

## **Sample Design for 2001 PALS**

### **Frame description:**

The sampling frame used for PALS consisted of estimates of the population by Enumeration Area (EA), age group and severity of disability according to the census definition of disability. These estimates were obtained from projections of the Canadian population produced by the Statistics Canada's Demography Division to which disability rates (using the census definition) as estimated from the 2000 PALS pilot test were applied. The reference period for these projections was the time of the 2001 Census.

### **Stratification and Sample selection methods:**

The strata are defined by the cross-classification of the ten provinces, the age and the severity of disability as defined by the census. The four age groups considered are under 25, 25 to 44, 45 to 64 and 65 years of age and older. The two levels of severity are "Often" and "Sometimes".

The sample allocation within each stratum was done using a simulation involving the 1996 Census data. Since the 2001 Census activity limitation questions were not on the 1996 Census form, some modeling assumptions involving the PALS pilot test were used. In order to determine the sample size in each stratum, a targeted minimum proportion and coefficient of variation (CV) were fixed. Some parameters were estimated using the 2000 pilot test, such as the response rate and the percentage of persons with disabilities in the 2001 Census who are also disabled in PALS.

The sampling design is a two-stage stratified design that uses the 2001 Census long form sample, which is administered to one in five households in Canada. The primary sampling unit (PSU) is made up of one or more Enumeration Areas and the secondary sampling unit is the respondent. A sample of PSUs is selected in each stratum using a probability proportional-to-size (PPS) sampling design.

The PSU size is the predicted size of the projected census disabled population of that PSU within the stratum for which the PSU was selected (combination of age group and severity). Note that a PSU can be selected for more than one age group and severity combination as independent samples are selected within each stratum. Some very large units were sampled with probability of one. PSUs for which no or very few disabled individuals were predicted, were selected using a stratified random sample of PSUs.

In the second stage of the sample design, all of the 2001 Census long form respondents having the characteristics of the stratum for which the PSU was selected were included in the 2001 PALS sample. This second stage took place in the five census Field Collection Units (FCU) across Canada.

The FCU operations constituted the last phase of the census data collection process. In the census field collection units, each EA box selected for PALS was identified by the stratum description for which the Enumeration Area was selected (age group and severity combination). The clerks then had to list all the individuals with the specified characteristics on forms designed for that purpose.

The PPS sampling design allows a better control of the sample size and provides higher probabilities of selection to the larger primary sampling units. Given the FCU sampling selection process, the PPS design was particularly useful (for example, the reduction of the number of EA boxes to be inspected).

**Sample size:**

The total sample size is 43,276. Of these individuals, 42,485 live in private dwellings, while 791 are residents of collective dwellings.