# Data Accuracy Vital Statistics – Birth Database

(Survey number 3231)

## Coverage

Since the registration of births is a legal requirement in each Canadian province and territory, reporting is virtually complete. Under-coverage is thought to be minimal, but is being monitored. Under-coverage may occur because of late registration, which, if not completed soon after birth, is needed for school registration. Statistics Canada does receive late registrations (typically 1,000 to 1,500 cases, five years after the year of the event), and consideration is currently being given to including late registrations and late amendments on the data file for subsequent publication. Incomplete registration is also a source of under-coverage. For example, some provinces require that a notarized statement be completed when a mother declines to name the father on the application for birth registration. Until the statement is notarized, the application is not registered.

Out-of-country births are incompletely reported. There is no reporting of births to Canadian resident women occurring in countries other than the United States; although there is a reciprocal agreement with the U.S., some states may not report births to Canadian resident women occurring in their state.

Non-registration is minimal, except in Ontario where provincial health officials have noted a rise in the number of physician notices of birth that do not have a matching registration from the parents. This may represent up to 4,000 births in 2000, or 3% of all Ontario births, but is probably less because of duplicate or late registrations being included in this total. This is apparent especially in districts of Ontario that charge a service fee for birth registration (for example, the City of Ottawa charged a \$30 service fee in 2003 to register a birth), and for infants who die within days of the birth (25% of Ontario infant deaths do not have a matching birth registration). These quality concerns have been discussed several times with the Ontario Office of the Registrar General (ORG). Labour disruptions and backlogs have limited ORG resources available for follow-up. For missing birth registrations for infant deaths, it is recognized that collection of these data from the grieving families is difficult.

Over-coverage is minimal. Births to non-resident women in Canada are registered but are excluded from most tabulations. Duplicate birth registrations are identified as part of the regular processing operations on each provincial and territorial subset, as well as additional inter-provincial checks, and comparisons between the birth and stillbirth databases for multiple births. Possible duplicate registrations are checked against microfilmed registrations or optical images, or by consulting with the provinces and territories.

## Response rates

#### Item response

For 1997 to 2000, the response rates were 98-100% for most variables on the Birth database, except for mother's marital status, father's age, and birthplace where the response rates were 90-95%. One notable exception is that data on the dates of birth of the mother and the father are not supplied to Statistics Canada by the Province of Ontario; however, the age of each parent is provided by that province.

#### **Other Accuracy Issues**

#### Ontario birth weights and gestation data

In the development of the Canadian Perinatal Surveillance System, problems with Ontario Birth data had been noted related to the truncation of birth weights. Working with the Ontario Office of the Registrar General, the issues of truncation of birth weight, and the consistent editing of weight and gestation data (from the physician's notice of birth as opposed to the parent's registration) have been resolved. The data continue to be monitored on an ongoing basis.

### Low birth weight/low gestation data

Health Statistics Division continues to monitor developments in the field of assisted reproductive technology and medical technology as they relate to the reporting of extremely low birth weight and/or low gestation babies. There is some inconsistency in the practice of registering these babies, even though there is a legal requirement to do so. Statistically, this problem has resulted in alternative indicators for infant mortality being calculated, where the denominator is composed of live births weighing 500 g or more.