or who are non-permanent residents.
Population size	Canadian women.
Statistical units	Individuals.
Sample size	N/A
Geographic coverage	The current information about therapeutic abortions performed in hospitals is based on reports from the two territories and nine of the ten provinces. Prince Edward Island has not furnished reports on this subject since 1983, though there have been reports of some residents obtaining abortions in other provinces. Clinics in eight of the ten provinces also report; Newfoundland, Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba, Alberta and British Columbia.
Coverage—Standard classification	Standard Geographical Code (SGC)

Therapeutic Abortion

Item	Description
Main topics and variables	The main topics are counts and detail pertaining to therapeutic abortion for abortions performed in hospitals in Canada. Counts of abortions obtained in clinics in Canada and some states are also reported. The following variables are reported by hospitals: • age • marital status • first day of last normal menses • date fetus removed • number of previous deliveries • number of previous spontaneous abortions • number of previous induced abortions • days of in-patient care • initial surgical procedure(s) • subsequent surgical procedure(s) • sterilization procedure(s) • therapeutic abortion complication(s) • month, year and province of report

Therapeutic Abortion

Item	Definition
Province of residence	The province of usual residence of the patient.
Age	The age of the woman (in completed years) at the time of the therapeutic abortion.
Marital status	Hospital data are provided by all categories of marital status including separated and common-law. Women who were separated or living in common-law unions are included in the "married" category in abortion rates tabulations. (See note on impact of revised population estimates.)
• **Single**	A person who has never been married, or a person whose marriage has been annulled and who has not remarried.
• **Married**	A person who is legally married.
• **Widowed**	A person whose spouse has died and who has not remarried.
• **Divorced**	A person who has obtained a legal divorce and who has not remarried.
• **Separated**	A person who is legally married, who is not living with his or her spouse because the couple no longer wants to live together, but who has not obtained a divorce. A person who is separated is included in the "married" category in abortion rates tabulations.
• **Common-law**	A person whose legal conjugal status is single, widowed or divorced or who is separated and is living in a common-law union at the time of the event. A person who is in a common-law union is included in the "married" category in abortions rates tabulations.

Therapeutic Abortion

Item	Definition
Collection definitions	Listed below
• **First day of last normal menses**	The day, month and year the woman had her last normal menses. In case of non-availability, the doctor in attendance records a clinical estimation of the gestation period under this item.
• **Date fetus removed**	The day, month and year on which the therapeutic abortion was performed and the fetus expelled or extracted from the woman.
• **Number of previous deliveries**	Number of deliveries for the woman prior to this induced abortion.
• **Number of previous spontaneous abortions**	Number of previous abortions as a result of natural causes.
• **Number of previous induced abortions**	Number of previous abortions whether induced medically or otherwise.
• **Initial surgical procedure(s)**	A surgical procedure or a combination of two or more procedures used to terminate the pregnancy.
• **Subsequent surgical procedure(s)**	A surgical procedure or a combination of two or more procedures used to treat complication(s) arising out of the pregnancy termination.
• **Sterilization procedure(s)**	The surgical procedure used for sterilization of the woman, concurrent with therapeutic abortion.
• **Therapeutic abortion complica-tion(s)**	A morbid condition resulting from the pregnancy termination. The report form has provision to report up to three therapeutic abortion complications. Information about abortion complication relates to hospitalization period for purpose of abortion only.
Out-patient (day surgery) cases	Women with less than a 24-hour stay in hospital when obtaining a therapeutic abortion.

Therapeutic Abortion

Item	Definition
Gestation period	The difference in days (rounded to nearest week) between the date of removal of fetus from the mother and the first day of last normal menses. For cases with unknown date of last normal menses, gestation period is based on clinical estimation.
Abortion rate	Can be calculated in two ways. Check footnotes to the statistical tables for method used: (a) number of therapeutic abortions per 1,000 females ages 15 to 44 years at the time of pregnancy termination, (b) number of therapeutic abortions per 100 live births.
Age-specific abortion rate	Number of therapeutic abortions per 1,000 females of the same age.
Teenage abortion rate	Number of therapeutic abortions to females under 20 years of age per 1, females aged 15 to 19 years.
Abortion complication rate	Number of women with abortion complications per 100 therapeutic abortion cases. The abortion complications relate only to period of hospitalization following therapeutic abortions.
Mean and median	The arithmetic mean (average) and the median are measures of central tendency. The *mean* is calculated by summing observations weighted by their relative frequency. The *median* is the point in a frequency distribution where half of the observations fall above it and half below it.

Therapeutic Abortion

Item	Definition
Adjusted population estimates	Statistics Canada introduced new population estimates in 1993. They differ from the previous ones by: • including adjustments for net census undercoverage • including estimates for non-permanent residents • establishing the reference date for the annual estimates at July 1 These adjusted population estimates are used as denominators in the calculation of all the rates.
Net census undercoverage	Net census undercoverage is the difference between census undercoverage and census overcoverage. The former refers to persons not enumerated in the census but who were part of the census universe, the latter to persons either enumerated more than once or enumerated but not part of the census universe.
Non-permanent residents	Non-permanent residents are persons: • claiming refugee status • holding a student authorization • holding an employment authorization • holding a minister's permit • all non-Canadian-born dependants of the above individuals
Data affected by population adjustments	The new population estimates series for provinces and territories comprises annual population estimates by single year of age, sex and marital status going back to 1971. For census divisions and census metropolitan areas, annual estimates by age group and sex are available as of 1986. **Note that the adjustments to the census data are provided only by Statistics Canada's population estimation program. Census data are not adjusted.** Thus, for census years, two types of population counts are available: adjusted population estimates as of July 1, and unadjusted census counts as of the census reference date.

Therapeutic Abortion

Item	Description
Impact of adjustments	The impact of the adjustment varies by year, province or territory, and by demographic characteristic. In 1991 for instance, these adjustments altogether added about one million individuals to the postcensal estimates based on the 1986 census. The increase in the estimate for young adult males is higher than for other age-sex categories. Therefore, rates involving this group will be affected more than others. In general, the rates decrease with adjustment, but the underlying trends remain valid. Health Statistics Division examined the impact of the adjusted populations on a number of vital statistics and health indicators. Results of this study were presented in Health Reports, Winter 1997, vol. 9, No. 3. (Catalogue no. 82-003-XPB)
Heath Statistics Division policy on the population estimates	The Health Statistics Division uses the adjusted population estimates for its standard data products and publications.
Impact of adjustments on therapeutic abortion rates	Revised population estimates were used to calculate total abortion rates. In breakdowns of these population estimates by age and marital status, persons who were separated or living common-law were included in th "married" category. As a result, abortion rates for women who were separated or living in a common-law union are not available.

Therapeutic Abortion

Item	Description
Survey frame or frame sources	Therapeutic Abortion Survey.
Collection methods	Information on the numbers of therapeutic abortions performed in hospitals is reported to Statistics Canada annually, either through provincial health departments, or in some cases by the hospitals, based on individual case reports. The clinics in Newfoundland, Nova Scotia, New Brunswick, Manitoba and British Columbia report abortion information directly to Statistics Canada. Provincial authorities in Quebec, Ontario and Alberta co-ordinate the data collection from clinics under their jurisdictions and send the desired information to Statistics Canada. The reports about abortions performed in clinics are simple counts of induced abortion.
Collection period	Continuous, January to December
Overview of processing system	N/A

Therapeutic Abortion

Item	Description
Cleaning operations (edit and imputation)	A complex editing and validating process was introduced in the early 1970s, and is reviewed and updated periodically. The system checks for internal consistencies, compatibilities and completeness for each item reported. Some of the quality control measures that form part of the computer edits specifications are compatibility checks for the following: • reporting hospitals in relation to the provinces in which they are located • ages of women in relation to the number of previous deliveries and/or previous abortions • days of hospitalization in relation to the surgical procedure(s) used for therapeutic abortion • presence or absence of therapeutic abortion complication(s) In some instances, respondents are contacted to clarify peculiar situations for the reported therapeutic abortion cases. For example, women in the following categories are sometimes contacted: • women under 20 years of age with four or more previous deliveries or abortions • women over 24 weeks pregnant at pregnancy termination; • women under 20 years of age with concurrent sterilization • women with more than 10 days of hospitalization without a therapeutic abortion complication Beginning in 1993, complete demographic and medical data became available for those women who had obtained abortions in Ontario and Alberta clinics. However, complete data were not available for women who had abortions in other Canadian provinces and territories or those who had abortions in the United States. The demographic characteristics reported by these clinics are similar to those reported by hospitals. Consequently, to estimate numbers and rates for all abortions, marital status and age were imputed for clinic abortions and American data, based on the distributions from hospital records.

Therapeutic Abortion

Item	Description
Weighting procedures	N/A
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC).
Coding documentation used	N\A

Therapeutic Abortion

Item	Description
Response rate	Because provincial and territorial health insurance commissions reimburse physicians for performing abortions, the response rate for the number of abortions from Canadian hospitals and clinics is estimated to be 99.9%. Although reporting abortions that took place in the United States is voluntary, the fact that there have not been large year-to-year fluctuations in the numbers suggests that these counts are complete.
Response rate unit	Therapeutic abortions.
Response rate weighting	Unweighted.
Variable respons rate	The response rate of reporting core statistical data items varies by item, reporting province and year.
Estimation procedures	N/A
Sampling errors	N/A

Therapeutic Abortion

Item	Description
Coverage errors	Abortion cases treated in hospital reported as "other than therapeutic abortions" are excluded. The majority of these cases are spontaneous abortions (miscarriages), other and unspecified abortions. A small number of patients in clinics pay for abortions themselves. As such, these abortions are not included in the counts because they are not reimbursed by health insurance commissions.
Non-response errors	N/A
Response errors	N/A
Processing errors	N/A
Other non-sampling errors	N/A
Suppression/ confidentiality restrictions	Occurrences of less than three are suppressed when tables are run.
Coefficients of variations	N/A

Annual Hospitals

Overview of the annual hospitals survey

The survey of Health Care Facilities—Hospitals is a mandatory annual survey, included under the jurisdiction of the Statistics Act in 1918, encompassing all facilities in Canada licensed to operate as hospitals. These facilities are licensed by provincial ministries of health and federal government departments. The survey was made annual in 1932 and periodically reviewed at the request of Health Canada and the provinces to meet new requirements for administration, analysis, policy planning and decisions on new programs. Statistics Canada is responsible for designing the forms and for processing and disseminating the data and updating and maintaining the program

Quebec, Alberta, British Columbia, and Ontario use their own reporting form. Hospitals in other provinces complete a 28-page document which is returned to Statistics Canada via the provincial ministries of health. Forms are mailed to the provinces who in turn send them to the hospitals. This takes place in mid-March. By the end of June the first complete reports are returned to Statistics Canada. It can take up to 24 months to receive all the data. Provinces have the option of returning the reporting forms to Statistics Canada or sending the data on magnetic tape. At the present time, Quebec, Ontario, Alberta and British Columbia choose to report on tape.

Beginning with the 1995–96 data year, the Canadian Institute for Health Information (CIHI) assumed responsibility for collecting the Survey of Health Care Facilities—Hospitals and for the producing and holding the clean dat files. Prior to that time, Statistics Canada was responsible for the survey.

All provinces co-operate in forwarding the data to CIHI, which contain information on hospital utilization, operating and capital finances and audited financial statements.

Annual Hospitals

The following table provides the information elements and descriptions of the items included in the annual hospitals component of the *Health Indicators* database.

Item	Description
Statistical activity or survey name	Health Care Facilities—Hospitals Database.
Characteristic	This is a census administrative survey that collects information on hospital utilization, operating and capital finances and audited financial statements.
Purpose	Hospital statistics constitute part of the essential requirements of several federal departments as well as the various provincial departments of health and welfare. Hospital expenditures represent a significant component of the gross domestic product figures. The data are further used for the administration, evaluation and planning of major provincial and federal programs as well as for satisfying many of the needs of hospital administrators, researchers and large special interest groups in the community to assist in policy planning and research.
Name of sponsors	N/A
Clients	The major clients for annual hospital statistics are: • Health Canada • provincial health departments • statistical departments • Economic Council • employment and labour departments • research organizations • universities • Demography Division of Statistics Canada • international organizations (United Nations, World Health Organization)

Annual Hospitals

Item	Description
Type of statistical activity	This is a census survey that uses administrative sources of information in the provinces.
Type of survey	This is a cross-sectional survey.
Reference period	In 1977, the survey switched from a calendar year to a fiscal year (April-March). For the transition period, data were collected for a 15-month period from January 1977 to March 1978 and for a 12-month period from April 1977 to March 1978.
Frequency of the survey	The data are collected once a year.
Target population	The target universe is all public, private and federal hospitals operating in the 10 provinces and 2 territories.
Population size	All Canadian hospitals.
Statistical units	Hospitals.
Sample size	N/A
Geographic coverage	All Canadian provinces and territories are included.
Coverage–Standard Classification	Standard Geographical Code (SGC), census division, census sub-division.

Annual Hospitals

Item	Description
Main topics and variables	Data collected are on beds and patient movement, ambulatory care, diagnostic and therapeutic services, administrative and support services, personnel, expenditures and income. The statistical data collected adheres to the Instructions and Definitions Parts I and II developed for the reporting of hospitals to Statistics Canada. Uniform accounting information is available from hospitals as a result of the acceptance of the Canadian Hospital Accounting Manual (CHAM) for reporting under the federal and provincial hospital insurance program. The following variables are reported by all jurisdictions: • type of hospital • type of service offered by hospital • size of hospital • ownership of the hospital • group responsible for hospital operations • number of beds and cribs (or bassinets for newborns) • distribution of beds and cribs (or bassinets for newborns) and patient-days by type of unit by type of accommodation • movement of in patients • patient days by responsibility for payment • patients by types of care • deaths, stillbirths, dead on arrivals, referred in bodies and autopsies

Annual Hospitals

Item	Description
Main topics and variables (continued)	• number and type of hospital personnel • laboratory workload • radiology workload • physical medicine and rehabilitation workload Operating income, including: • gross income • net income • operating expenses • salaries • employee benefits • supplies-medical, surgical and drugs Number of: • patients • separations • patient-days • out-patients • laboratory units

Annual Hospitals

Item	Definitions
Hospital	An institution where patients are accommodated on the basis of medical need and are provided with continuing medical care and supporting diagnostic and therapeutic services. It must be licensed or approved as a hospital by a provincial government, or operated by the Government of Canada. This definition includes mental institutions.
Type of hospital	See definitions below.
• **Public (voluntary, provincial, municipal)**	A hospital recognized by the province as a "public hospital." Such a hospital generally is not operated for profit.
• **Proprietary**	A hospital owned by an individual or by a private organization, operated for a profit and recognized by the province as a "proprietary hospital."
• **Federal**	A hospital owned by a department or agency of the Government of Canada and operated on a non-profit basis.
Type of unit	See definitions below.
• **Short-term—Adults and children**	In-patient units provided for those who, at the time of admission, requir diagnostic and therapeutic services and/or skilled nursing care and medical attention.
• **Long-term—Adults and children**	In-patient units provided for those who, at the time of admission, requir medical assessment and continuing nursing care.

Annual Hospitals

Item	Definitions
Type of service	See definitions below.
• **General**	**No long-term units.** Refers to a hospital that **primarily** provides diagnosis and short-term treatment for patients having a wide range of diseases or injuries. The services of a general hospital are not restricted to a specific age group or sex. **With long-term units.** Refers to a general hospital with a group of beds or rooms or a separate wing or building for long-term care that is recognized as a distinct and separate treatment unit of the hospital. Admission normally requires formal admission procedures even when a patient is transferred from another part of the hospital.
• **Teaching hospital**	A hospital that provides medical education programs to undergraduate medical students in their final two years. These programs have to be approved by the appropriate authorities and usually include the essential components of major clinical instruction in the medical disciplines of internal medicine and general surgery.
Allied special hospitals	See definitions below.
• **Specialty**	A hospital that **primarily** provides diagnosis and short-term treatment for a limited range of diseases or injuries, or provides a broad range of services to a specific age group.
• **Pediatric**	A hospital that provides diagnosis and short-term treatment to pediatric patients, generally 14 years of age and under.
• **Psychiatric**	A hospital that provides diagnosis and short-term treatment to patients with psychiatric conditions.
• **Other**	Cancer hospitals, cardiology hospitals or institutes, maternity hospitals, neurological institutes, orthopedic hospitals, etc. are included in this category.
• **Rehabilitation (including convalescent)**	A hospital that **primarily** provides continuing assessment and treatment to patients whose condition is expected to improve significantly through the provision of physical medicine and other rehabilitative services.
• **Extended care (including chronic**	A hospital that **primarily** provides continuing treatment for patients with long-term illness or with a low potential for recovery and who require regular medical assessment and continuing nursing care.

Annual Hospitals

Item	Definition
• **Psychiatric (long term)**	A hospital that **primarily** provides continuing assessment and long-ter treatment of patients with psychiatric conditions.
• **Other**	This category includes nursing stations and outpost hospitals.
Ownership and operation	The ownership and operation of the hospital are separate aspects of hospital functioning as listed below.
Ownership	The owner of the hospital is the person, group of persons, agency, or corporate body that is the registered owner according to the deed.
Operation	Refers to the person, group of persons, agency or corporate body that bears the day-to-day responsibility for ensuring that the hospital is able to function and provide services.
• **Voluntary**	Applies to a hospital owned and/or operated by a non-governmental organization.
• **Lay corporation**	A voluntary hospital owned and/or operated by a voluntary lay group.
• **Religious organization**	A voluntary hospital owned and/or operated by a religious organization.
• **Red Cross**	A voluntary hospital owned and/or operated by the Canadian Red Cross Society or one of its provincial divisions.
• **Municipal (union or hospital district)**	A hospital owned and/or operated by a city, county, municipality, or other municipal government, or by a union or combination of municipal governments, or by a district or other body which is empowered to levy taxes or to otherwise operate like a municipality. Municipal operation, as well as ownership, would be indicated if the members of the governing body of the hospital are appointed, elected or otherwise controlled by the municipal body or electorate.
• **Provincial**	A hospital owned and/or operated by a branch, division, agency or department of a provincial or territorial government.
• **Federal**	A hospital owned and/or operated by a department or agency of the Government of Canada and operated on a nonprofit basis. Operation will generally be by one of the following agencies: Veterans' Affairs, Health Canada, National Defence or Solicitor General Canada.
• **Proprietary**	A hospital owned and/or operated by an individual or by a private organization and operated for a profit.

Annual Hospitals

Item	Definition
Utilization	See definitions below.
• **Approved bed complement**	The number of beds and cribs (or bassinets for newborns), approved by the provincial authorities for the hospital, or a unit of the hospital, at year-end of the reporting year.
• **Beds staffed and in operation**	The distribution of beds and cribs (or bassinets for newborns), at the year-end of the reporting year, that are actually available for patient accommodation, with staff available to provide the required level and typ of care, whether or not actually occupied by a patient at that time.
In-patient	A person who has been admitted to a hospital for medical and hospital services and who has been assigned an in-patient bed, crib, or bassinet.
Separation	The discharge or death of an in-patient
Discharge	A discharge is defined as the official departure of a live patient from the hospital or from a provincially recognized unit of the hospital.
Death	A death is defined as the cessation of life of an in-patient after admission and before discharge.
Patient-day	The period of service to an in-patient between the census-taking hours on two successive days; the day of admission is counted as a patient-day but the day of separation is not.
Out-patients	Patients who have been formally accepted by a hospital and who received diagnostic and therapeutic services without being admitted as in-patients. This category includes patients attending a day or night care unit.
Laboratory unit	A measure of the workload of the laboratory—one unit is equivalent to one minute of composite technical, clerical and aide time spent actively engaged in the production of patient answers.

Annual Hospitals

Item	Description
Radiology	A radiology examination is defined as a single diagnostic procedure performed during one attendance of the patient, making use of any of the following: • fluoroscopy or examination by image intensifier • production of one or more exposed films • an integrated combination of (a) and (b) • procedures using other equipment such as ECG when done by the staff of the radiology department
Surgical suite/ ambulatory therapy care units	A visit is defined as one attendance of a patient, for a continuous period of time, during which operation(s), treatment(s), or examination(s) are performed.
Physiotherapy and occupational therapy attendances	An attendance day is only recorded when the patient receives direct patient care on that day. Where a patient was provided only indirect care on a given day, no attendance day is recorded for that patient that day. (Indirect patient care are those activities which support or supplement diagnosis, evaluation or treatment for which the presence of the patient is not required.) Each patient is assigned only one attendance day for each 24 hour treatment day, even though the patient: • may have attended the department more than once during the day • may have been treated on the in-patient unit more than once during the day • may have been treated both in the department and on an in-patient unit during the one day • may have been treated during the day in several areas of the department by several staff members, for example, in the pool, gymnasium, and electrotherapy area

Annual Hospitals

Item	Definitions
Personnel	See definitions of personnel below.
• **Full time**	Persons employed on a full-time basis; they are regularly employed throughout the department's full workweek.
• **Part time**	Persons employed on a part-time basis; they are regularly employed on selected days or partial days in the department's workweek.
• **Paid hours**	Include all full-time, part-time and casual employees excluding the medical staff of the hospital who, during the year, have had salaries or wages payable to them by the hospital. Hours covering paid holiday time and other paid leave are to be included for all categories of personnel.
Operating expense	The cost, on an **accrual basis** of operating and maintaining the hospital during the year
• **Gross salaries/ wages including all medical staff remuneration**	These are distributed to two sub-categories: • **Medical staff—**Includes all types of hospital remuneration such as salaries, wages, fees, contract rates and honorariu , earned during the year by paid medical staff (interns, residents and students).. • **Other gross salaries and wages—**Includes gross salaries and wages earned during the year by all other staff including non-medical teaching staff and regular employees involved in extramural or on-the-job training.
• **Employee benefits**	The facility's contribution to the cost of various fringe benefits provided to its employees. These do not include perquisites such as room and board provided for employees, which are a part of salaries and wages.

Annual Hospitals

Item	Definition
• **Supplies and other expenses**	These are distributed to three sub-categories: • **Supplies and other expenses (excluding medical and surgical supplies and drugs)—**Includes all of the hospital's operating expenses other than gross salaries and wages and excluding the cost of medical and surgical supplies, drugs and employee benefits. • **Medical and surgical supplies—**Items such as prosthesis and instruments used in the treatment and examination of patients such as sutures, dressings, clinical thermometers, sterile supplies, catheters, needles and syringes, etc. • **Drugs—**All drugs, as well as medicines, certain chemicals, anesthetic gases, oxygen and other medical gases, intravenous solutions, etc.
Operating income	Operating income is the revenue that accrues during the year to operate and maintain the hospital.
• **Gross income**	This includes the amounts earned by the hospital for the rendering of services to patients. These amounts are represented by the regular income earned by the hospital for such services, regardless of the terms of any special contract, agreement, or understanding as to the basis of rates to be paid.
• **Net income**	Net income comprises the difference between gross income and deductions (such as courtesy, rebates and free service, and bad debts) less recoveries.

Annual Hospitals

Item	Description
Survey frame or frame sources	Health Care Facilities—Hospitals Database.
Collection methods	Quebec, Alberta, British Columbia and Ontario use their own reporting form. Hospitals in other provinces complete a 28-page document which is returned to Statistics Canada via the provincial ministries of health. Forms are mailed to the provinces which in turn send them to the hospitals. This takes place in mid-March. By the end of June, the first complete reports are returned to Statistics Canada. It can take up to 24 months to receive all the data. Provinces have the option of returning the reporting forms to Statistics Canada or sending the data on magnetic tape.
Collection period	April to March

Annual Hospitals

Item	Description
Overview of processing system	Included under the jurisdiction of the *Statistics Act* in 1918, the survey of Health Care Facilities—Hospitals encompasses all facilities in Canada licensed to operate as hospitals. These facilities are licensed by provincial ministries of health and federal government departments. The survey was made annual in 1932. Statistics Canada designs the forms and processes and disseminates the data and updates and maintains the program. The data collection, data capture, editing of the information and finally the release of the data, cover a two-year period. All financial data reported by public hospitals undergo a professional audit. Private and federal hospitals are not required to report financial information on this survey. The only data available for these hospitals ar on beds and hospital utilization.
Cleaning operations (edit and imputation)	Once captured, data undergo a series of extensive edits and queries are generated when values fall outside a specified range. Queries are handled by contacting the facility or provincial contact.
Weighting procedures	N/A

Annual Hospitals

Item	Description
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC).
Coding documentation used	Standard Geographical Classification (SGC), is used to promote data reliability and consistency. The reporting form was last revised in 1976 with the introduction of a supplement to the Canadian Hospital Accounting Manual and the identification of new user requirements.

Annual Hospitals Component

Item	Description
Response rate	The Annual Hospital reporting form was the document accepted by the federal and provincial governments for hospital insurance purposes and thus ensured completeness of response. Response to this survey has always been very high, over 85% for most years usually representing 95% of the beds.
Response rate unit	Hospitals.
Response rate weighting	Unweighted.
Estimation procedures	N/A
Sampling errors	N/A
Coverage errors	No attempt is made to adjust the data to account for hospitals not responding to the survey or for item non-response. In order to indicate more precisely what the data represent, the number of hospitals reporting the particular variables being tabulated are incorporated into the tables.
Non-response errors	Hospital data are used by other Statistics Canada divisions and government departments such as Input–Output Division, Labour Division and Health Canada. Many of these departments will use their own calculations to adjust for non-response so care should be taken if comparing their final output with reported data.
Response errors	N/A
Processing errors	Processing errors are usually discovered and queried when editing the data.
Other non-sampling errors	N/A
Suppression and other confidentiality restrictions	Occurrences of less than three in a table are suppressed. Information about individual hospitals is not released.
Coefficients of variations	N/A

Residential Care Facilities

Overview of the residential care facilities survey

The collection of data on residential care facilities began with an inventory in 1974 using an address list from Health Canada based on facilities receiving benefits from the Canada Assistance Plan (CAP). Statistics Canada has expanded this inventory. The target universe now includes all residential care facilities in Canada. Provinces and territories are annually requested to update the inventory of residential care facilities.

The term “residential care facilities” refers to facilities which are approved, funded or licensed by provincial/territorial departments of health and/or social services. Among the facilities included are homes for the aged (including nursing homes), persons with physical disabilities, persons who are developmentally delayed, persons with psychiatric disabilities, persons with alcohol and drug problems, emotionally disturbed children, transients, young offenders and others.

Generally, only facilities which have four beds or more are surveyed. The exception is some composite reporting, where a head office reports on all of its residential care facilities, some of which may have fewer than four beds.

Some of these facilities (homes for the aged, most facilities for the physically disabled, developmentally delayed and psychiatrically disabled) are maintained for chronically ill or disabled people who reside there more or less permanently. This is in contrast to, for example, a hospital where patients are accommodated on the basis of medical need and are provided with continuing medical care and supporting diagnostic and therapeutic services. Generally, residential care facilities provide a level of care that is below that found in hospitals, although there is some overlap. Some psychiatric hospitals are included in the inventory of residential care facilities. The remainder are included in the inventory of hospitals and complete the Annual Return of Health Care Facilities—Hospitals.

The other categories of residential care facilities (for emotionally disturbed children, persons with alcohol and drug problems, delinquents, transients and others) provide shelter for a shorter period of time, often combined with a program of service.

Residential Care Facilities

Data years available

Data are not available for the years 1994–95 and 1995–96. Responsibility for the collection of the Residential Care Facilities survey was transferred from Statistics Canada to the Canadian Institute for Health Information beginning with the 1994–95 data year. Poor response from the facilities resulted in the transfer of the responsibility for the survey back to Statistis Canada beginning with the 1996–97 data year.

Data are available for 1975 through 1993–94 and for the 1996–97 data year (the latest year available).

Residential Care Facilities

The following table provides the information elements and descriptions of the items included in the residential care facilities component of the *Health Indicators* database.

Item	Description
Statistical activity or survey name	Residential Care Facilities
Characteristic	This is a survey that collects information concerning residential care facilities in Canada that began in 1975.
Purpose	Institutional statistics are an essential requirement of several federal departments as well as of the various provincial and territorial departments of health and social services. The data are used for the administrative evaluatio and planning of provincial and federal programs as well as satisfying many of the needs of administrators, researchers and large special interest groups in the community. Within Statistics Canada, financial data from the survey are provided to the System of National Accounts, Labour Division for economic analysis. Hospital statistics constitute part of the essential requirements of several federal departments as well as the various provincial departments of health and welfare.
Name of sponsors	N/A
Clients	The major clients for annual hospital statistics are: • System of National Accounts • Health Canada • provincial health departments • statistical departments • Economic Council • employment and labour departments • research organizations • Demography Division of Statistics Canada

Residential Care Facilities

Item	Description
Type of statistical activity	This is a combination survey of self-completed mail-out/mail-back questionnaire and administrative data.
Type of survey	This is a cross-sectional survey.
Reference period	Fiscal year.
Frequency of the survey	The data are collected and submitted to Statistics Canada on an annual basis.
Target population	The target universe is all public, private and federal residential care facilities operating in the ten provinces and two territories.
Population size	All Canadian residential care facilities.
Statistical unit	Establishments and individuals.
Sample size	N/A
Geographic coverage	All Canadian provinces and territories are included.
Coverage—Standard classification	Standard Geographical Code (SGC), census division, census sub-division.
Coding documentation used	"Instructions and Definitions for the Annual Return of Residential Care Facilities" describe the data definitions and are mailed out annually to facilities with the survey forms.

Residential Care Facilities

Item	Description
Main topics and variables	The main topics include: income and expenditures, utilization, resident characteristics, type of facility and ownership, personnel and level of care. The following variables are reported by all jurisdictions: • type of residential care facility • ownership of the residential care facility • days of care by responsibility for payment • type of care • level of care • the number of beds • number and type of personnel • number of residents • admissions • separations • movement of residents • age and sex of residents • characteristics of residents • operating income by source • operating expenses

Residential Care Facilities

There are two survey forms: long and short. The short form is a subset of the long form. The following definitions cover the data collected on the long survey form. The descriptions of the long and short forms are included under the Data Collection Methods.

Item	Definition
Ownership	The person, group of persons, agency or corporate body that is the registered owner according to the deed as defined below.
• **Proprietary**	A facility owned by an individual. This also applies to private organizations and/or corporations operating for a profit.
• **Religious**	A facility owned and operated by a religious organization on a non-profit basis.
• **Lay**	A facility owned and operated by a voluntary lay body on a non-profit basis. This category excludes facilities maintained by industrial or commercial corporations (see *proprietary*).
• **Municipal**	A facility owned and operated by a city, county, municipality or other municipal government, or another body which is empowered to levy taxes or to otherwise operate like a municipality.
• **Provincial or territorial**	A facility owned by a branch, division, agency or department of a provincial or territorial government.
• **Federal**	A facility operated by a department or agency of the Government of Canada, such as Veterans' Affairs, Health Canada or National Defence.
• **Other**	A facility that does not fit into any of the categories described above.
Beds—Approved complement	The number of beds licensed or approved by provincial or municipal authorities.
Beds—Staffed and in operation	The number of beds available for use. They include those occupied and any vacant beds to which residents could be admitted immediately. This amount does not have to agree with the approved complement.

Residential Care Facilities

Item	Definition
Total days of care during reporting period by responsibility for payment	A *day of care* is the period of service to a resident between the census taking hours on two successive days. The total days of care are the number of days of care in the reporting period or year. A facility of four beds and 100% occupancy would report total days of care as (4 x 365) 1,460. A facility of four beds in which one bed was not occupied for 31 days during the year would report total days of care as 1,429. This could be calculated as (4 x 365)-31 or counting each day that each bed was occupied (1 x 365)+(1 x 365)+(1 x 365)+(1 x 334). If unable to provide a breakdown, facilities report days under major funding agency.
Movement of residents	See definitions of movement of residents below.
• **In facility as of April 1**	The number of residents who were assigned a bed as at 00:01, April 1. Included is any resident who was temporarily absent from the facility on this date, for example, those visiting relatives, or residents transferred to other institutions such as a hospital, but not formally discharged fro facility.
• **Admission**	The official acceptance of a resident into the facility. Reception involves the allocation of a bed to a resident. An admission is registered each time a person is formally admitted.
• **Total under care**	The total of those on the books April 1 plus all admissions during the year.
• **Discharge**	The official departure from the facility of a live resident.
• **Death**	The cessation of life of a resident after admission and before discharge.
• **Total separations**	The total of discharges and deaths.
• **In facility as of March 31**	The number of residents registered in the facility at 24:00 hours, March 31 including residents temporarily out of the facility but not formally discharged.
Age and sex of residents	Each resident is to be counted only once and assigned to the appropriate age and sex grouping.

Residential Care Facilities

Item	Definition
Types of care	The level of care required by the resident as outlined below.
• **Room and board**	Those residents paying only for a room. No services or care are received.
• **Room and board with guidance counselling**	Minimum amount of care possible in a facility—usually basic counselling and assistance with social problems. Most children's and alcohol and drug facilities will fall in this category.
• **Room and board with custodial care**	Minor supervision required.
• **Type I care**	Care required by a person who is ambulant and/or independently mobile, who has decreased physical and/or mental faculties, and who requires primarily supervision and/or assistance with activities of daily living and provision for meeting psycho-social needs through social and recreational services. The period of time during which care is required is indeterminate and related to the individual condition but is less than 90 minutes in a 24-hour day.
• **Type II care**	Care required by a person with a relatively stabilized (physical or mental) chronic disease or functional disability, who, having reached the apparent limit of his recovery, is not likely to change in the near future. The person has relatively little need for the diagnostic and therapeutic services of a hospital but requires personal care for 1 1/2 to 2 1/2 hours in a 24-hour day. Medical and professional nursing supervision and provision for meeting psycho–social needs are present.
• **Type III care**	Care required by a person who is chronically ill and/or has a functional disability (physical or mental) and whose acute phase of illness is over. Vital processes may or may not be stable, and potential for rehabilitation may be limited. A range of therapeutic services, medical management and skilled nursing care plus provision for meeting psycho-social needs are necessary. A minimum of 2 1/2 hours of individual therapeutic and/or medical care is required in a 24-hour day.

Residential Care Facilities

Item	Definition
• **Higher type care**	Substantially more nursing and/or medical care than described above. It is assumed there would be very few residents who would be receiving care of this type. Care above Type III is usually provided in a hospital setting.
Principal characteristics of residents	Principal characteristics of the residents are listed below.
• **Aged**	Residents are in the facility mainly because of old age (65+). They may have some other disabilities associated with aging.
• **Physically disabled**	Residents are in a facility primarily because of bodily dysfunctions (for example, blindness, deafness, loss of limbs, quadriplegia, paralysis).
• **Developmen-tally delayed**	Residents who are limited in intellectual or emotional development or academic progress.
• **Psychiatrically disabled**	Includes ex-psychiatric patients, individuals with chronic mental illness or those convalescing fro mental illness.
• **Emotionally disturbed children**	Children with behaviour disorders who require specialized treatment.
• **Alcohol/drug users**	Residents who require treatment for problems with alcohol or drug addiction.
• **Young offenders**	Young persons whose conduct is out of accord with accepted behaviour under the law. The emphasis is placed on social maladjustment rather than criminal intent.
• **Transients**	Persons requiring short-term respite who are without a home due to an emergency or a continuing situation.
• **Others**	Includes residents who do not fit in any of the other categories, such as unmarried mothers, battered women and their children or children requiring shelter who do not fit in any of the other categories.

Residential Care Facilities

Item	Definition
Personnel	Types of personnel are defined below.
• **Persons employed as of March 31**	Persons on the payroll of the facility as of March 31. Voluntary workers are excluded. Persons paid on a fee for services basis (for example, doctors or dentists on call) are also excluded. The owner/operator of a small facility may be the only person working full time. In this case he/she is recorded under "other care staff not included above" and the hours of the individual should be split to reflect the approximate time spent in direct care services and general services. When a person on the staff fills more than one position, that individual is recorded only once under the category of employment in which he/she spends the major portion of his/her time.
• **Full time**	Persons employed on a full-time basis; they are regularly employed throughout the facility's full workweek.
• **Part time**	Persons employed on a part time basis; they are regularly employed on selected days or partial days in the facility's workweek.
• **Casual employees**	Persons employed on a non-continuing or irregular basis. Those who temporarily relieve regular employees on vacation or sick leave or office overload, or those who are hired temporarily for such jobs as snow removal, are not included in the personnel totals.
Personnel pai hours	Total accumulated paid hours during reporting period which include total paid hours for all full-time, part-time and casual employees who have had salaries or wages paid to them by the facility. Hours covering paid holiday time and other paid leave are to be included for all categories of personnel.

Residential Care Facilities

Item	Definition
Direct care to residents	All personnel whose time is spent mainly with the residents, giving assistance, nursing care, guidance or any other forms of help.
• **Registered nurse**	A person who has graduated from a recognized formal nursing educational program and has qualified to practise nursing as a registered nurse according to appropriate provincial legislation.
• **Registered qualified nursing assistant– licensed practical nurses**	Persons authorized to function as nursing assistants according to appropriate provincial legislation
• **Physiotherapists**	Persons qualified to practise by meeting the requirements of the Canadian Physiotherapy Association or equivalent standards and who maintain and improve the functional capacity of a resident through procedures including exercise, massage and manipulation.
• **Occupational therapists**	Persons qualified to practise by meeting the requirements of the Canadian Association of Occupational Therapists and is responsible for maintaining and improving the functional capacity of the resident through the practice of activities of daily living and the development of vocational and manual skills.
• **Other therapists**	These would include speech therapists, behaviour therapists, group therapists, etc.
• **Activity and recreation staff**	Staff involved in setting up or maintaining a program of social activities, recreation, or hobbies for the residents.
• **Other care staff**	Staff such as nursing aides, health care aides, counsellors, child care workers, orderlies, social workers, etc.

Residential Care Facilities

Item	Definition
General services	All other personnel of the facility who provide indirect services and are not shown in direct care to residents.
• **Administration**	Person(s) providing administrative direction and also carrying out such functions as admitting, personnel and payroll, accounting, purchasing, switchboard, public relations, etc.
• **Dietary**	Person(s) involved in the requisitioning, storage, preparation and distribution of food to meet the normal and therapeutic nutritional needs of residents and for other food services provided by the facility. This will include the operation of a cafeteria.
• **Housekeeping, laundry**	Person(s) involved in maintaining a sanitary environment, processing soiled linen, and receiving, repairing, storing, distributing, controlling and supplying clean linen and wearing apparel as required for residents and staff of the facility.
• **Plant operation, maintenance and security**	Person(s) involved in the provision, distribution and monitoring of water, light, heat, power and other building service systems throughout the physical plant, and in the protection of property, persons and residents, and responsible for the servicing and repairing of the physical plant. This includes services of a janitor.
• **Other general services personnel**	Other general services personnel and hours not provided for above. Included are outreach workers employed by the facility but providing services outside of the facility in the community.
Costs by types of services	Costs by the types of services are defined below.
• **Expenses**	The total cost of operating and maintaining the facility for the twelve months ending March 31. Capital costs are excluded.
• **Direct care to residents**	Includes the cost of direct care to residents, drugs, medical and surgical supplies, and other supplies.

Residential Care Facilities

Item	Definition
• **General services**	Expenses relating to administration (including employee benefits), dietary, housekeeping and laundry, plant operation (including utilities, maintenance and security and all other costs of indirect services which cannot be allocated to direct care of residents). Where the facility has arranged for any service, for example, dietary, to be provided by an independent, outside company as a "purchased service." The total costs for such services should be given including salaries and wages.
Other	This section includes: • any interest on loans, notes, mortgages, etc; • business taxes, land and realty taxes, etc. • overhead charged to the facility for head office management, • depreciation for the 12-month period for buildings, furniture and equipment, land improvements, automobiles, etc. • rent or leased costs of building and/or equipment, insurance premiums, licences and fees paid to government or other regulatory bodies, etc.
Income	The total income of the facility for the 12 months ending March 31. Because the usual basis of income is the charging of a set rate for accommodation, this will represent the majority of the income

Residential Care Facilities

Item	Definition
Source of earnings for accommodation	Listed below are the sources of earnings for accommodati .
• **Provincial health insurance plan**	Where provincial health insurance provides coverage for standard ward accommodation for an eligible resident, the income earned from such a plan, for example, Ministry or Department of Health or long-term care.
• **Provincial social services plan**	All amounts earned from provincial government social service programs or departments, for example, Department of Social Services, De artment of Social Services and Community Health (Alberta), Ministry o Community and Social Services, (Ontario), Community Services and Corrections (Manitoba), etc.
• **Other provincial department or ministry**	Amounts earned from a provincial department or agency other than Health or Social Services for example, crown agencies such as alcohol/drug commissions.
• **Municipalities, regional or district administrations**	All amounts earned from municipalities, regional or district administrations on behalf of residents.
• **All other**	Amounts for accommodation earned from sources such as federal government agencies, Department of Veterans' Affairs, Worker's Compensation, etc. Also included are any grants or donations received by the facility.
• **Residents co-insurance or self-pay**	All amounts to be paid by residents personally or by private insurance companies as their share of the standard ward rate.

Residential Care Facilities

Item	Definition
• **Differential–preferred accommodation**	All amounts earned from persons occupying semi-private and privat rooms for which an additional charge over and above standard ward rate is charged.
• **Sundry earnings**	All other earnings not attributable to basic accommodation. Where applicable, this would include such items as: physical therapy, special duty nursing, hairdressing or barber services, laundry, dry cleaning, employee or guest meals, vending machines, telephone, day care, sale of crafts, etc.
Principal characteristics of residents	Residents are classified into one of nine principal characteristic categories. The category of a facility is the principal characteristic of the predominant group that comprises the largest number of residents in the facility. • aged residents who require care principally because of the aging process • physically handicapped and/or disabled, including blind and deaf • psychiatrically disabled • developmentally delayed • emotionally disturbed children • alcohol/drug addiction • young offenders • transients • other (such as unwed mothers and children who do not fall in any other category)

Residential Care Facilities

Item	Description
Survey frame	Residential care facilities
Collection methods	Generally, only facilities which have four beds or more are surveyed. The exception is some composite reporting, where a head office reports on all of its residential care facilities, some of which may have fewer than four beds. Facilities providing self sufficient, minimal or Type I care with 10 beds or less receive an abbreviated form. These facilities represent 50% of the universe. These facilities report totals for personnel (direct care services and general services) and expenses (direct care services, general services and other expenses). The remainder of facilities—those providing Type II care or higher and ten beds or more— receive the standard form. These facilities report totals and detailed breakdown for personnel (direct care services and general services) and expenses (direct care services, general services and other expenses). The forms are mailed out annually in April. At the end of May, thank-you/reminder cards are sent to facilities from which a survey form has not been received. During the summer, calls are made to the facilities that have not returned a form. Again in the fall, telephone calls are made to those facilities who have not returned a form. At this point, an attempt is made to complete the form over the telephone. There are written instructions outlining the procedures for telephone reminder and form completion.

Residential Care Facilities

Item	Description
Collection methods	Quebec collects data from facilities for its own information and provides Statistics Canada with the data on tape. Alberta provides information on nursing homes on tape. The tapes are reformatted and loaded so that the data appears in the same format as the survey forms and is subjected to the same editing as the survey forms received directly from facilities. Starting in 1990–91, the auxiliary hospitals in Alberta, which previously reported in the Annual Hospital Surve were included in the Residential Care Facilities survey. About 80% of the data are received through annual returns completed by individual facilities. The provinces of Quebec and Alberta send data directly to Statistics Canada. The data from Alberta are from nursing homes and auxiliary hospitals only (which make up about one-third of residential care facilities in Alberta on the Statistics Canada inventory); the remainder of the residential care facilities in the province are surveyed directly.
Collection period	April to March.
Overview of processing system	N/A

Residential Care Facilities

Item	Description
Cleaning operations (edit and imputation)	Survey forms are edited in groups by province, principal characteristic and the number of beds in the facility to ensure consistency in reporting. Each form is compared section-by-section to previous years' reports from the facility. Significant changes such as an increase or decrease of 20% with no change in the number of beds are referred to the supervisor. If there is no indication that there has been a change in funding in the province, the supervisor arranges for a follow-up call to the facility. If a financial statement is included with the survey return, an effort is made to use th information in the editing. The Alberta and Quebec data on tape are reformatted into individual files which are then submitted to the same manual editing procedures as the survey forms. There are a number of on-line edits, most relating to an acceptable rang for the cell and/or its relationship to data in another cell. Columns are automatically summed so that they can be compared with the total provided by the facility. Consistency checks are also built in to the process. A query is produced when a value falls outside the range specified in the edits. The supervisor handles queries by contacting the facility, or provincial contact. Once the editing is completed the data are produced in 32 standard tables by principal characteristic and type of care. These tables are manuall compared manually with the previous year’s tables.
Weighting procedures	N/A
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC).

Residential Care Facilities

Item	Description
Coding documentation used	Standard Geographical Classification (SGC).

Residential Care Facilities Component

Item	Description
Response rate	Completion of the survey is a legal requirement under the *Statistics Act*. The response to the survey is about 80% of the facilities, containing 82% of the beds in the universe.
Response rate unit	Residential care facilities
Response rate weighting	Unweighted.
Estimation procedures	N/A
Sampling errors	N/A
Coverage errors	No attempt is made to adjust the data to account for facilities not responding to the survey or for item non-response for those facilities which did report.
Non-response errors	Since no weighting of the data is done to account for non-response, caution must be used in interpreting the data.
Response errors	N/A
Processing errors	Processing errors are usually discovered and queried during the editing of the data.
Other non-sampling errors	N/A
Suppression and other confidentiality restrictions	Occurrences of less than three in a table are suppressed. Information about individual hospitals is not released.
Coefficients of variations	N/A

Hospital Morbidity/Surgical Procedures

Overview of the hospital morbidity/surgical procedures database

The Royal Commission on Health Services (the Hall Commission of 1961) recommended that the then Dominion Bureau of Statistics (Statistics Canada) collect and publish national hospital morbidity statistics including in-patient procedures. These were first published in 1964 for the data year 1960. These statistics have been published for every year since 1960 except for 1963 and 1965.

The data consist of a count of in-patient cases, separated during the data year from general and allied special hospitals in Canada. Separations involving surgery or treatment are included in the database.

The basic source of in-patient hospital morbidity information is the admission/separation form completed by general and allied hospitals. Beginning with the data year 1994–95, the Canadian Institute for Health Information (CIHI) assumed the responsibility for the collection of the Hospital Morbidity/Surgical Procedures and for th production and custody of the clean data files. Prior to the 1994–95 data year, Statistics Canada was responsible for the survey.

All provinces co-operate in forwarding computer tapes to CIHI, containing patient medico-demographic information, such as age, sex, diagnosis, surgical operations, external causes of injuries and poisonings (E-codes), length of stay, etc. The information published is the only national source of the hospital experience of the Canadian population in terms of diseases and surgical procedures.

The data do not contain cases treated as out-patients or patients in mental hospitals.

CIHI provides Statistics Canada with a clean file for data analysis.

Hospital Morbidity/Surgical Procedures

The following table provides the information elements and descriptions of the items included in the hospital morbidity and surgical procedures component of th *Health Indicators* database.

Item	Description
Statistical activity or survey name	Hospital Morbidity/Surgical Procedures Survey.
Characteristic	This is an administrative survey that collects information from all provincial general and allied hospitals on patients who have been separated fro hospitals in Canada by discharge, transfer or death. The data consist of a count of in-patient cases separated during the data year from general and allied special hospitals in Canada, excluding Yukon and Northwest Territories. The data do not contain cases treated as out-patients or as patients in mental hospitals. The source of these data is the admission/separation form, which records one continuous stay in hospital for each patient. At the end of each stay the patient is separated as a discharge or death, or is transferred to another institution. Because a patient may be admitted to, and discharged from, a hospital several times during the year, the statistics are a count of cases rather than of unique persons or patients. The statistics provide a count of cases separated from hospital by primary diagnoses. A full count of other diagnoses on the cases separated may b extracted from the computer file. Information relating to surgery and treatment is included in the database.

Hospital Morbidity/Surgical Procedures

Item	Description
Purpose	The Hospital Morbidity survey was developed to provide statistics on national morbidity and presents a profile of the Canadian population in terms of diseases and surgical procedures for those treated on an in-patient basis. In Canada, the primary use of the data is statistical, projections, demographi trend analyses, surgical procedure surveillance and epidemiological research. The data are used extensively by the research community and other health professionals. Data are collected for a variety of purposes within each province, such as to monitor trends or to use in research studies aimed at improving treatment methods or identifying risk factors for disease.
Name of sponsors	N/A
Clients	The major clients for hospital morbidity data are: • Health Canada • provincial health departments • statistical departments • research organizations • universities • professional associations • media • public
Type of statistical activity	This is an administrative survey.
Type of survey	This is a cross-sectional survey.

Hospital Morbidity/Surgical Procedures

Item	Description
Reference period	The reference period is the fiscal year. The survey started in 1960.
Population size	Approximately 4,000,000 per year.
Statistical units	Hospital patient separations—discharges and deaths from hospitals.
Sample size	N/A
Frequency of the survey	The data are collected continuously but are submitted to Statistics Canada on an annual basis.
Target population	All in-patients by province of hospitalization.
Geographic coverage	All provinces are included—the Northwest Territories since 1993–94, and the Yukon since 1994–95.
Coverage—Standard classification	Standard Geographical Code (SGC), census division, census sub-division.

Hospital Morbidity/Surgical Procedures

Item	Description
Coding documentation used	Statistics Canada provides provinces with manuals, such as the Standard Geographical Classification (SGC), to promote data reliability and consistency. For the 1979–80 fiscal year and subsequent years, diagnosis is coded according to the International Classification of Diseases, 9th Revision (ICD-9) produced by the World Health Organization**.** Surgical procedures and treatments are coded according to the Canadian Classification of Diagnostic, Therapeutic and Surgical Procedures (CCP). The CCP, originally produced by Statistics Canada in 1978 to meet Canadian needs for a procedural classification to be used in conjunction with the ICD-9, includes a tabular list divided into 18 chapters of categories and subcategories, and an alphabetical index

Hospital Morbidity/Surgical Procedures

Item	Description
Main topics and variables	The main topics are hospital morbidity/surgical procedures statistics: • hospitalization, by cause, International Classification of Diseases, 9th Revision (ICD-9) codes • hospital total separations, and separations involving surgical, diagnostic and therapeutic procedures • E-codes, days of hospital care and average length of stay • hospital separations and average days per separation, by ICD-9 codes and, by the Canadian Diagnostic List (CDL) • hospital separations and average days per separation for operations and treatments, by Canadian Classification of Procedures (CCP) and the corresponding Canadian Procedure Short List • hospital utilization, trends in major indicators • leading causes of hospitalization, by ICD-9 chapter, by separations and by days of care The variables provided for each separation are: • primary diagnosis • secondary and associated diagnosis up to 16 diagnosis • primary surgery/procedure • secondary and associated surgeries up to 10 surgeries • age • sex • days stay, plus admission/separation dates • discharge condition • residence • accident code and location (up to five accident codes) • morphology codes (up to three codes)

Hospital Morbidity/Surgical Procedures

Item	Definition
Hospital	An institution which is operated for the medical, surgical and obstetrical care of in-patients, and which is licensed or approved as a hospital by federal, provincial or municipal governments, the latter being duly authorized under the laws of the province.
Separation	The discharge or death of an in-patient. The frequency counts show individual cases separated, not persons separated.
Surgical procedure	The procedures are based on the principal procedure. In most provinces this refers to the procedure considered the most significant during the patient's hospital stay.
Population	For all provinces, Statistics Canada census and post-censal population estimates are used in calculating rates.
Per 100,000	The number of separations or days of care expressed as a rate per 100,000 population in each age group, total and province.
Adults and children	All in-patients except newborns.
Newborn	An infant in-patient born alive in the hospital or post natal newborn, born outside the hospital and admitted with mother for maternal care. Newborns are not included in these tables.
Diagnoses	The diagnoses in these tables are according to 211 categories of the Canadian Diagnostic List. The diagnoses selected for the published tables are based on the primary diagnoses. In the provinces this refers to the diagnosis which describes the most significant condition of a patient which causes his stay in hospital or the diagnosis which consumes the greatest amount of medical resources.
Province	The province of hospitalization of the in-patient.
Age	Age of the patient in completed years at the time of separation.

Hospital Morbidity/Surgical Procedures

Item	Definition
Adjusted population estimates	In 1993, Statistics Canada introduced new population estimates. They differ from the previous ones by: • including adjustments for net census undercoverage • including estimates for non-permanent residents • establishing the reference date for the annual estimates at October 1 These adjusted population estimates are used as denominators in the calculation of all the rates presented.
Net census undercoverage	Net census undercoverage is the difference between census undercoverage and census overcoverage. The former refers to persons not enumerated in the census but who were part of the census universe, the latter to persons either enumerated more than once or enumerated but not part of the census universe.
Non-permanent residents	Non-permanent residents are persons: • claiming refugee status • holding a student authorization • holding an employment authorization • holding a minister's permit • all non-Canadian-born dependants of the above individuals
Data affected by population adjustments	The new population estimates series for provinces and territories comprises annual population estimates by single year of age, sex and marital status going back to 1971. For census divisions and census metropolitan areas, annual estimates by age group and sex are available as of 1986. **Note that the adjustments to the census data are provided only by Statistics Canada's population estimation program. Census data are not adjusted.** Thus, two types of population counts are availabl for census years: adjusted population estimates as of October 1 and unadjusted census counts as of the census reference date.

Hospital Morbidity/Surgical Procedures

Item	Description
Impact of adjustments	The impact of the adjustment varies by year, province and territory, and demographic characteristic. In 1991 for instance, these adjustments altogether added about one million individuals to the postcensal estimates based on the 1986 census. The increase in the estimate for young adult males is higher than for other age–sex categories. Therefore, rates involving this group will be affected more than others. In general, the rates decrease with adjustment, but the underlying trends remain valid.
Heath Statistics Division policy on the population estimates	The Health Statistics Division uses the adjusted population estimates for its standard data products and publications.

Hospital Morbidity/Surgical Procedures

Item	Description
Survey frame or frame sources	The data are based on the separation forms completed by the hospital and record one continuous stay in hospital for each patient. At the end of each hospital stay, the patient is separated by either discharge or death.
Collection methods	100% extraction from administrative files. Separation forms are completed by the staff of the medical records department of the hospital and sent to their respective provincial Ministry of Health. The information is captured on a computer file and a copy of this file is subsequently sent to CIHI by the provincial Ministries of Health. Th statistics are from institutions which are, acute care, convalescence and chronic hospitals, and represent the province in which the patient was treated, which in about 2% of cases is not the province of the patient's residence. The data consist of a count of in-patient cases separated during the data year from general and allied special hospitals in Canada, (excluding Yukon and Northwest Territories until the 1994-95 data year at which time they began to report). The data do not contain cases treated as out-patients or as patients in mental hospitals. The statistics published provide a count of cases separated from hospital by primary diagnoses. A full count of other diagnoses on the cases separated may be extracted from the computer file.
Collection period	Continuous, April to March

Hospital Morbidity/Surgical Procedures

Item	Description
Overview of processing system	Each of the provincial hospital insurance commissions sends computer tapes containing records of the hospital separations of their respective populations to CIHI on an annual basis. The data are on a fiscal year basis. The content and format of these records vary by province and by year. In order to process the data, CIHI prepares a standard record and a set of standard codes for the most common elements of the data including age, sex, diagnosis, therapeutic and surgical procedures, length of stay, residence and hospital identification. The records are then submitted to a two-phase quality editing system.
Cleaning operations (edit and imputation)	All separation records received from the provinces are edited at CIHI. The edit consists of a validity edit and a correlation edit. The validity edit checks that the necessary data elements are present, are consistent and are not duplicated. It also eliminates extraneous elements such as out-patient cases when these are present. The correlation edit, called the Medical Edit, checks that reported diagnoses and procedures are reasonably consistent with reported age and sex. A total of 74 automatic edits are built into this phase of the processing system. In addition to the automatic computer edits there are a series of manual checks to ensure that diagnostic and surgical information are both internally compatible and consistent with age and sex. Missing items are imputed according to a module based on past experience with the data. The provincial data files are edited separately. After all the provincial files are checked, they are merged into a single data set which is used to generate the tabulations for publication.

Hospital Morbidity/Surgical Procedures

Item	Description
Weighting procedures	N/A
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC). Canadian Classification of Diagnostic, Therapeutic and Surgical Procedures (CCP). International Classification of Diseases, 9th Revision (ICD-9).
Coding documentation used	The International Classification of Diseases, 9th Revision (ICD-9) which came into effect in Canada in 1979 is used for coding diagnosis. Data are published using the Canadian Diagnostic List which is an abridged list grouping ICD-9 three-digit codes. For the 1979-80 fiscal year and subsequent years, procedures are coded according to the Canadian Classification of Diagnostic, Therapeutic and Surgical Procedures (CCP and published on the Surgical Short List—an abridged list—grouping the CCP codes. More detailed codes for the ICD-9 and CCP, and conversion tables for previous versions of the ICD and International Classification of Disease Adapted, 8th Revision (ICDA-8) operations codes are available from the Health Statistics Division, Statistics Canada. The Standard Geographical Classification (SGC) is used for geographical classification.

Hospital Morbidity/Surgical Procedures

Item	Description
Response rate	100%
Response rate unit	Hospital separations.
Response rate weighting	Unweighted.
Estimation procedures	N/A
Sampling errors	N/A
Coverage errors	The data refer to separations or cases and not to persons. One individual could be admitted to, and discharged from, a hospital several times during the year; the statistics are a count of cases rather than of unique persons o patients. The data do not contain cases treated as out-patients, in day surgery or as patients in mental hospitals. However, they do contain patients treated i psychiatric units of general and allied special hospitals. The data cannot be used as a measure of period prevalence because the number of cases separated during the year may be both undercounted an overcounted. The number of cases separated may be undercounted because, under the terms of diagnosis-linked separation, a more serious diagnosis may override a less serious one. The number of cases separated may be overcounted by multiple separations of the same patient for the same diagnosis during a year. The number of procedures may be undercounted because a less serious procedure, such as the procedure of separation, may be over-ridden by a more serious procedure. The counts cannot be used as an approximation of total occurrence of procedures because the number of procedures performed during a year may be undercounted.

Hospital Morbidity/Surgical Procedures

Item	Description
Non-response errors	N/A
Response errors	N/A
Processing errors	All data are edited by computer to ensure validity of each field and to check on the compatibility of different data elements within a record.
Other non-sampling errors	N/A
Suppression and other confidentiality restrictions	Occurrences of less than three are suppressed when tables are run.
Preliminary estimates released	N/A
Coefficients of variations	N/A

National Population Health Survey (NPHS)

Overview of the National Population Health Survey database

In the fall of 1991, the National Health Information Council recommended that an ongoing national survey of population health be conducted. This recommendation was based on the economic and fiscal pressures on the health care system and the commensurate requirement for information with which to improve the health of the Canadian population. Existing sources of health data were unable to provide a complete picture of the health status of the population and the myriad of factors that have an impact on health.

Statistics Canada received funding for the development of a National Population Health Survey (NPHS) beginning in April 1992. The survey was designed to be flexible and to produce valid, reliable and timely data. Also, it was to respond to changing requirements, interests and policies.

The NPHS is designed to collect information related to the health of the Canadian population. The first cycle of data collection began in 1994, and continues every second year thereafter. The survey collects not only cross-sectional information, but also data from a panel of individuals at two-year intervals.

It is composed of three parts: the survey of households, the survey of institutions and the survey of the North.

The household component includes household residents in all provinces, with the principal exclusion of populations on Indian Reserves, Canadian Forces Bases and some remote areas in Quebec and Ontario. The institutional component includes long-term residents (expected to stay longer than six months) in health care facilities with four or more beds in all provinces with the principal exclusion of the Yukon and the Northwest Territories. The northern component includes household residents in both the Yukon and th Northwest Territories with the principal exclusion of populations on Indian Reserves, Canadian Forces Bases and some of the most northerly remote areas of the Territories.

Only the household component is relevant to *Health Indicators*; therefore, this documentation will not cover the institution or the northern components of NPHS.

National Population Health Survey (NPHS)

Overview of the National Population Health Survey database (continued)

In each household, some limited information was collected from all household members and one person, aged 12 years and over, in each household was randomly selected for a more in-depth interview. The questionnaire included sections on health status, use of health services, risk factors and demographic and socio-economic status.

The selected person in each household will be followed at two year intervals as part of the longitudinal component. Interviewing one respondent simplifies the longitudinal follow-up. Each time the respondent is re-surveyed, the same basic health-related information will also be collected from all members of the household in which he or she is then living.

A minimum of 1,200 households in each province was needed to ensure reliable estimates by sex and age groups. Some provinces chose to increase the sample size to increase the utility of the survey.

The NPHS has been conducted by Statistics Canada for two cycles, 1994–95 and 1996–97. The documentation for the two cycles will be presented separately.

The NPHS documentation in *Health Indicators* provides a basic overview the household survey. To facilitate the manipulation of the micro-data file of the survey results, an in-depth manual has been produced that provides detail for such things as the sampling design, data processing, sampling variability tables and weighting.

The NPHS Public Use Micro-data Documentation (Catalogue no. 82M0009GPE is available from Health Statistics Division. Also available is the National Population Health Survey Overview for 1994–95 and 1996–97 (Catalogue no. 82-567-XPB).

National Population Health Survey (NPHS)

The following table provides the information elements and descriptions of the items included in the NPHS–Households 1994–95 component of the *Health Indicators* database.

Item	Description
Statistical activity or survey name	National Population Health Survey—Households, 1994–95
Characteristic	The NPHS is designed to collect information related to the health of the Canadian population. The first cycle of data collection began in 1994, and takes place every two years thereafter. The survey will collect not only cross-sectional information, but also data from a panel of individuals at two-year intervals. It is composed of three parts: the survey of households, the survey of institutions and the survey of the North. The household component is an ongoing national population health survey of individuals residing in households in Canada. In each household, some limited information was collected about all household members (the general component) and one person, aged 12 years and over, was randomly selected for a more in-depth interview (the health component) and will be followed every two years as part of a panel.

National Population Health Survey (NPHS)

Item	Description
Purpose	The objectives of the NPHS are to: • aid in the development of public policy by providing measures of the level, trend and distribution of the health status of the population • provide data for analytic studies that will assist in understanding the determinants of health • collect data on the economic, social, demographic, occupational and environmental correlates of health • increase the understanding of the relationship between health status and health care utilization, including alternative as well as traditional services • provide information on a panel of people who will be followed over time to reflect the dynamic process of health and illness • provide the provinces and territories and other clients with a health survey capacity that will permit supplementation of content or sample In Canada, the primary use of the data is statistical, such as in prevalence of disease and projections, demographic trend analyses and research. The data are used extensively by the research community and other health professionals.

National Population Health Survey (NPHS)

Item	Description
Name of sponsors	N/A
Clients	The major clients for NPHS data are: • Health Canada • provincial, regional and local health departments • statistical departments • research organizations
Type of statistical activity	This is a direct sample survey.
Type of survey	This is both a cross-sectional and longitudinal survey.
Reference period	The reference period is 1994–95. Data collection took place between June 1994 and June 1995.
Frequency of the survey	Every two years.
Target population	The target population of the NPHS includes household residents in all provinces, with the principal exclusion of populations on Indian Reserves, Canadian Forces Bases and some remote areas in Quebec and Ontario.
Population size	The population of Canada aged 12+.
Statistical units	Individuals
Sample size	17,626 individuals (selected respondents for the health component); 58,439 individuals (all household members for the general component).
Geographic coverage	All provinces were included in the survey.
Coverage—Standard classification	Standard Geographical Code (SGC), census division, census sub-division.

National Population Health Survey (NPHS)

Item	Description
Main topics and variables	The main topic is the health status of individuals residing in households in Canada. A variety of information has been collected on perceived health, chronic conditions, injuries, depression, smoking, alcohol consumption, physical activity, consultations with medical professionals, use of medicines and use of alternative medicine. In addition, each cycle of the NPHS contains a special focus component. In 1994–95, the focus content was psychosocial factors that may influence health, such as stress, self-esteem, mastery and social support. The extensive number of variables makes listing them for this documentation impractical. The list of variables is available on the Statistics Canada web site, <http://www.statcan.ca> or from Health Statistics Division. A supplementary survey was sponsored by Health Canada. The Health Promotion Survey data were collected as an additional separate component of the NPHS.

National Population Health Survey (NPHS)

Item	Description
Survey frame or frame sources	Labour Force Survey (LFS) for provinces outside of Quebec and the Enquête sociale et de santé (ESS) for Quebec. The frame source for some supplemental samples, such as Prince George, B.C., was Random Digit Dialing (RDD).
Collection methods	Computer Assisted Interview (CAI): face-to-face collection, telephone and Random Digit Dialing (RDD). The NPHS questions were designed for CAI, which meant that as the questions were developed, the associated logical flows into and out of the questions were programmed. This included specifying the type of answer required, the minimum and maximum values, on-line edits associated with the question and what to do in case of item non-response. Collection operations were divided in four quarters (June, August and November 1994, and March 1995) with a follow-up in June 1995. Interviews were conducted by Statistics Canada Labour Force Survey (LFS) interviewers, who are part-time employees hired and trained specifically to carry out the LFS, using the computer-assisted interviewing method. All respondents were first contacted in person except for a small sample in British Columbia that was conducted by telephone using the RD approach Some of the interviews were finished on the telephone either because the selected respondent was not available at the time of the initial visit or because the long interview time prevented the completion of the interview in one contact. The total interview took an average of one hour in each household.

National Population Health Survey (NPHS)

Item	Description
Collection methods (continued)	In all dwellings, information about all household members is obtained from a knowledgeable household member—usually the person at home at the time of the interviewer visit. Such proxy reporting, which accounts for approximately 55% of the information collected for this part of the interview, is used to avoid the high cost and extended time requirements that would be involved in repeat visits or calls necessary to obtain information directly from each respondent. Proxy reporting was allowed for the selected respondent only for reasons of illness or incapacity. Such proxy reporting accounts for 4% of the information collected.
Collection period	June, August and November 1994 and March 1995 with a follow-up in June 1995.
Overview of processing system	Because NPHS used CAI, capture was part of the data collection process. The data collected during the interview were recorded directly onto a laptop computer. Each question is represented by a screen on the computer. After the answer to each question is entered, the next question appears automatically on the screen. Several questions allowing write-in responses had the write-in information coded into either new unique categories, or to a listed category if the write-in information duplicated a listed category. Where possible, such as in the categories of occupation, industry and diseases, the coding followed either the standard classification systems as used in the Census of the Population or in other Statistics Canada Surveys such as the Health and Activity Limitation Survey and General Social Survey—cycle 6. A number of variables on the file have been derived by using items found on the NPHS questionnaires in order to facilitate data analysis. In some cases, the derived variables are straightforward and involve collapsing of categories. In other cases, several variables have been combined to create a new variable.

National Population Health Survey (NPHS)

Item	Description
Cleaning operations (edit and imputation)	Some editing, usually done at head office, was performed during data collection on-line in the CAI application. The editing to deal with out of range values and flow errors was controlled through the use of CAI by not allowing invalid values to be entered as responses, and by not allowing incorrect question paths to be followed. For example, CAI ensured that questions that did not apply to the respondent, and therefore should not have been answered, were not asked. In other situations, warning messages were invoked, but no corrective action was taken if an interviewer entered contradictory responses between questions. Because no corrective action was taken in such instances, edits were developed to be performed after data collection at head office. Inconsistencies were usually corrected by setting one or both of the variables in question to "not stated." No imputation was performed.
Weighting procedures	The principle behind estimation in a probability sample such as the NPHS is that each person in the sample "represents" several other persons not in the sample besides himself or herself. For example, in a random 2% sample of the population, each person in the sample represents 50 persons in the population. In the terminology used here, it can be said that each person has a weight of 50. The weighting phase is a step which calculates what the associated weight is for each person. This weight appears on all NPHS files, and must be used to derive meaningful estimates from the survey. For example, if the number of individuals who smoke daily is to be estimated, it is done by selecting the records referring to those individuals in the sample having that characteristic and summing the weights entered on those records. Details of the method used to calculate these weights are presented in NPHS Micro-data Users Manual.

National Population Health Survey (NPHS)

Item	Description
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC). Standard Occupational Classification (SOC). International Classification of Diseases, 9th Revision (ICD-9). Census of the Population.
Coding documentation used	International Classification of Diseases, 9th Revision (ICD-9). Several questions allowing write-in responses had the write-in information coded into either new unique categories, or to a listed category if the write-in information duplicated a listed category. Where possible, for example, in the categories of occupation, industry, and diseases, the coding followed either the standard classification systems as used in the Census of the Population or in other Statistics Canada Surveys such as the Health and Activity Limitation Survey and General Social Survey—cycle 6.

National Population Health Survey (NPHS)

Item	Description
Response rate	The household response rate at the Canada level was **88.7%**. At the provincial level, this rate varied from 85.2% in Ontario to 93.2% in Alberta. The selected person response rate for NPHS was **91.1%** at the Canad level, and ranged from 94.7% in Nova Scotia to 97.6% in Saskatchewan.
Response rate unit	Households and individuals.
Variable respons rate	The response rate of reporting core statistical data varies by item.
Estimation procedures	The survey produces estimates based on information collected from and about a sample of individuals. Since it is an unavoidable fact that estimates from a sample survey are subject to sampling error, sound statistical practice calls for researchers to provide users with some indication of the magnitude of this sampling error. The basis for measuring the potential size of sampling errors is the standard error of the estimates derived from survey results. However, because of the large variety of estimates that can be produced from a survey, the standard error of an estimate is usually expressed relative to the estimate to which it pertains. This resulting measure, known as the coefficient of variation (C.V.) of an estimate, is obtained by dividing the standard error of the estimate by the estimate itself and is expressed as a percentage of the estimate.

National Population Health Survey (NPHS)

Item	Description
Rounding guidelines	Estimates in the main body of a statistical table are rounded to the nearest hundred units using the normal rounding technique. If the first or only digit dropped is zero to four, the last digit retained is not changed. If the first or only digit dropped is five to nine, the last digit retained is raised by one. Marginal sub-totals and totals in statistical tables are derived from their corresponding unrounded components and then are rounded themselves to the nearest 100 units using normal rounding methods. Averages, proportions, rates and percentages are computed fro unrounded components (for example, numerators and/or denominators) and then are rounded themselves to one decimal using normal rounding. In normal rounding to a single digit, if the final or only digit dropped is zero to four, the last digit retained is not changed. If the first or only digit dropped is five to nine, the last digit retained is increased by one. Sums and differences of aggregates (or ratios) are derived from their corresponding unrounded components and then are rounded themselves to the nearest 100 units (or the nearest one decimal) using normal rounding. Under no circumstances are unrounded estimates, published or otherwise, released. Unrounded estimates imply greater precision than actually exists.

National Population Health Survey (NPHS)

Item	Description
Sampling errors	The sampling error is the difference between the estimate derived from a sample and the result that would have been obtained from a census. This error has been estimated; unreliable data have not been published and those that should be used with caution are properly identified.
Non-sampling errors	Non-sampling errors include errors due to a difference between the target population and the sample population, non-response, response and processing. They are more difficult to identify and measure than sampling errors. Errors which are not related to sampling may occur at almost every phase of a survey operation. Interviewers may misunderstand instructions, respondents may make errors in answering questions, the answers may be incorrectly entered on the questionnaire and errors may be introduced in the processing and tabulation of the data. These are all examples of non-sampling errors. Interviewers are instructed to make all reasonable attempts to obtain NPHS interviews with members of eligible households. For individuals who at first refuse to participate, a letter is sent from the regional offic stressing the importance of the survey and requesting the household's cooperation. This is followed by a second call (or visit) from the interviewer. For cases in which the timing of the interviewer's call (or visit) is inconvenient, an appointment is arranged to call back at a more convenient time. For cases in which there is no one home, numerous callbacks are made. Under no circumstances are sample dwellings replaced by other dwellings for reasons of non-response. Each quarter, after all attempts to obtain interviews have been made, a small number of non-responding households remain. Actions have been taken to reduce non-sampling errors to a minimum. More information on these actions and on the subject of data quality can be found in the NPHS Public Use Micro-data Documentation, available from Health Statistics Division.

National Population Health Survey (NPHS)

Item	Description
Suppression and other confidentiality restrictions	Data relating to fewer than 30 respondents in a given cell are not released under any circumstances. Data are suppressed following the guidelines outlined in the table below.
Coefficients of variations	In order to provide a means of assessing the quality of tabulated estimates, Statistics Canada has produced a set of Approximate Sampling Variability Tables (commonly referred to as "C.V. Tables" because they refer to the coefficient of variation) for the NPHS. These tables can be used to obtain approximate coefficients of variation for categorical-type estimates and proportions. Before releasing and/or publishing estimates, the number of sampled respondents who contribute to the calculation of the estimate must be determined. If this number is less than 30, the weighted estimate should not be released regardless of the value of the coefficient of variation for this estimate. For weighted estimates based on sample sizes of 30 or more, users should determine the coefficient of variation of the rounded estimate and follow the guidelines below. The sampling variability guidelines for NPHS are provided in the table below.

National Population Health Survey (NPHS)

National Population Health Survey Sampling Variability Guidelines

Type of estimate	C.V. (in %)	Guideline
1. Unqualified	0.0–16.5	Estimates can be considered for general unrestricted release. Requires no special notation.
2. Qualified	16.6–25.0	Estimates can be considered for general unrestricted release but should be accompanied by a warning cautioning subsequent users of the high sampling variability associated with the estimates. Such estimates should be identified by the letter Q (or in some other similar fashion).
3. Confidential	25.1–33.3	Estimates can be considered for general unrestricted release only when sampling variabilities are obtained using an exact variance calculation procedure. Unless exact variances are obtained, such estimates should be deleted and replaced by three hyphens (---) in statistical tables.
4. Not for release	33.4 or greater	Estimates cannot be released in any form under any release or circumstances. In statistical tables, such estimates should be deleted and replaced by two hyphens (--).

National Population Health Survey (NPHS)

The following table provides the information elements and descriptions of the items included in the NPHS—Households, 1996-97 component of the *Health Indicators* database.

Item	Description
Statistical activity or survey name	National Population Health Survey—Households, 1996-97.
Characteristic	The NPHS is designed to collect information related to the health of the Canadian population. The second cycle of data collection began in 1996, and takes place every two years thereafter. The survey will collect not only cross-sectional information, but also data from a panel of individuals at two-year intervals. It is composed of three parts: the survey of households, the survey of institutions and the survey of the North. The household component is an ongoing national survey of population health conducted on individuals residing in households in Canada. In the first cycle, the sample was created by first selecting households and then choosing one member to be the longitudinal respondent within each household. For the second cycle, the distinction is made between the sample selected for longitudinal purposes and the sample selected for cross-sectional purposes. Only the longitudinal respondent chosen in 1994–95 was traced, using contact information collected at that time. For cross-sectional purposes, all household members currently living with the longitudinal respondent were interviewed. The selected longitudinal respondent's data will be used for longitudinal purposes and cross-sectional purposes. NPHS children who were under the age of 12 in cycle 1 and previously interviewed as part of the 1994–95 National Longitudinal Survey of Children and Youth (NLSCY), were included in the NPHS sample in 1996–97 and are on the cross-sectional and longitudinal files.

National Population Health Survey (NPHS)

Item	Description
Purpose	The objectives of the NPHS are to: • aid in the development of public policy by providing measures of the level, trend and distribution of the health status of the population • provide data for analytic studies that will assist in understanding the determinants of health • collect data on the economic, social, demographic, occupational and environmental correlates of health • increase the understanding of the relationship between health status and health care utilization, including alternative as well as traditional services • provide information on a panel of people who will be followed over time to reflect the dynamic process of health and illness • provide the provinces and territories and other clients with a health survey capacity that will permit supplementation of content or sample • allow the possibility of linking survey data to routinely collected administrative data such as vital statistics, environmental measures, community variables, and health services utilization In Canada, the primary use of the data is statistical, such as in prevalence of disease and projections, demographic trend analyses and research. The data are used extensively by the research community and other health professionals.

National Population Health Survey (NPHS)

Item	Description
Name of sponsors	N/A
Clients	The major clients for NPHS data are: • Health Canada • provincial, regional and local health departments • statistical departments • research organizations
Type of statistical activity	This is a direct sample survey.
Type of survey	This is both a cross-sectional and longitudinal survey
Reference period	The reference period is 1996-97. Data were collected from June 1996 to August 1997.
Frequency of the survey	Every two years.
Target population	The target population of the NPHS includes household residents in all provinces, with the principal exclusion of populations on Indian Reserves, Canadian Forces Bases and some remote areas in Quebec and Ontario.
Population size	The population of Canada, all ages for both cross-sectional and longitudinal components.
Statistical units	Individuals.
Sample size	81,804 health components and 210,377 individuals which includes 17,276 longitudinal sample and supplementary sample from Ontario, Manitoba and Alberta.
Geographic coverage	All Canadian provinces and territories are included.
Coverage—Standard classification	Standard Geographical Code (SGC), census division, census sub-division.

National Population Health Survey (NPHS)

Item	Description
Main topics and variables	The main topic, or core component, is the health status of individuals residing in households in Canada. A variety of information has been collected on perceived health, chronic conditions, injuries, depression, smoking, alcohol consumption, physical activity, consultations with medical professionals, use of medicines and use of alternative medicine. In addition, each cycle of the NPHS contains a special focus component. In 1996-97 the focus was on access to services. For various health services, questions on the frequency of use, barriers encountered, and reasons for non-use or less frequent use than recommended by the Canadian Medical Associations were probed. These services included the following tests: blood pressure check, pap smear test, mammography, physical check-up, flu shots, dental visits and eye exams. Health Canada sponsored an asthma supplement and the Health Promotion Survey (HPS). The HPS was not conducted as a separate survey; the questions for the HPS were integrated with the NPHS. The extensive number of variables makes listing them for this documentation impractical. The list of variables is available on the Statistics Canada web site, <http://www.statcan.ca> or from Health Statistics Division.

National Population Health Survey (NPHS)

Item	Description
Survey frame or frame sources	Labour Force Survey (LFS) for provinces outside of Quebec and the Enquête sociale et de santé (ESS) for the province of Quebec. The frame source for supplement sample in Ontario, Manitoba and Alberta was RDD.
Collection methods	Computer Assisted Interview (CAI): telephone (95%), face-to-face collection, and Random Digit Dialing (RDD). The NPHS questions were designed for CAI, which meant that as the questions were developed, the associated logical flow into and out of the questions were programmed. This included specifying the type of answer required, the minimum and maximum values, on-line edits associated with the question and what to do in case of item non-response. Collection operations were divided in four quarters (June, August and November 1996, and February 1997) and interviews were conducted by part-time employees hired and trained specifically to carry out surveys using the CAI method. An additional collection was held in June 1997 and further attempts to trace non-respondents from previous quarters were made. Collection for the RDD samples was carried out monthly, with survey start and end dates depending upon provincial funding. For Alberta, collection ran from June 1996 to March 1997. For Ontario, collection ran fro October 1996 to August 1997. In Manitoba, collection ran from November 1996 to August 1997. Interviews were conducted by part-time employees, usually experienced in telephone interviewing, who were hired and trained specifically to carry out the RDD portion using CAI. Respondents in the core sample, which does not include the supplemental sample, were first contacted by telephone, and 95% of the interviews were conducted in this manner. Personal visits were made if the respondent did not have a telephone, if it was required in the course of tracing a respondent, or upon request by the respondent. For the RDD collection, no personal interviews were allowed.

National Population Health Survey (NPHS)

Item	Description
Collection methods (continued)	In all dwellings, information about all household members was obtained from the person at home at the time of the interviewer call. Such proxy reporting accounted for approximately 55% of the information collected for this part of the interview. Proxy reporting was allowed for the selected respondent health component only for reasons of illness or incapacity. Such proxy reporting accounts for 2% of the information collected for respondents aged 12 and over. All interviews for selected respondents under 12 years old were done by proxy.
Collection period	June, August and November 1996 and February 1997. An additional collection was held in June 1997 and further attempts to trace non-respondents from previous quarters were made.
Overview of processing system	Because NPHS used CAI, capture was part of the data collection process. The data collected during the interview were recorded directly onto a laptop computer. Each question is represented by a screen on the computer. After the answer to each question is entered, the next question appears automatically on the screen. Several questions allowing write-in responses, had the write-in information coded into either new unique categories, or to a listed category if the write-in information duplicated a listed category. Where possible (for example in the categories of occupation, industry, diseases), the coding followed either the standard classification systems as used in the Census of the Population or in other Statistics Canada Surveys such as th Health and Activity Limitation Survey and General Social Survey—cycle 6.

National Population Health Survey (NPHS)

Item	Description
Cleaning operations (edit and imputation)	Editing is performed on-line in the CAI application during data collection. It is not possible to enter out-of-range values and flow errors are controlled through the use of CAI. Invalid values cannot be entered and the correct question paths are automatically followed. For example, CAI ensured that questions that did not apply to the respondent were not asked. In other situations, warning messages were invoked, but no corrective action was taken (for example, if an interviewer entered contradictory responses between questions). Because no corrective action was taken in such instances, edits were developed to be performed after data collection at head office. Inconsistencies were usually corrected by setting one or both of the variables in question to "not stated." No imputation was performed.
Weighting procedures	The principle behind estimation in a probability sample such as the NPHS is that each person in the sample "represents," besides himself or herself, several other persons not in the sample. For example, in a random 2% sample of the population, each person in the sample represents 50 persons in the population. In the terminology used here, it can be said that each person has a weight of 50. The weighting phase is a step which calculates, what the associated weight is for each person. This weight appears on the micro-data file, and must be used to derive meaningful estimates from the survey. For example, if the number of individuals who smoke daily is to be estimated, it is done by selecting the records referring to those individuals in the sample having that characteristic and summing the weights entered on those records. Details of the method used to calculate these weights are presented in NPHS Micro-data Users Manual.

National Population Health Survey (NPHS)

Item	Description
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC). Standard Occupational Classification (SOC). International Classification of Diseases, 9th Revision (ICD-9). Census of the Population.
Coding documentation used	International Classification of Diseases, 9th Revision (ICD-9). Several questions allowing write-in responses had the write-in information coded into either new unique categories, or to a listed category if the write-in information duplicated a listed category. Where possible (for example, in the categories of occupation, industry and diseases), the coding followed either the standard classification systems as used in the Census of the Population or in other Statistics Canada surveys such as the Health and Activity Limitation Survey and General Social Survey—cycle 6.

National Population Health Survey (NPHS)

Item	Description
Response rate	The core household response rate at the Canada level was **94.3%**. The core selected person response rate for NPHS was **98.7%** at the Canada level, and ranged from 93.8% in Quebec to 99.3% in New Brunswick and Alberta. The response rate for household RDD was **80.0%**; for selected persons, excluding RDD—Child, **95.6%**; and for selected persons, RDD—Child only, **98.2%**. The overall response rate, core plus RDD, was **82.6%** for households and **95.6%** for selected persons, excluding RDD-Child.
Response rate unit	Households and individuals.
Variable respons rate	The response rate of reporting of core statistical data items varies by item.
Estimation procedures	The survey produces estimates based on information collected from and about a sample of individuals. Since it is an unavoidable fact that estimates from a sample survey are subject to sampling error, sound statistical practice calls for researchers to provide users with some indication of the magnitude of this sampling error. The basis for measuring the potential size of sampling errors is the standard error of the estimates derived from survey results. However, because of the large variety of estimates that can be produced from a survey, the standard error of an estimate is usually expressed relative to the estimate to which it pertains. This resulting measure, known as the coefficient of variation (C.V.) of an estimate, is obtained by dividing the standard error of the estimate by the estimate itself and is expressed as a percentage of the estimate.

National Population Health Survey (NPHS)

Item	Description
Rounding guidelines	Estimates in the main body of a statistical table are rounded to the nearest hundred units using the normal rounding technique. If the first or only digit dropped is zero to four, the last digit retained is not changed. If the first or only digit dropped is five to nine, the last digit retained is raised by one. Marginal sub-totals and totals in statistical tables are derived from their corresponding unrounded components and then are rounded themselves to the nearest 100 units using normal rounding procedures. Averages, proportions, rates and percentages are computed fro unrounded components, such as numerators and/or denominators, and then are rounded themselves to one decimal using normal rounding methods. In normal rounding to a single digit, if the final or only digit dropped is zero to four, the last digit retained is not changed. If the first or only digit dropped is five to nine, the last digit retained is increased by one. Sums and differences of aggregates (or ratios) are derived from their corresponding unrounded components and then are rounded themselves to the nearest 100 units (or the nearest one decimal) using normal rounding. Under no circumstances are unrounded estimates, published or otherwise, released. Unrounded estimates imply greater precision than actually exists.

National Population Health Survey (NPHS)

Item	Description
Sampling errors	The sampling error is the difference between the estimate derived from a sample and the result that would have been obtained from a census. This error has been estimated; unreliable data have not been published and those that should be used with caution are properly identified
Non-sampling errors	Non-sampling errors include errors due to a difference between the target population and the sample population, non-response, response and processing. They are more difficult to identify and measure than sampling errors. Errors which are not related to sampling may occur at almost every phase of a survey operation. Interviewers may misunderstand instructions, respondents may make errors in answering questions, the answers may be incorrectly entered on the questionnaire and errors may be introduced in the processing and tabulation of the data. These are all examples of non-sampling errors. Interviewers are instructed to make all reasonable attempts to obtain NPHS interviews with members of eligible households. For individuals who at first refuse to participate, a letter is sent from the regional offic stressing the importance of the survey and requesting the household's cooperation. This is followed by a second call (or visit) from the interviewer. For cases in which the timing of the interviewer's call (or visit) is inconvenient, an appointment is arranged to call back at a more convenient time. For cases in which there is no one home, numerous callbacks are made. Under no circumstances are sample dwellings replaced by other dwellings for reasons of non-response. Each quarter, after all attempts to obtain interviews have been made, a small number of non-responding households remain. Actions have been taken to reduce non-sampling errors to a minimum. More information on these actions and on the subject of data quality can be found in the NPHS Public Use Micro-data Documentation, available from Health Statistics Division.

National Population Health Survey (NPHS)

Item	Description
Suppression and other confidentiality restrictions	Data relating to fewer than 30 respondents in a given cell are not released under any circumstances. Data are suppressed following the guidelines outlined in the table below.
Coefficients of variations	In order to provide a means of assessing the quality of tabulated estimates, Statistics Canada has produced a set of Approximate Sampling Variability Tables (commonly referred to as "C.V. Tables") for the NPHS. These tables can be used to obtain approximate coefficients of variation for categorical-type estimates and proportions. Before releasing and/or publishing estimates the number of sampled respondents who contribute to the calculation of the estimate must be determined. If this number is less than 30, the weighted estimate should not be released regardless of the value of the coefficient of variation for this estimate. For weighted estimates based on sample sizes of 30 or more, users should determine the coefficient of variation of the rounded estimate and follow the guidelines below. The sampling variability guidelines for NPHS are provided in the table below.

National Population Health Survey (NPHS)

National Population Health Survey Sampling Variability Guidelines

Type of estimate	C.V. (in %)	Guideline
1. Acceptable	0.0–16.5	Estimates can be considered for general unrestricted release. Requires no special notation.
2. Marginal	16.6–33.3	Estimates can be considered for general unrestricted release but should be accompanied by a warning cautioning subsequent users of the high sampling variability associated with the estimates. Such estimates should be identified by the letter M (or in some other similar fashion).
3. Unacceptable	Greater than 33.4	Statistics Canada recommends not releasing estimates of unacceptable quality. However, if the user chooses to do so, then estimates should be flagged with the letter U (or in some other fashion) and the following warning should accompany the estimates: "The user is advised that …(specify the data)… do not meet Statistics Canada's quality standards for this statistical program. Conclusions based on these dat will be unreliable and most likely invalid. These data and any consequent findings should not be published. If the user chooses to publish these data or findings then this disclaimer must be published with the data."

Health and Activity Limitation Survey (HALS)

Overview of the health and activity limitation survey database

The Health and Activity Limitation Survey (HALS) was instituted in 1986 at Statistics Canada as a post-censal survey used to identify the numbers and distribution of persons with disabilities in Canada residing in households and in health related non-penal institutions and the barriers face by them. HALS was conducted in 1986 and 1991.

HALS was designed to collect data for a national database on disability.

Beginning with the 1986 Census of Population, two questions were added to the Census form to identify the population that experienced some activity limitation or that had a long-term disability or handicap.

Interviews were conducted, with a sample of selected individuals aged 15 and older who answered "Yes" to questions 18 and 19. A sample of individuals who answered "No" to questions 18 and 19 or who did not answer these questions was also selected. Approximately 5% converted from a "No" to a "Yes."

Interviews for selected individuals aged 14 and younger were conducted mainly by proxy. Two questionnaires were used: one for adults, 15 years of age and over, and one for children, under 15 years of age.

HALS is divided into two separate components:

- households—individuals residing in private households
- institutions—individuals residing in health-related, non-penal institutions

Health and Activity Limitation Survey (HALS)

The following table provides the information elements and descriptions of the items included in the HALS—Households component of the *Health Indicators* database.

Item	Description
Statistical activity or survey name	Health and Activity Limitation Survey—Households, 1986.
Characteristic	This is a post-censal survey conducted on individuals residing in households in Canada, who were pre-identified in the Census as having an activity limitation or long-term disability. HALS identified barriers faced by these individuals with disabilities. There are two separate questionnaires: • one for children, under 15 years of age • one for adults, 15 years of age and over
Purpose	HALS was developed to provide, in a national database, the number and distribution of disabled persons in Canada, according to the nature and severity of disability, and the barriers faced by them in such areas as housing, employment, transportation, education and community support. In Canada, the primary use of the data is statistical, such as in prevalence of disability and projections, demographic trend analyses and research. The data are used extensively by the research community and other health professionals.
Name of sponsors	N/A
Clients	The major clients for HALS data are: • Health Canada • provincial health departments • statistical departments • research organizations • hospitals

Health and Activity Limitation Survey (HALS)

Item	Description
Type of statistical activity	This is a direct sample survey.
Type of survey	This is a cross-sectional survey.
Reference period	The reference period is fall 1986.
Frequency of the survey	Every five years.
Target population	Individuals with disabilities residing in private households.
Population size	3,070,000
Statistical units	Individuals.
Sample size	200,000
Geographic coverage	All Canadian provinces and territories are included.
Coverage—Standard classification	Standard Geographical Code (SGC), census division, census sub-division.

Health and Activity Limitation Survey (HALS)

Item	Description
Main topics and variables	The main topic is individuals residing in households who report activity limitation or long-term disability, according to the nature and severity of disability, and the barriers they face in such areas as housing, employment, transportation, education and community support. The following information is reported by: 1. Children with disabilities under 15 years of age living in private households: • statistical profiles, by age, sex and disability-related characteristics 2. Persons with disabilities 15 years and over, living in private households: • statistical profiles, by socio-economic and disability related characteristics

Health and Activity Limitation Survey (HALS)

Main topics and variables (continued)	3. Persons with disabilities: • income related to disability and out-of-pocket expenses related to health problem, by type of expense • requiring or using special aids and assistive devices, by age group, sex and by type of special aid or device • having activity limitations, by age group, sex and by type of activity limitation • barriers to local transportation, by type of service and by type of problems using public transportation syste • requiring special modification to accommodation, by type of special modification • aged 15 to 64, by sex, by labour force status • aged 15 to 64, by education-related issues Information concerning specific variables is available from Statistics Canada.

Health and Activity Limitation Survey (HALS)

Item	Description
Survey frame or frame sources	1986 Census of Population.
Collection methods	Face-to-face collection recorded on paper.
Collection period	August to October 1986.
Overview of processing system	Questions 18 and 19 on the Census 2B questionnaire were included in the 1986 Census of Population to identify the population that experienced some activity limitation or that had a long-term disability or handicap. Interviews were conducted, by Statistics Canada, with a sample of selected individuals aged 15 and older who answered “Yes” to questions 18 and 19. A sample of individuals who answered “No” to questions 18 and 19 or who did not answer these questions was also selected. Approximately 5% converted from a “No” to a “Yes.” Interviews for selected individuals aged 14 and younger were conducted mainly by proxy. Two questionnaires were used: one for adults 15 years and over and one for children under 15 years of age. Completed questionnaires were returned to Statistics Canada for data capture and processing.

Health and Activity Limitation Survey (HALS)

Item	Description
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC). International Classification of Diseases, 9th Revision (ICD-9).
Coding documentation used	International Classification of Diseases, 9th Revision (ICD-9).

Health and Activity Limitation Survey (HALS)

Item	Description
Variable respons rate	The response rate of reporting of core statistical data items varies by item.
Estimation procedures	Post-stratification methods were employed for the modification of the design weights, using the 1986 Census of Population results.
Sampling errors	The sampling error is the difference between the estimate derived from a sample and the result that would have been obtained from a census. This error has been estimated; unreliable data have not been published and those that should be used with caution are properly identified.
Non-sampling errors	Non-sampling errors include errors due to a difference between the target population and the sample population, non-response, response and processing. They are more difficult to identify and measure than sampling errors. Actions have been taken to reduce these errors to a minimum. More information on these actions and on the subject of data quality can be found in the publication available from Household Surveys Division, Statistics Canada.

Health and Activity Limitation Survey (HALS)

The following table provides the information elements and descriptions of the items included in the HALS—Institutions 1986 component of the *Health Indicators* database.

Item	Description
Statistical activity or survey name	Health and Activity Limitation Survey—Institutions, 1986.
Characteristic	This is a post-censal survey conducted on individuals residing in health related, non-penal institutions who were pre-identified in the Census as having an activity limitation or a long-term disability. HALS identified barriers faced by these individuals with disabilities.
Purpose	HALS was developed to provide, in a national database, the number and distribution of disabled persons in Canada, according to the nature and severity of disability, and the barriers faced by them. In Canada, the primary use of the data is statistical, such as in prevalence of disability and projections, demographic trend analyses and research. The data are used extensively by the research community and other health professionals.
Name of sponsors	N/A
Clients	The major clients for HALS data are: • Health Canada • provincial health departments • statistical departments • research organizations • hospitals

Health and Activity Limitation Survey (HALS)

Item	Description
Type of statistical activity	This is a direct sample survey.
Type of survey	This is a cross-sectional survey.
Reference period	The reference period is March 1987.
Frequency of the survey	Every five years.
Target population	Individuals residing in health-related, non-penal institutions for six months or longer.
Population size	250,000
Statistical units	Individuals.
Sample size	18,000
Geographic coverage	All Canadian provinces and territories are included.
Coverage—Standard classification	Standard Geographical Code (SGC). International Classification of Diseases, 9th Revision (ICD-9).

Health and Activity Limitation Survey (HALS)

Item	Description
Main topics and variables	Disabled persons living in health related institutions report the following information: • statistical profiles, by age, sex and disability related characteristics • out-of-pocket expenses related to health problem, by type of expense • special aids and assistive devices, by age group, sex and by type of special aid or device • activity limitations, by age group, sex and by type of activity limitation • barriers to local transportation, by type of service and by type of problems using public transportation syste • special modification to accommodation, by type of special modification • aged 15 to 64, by sex, by labour force status • aged 15 to 64, by education-related issues Information concerning specific variables is available from Health Statistics Division, Statistics Canada.

Health and Activity Limitation Survey (HALS)

Item	Description
Survey frame or frame sources	1986 Census of Population
Collection methods	100% face-to-face collection recorded on paper.
Collection period	March to April 1987.
Sample design and procedures	The 1986 Census of Population provided a list of institutions and from this list, six types were chosen for inclusion in the Health and Activity Limitation Survey (HALS): • nursing homes • residences for senior citizens • hospitals: general, maternity, etc. • chronic care hospitals • psychiatric institutions • treatment centres and institutions for persons with physical disabilities A sample of institutions was selected based on type and by size—the number of permanent residents at the time of the 1986 Census. Within each selected institution, a sample of residents was chosen based on a listing provided by the institution. The preferred collection method was a personal interview; a proxy interview was conducted for all selected individuals aged 14 and under. Two questionnaires were used: one for adults 15 years of age and over and a second for children 14 years of age and under.

Health and Activity Limitation Survey (HALS)

Item	Description
Cleaning operations (edit and imputation)	N/A
Weighting procedures	Weights are assigned to each record. These weights when summed, add to the total institutional population. The weighting is based on the sample design with adjustments for non-response.
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC). International Classification of Diseases, 9th Revision (ICD-9).
Coding documentation used	International Classification of Diseases, 9th Revision (ICD-9).

Health and Activity Limitation Survey (HALS)

Item	Description
Response rate	97%
Response rate unit	Individuals
Response rate weighting	N/A
Variable respons rate	The response rate of reporting core statistical data varies by item.
Estimation procedures	Post-stratification methods were employed for the modification of the design weights, using the 1986 Census results.
Sampling errors	The sampling error is the difference between the estimate derived from a sample and the result that would have been obtained from a census. This error has been estimated; unreliable data have not been published and those that should be used with caution are properly identified. When the sampling error is between 16.5% and 33.3%, the corresponding estimate is accompanied by the symbol "*" in a table. Such estimates should be used with caution. Finally, all estimates with a sampling error of less than 16.5% can be used without restriction.
Non-sampling errors	All other types of errors (observation, response, processing and non-response errors) are called non-sampling errors. Identifying and evaluating the importance of many of these errors can be difficult. Observation errors arise when there is a difference between the target population and the sample population. Observation errors should not have a significant influence on the HALS data. All statistical surveys are susceptible to a certain percentage of non-response among the selected sample. With respect to HALS, th response rate (97%) compares favourably with the rate generally observed for this type of survey. In addition, various methods have been used to reduce the bias caused by any total non-responses, notably by adjusting the data to reflect the distribution of certain demographic characteristics obtained by the census. As well, response rates were higher for most specific questions. In tables non-responses appear in the column labelled: "Unknown" or "Not Stated." More information on these actions and on the subject of data quality can be found in HALS publications.

Health and Activity Limitation Survey (HALS)

The following table provides the information elements and descriptions of the items included in the HALS—Households 1991 component of the *Health Indicators* database.

Item	Description
Statistical activity or survey name	Health and Activity Limitation Survey—Households, 1991.
Characteristic	This is a post-censal survey conducted on individuals residing in households in Canada, who were pre-identified in the Census as having an activity limitation or long-term disability. HALS identified barriers faced by these individuals with disabilities. There are two separate questionnaires: • one for children, under 15 years of age • one for adults, 15 years of age and over
Purpose	HALS was developed to record, in a national database, the number and distribution of disabled persons in Canada, according to the nature and severity of disability, and the barriers faced by them in such areas as housing, employment, transportation, education and community support. In Canada, the primary use of the data is statistical, such as in prevalence of disability and projections, demographic trend analyses and research. The data are used extensively by the research community and other health professionals.
Name of sponsors	N/A
Clients	The major clients for HALS data are: • Health Canada • provincial health departments • statistical departments • research organizations • hospitals

Health and Activity Limitation Survey (HALS)

Item	Description
Type of statistical activity	This is a direct sample survey.
Type of survey	This is a cross-sectional survey.
Reference period	The reference period is fall 1991.
Frequency of the survey	Every five years.
Target population	Individuals with disabilities residing in private households.
Population size	3,922,000
Statistical units	Individuals.
Sample size	150,000
Geographic coverage	All Canadian provinces and territories are included.
Coverage—Standard classification	Standard Geographical Code (SGC).

Health and Activity Limitation Survey (HALS)

Item	Description
Main topics and variables	The main topic is individuals residing households who report activity limitation or long term disability, according to the nature and severity of disability, and the barriers they face in such areas as housing, employment, transportation, education and community support. The following information is reported by: 1. Children with disabilities under 15 years of age living in private households: • statistical profiles, by age, sex and disability-related characteristics 2. Persons with disabilities 15 years and over, living in private households: • statistical profiles, by socio-economic and disability related characteristics

Health and Activity Limitation Survey (HALS)

Item	Description
Main topics and variables (continued)	3. Persons with disabilities: • income related to disability and out-of-pocket expenses related to health problem, by type of expense • special aids and assistive devices, by age group, sex and by type of special aid or device; • activity limitations, by age group, sex and by type of activity limitation • barriers to local transportation, by type of service and by type of problems using public transportation syste • requiring special modification to accommodation, by type of special modification • aged 15 to 64, by sex, by labour force status • aged 15 to 64, by education-related issues Information concerning specific variables is available from HSD, Statistics Canada.

Health and Activity Limitation Survey (HALS)

Item	Description
Survey frame or frame sources	1991 Census of Population.
Collection methods	Most interviews were conducted by telephone. In special cases, personal interviews were carried out.
Collection period	August to October 1991.
Overview of processing system	Questions 18 and 19 on the Census 2B questionnaire were included in the 1991 Census of Population to identify the population that experienced some activity limitation or that had a long-term disability or handicap. Interviews were conducted, by Statistics Canada, with a sample of selected individuals aged 15 and older who answered "Yes" to questions 18 and 19. A sample of individuals who answered "No" to questions 18 and 19 or who did not answer these questions was also selected. Approximately 5% converted from a "No" to a "Yes." Interviews for selected individuals aged 14 and younger were conducted mainly by proxy. Two questionnaires were used: one for adults, 15 years of age and over and a second for children, under 15 years of age. Completed questionnaires were returned to Statistics Canada for data capture and processing.

Health and Activity Limitation Survey (HALS)

Item	Description
Cleaning operations (edit and imputation)	N/A
Weighting procedures	Weights are assigned to each record. These weights when summed, add to the total Canadian population. The weighting is based on the sample design with adjustments for non-response.
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC).
Coding documentation used	International Classification of Diseases, 9th Revision (ICD-9).

Health and Activity Limitation Survey (HALS)

Item	Description
Response rate	96%
Response rate unit	Individuals
Response rate weighting	N/A
Variable respons rate	The response rate of reporting of core statistical data items varies by item.
Estimation procedures	Post-stratification methods were employed for the modification of the design weights, using the 1991 Census of Population results.
Sampling errors	The sampling error is the difference between the estimate derived from a sample and the result that would have been obtained from a census. This error has been estimated; unreliable data have not been published and those that should be used with caution are properly identified.
Non-sampling errors	Non-sampling errors include errors due to a difference between the target population and the sample population, non-response, response and processing and are more difficult to identify and measure. Actions have been taken to reduce these errors to a minimum. More information on these actions and on the subject of data quality can be found in the publication.
Suppression and other confidentiality restrictions	N/A
Coefficients of variations	N/A

Health and Activity Limitation Survey (HALS)

The following table provides the information elements and descriptions of the items included in the HALS—Institutions 1991 component of the *Health Indicators* database.

Item	Description
Statistical activity or survey name	Health and Activity Limitation Survey—Institutions, 1991.
Characteristic	This is a post-censal survey conducted on individuals residing in health related, non-penal institutions. HALS identified barriers face by these individuals with disabilities.
Purpose	HALS was developed to provide, in a national database, the number and distribution of disabled persons in Canada, according to the nature and severity of disability, and the barriers faced by them. In Canada, the primary use of the data is statistical, such as in prevalence of disability and projections, demographic trend analyses and research. The data are used extensively by the research community and other health professionals.
Name of sponsors	N/A
Clients	The major clients for HALS data are: • Health Canada • provincial health departments • statistical departments • research organizations • hospitals

Health and Activity Limitation Survey (HALS)

Item	Description
Type of statistical activity	This is a direct sample survey.
Type of survey	This is a cross-sectional survey.
Reference period	The reference period is January 1992.
Frequency of the survey	Every five years.
Target population	Individuals residing in health-related, non-penal institutions for six months or longer.
Population size	262,000
Statistical units	Individuals.
Sample size	18,000
Geographic coverage	All Canadian provinces and territories are included.
Coverage—Standard classification	Standard Geographical Code (SGC).

Health and Activity Limitation Survey (HALS)

Item	Description
Main topics and variables	Disabled persons living in health related institutions report the following information: • statistical profiles, by age, sex and disability related characteristics • out-of-pocket expenses related to health problem, by type of expense • special aids and assistive devices, by age group, sex and by type of special aid or device • activity limitations, by age group, sex and by type of activity limitation • barriers to local transportation, by type of service and by type of problems using public transportation syste • special modification to accommodation, by type of special modification • aged 15 to 64, by sex, by labour force status • aged 15 to 64, by education-related issues Information concerning specific variables is available from Health Statistics Division, Statistics Canada.

Health and Activity Limitation Survey (HALS)

Item	Description
Survey frame or frame sources	1991 Census of Population.
Collection methods	Face-to-face collection recorded on paper.
Collection period	January to March 1992.
Design and procedures	The 1991 Census of Population provided a list of institutions and from this list, six types were chosen for inclusion in the Health and Activity Limitation Survey (HALS): • nursing homes • residences for senior citizens • hospitals: general, maternity, etc. • chronic care hospitals • psychiatric institutions • treatment centres and institutions for persons with physical disabililities A sample of institutions was selected based on type and by size (the number of permanent residents at the time of the 1991 Census). Within each selected institution, a sample of residents was selected based on a listing provided by the institution. The preferred collection method was a personal interview. One questionnaire was used: that for adults 15 years and over.

Health and Activity Limitation Survey (HALS)

Item	Description
Cleaning operations (edit and imputation)	N/A
Weighting procedures	Weights are assigned to each record. These weights when summed, add to the total institutional population. The weighting is based on the sample design with adjustments for non-response.
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC).
Coding documentation used	International Classification of Diseases, 9th Revision (ICD-9).

Health and Activity Limitation Survey (HALS)

Item	Description
Response rate	96%
Response rate unit	Individuals.
Response rate weighting	N\A
Variable respons rate	The response rate of reporting of core statistical data items varies by item.
Estimation procedures	Post-stratification methods were employed for the modification of the design weights, using the 1991 Census of Population results.
Sampling errors	The sampling error is the difference between the estimate derived from a sample and the result that would have been obtained from a census. This error has been estimated; unreliable data have not been published and those that should be used with caution are properly identified When the sampling error is between 16.5% and 33.3%, the corresponding estimate is accompanied by the symbol "*" in a table. Such estimates should be used with caution. Finally, all estimates with a sampling error of less than 16.5% can be used without restriction.

Health and Activity Limitation Survey (HALS)

Item	Description
Non-sampling errors	All other types of errors (observation, response, processing and non-response errors) are called non-sampling errors. Identifying and evaluating the importance of many of these errors can be difficult. Observation errors arise when there is a difference between the target population and the sample population. Observation errors should not have a significant influence on the HALS data. All statistical surveys are susceptible to a certain percentage of non-response among the selected sample. With respect to HALS, the response rate (97%) compares favourably with the rate generally observed for this type of survey. In addition, various methods have been used to reduce the bias caused by any total non-responses, notably by adjusting the data to reflect the distribution of certain demographic characteristics obtained by the census. As well, response rates were higher for most specific questions. In tables, non-responses appear in the column labeled: “Unknown” or “Not Stated.” More information on these actions and on the subject of data quality can be found in HALS publications.
Suppression and other confidentiality restrictions	N/A
Preliminary estimates released	N/A
Coefficients of variations	N/A

General Social Survey (GSS)

Overview of the General Social Survey database

The General Social Survey (GSS) was initiated by Statistics Canada in order to reduce gaps in the statistical information system, particularly in relation to socio-economic trends. Many of these gaps could not be filled through existing data sources because of the range or periodicity of the information required, or the lack of capacity of relevant vehicles.

The GSS was conducted by Housing, Family and Social Statistics Division, Statistics Canada.

The GSS has two principal objectives:

- to gather data on trends in Canadian society over time
- to provide information on specific policy issues of interest

To meet these objectives, the GSS was established as a continuing program with a single survey cycle each year.

The GSS has three components: Core, Focus and Classification.

Core

Core content is directed primarily at monitoring long-term social trends by measuring temporal changes in living conditions and well-being. Main topics within Core content include health, education, social environment and personal risk. A single cycle covers one of these specific topics and recurs on a periodic basis.

The Core content of the cycles in 1985, 1991 and 1996, relevant to *Health Indicators*, is health.

General Social Survey (GSS)

Core (continued)	Core content is aimed at meeting the second objective of the GSS, namely to provide information touching directly on a specific policy issue or social problem such as youth unemployment. The Core content for the 1985 cycle was on social support and the elderly. In 1991, the Core content was health status and occupational health, and in 1996, the Core content was social and community support.
Classification	Classification content provides the means of delineating population groups and is used in the analysis of Core and Focus data. Examples of classification variables are age, sex, education and income.

General Social Survey (GSS)

The following table provides the information elements and descriptions of the items included in the GSS, 1985 component of the *Health Indicators* database.

Item	Description
Statistical activity or survey name	General Social Survey—1985. (Cycle 1)
Characteristic	This quinquennial survey monitors changes in the health of Canadians and examines social support related to persons 55 years and older, covering their lifestyle, health problems, health services utilization, active kinship, social activity, participation, etc.
Purpose	This survey is used to guide policy formation, to evaluate the effectiveness of health programs, to act as a national baseline against which local area health data can be compared and to stimulate further in depth research.
Clients	The major clients for GSS data are planners, policy makers, scholars and researchers in: • federal, provincial and local governments • universities • agencies and associations representing individuals • corporations associated with the health care field
Type of statistical activity	This is a direct sample survey.
Type of survey	This is a cross-sectional survey.

General Social Survey (GSS)

Item	Description
Reference period	The reference period varies; it may be one week or greater.
Frequency of the survey	This is an annual survey with specific subject areas such as health, recurring quinquennially.
Target population	All persons 15 years of age and over, living in the 10 provinces of Canada, excluding full-time residents living in institutions.
Population size	19,668,000
Statistical units	Individuals.
Sample size	11,200 aged 15 to 64, 3,130 persons aged 65 and over
Geographic coverage	Provinces only.
Coverage—Standard classification	Standard Geographical Code (SGC). Standard Industrial Classification (SIC-E 1980) for all industries.

General Social Survey (GSS)

Item	Description
Main topics and variables	The main topics for persons 15 years and over by age group and sex are: • quality of life and social status, by lifestyle habits, education, labour force status, occupation and household income • current health status by prevalence of major health problems and chronic diseases, by various risk factors or health measures • health care services utilization, by type of health professional, by main reason for consultation, household income • self-rated health status, reported happiness with life, satisfaction with health, and socio-economic characteristics • short-term or long-term activity limitation (disability), by nature and degree of activity limitations (disability), and socio-economic characteristics The main topics for persons 55 years and older by age group and sex are: • active kinship and close friendship ties and social support networks, by primary potential social support group structures, and living arrangement • receiving social support, by living arrangement, age group, sex and type of social support • providing social support, by self-rated health status, and type of social support • social activity participation by type of social activity

General Social Survey (GSS)

Item	Description
Survey frame or frame sources	Random Digit Dialing (RDD) for the 10 provinces for those aged 15 to 64 years; Labour Force Survey Frame for 65 years and over.
Collection methods	28% face-to-face collection recorded on paper; 72% by telephone, recorded on paper.
Collection period	September and October 1985.
Design and procedures	Persons 15 to 64 years of age were selected using RDD of telephone numbers and then interviewed by phone. Persons 65 years of age and older were selected from an earlier Labour Force Survey sample and interviewed face-to-face.

General Social Survey (GSS)

Item	Description
Cleaning operations (edit and imputation)	Data for cycle 1 were collected using Computer Assisted Telephone Interviewing (CATI) and Computer Assisted Personal Interviewing (CAPI) using Computer Assisted Survey Execution System software (CASES). All responses entered were subject to built-in edits during th interview. The head office edit system performed the same kind of checks as in the CATI system as well as more complex verifications.
Weighting procedures	Each cycle of the GSS is viewed as being composed of independent surveys—one collection per month. Therefore wherever possible, each monthly survey is weighted independently so that data collected for a particular month would contribute equally to the estimates. Where the sample size for a particular month was not large enough, records for two or more months were grouped at certain stages of the weighting process.
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC). Standard Industrial Classification (SIC) CODING OF MICRO-DATA SIC-E 1980, three-digit. Standard Occupational Classification (SOC) CODING OF MICRO-DATA, SOC 1980, three-digit. International Classification of Diseases, 9th Revision (ICD-9).
Coding documentation used	International Classification of Diseases, 9th Revision (ICD-9).

General Social Survey (GSS)

Item	Description
Response rate	85%
Response rate unit	Individuals..
Response rate weighting	N/A
Variable respons rate	The response rate of reporting of core statistical data items varies by item.
Estimation procedures	N/A
Sampling errors	By using the standard error from the sample data and ignoring the effects of non-sampling error, confidence intervals for estimates may be obtained under the assumption that the estimates are normally distributed about th true population value. The chances are about 68 out of 100 that the difference would be less than one standard error, 95 out of 100 that the difference would be less than two standard errors and it is virtually certain the differences would be less than three standard errors.
Non-sampling errors	Non-sampling error was reduced through quality assurance and adjustment for total non-response. Quality assurance measures were implemented at each step of the data collection and processing cycle to monitor the quality of the data. These measures included the use of highly skilled interviewers, extensive training of the interviewers, observation of interviews to detect questionnaire design problems, procedures to ensure that data capture errors were minimized and coding and editing quality checks to verify the processing logic.
Suppression and other confidentiality restrictions	When the number of respondents to the weighted estimate is less than 15, the weighted estimate should not be released regardless of the value of the approximate coefficient of variation.

General Social Survey (GSS)

The following table provides the information elements and descriptions of the items included in the GSS 1991 component of the *Health Indicators* database.

Item	Description
Statistical activity or survey name	General Social Survey—1991.
Characteristic	This quinquennial survey monitors changes in the health of Canadians. The focus content covers health status indicators and occupational health.
Purpose	The purpose of the survey is to gather data with a degree of regularity on social trends in order to monitor changes in Canadian society, and to provide information on specific policy issues of current and emerging issues.
Clients	The main clients of the survey are planners, policy makers, scholars and researchers in: • all levels of government • universities • agencies and associations representing individuals or corporations associated with the health care field.

General Social Survey (GSS)

Item	Description
Type of statistical activity	This is a direct sample survey.
Type of survey	This is a cross-sectional survey.
Reference period	The reference varies; it may be one week or greater.
Frequency of the survey	Every five years.
Target population	All persons 15 years of age and older living in the 10 provinces of Canada, excluding full-time residents of institutions.
Population size	20,980,862
Statistical units	Individuals
Sample size	11,924
Geographic coverage	Provinces only.
Coverage—Standard classification	Standard Geographical Code (SGC). Standard Industrial Classification–E, 1980, all industries, three-digit. Standard Occupational Classification (SOC).

General Social Survey (GSS)

Item	Description
Main topics and variables	The main topics for cycle 6 of the GSS are: • disability, short and long term, measures • emotional health measures and satisfaction • health care utilization • health status indicators • life style and risk factors • occupational health measures Variables included in cycle 6 of GSS are: • health status, by prevalence of major health problem and by selected health measures • short-term activity limitation because of disability, by type • health care service utilization, by type of health professional • health care delays, by type of care • health care delays, by duration • health status indicators, by type • smoking, by type of smoker • alcohol use, by type of drinker and weekly volume • health status, by health risk factors • activity limitation (long term), by nature • main activity, by selected characteristics

General Social Survey (GSS)

Main topics and variables (continued)	Health status, health care utilization, lifestyle risk factors by: • age, sex, marital status • household characteristics • country of birth • first language • home language • education • religious background • ethnic background • personal income by sources of retirement such as pension, old ag security, disability • household income and number of contributors

General Social Survey (GSS)

Item	Description
Survey frame or frame sources	Random Digit Dialing (RDD) for all telephone numbers in 10 provinces.
Collection methods	100% by telephone.
Collection period	January to December 1991.
Design and procedures	Persons 15 years of age and older were selected using RDD of telephone numbers and then interviewed by phone.
Cleaning operations (edit and imputation).	Data for Cycle 6 were collected using Computer Assisted Telephone Interviewing (CATI) and using Computer Assisted Survey Execution System software (CASES). All responses entered were subject to built-in edits during the interview. The head office edit system performed the same kind of checks as in the CATI system as well as verifications of greater complexity.
Weighting procedures.	Each cycle of the GSS is viewed as being composed of independent surveys—one collection per month. Therefore, wherever possible, each monthly survey is weighted independently so that data collected for a particular month would contribute equally to the estimates. Where the sample size for a particular month was not large enough, records for two or more months were grouped at certain stages of the weighting process.
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC). Standard Industrial Classification (SIC—E), 1980, all industries, three-digit. Standard Occupational Classification(SOC)–1980, four-digit.
Coding documentation used	N/A

General Social Survey (GSS)

Item	Description
Response rate	80%
Response rate unit	Individuals.
Sampling errors	By using the standard error from the sample data and ignoring the effects of non-sampling error, confidence intervals for estimates may be obtained under the assumption that the estimates are normally distributed about th true population value. The chances are about 68 out of 100 that the difference would be less than one standard error, 95 out of 100 that the difference would be less than two standard errors and it is virtually certain the differences would be less than three standard errors.
Non-sampling errors	Non-sampling error was reduced through quality assurance and adjustment for total non-response. Quality assurance measures were implemented at each step of the data collection and processing cycle to monitor the quality of the data. These measures included the use of highly skilled interviewers, extensive training of the interviewers, observation of interviews to detect questionnaire design problems, procedures to ensure that data capture errors were minimized and coding and editing quality checks to verify the processing logic.
Suppression and other confidentiality restrictions	When the number of respondents to the weighted estimate is less than 15, the weighted estimate should not be released regardless of the value of the approximate coefficient of variation.

General Social Survey (GSS)

The following table provides the information elements and descriptions of the items included in the GSS 1996 component of the *Health Indicators* database.

Item	Description
Statistical activity or survey name	General Social Survey—1996.
Characteristic	This quinquennial survey monitors changes in the health of Canadians. The focus content covers health status indicators and occupational health.
Purpose	The purpose of the survey is to gather data with a degree of regularity on social trends in order to monitor changes in Canadian society, and to provide information on specific policy issues of current and emerging issues.
Clients	The main clients of the survey are planners, policy makers, scholars and researchers in: • all levels of government • universities • agencies and associations representing individuals or corporations associated with the health care field

General Social Survey (GSS)

Item	Description
Type of statistical activity	This is a direct sample survey.
Type of survey	This is a cross-sectional survey.
Reference period	The reference varies; it may be one week or greater.
Frequency of the survey	Every five years.
Target population	All persons 15 years of age and older living in the 10 provinces of Canada, excluding full-time residents of institutions.
Population size	23,604,792
Statistical units	Individuals
Sample size	12,756
Geographic coverage	Provinces only
Coverage—Standard classification	Standard Geographical Code (SGC). Standard Industrial Classification (SIC)—E, 1980, all industries, three-digit. Standard Occupational Classification (SOC), 1980.

General Social Survey (GSS)

Item	Description
Main topics and variables	The main topics for cycle 11 of the GSS are • long-term health or physical limitation • temporary difficult time • help received by respondent • help given by respondent • unmet needs (help received by respondent) • impact of help given by respondent • family and closest friend contact • paid and unpaid work • health indicators Variables included in cycle 11 of GSS are: • help received by person by formal/informal care, type of assistance, person or organization (formal/informal care), amount of time • help given by reason, person, activities assisted with • unmet needs by adequacy, amount of help and information • impact of help by type of impact and perception of burden • family and friends by proximity, number and sex • paid and unpaid work, by selected characteristics • long-term activity limitation by nature • tobacco use, amount smoked, type of smoker.

General Social Survey (GSS)

Item	Description
Main topics and variables (continued)	Health status, health care utilization, lifestyle risk factors by: • age, sex, marital status • household characteristics • country of birth • first language • home language • education • religious background • ethnic background • personal income by sources of retirement (such as pension, old age security, disability) • household income and number of contributors

General Social Survey (GSS)

Item	Description
Survey frame or frame sources	RDD with 25% of the regular sample from seniors in the Labour Force Survey rotate outs. Supplemental sample from the Labour Force Survey rotate outs. All telephone numbers in 10 provinces.
Collection methods	100% by telephone.
Collection period	February to December 1996.
Design and procedures	Persons 15 years of age and older were selected RDD of telephone numbers and then interviewed by phone.
Cleaning operations (edit and imputation)	Data for cycle 11 were collected using Computer Assisted Telephone Interviewing (CATI) using Computer Assisted Survey Execution System software (CASES). All responses entered were subject to built-in edits during the interview. The head office edit system performed the same kind of checks as in the CATI system as well as more complex verifications.
Weighting procedures	Each cycle of the GSS is viewed as being composed of independent surveys—one collection per month. Therefore wherever possible, each monthly survey is weighted independently so that data collected for a particular month would contribute equally to the estimates. Where the sample size for a particular month was not large enough, records for two or more months were grouped at certain stages of the weighting process.
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC). Standard Industrial Classification (SIC—E), 1980, all industries, three-digit. Standard Occupational Classification (SOC)—1980, four-digit.
Coding documentation used	N/A

General Social Survey (GSS)

Item	Description
Response rate	85%
Response rate unit	Individuals
Response rate weighting	N/A
Variable respons rate	The response rate of reporting of core statistical data items varies by item.
Estimation procedures	Each monthly collection was weighted separately. Cycle 11 consisted of two parts derived from two independent sources—the RDD households and the LFS households—and it had to be weighted so that the respondents in each part were appropriately represented. They were combined at the very end of the process.
Sampling errors	By using the standard error from the sample data and ignoring the effects of non-sampling error, confidence intervals for estimates may be obtained under the assumption that the estimates are normally distributed about th true population value. The chances are about 68 out of 100 that the difference would be less than one standard error, 95 out of 100 that the difference would be less than two standard errors and it is virtually certain the differences would be less than three standard errors.
Non-sampling errors	Non-sampling error was reduced through quality assurance and adjustment for total non-response. Quality assurance measures were implemented at each step of the data collection and processing cycle to monitor the quality of the data. These measures included the use of highly skilled interviewers, extensive training of the interviewers, observation of interviews to detect questionnaire design problems, procedures to ensure that data capture errors were minimized and coding and editing quality checks to verify the processing logic.
Suppression and other confidentiality restrictions	When the number of respondents to the weighted estimate is less than 15, the weighted estimate should not be released regardless of the value of the approximate coefficient of variation.

General Social Survey (GSS)

Coefficients of variations	Approximate sampling variability tables (unofficial) are included in the Public Use Micro-data File Documentation and User's Guide (12M0011GPE).
For more detailed information	For more detailed information concerning data quality for GSS cycle 11, see Public Use Micro-data File Documentation and User's Guide (12M0011GPE).

Labour Force Survey

The following table provides the information elements and descriptions of the items included in the Labour Force Survey (LFS) component of the *Health Indicators* database.

Item	Description
Statistical activity or survey name	Labour Force Survey
Characteristic	The Labour Force Survey (LFS) is a monthly household sample survey which collects data on the labour market activities of the working age population of Canada. It generates a wide range of estimates relating to the employed, the unemployed, and persons not in labour force.
Purpose	The information obtained in this survey are used to make month-to-month changes in the levels of employment and unemployment in Canada, and to provide key measures to the state of the nation's economy.
Name of sponsors	N/A
Clients	The major clients for LFS data are: • federal, provincial and local governments • industries • manufacturers • labour related associations and agencies • institutions • researchers
Type of statistical activity	This is a direct survey.

Labour Force Survey (LFS)

Item	Description
Type of survey	This is a cross-sectional survey.
Reference period	Usually the week containing the 15th of the month.
Frequency of the survey	The data are collected monthly.
Target population	Population aged 15 years and older, excluding inmates of institutions, full-time members of the Armed Forces and residents of Indian Reserves.
Population size	Approximately 23,352,000.
Statistical units	Individuals.
Sample size	52,000 reporting units (households).
Geographic coverage	Provinces
Coverage—Standard classification	Standard Geographical Code (SGC), census division, census sub-division.

Labour Force Survey (LFS)

Item	Description
Main topics and variables	The main topics in the LFS are: • labour forces: selected seasonally adjusted data and unadjusted data, labour force, employment, family, demographic and geographic characteristics; • labour force characteristics by family status and family composition • labour force, employment and unemployment by industry, occupation class of worker and demographic characteristics • part-time employment by reason and by demographic and job characteristics • employment by number of hours actual or usual by demographic and job characteristics • employment by reason of time and number of hours lost, by demographic and job characteristics • unemployment by type of work sought, methods of job search, reason for leaving last job and activity prior to unemployment, by demographic characteristics • multiple job holders by characteristics of main job and demographic characteristics • job tenure by demographic and job characteristics • duration of unemployment by demographic characteristics • persons not in the labour force by reason for leaving last job, by demographic characteristics • persons not in the labour force, wantin to and available for work, by reason for not looking in reference week, by demographic characteristics • wages by demographic and job characteristics • employees by coverage, by demographic and job characteristic • employees by job permanency, by demographic and job characteristics • employees by workplace size, by demographic and job characteristics • weekly paid and unpaid overtime by demographic and job characteristics

Labour Force Survey (LFS)

Item	Description
Survey frame or frame sources	Labour Force Survey Household Frame.
Collection methods	80% telephone interviews, 20% face-to-fa using CAPI.
Collection period	Monthly
Design and procedures	The Labour Force Survey (LFS) is conducted by Household Surveys Division, Statistics Canada. The LFS is based on a multistage, stratified, clustered, probability, are sample. The sample is divided into six representative parts with one part being replaced each month. The sample represents all persons 15 years of age and over residing in Canada with the exception of inmates of institutions, full-time members of the Armed Forces, and residents of Indian Reserves, the Yukon, and the Northwest Territories. (These exclusions account for less than 3% of the population.)
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC). Standard Occupational Classification (SOC). Standard Industrial Classification (SIC).
Coding documentation used	Standard Geographical Classification (SGC) manual.

Labour Force Survey (LFS)

Item	Description
Response rate	The response rate for LFS is approximately 95%.
Response rate unit	Households
Response rate weighting	(Number of responding households in Employment Insurance region by type, by rotation group / Number of in-scope households in employment insurance region by type of rotation group) x 100.
Estimation procedures	The LFS records are weighted using what can be thought of as a three-stage process. During the first stage, each record is assigned the inverse of the design-sampling ratio which is applicable to the geographic area where the respondent represented by that particular record resides. The second stage involves adjusting the weight assigned in the first stage. This includes an adjustment for non-response and an adjustment for unanticipated population growth in particular small areas selected for the sample (clusters) and an adjustment for the fact that the sample size remains constant at 52,000 households, resulting in a slowly declining sampling ratio as the population grows. In the last stage of weighting, the weights calculated in the first two stages are adjusted to agree with population totals derived from sources independant of the LFS. This agreement is obtained for selected age–sex groups by province and also for the major sub-provincial areas defined for the survey such as economic region (ER), census metropolitan are (CMA), and selected cities.

Labour Force Survey (LFS)

Item	Description
Estimation procedures (continued)	The weighting scheme used by the LFS to perform the last stage of weighting was recently enhanced so that each member of a household gets the same weight. This new procedure is called Integrated Family Weighting. The independently derived population totals are obtained as projections from the annual post-censal estimates of population produced by Demography Division with adjustments to reflect the exclusion described under “Design and Procedures” above. Estimates for cross-classified variables are then derived by the summation of the weights from all respondent records with that particular set of cross-classified characteristics.
Sampling errors	The estimates are based on a national sample of approximately half of one percent of the population. The resulting sampling errors vary according to a number of factors, the most important of which is the size of the estimates. Approximate sampling variability tables and release criteria are in the “Guide to the Labour Force Survey,” which can be found on the Statistics Canada Web site.
Non-sampling errors	Errors unrelated to sampling can occur at almost every stage of a survey. These non-sampling errors range from the respondent misunderstanding the question to errors introduced during processing. Mechanisms to minimize these errors are in place although the final estimates may still be affected to some degree.

Census Survey

The following table provides the information elements and descriptions of the items included in the Census Survey component of the *Health Indicators* database.

Item	Description
Statistical activity or survey name	1996 Census of Population.
Characteristic	The quinquennial Census of Population collects extensive demographic, social, cultural and economic information such as age, sex, marital status, education, ethnic origin, mother tongue, labour force activity, income, and so on. In addition, data are provided on dwelling, family and household chacteristics.
Purpose	Census data are used for a myriad of purposes, such as determining: • representation in Parliament • federal transfer payments to the provinces • the amount of money to be allocated to municipalities • business plans and markets • health care needs and costs • labour markets • human resources development • special employment programs • characteristics of women in labour force • projections for school enrolments • measuring food production • activity limitation and long term disability • the situation of Aboriginal peoples • law enforcement requirements • background information on economic, social, cultural and other activities of Canadian society for news media

Census Survey

Item	Description
Clients	The major clients for census data are: • federal, provincial/territorial and municipal governments • libraries • educational institutions • researchers and academics • private industries researchers • business and labour associations • religious groups • ethnocultural groups • private citizens and public interest groups

Census Survey

Item	Description
Type of statistical activity	This is a direct census survey.
Type of survey	This is a cross-sectional survey.
Reference period	May 14, 1996.
Frequency of the survey	The data are collected every five years.
Target population	Canadian citizens and non-permanent residents.
Population size	28,846,761
Statistical units	All individuals, households, families and dwellings.
Geographic coverage	All Canadian provinces and territories are included.
Coverage—Standard classification	Standard Geographical Code (SGC) 1996. Standard Industrial Classification (SIC) 1980. Standard Occupational Classification (SOC) 1991.

Census Survey

Item	Description
Main topics and variables	The main topics in the census are: • counts and demographic data • ethnic origin • population group • place of birth, citizenship, immigration • language • Aboriginal peoples • schooling • household activities • labour force • income • families and households • housing • institutions and other collectives • disability The number of variables is too extensive to be listed in this documentation. More information concerning the census is available from Statistics Canada. The items that relate to *Health Indicators* are counts used in the calculation of rates, family composition and education levels.

Census Survey

Item	Description
Survey frame or frame sources	Census of Population
Collection methods	Face-to-face collection recorded on paper, 2%; self-completion, drop-off, mail-back recorded on paper, 98%.
Collection period	May 6 to July 31, 1996.
Design and procedures	The census collects basic information such as age, sex, legal marital status, common-law status, household activities, mother tongue, agricultural operator, type of dwelling and dwelling ownership from the total population. Supplementary information, such as education, occupation, labour force activity, activity limitations, disability, mobility, housing stock, income, place of work, mode of transportation, immigration, ethnic origin, official languages, non-official languages, home language, place of birth, citizenship, Aboriginal self-reporting, population group, Indian Band/First Nation affiliation, landed immigrant status, registered Indian status, household activities, and characteristics related to the household, family and dwelling is collected from 20% of the population. The 1996 Census used primarily the self-enumeration method where a census representative dropped off a questionnaire which the respondent completed and returned by mail. In some cases, the canvasser enumeration method was used where the census representative asked the questions and the respondents answered. For a more detailed description of design and procedures, please consult the “Procedures Manual—Mail-back Areas,” Form 41, and the “Procedures Manual—Canvasser,” Form 42. Reference to these and other 1996 Census material may be found in the “Index to Statistics Canada Surveys and Questionnaires, 1996,” Catalogue no. 12F0046XPB.
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC). Standard Occupational Classification (SOC). Standard Industrial Classification (SIC).

Census Survey

Item	Description
Coding documentation used	Standard Geographical Classification (SGC) manual.

Census Survey

Item	Description
Response rate	98–99%
Response rate unit	Household.
Response rate weighting	Unweighted.
Data quality	An assessment of the quality, comparability and limitations of the 1996 Census data is carried out as an integral part of release and dissemination activities. All variables are certified before release by way of a set of brief studies designed to judge the consistency of the data with that of previous censuses and that of alternate data sources. This process is augmented by measures of data quality provided by evaluation studies. The data quality evaluation studies are directed beyond the immediate certification objectives. They provide indications of the quality of the census data from the source of error—coverage, response, non-response, processing and sampling—and of the impact on individual variables. The result of these studies along with the certification analysis, will be integrated into a series of technical reports.
Estimation procedures	The Generalized Least Squares Estimation Procedure (GLSEP) is used to produce the census estimates. The GLSEP reduces the standard errors of the sample estimates and ensures that the estimates agree with known population counts. Weights are calculated at the household level.

University Student Information System (USIS)

The following table provides the information elements and descriptions of the items included in the University Student Information System (USIS)—Enrolment and Degrees Awarded component of the *Health Indicators* database. More detailed information is available from the Education, Culture and Tourism Division in Statistics Canada.

Item	Description
Statistical activity or survey name	University Student Information System (USIS)—Enrolment and Degrees Awarded.
Characteristic	This survey is conducted by Education, Culture and Tourism Division, Statistics Canada. This survey collects annual information from degree-granting universities and affiliated colleges in Canada, highlighting enrolment, degrees/diplomas granted, level, field of study and student characteristics.
Purpose	The information is used for the analysis of the labour force supply, studies of the education system and the participation of special groups such as foreign students and women.
Clients	The major clients for USIS data are: • federal government departments and • provincial departments of higher education • related associations • individual researchers
Type of statistical activity	This is an administrative census.
Type of survey	This is a cross-sectional survey.
Reference period	The reference period is the academic year for enrolment and the calendar year for degrees.

University Student Information System (USIS)

Item	Description
Frequency of the survey	Annual
Target population	All degree-granting institutions.
Population size	N/A
Statistical unit	Degree-granting university.
Sample size	78 institutions
Geographic coverage	Provinces
Coverage—Standard classification	Institution code.
Main topics and variables	The main topics surveyed at universities are: • enrolment and degrees granted • university participation rates • foreign student participation in Canadian education • discipline profile trends • sex distribution of Canadian students and graduates The main variables are: • program information—level of study (undergraduate, graduate, bachelor, masters, doctorate, etc.) • registration status (full- or part-time) • field of study • year of study • duration of program and type of session (for example, semester, quarter, etc.) • student information—age, sex, marital status, mother tongue, citizenship and province of residence

University Student Information System (USIS)

Item	Description
Survey frame or frame sources	Degree-granting institutions.
Collection methods	100% extraction from administrative files fro registrars' offices.
Collection period	The preliminary collection period is from mid-September to mid-October of the survey year while the regular collection period is fro the beginning of November to the end of January of the survey year. The regular enrolment–registration forms are collected from July to the end of January of the survey year. The collection months are: September, October, November, December and January.
Weighting procedures	N/A
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC).
Coding documentation used	University Student Information System (USIS) input manual. University Student Information System (USIS) user guide.

University Student Information System (USIS)

Item	Description
Data quality	Overall, enrolment and degree data are very good. However, certain elements of the data require improvement. Some of these are: • number of interns and residents • current enrolment status and activity of students last year • home province • mother tongue • marital status
Response rate	The response rate for universities is 100%.
Response rate unit	Universities
Response rate weighting	Unweighted
Estimation procedures	Enrolment of full- and part-time undergraduates and full-time community college students by sex were based on participation rates. These estimated participation rates were then applied to the population to arrive at enrolment figures. Unlike undergraduate enrolment, graduation enrolment is not closely related to the size of the population. Estimates of university degrees were made by level and sex. The number of bachelor's and first professional degrees was based on full-time and part-time undergraduate enrolment in the year levels from which students may graduate. Masters degrees were estimated as a percentage of total full- and part-time master's enrolment on year earlier and doctoral degrees as a percentage of full- and part-time PhD. enrolment three years earlier.

Community College Student Information System (CCIS)

The following table provides an overview of the Community College Information Syste (CCIS) component of the *Health Indicators* database. More detailed information is availabl from the Education, Culture and Tourism Division in Statistics Canada.

Item	Description
Statistical activity or survey name	Full- and Part-time Enrolment and Graduates of Community College Information System (CCIS).
Characteristic	This survey is conducted by Education, Culture and Tourism Division; Statistics Canada. It collects annual information from colleges and related institutions in Canada, highlighting enrolment and graduation statistics, data detail by program and student characteristics.
Purpose	The college and related institutions post-secondary enrolment and graduates survey was developed to meet the information needs of a wide range of organizations, and to support education-related research. The survey data are used by Human Resources Development Canada, the Secretary of State, the Council of Ministers of Education, and other governmental agencies concerned with issues such as labour force supply, college accountability and policy development. In addition, the survey data serve the information needs of various education associations, academics and other public and private researchers. International agencies such as the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Organisation for Economic Cooperation and Development (OECD) also draw from Canadian college statistics.
Clients	The major clients for college programs data are: • federal government departments • provincial departments of higher education • related associations • individual researchers • UNESCO • OECD

Community College Student Information System (CCIS)

Item	Description
Type of statistical activity	This is a combined administrative and direct census survey.
Type of survey	This is a cross-sectional survey.
Reference period	The academic year.
Frequency of the survey	Annual.
Target population	All public, non-university, educational institutions which provide post-secondary training.
Population size	285,000 career and 105,000 university transfer educational institutions and associations.
Statistical units	Public post-secondary, non-university, educational institutions.
Sample size	78 institutions
Geographic coverage	Canada
Coverage—Standard classification	Institution code.

Community College Student Information System (CCIS)

Item	Description
Main topics and variables	The following main topics were surveyed at community colleges and similar institutions: • enrolment, full-and part-time, by progra type, program field, sex, age group, citizenship status, activity prior to enrolment and residence prior to enrolment • enrolment and graduation statistics, data detail, by progra and student characteristics, community colleges • community colleges: career programs, university transfer progra s, full-time enrolment, by sex, by province and territory • hospital schools: full-time enrolment, by sex, by province and territory In post-secondary career progra s, the topics surveyed were: • graduates, by sex, by provinces and territories • graduates, by sex, by program field, by subject field • full-time fall enrolments in the first year, percentage distribution by activity and residence during the previous year • full-time fall enrolment, by province of location and institution, by name of foreign students (authorization or visa), full-time fall enrolment and percentage distribution, by progra field • full-time enrolment, by sex, by progra field, by subject field, by province and territory

Community College Student Information System (CCIS)

Item	Description
Survey frame or frame sources	Educational institutions and associations.
Collection methods	The data are collected in various ways: 44% by electronic file, 40% self completion mail-out/mail-back method, 8% by the Admin centre, 6% by computer printout and 2% by other (such as extraction from USIS data).
Collection period	From November 1 to January 13 (until March for Ministry Data).. The collection months are: January, February, March, November and December.
Design and procedures	Information on enrolment and graduates is requested from individual institutions or from the ministries of education. These data are received as aggregate data on questionnaires or as individual records on diskette and as aggregate data on printouts from the ministry.
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC).
Coding documentation used	N/A

Community College Student information System (CCIS)

Item	Description
Data quality	As of 1990, data quality varies by degree of variable. Some variables have a very high rate of non-response. For example, marital status, province of residence, current status, previous activity and sponsor all have non-response rates in excess of 45%.
Response rate	The response rate for colleges is 100%.
Response rate unit	Colleges
Response rate weighting	Unweighted
Estimation procedures	None

Survey of Consumer Finances (SCF)

The following table provides the information elements and descriptions of the items included in the Survey of Consumer Finances (SCF) component of the *Health Indicators* database. More detailed information is available from Household Surveys Division in Statistics Canada.

Item	Description
Statistical activity or survey name	Survey of Consumer Finances (SCF)
Characteristic	This survey is conducted by Household Surveys Division, Statistics Canada. This is a household survey that provides data for annual estimates of income distributions by size and of low income rates for individuals and families for the previous calendar year.
Purpose	The purpose of the study is to provide data on income, as well as other statistics on families by size, region and other characteristics. The study is important for planning future policies affecting all Canadians. The data are also used for research and analysis and for the study of trends in current living conditions.
Clients	The major clients for SCF data are: • federal, provincial and local departments and • businesses • universities • social agencies • trade unions • other organizations such as the National Council of Welfare, Human Resources Development
Type of statistical activity	This is a direct sample survey.
Type of survey	This is a cross-sectional survey.
Reference period	The calendar year prior to the survey.

Survey of Consumer Finances (SCF)

Item	Description
Frequency of the survey	Annual.
Target population	Individuals aged 15 and over, with and without income and families in private households, excluding residents of the Yukon and Northwest Territories, residents of Indian reserves, residents of military bases, inmates of institutions, residents of collective-type households, private households living in trailers, etc.
Population size	23,700,000 individuals aged 15 and over. The population size is 23.7 million individuals which translates into 7.5 million census families and 4.3 million persons not in families, 8.3 million economic families and 3.9 million unattached individuals, 11.6 million households.
Statistical units	Individuals aged 15 and over with income, census family, economic family and households.
Sample size	34,000 reporting units (households).
Geographic coverage	Provinces.
Coverage—Standard classification	Labour Force Survey primary sampling unit codes which include province, CMA and EA.
Main topics and variables	The main topics are: income, expenditure, wealth and consumer finances. Detail is provided for: 1. Families and individuals • income profiles and trends, by income groups and by socio-economic and geographic characteristics • percentage distribution, by income groups, family, socio-economic and geographic characteristics 2. Persons not in families • income profiles, by income groups and selected characteristics, by urban and rural areas, by size of residence

Survey of Consumer Finances (SCF)

Item	Description
Main topics and variables (continued)	3. Female earners, male earners • percentage distribution, by earnings groups and selected characteristics 4. Women and men • comparison of average earnings and female to male earnings ratios, historical data 5. Low income • incidence of low income among families, unattached individuals and persons, by selected characteristics 6. Families, unattached individuals and individuals with income • percentage composition of their income within income quintiles • percentage distribution, by selected characteristics within income quintiles 7. Households within household income groups • percentage distribution, by household and dwelling characteristics and by household facilities and equipment, for urban and rural areas, by size 8. Census families, economic families, unattached individuals and persons not in families • percentage distribution, by income groups and their average and median incomes 9. Income • average family income, distribution of all family types and growth rate of average income, comparative statistics, for selected family unit types • family and individual income in current and constant dollars for selected years

Survey of Consumer Finances (SCF)

Item	Description
Survey frame or frame sources	Labour Force Survey Frame.
Collection methods	The data are collected in two ways: 83% is collected through self-completion using mail-out/call-back with computer assisted interviewing while 17% is collected through self-completion using mail-out/pick up or mail-out/mail-back surveys.
Collection period	From the end of April to early May.
Standard classifications used for coding the micro-data	Standard Geographical Classification (SGC).
Coding documentation used	Sample frame “record identifier” Census population counts of covered universe.

Survey of Consumer Finances (SCF)

Item	Description
Data quality	Published data are accompanied by estimated sampling errors of average income. Generally, these errors range from a minimum of 0.5 to 1.5% of the mean for the major universes published (individuals, families, unattached individuals) to approximately 5% for some small subgroups of the population. Another way of evaluating quality is pursued by reconciling survey estimates by component to National Account aggregates that have been adjusted for conceptual and coverage differences. In total comparable money income components in the survey account for approximately 100% of the corresponding National Account aggregates. A summary of this reconciliation is contained in Income Distributions by Size in Canada (Catalogue no. 13-207-XPB) and a detailed statement is included in the public use micro-data documentation.
Design and procedures	With this survey being a supplement annually to the April Labour Force Survey (LFS), standard survey operations are carried out in respect to the LFS. In 4/6 of LFS households, income questionnaires were mailed to the households prior to the survey. After the administration of the Labour Force Survey, persons 15 years of age and over were asked questions concerning their labour force experience during the previous year and other demographic data. Respondents then gave detailed income information for the previous calendar year from the mailed out questionnaires that they were asked to complete prior to the computer assisted interview (CAI). In 1997 the income questionnaire asked for the reporting of 20 income components plus 4 income tax/tax credit items for the 1996 calendar year. Income estimates are available on the basis of total money income or after tax income.

Survey of Consumer Finances (SCF)

Item	Description
Response rate	In 1995, the response rate was 82.1%. Economic families units had a response rate of 82.1% and individuals had a response rate of 76.6%.
Response rate unit	Households.
Response rate weighting	Unweighted.
Estimation procedures	Individuals who are complete income non-respondents have the entire income record imputed from geographically-nearest respondent records possessing similar characteristics. This categorization is based on significant variables including family relationship, labour force status, education, weeks worked and so on. Partial income respondents have some individual income items imputed from similar respondent records while other individual income items such as Old Age Security, are assigned on the basis of their own family/demographic information. Each record is assigned a weight in two steps: a “simple survey weight” is created, based on the universe of the sampling ratio and a compensation for non-response, and a “final weight” is created by applying a ratio estimation procedure to the simple survey weight. This procedure incorporates independent, census-derived control totals of the population by province, age, sex and subprovincial area.

Tables from Outside Organizations

For the following tabulations included in *Health Indicators*, data are provided by organizations outside of Statistics Canada. Documentation for these tabulations is not available from Statistics Canada. To obtain information concerning these tabulations users may contact the following organizations.

Canadian Institute for Health Information (CIHI)

Telephone: (613) 241-7860
Website: http://www.cihi.ca

Table 00060201	Health Expenditures by Type
Table 00060202	Health Expenditures by Use of Funds
Table 00060205	Health Personnel
Table 00060206	Payment for Medical Services

Laboratory Centre for Disease Control (LCDC)

Telephone: (613) 957-1351
Website: http://www.hc.gc.ca

Table 00060132	Sexually Transmitted Diseases
Table 00060136	Notifiable Diseases

Association of Workers' Compensation Boards of Canada

Telephone: (905) 542-3633
Website: http://www.awcbc.org
Email: awcbc@wowdx.net

Table 00060134	Time-Loss Work Injuries

Page: 231
[0]It is obvious to the reader that this is a component of the Health Indicators Database; I believe this can be omitted.
Page: 231
[0] When cited in the text, the title *Health Indicators* should be put in italics.
Page: 231
[0] The phrasing for this sentence was taken directly from the 1997 Health Indicators diskette.
Page: 231
[0] I suggest the following wording:
Extensive information is available for surveys conducted by Health Statistics Division. For more information on either surveys conducted by Statistics Canada—other than Health Statistics Division—or on surveys conducted by departments or organizations other than Statistics Canada, a list of contacts is provided.
Page: 231
[0] I suggest reformatting the bullets to better illustrate subdivisions within the files.
Page: 231
[0] I was unable to find this heading in the tables; I would remove it from this list.
Page: 231
[0] Define this term; using the terms “stillbirths” AND “late fetal deaths” makes comprehension more difficult. What is the difference between the two?
Page: 231
[0] Departments of what? Universities? Government
Page: 231
[0] Departments of what? Government? Schools?
Page: 231
[0] idem
Page: 231
[0] Why is Quebec excluded here? Is clarification necessary
Page: 231
[0] Changed wording to conform to wording on page 23.
Page: 231
[0] Where is common-law union in the marital status tables? Clarify.
Page: 231
[0] I suggest changing the subdivisions within the definitions. Delete italics and insert a bullet to illustrate subdivision.
Page: 231
[0]I would put this heading on a separate page to better illustrate the differences between the simple term definitions and the measures definitions.
Page: 231
[0] Which ones are “western?”
Page: 231
[0] One possible suggestion for reworking the sentence… any others
Page: 231
[0] Or a “process?” (A process has been designed to measure data coding and to capture errors.)
Page: 231
[0] see comment no. 8.
Page: 231
[0] See comment no. 9.
Page: 231
[0] See comment no. 10.
Page: 231
[0] Bullets indented at the same point as all other bulleted lists.
Page: 231
[0] Where does common-law union fall within these tables
Page: 231
[0]New page inserted here as for all other “Measures and Indices” categories.

Page: 232
[0]This does not need italics as well as boldtype; one or the other will do.
Page: 232
[0] Which ones
Page: 232
[0] Same as page 16? Verify.
Page: 232
[0]This sentence is difficult to comprehend. Can it be reworked Maybe the following: When the size of this category is relatively large, the results derived may be biased by differences in the characteristics of individuals with not-stated or valid (should this be invalid?) responses.
Page: 232
[0] Should the italics be kept here and in the following paragraph
Page: 232
[0] Where?
Page: 232
[0] Where is this?
Page: 232
[0] I removed the full justification on this page to keep conformity throughout the text.
Page: 232
[0] If these are to be footnotes or endnotes, the number should be kept. However, if it is only for a bibliography, no numbers should be used as they are to be listed alphabetically.
Page: 232
[0] I have moved all equations to the left of the page and tabbed them in for easier reading; if centred on the page, they are not as easy to read because the eye has to adapt to the different alignments.
Page: 232
[0] Check the bullet style for this particular line. I can’t seem to get it in line with the others. Does anyone have any suggestions
Page: 232
[0]I think there is text missing here. Verify.
Page: 232
[0]Text missing? Verify.
Page: 232
[0] Font changed to 12pt Times New Roman instead of 9pt Arial.
Page: 232
[0] What is this supposed to represent
Page: 232
[0] This bulleted list has been moved and bullets set to different tabs.
Page: 232
[0] What is SAS?
Page: 232
[0] The font size and style have been changed from 9pt Arial to 12pt Times New Roman for conformity. However, why do numbers 1 and 2 not have as distinct an introduction as this one
Page: 232
[0] This page needs to be reorganized. See attached document.
Page: 232
[0] I have put these in bold to conform to the table style in the first column.
Page: 232
[0] Where? Are you referring to the next section
Page: 232
[0] Is this a repetition of the previous sentence? I think it can be eliminated here.
Page: 232
[0] Is there text missing here
Page: 232
[0] Text missing?
Page: 232
[0] What are these? Nowhere is the full title given to the reader.

Page: 233
[0] To conform with page 81.
Page: 233
[0] Are you referring to the pages here?
Page: 233
[0] This sentence does not need bold and italics. One of the two will suffice to attract attention.
Page: 233
[0] departments and organizations of what? (government? schools?)
Page: 233
[0] This needs definition. If they reside in Canada yet are not yet classed as “permanent residents” then this needs to be stated in the text
Page: 233
[0] Similarly, this implies that only women who have Canadian citizenship are included in the survey. It may need reworking to read “All women in Canada.”
Page: 233
[0] Is it necessary to include “of residence?” See page 68.
Page: 233
[0] Is this row necessary? It’s obvious that the definitions are listed below.
Page: 233
[0] This has been put in bold type just as the others have been.
Page: 233
[0] of what?
Page: 233
[0] of what?
Page: 233
[0] Should this be a separate variable?
Page: 233
[0] What makes it a “public hospital?” The fact that it is recogized by the province as such or the fact that it is not operated for profit
Page: 233
[0]Is this precision necessary
Page: 233
[0]idem
Page: 233
[0] Of what? (Provincial statistical departments?)
Page: 233
[0] I would call this “alcohol/drug use” or “… users.” As it stands right now, it is ambiguous.
Page: 233
[0] If these cards are ony sent to those facilities which have not replied, shouldn’t they be changed to “reminder” cards? Thank-you cards seem to be inappropriate to send to these facilities.
Page: 233
[0] Government statistical departments? If not, departments of what
Page: 233
[0] Where are they
Page: 233
[0] This has been put in bold type.
Page: 233
[0] This is only the second time that this abbreviation occurs. The 211 is the number of categories and I feel it can be omitted from the abbreviation altogether as it is not part of the title. In addition, I think that the entire text between the parentheses can be omitted here as it never occurs again in the text.
Page: 233
[0] How does this differ from the ICD-9? Nowhere are we told what this is. Clarification is needed here.
Page: 233
[0] Why are these areas excluded? Are they included elsewhere? Further explanation is needed for clarification.
Page: 233
[0] See comment 66.

Page: 234
[0] See note 66.
Page: 234
[0] Again, of what? Governmental statistical departments
Page: 234
[0] Again, why were these people not included in the study
Page: 234
[0] Is this supposed to be in the text at this point
Page: 234
[0] I find this sentence extremely unclear. Can it be improved
Page: 234
[0] This term does not need to be underlined.
Page: 234
[0] This needs to be inserted so the reader can clearly understand where the initials C. V. come from.
Page: 234
[0] This word does not need to be underlined.
Page: 234
[0] These headings have been centred in the columns.
Page: 234
[0] Of what? Government?
Page: 234
[0] Why were these excluded from the study
Page: 234
[0] Should this be in the text at this point?
Page: 234
[0] Again; is there any way to clarify this sentence
Page: 234
[0] This term does not need to be underlined.
Page: 234
[0] No underlining is necessary here.
Page: 234
[0] of what?
Page: 234
[0] Is the reference here to non-sampling errors only or to sampling errors as well? If it is referring to both types, can we lump them together under non-sampling errors here? (I believe this also exists elsewhere in the text.)
Page: 234
[0] of …?
Page: 234
[0] I think this can be omitted; à vérifier.
Page: 234
[0] I think this word choice is inappropriate. I think a verb such as “record” or “establish” should be used here.
Page: 234
[0] of…?
Page: 234
[0] Which ones, the sampling or the non-sampling or both? Needs clarification.
Page: 234
[0] of…?
Page: 234
[0] Is this the reference number
Page: 234
[0] This term does nto need to be put in bold type.
Page: 234
[0] We have seen the Core and the Classification; where is the Focus? What does it entail
Page: 234
[0] Why are the territories not included

Page: 235
[0] What does the “E” mean in this abbreviation
Page: 235
[0] Again, where are the territories? Clarify.
Page: 235
[0] Is there an abbreviation for this publication SIC?
Page: 235
[0] What are these? Are they variables, main topics, what? Needs clarification.
Page: 235
[0] The territories are where in this survey
Page: 235
[0] Is there a reference number missing here
Page: 235
[0] Again, what are these?
Page: 235
[0] Where are the official ones
Page: 235
[0] Is this a reference number?
Page: 235
[0] Are these supposed to be inserted for the LFS section as well
Page: 235
[0] Why are these groups excluded?
Page: 235
[0] As opposed to what? Aren’t the other SGC references “manuals?”
Page: 235
[0] Is this what is meant here? à vérifier
Page: 235
[0] à vérifier
Page: 235
[0] Should this be inserted here?
Page: 235
[0] As opposed to…?
Page: 235
[0] Related to what? Federal and provincial departments? What kind of associations are they? Needs clarification.
Page: 235
[0] Should this be inserted here?
Page: 235
[0] Are there any other suggestions for improving this sentence
Page: 235
[0] Again, related to what?
Page: 235
[0] Should this be inserted at this point?
Page: 235
[0] What are these? I believe some clarification is needed here.
Page: 235
[0] Idem; clarification is needed.
Page: 235
[0] This is too vague; can you specify which ones, or at least, what types of businesses are involved
Page: 235
[0] To be inserted here
Page: 235
[0] Who else is excluded and more importantly, why are these individuals or groups excluded from the survey
Page: 235
[0] What is a “census family” and how does it differ from an “economic family?”
Page: 235
[0] What is EA? Needs clarification.

Page: 236
[0] Is there a more familiar term to use here? This sentence could be clarified I think.
Page: 236
[0] Check to see that this paragraph is split correctly.
Page: 236
[0] Do we need caps here