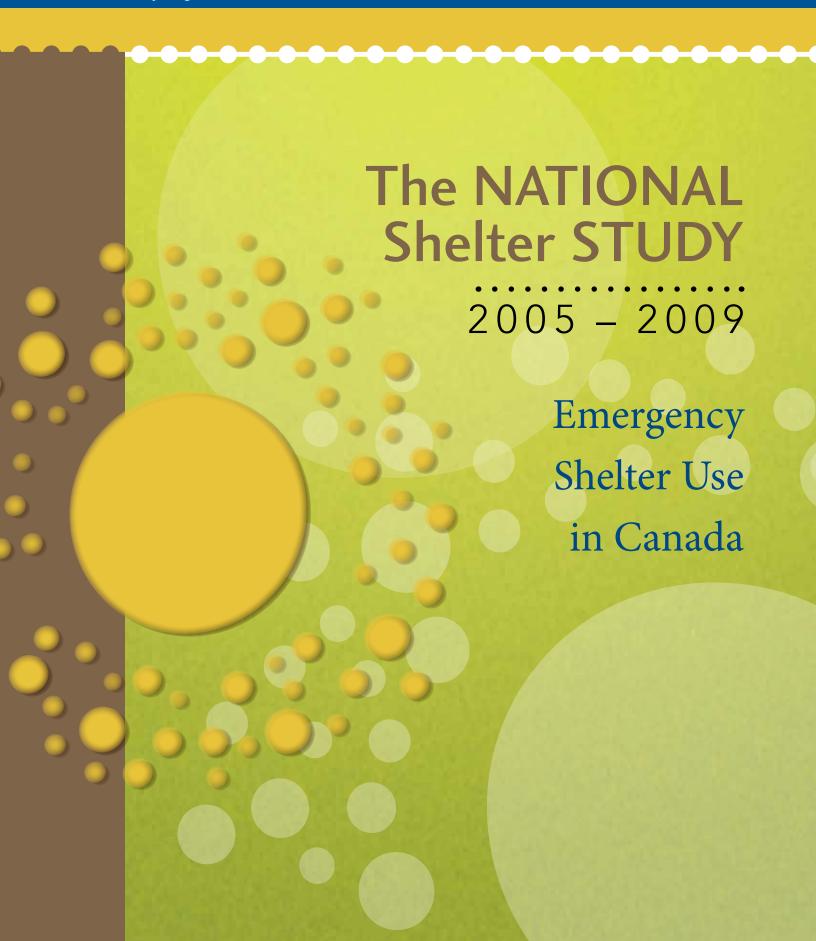


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The NATIONAL Shelter STUDY

2005 - 2009

Emergency

Shelter Use

in Canada

Aaron Segaert

Homelessness Partnering Secretariat

Human Resources and Skills Development Canada

National Shelter Study 2005 – 2009

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Contents

1 Acknowledgments

3 Executive Summary

- 3 Methods
- 3 Key Findings
- 3 Conclusion

4 The National Shelter Study

Emergency Shelter Use in Canada

- 4 Introduction
- 4 Methodological Issues
- 5 Previous Studies
- 6 The Present Study
- 7 Methods
- 8 Data and Sources
- 10 Sample Design
- 12 The Duplication Factor

15 Results

- 17 Children (Under 16 Years of Age)
- 17 Youth (Ages 16 to 24)
- 18 Older Adults (Age 55 and Over)
- 19 Adults (Ages 25 to 54)
- 19 Length of Stay
- 21 Shelter Level Statistics
- 23 Discussion

26 Conclusion

- 28 Appendix A
- 29 References

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Executive Summary

To improve knowledge about the size and characteristics of Canada's homeless population, Human Resources and Skills Development Canada has developed the Homeless Individuals and Families Information System (HIFIS), a software tool used in homeless shelters across Canada. The National Shelter Study uses information gathered by HIFIS and the City of Toronto to provide estimates of the number of Canadians using emergency homeless shelters and to describe the characteristics of shelters and shelter users for the years 2005 to 2009.

Methods

A stratified cluster sample was used to produce national estimates of the annual number of emergency shelter users. Client stay information from approximately one quarter of Canada's 396 emergency shelters was used in each year of the study. The sample was stratified by shelter type and adjusted to account for clients who use more than one shelter.

Key Findings

In 2009, 147,000 individuals, or about 1 in 230 Canadians, used an emergency shelter at least once. This number has remained stable since 2005; however, the number of shelter bed nights used annually increased from 4.5 million in 2007 to 5.3 million in 2009. In other words, on average, over 2,000 more people slept in homeless shelters each night in 2009 compared to 2007. On any given night in Canada, an average of 14,400 shelter beds are in use out of the 15,467 permanent beds available.

The mean age of adults staying at shelters was 37 years and 73 percent of adult shelter users were male. Youth aged 16 to 24 comprised 20 percent of shelter users while just 1.7 percent of shelter users were over 65 years of age. The proportion of children under 16 using shelters increased from 4.0 percent in 2005 to 6.5 percent in 2009. In 2009, almost 9,500 children under 16 years of age spent a night in an emergency shelter, an increase of 50 percent since 2005.

Corresponding with the growing number of children using shelters, the sharpest increase in shelter use has been at family shelters, where there was a nearly 40 percent increase in bed nights used from 2008 to 2009. This is reflected in median stay lengths at family shelters, which have nearly tripled from 10 nights in 2005 to 29 nights in 2009, and in occupancy rates, which averaged over 100 percent of capacity.

Overall, the proportion of long shelter stays (one month or more) increased from 12.6 percent of shelter stays in 2005 to 16.7 percent in 2009.

Conclusion

The total number of individuals using shelters did not change significantly during the 2005 to 2009 study period. However, individuals are using shelters more and the composition of the homeless population is changing, especially with respect to children and families.

The National Shelter Study is the first national report using consistent shelter data collected over an extended period of time to establish a baseline count and description of the characteristics of the shelter-using population in Canada. Though not all homeless people regularly use them, emergency shelters are often the first point of contact for those experiencing absolute homelessness. Emergency shelter use thus serves as the best available indicator for understanding national trends in the size and composition of the homeless population.

The National Shelter Study

Emergency Shelter Use in Canada

Introduction

The challenges of enumerating homelessness are many and well-known. It is largely due to these challenges that the extent of homelessness in Canada is not known and there have been few attempts to enumerate homelessness at the national level.

What follows is the first nationwide study of homeless shelter use using data from the Homeless Individuals and Families Information System (HIFIS), which forms the cornerstone of Government of Canada's efforts to enumerate homelessness nationally. Originally conceived in the late 1990s at the Canada Mortgage and Housing Corporation, HIFIS is a software tool installed in over thirty percent of emergency homeless shelters in Canada. HIFIS is currently developed and supported by the Homelessness Partnering Secretariat, Human Resources and Skills Development Canada.

The National Shelter Study uses shelter data from HIFIS and the City of Toronto to estimate the number of people using emergency homeless shelters each year in Canada and to describe some characteristics of shelters and shelter users. The study covers the years 2005 to 2009.

Methodological Issues

Homelessness can take many forms, from sleeping rough on the streets, in parks or abandoned buildings, to couch surfing at the homes of friends and family, to relying on emergency shelters or transitional housing. Because the homeless are a diverse, mobile, and difficult to reach population, attempts to enumerate the homeless population are fraught with difficulty. Having no stable address or telephone makes it nearly impossible to use conventional sampling methodologies. Even if homeless persons were easily reachable, there remains the problem of statistical rarity: the homeless make up such a small proportion of the population that a massive sample would be required to obtain enough homeless persons for analysis (Rossi 1987: 1).

Street counts, organized and conducted by people knowledgeable about local homeless populations, or analysis of service-based administrative data are the two most common methods used to overcome these problems. Some enumeration efforts have counted both the shelter and the street population on a single night, known as a point-in-time count. A serious shortcoming with point-in-time counts is that the composition of the homeless population is fluid. There are individuals who repeatedly move in and out of homelessness, but more importantly, it has been found that most experience only one episode of homelessness in their lives (Culhane 2010; Sumner et al. 2001; Rossi 1987). Point-in-time counts exclude those who are not experiencing a homeless episode at the time of the count, meaning those who are chronically homeless have a greater likelihood of being included (Kuhn and Culhane 1998). Point-in-time counts are thus biased towards the chronically homeless, whose characteristics may differ in important ways from the temporarily homeless.

The difficulty of acquiring a sample that is generalizable to the entire homeless population extends beyond the differences between the temporarily and chronically homeless. In a more general sense, the homeless population is not homogeneous. It includes many categories of people who often have very different patterns and experiences of homelessness. For example, those whose homelessness is caused by mental illness may differ greatly from those who are homeless for economic reasons. There are further differences by age and ethnicity, and research consistently

shows important differences in the characteristics of unaccompanied homeless individuals and homeless families (Culhane et al. 2007). One of the key differences is that families are much less likely to be chronically homeless than individuals.

Period prevalence studies, in contrast to point-in-time counts, look at homeless populations over a period of time, often one year. They have the advantage of capturing a more representative section of the homeless population. Period prevalence studies are generally restricted to administrative or service-based approaches (usually registrations with service providers) because large-scale street counts over an extended period would be difficult and prohibitively expensive. The key limitation of service-based approaches is that they are certain to underestimate the homeless population—not all homeless people access services. Because of this, a multiple frame approach is sometimes used to reach as much of the homeless population as possible, sampling individuals from shelters as well as other services likely to be used by homeless persons, such as soup kitchens or outreach centres (e.g. Fournier et al. 1998). However, this introduces its own problems. Non-shelter services are frequently used by those who are housed, which necessitates a screening mechanism to determine whether the users of these services are homeless or not. Because individuals are likely to use both shelter and non-shelter services, the inclusion of non-shelter services complicates efforts to unduplicate clients. This is further complicated due to the fact that soup kitchens and meal programs do not normally collect information that could be used to identify individuals who are also shelter users. The research would thus rely on self reports of shelter use.

The present study employs a period prevalence service-based approach using records from emergency shelters. The decision to restrict the study to emergency shelters is based on both practical and theoretical grounds. The availability of data is the study's major practical consideration, and HIFIS is most widely used in emergency shelters. On the theoretical side, it is assumed that emergency shelters are a crisis point in the housing spectrum. Other services, such as food banks, soup kitchens and outreach programs, could also be viewed as crisis points; however, these services capture a broader spectrum of individuals and families experiencing poverty or economic crises, many of whom are housed. Emergency shelter clients have exhausted all other resources and are in acute need of shelter. In other words, they are literally homeless. As emergency shelters are often the first point of contact for those experiencing homelessness, they serve as indicators of changes in homelessness, with the caveat that the capacity of the shelter system is a limiting factor.

Previous Studies

The earliest study to use a sample of shelters to enumerate homelessness is the Chicago Homeless Study conducted during 1985 and 1986 (Rossi 1987). The Chicago study differs from the present study in significant ways. First, the Chicago study included an area probability sample to estimate the street population in addition to sampling shelters to estimate the sheltered homeless population. Second, it was a point-in-time count rather than a period count. Nevertheless, the authors of the Chicago study note that the particular strength of the sampling approach is that it can be replicated in any jurisdiction and is generalizable at any geography.

A 1987 report by the Canadian Council on Social Development (CCSD) (McLaughlin 1987) is probably the best attempt at producing a national estimate of homeless shelter use in Canada to date. A list of all homeless and violence against women (VAW) shelters in Canada was compiled, identifying 472 shelters providing 13,797 beds. Each shelter was asked to provide data about the number of clients served during the year 1986. The response rate was 59 percent. Using the known capacities of the shelters contributing data, it was found the average number of clients served per bed in one year was 18.8. Multiplying 18.8 by the total number of shelter beds (13,979) yields an estimate of 259,384 individuals using shelters during 1986. With no way to determine the rate of client duplication, it was assumed that clients used two different shelters on average, so the total was divided in half. Aware that not all homeless people use shelters,

the study concluded that between 130,000 and 250,000 individuals used a shelter in 1986. The CCSD study has been criticized for failing to include the street homeless and for its low response rate (Peressini, McDonald and Hulchanski 1996); however, a more pertinent criticism would point to the incomplete sampling frame and the lack of differentiation of shelter types in the weighting procedure. The strengths of the CCSD study were its use of administrative shelter data and period prevalence, as well as its attempts to take into account duplication and to base the estimates on a complete frame of homeless shelters.

The second major attempt at enumerating the Canadian homeless population was carried out by Statistics Canada as part of the 1991 Census. Interviews were conducted at 90 soup kitchens sampled in 16 Canadian cities (Peressini et al. 1996). The results of this study were never released due to poor data quality. Since then, the Homelessness Partnering Secretariat has estimated that between 150,000 and 300,000 individuals experience homelessness each year in Canada. The wide range of the estimate is due to the rough extrapolation methods used, which included homeless counts from several cities that used widely varying enumeration methods, including a mixture of point-in-time counts and period prevalence.

Starting in 2007, the United States Department of Housing and Urban Development has included annual estimates of the sheltered homeless population using a large sample of administrative shelter data in its Annual Homeless Assessment Report to Congress (AHAR). The AHAR bases its national estimates on a stratified cluster sample of 80 communities with 16 strata based on geographic region and community size. Communities with partial data are extrapolated based on the number of beds in the community. Individual cases are unduplicated at the community level and within shelter types, as both emergency shelters and transitional housing are included in the study. Communities with available data that are not among the 80 sample communities are included as "self-representing." An "overlap adjustment factor" is applied to the weights to account for clients who use more than one type of shelter. Results of the AHAR show that approximately 1.5 million Americans use emergency and transitional shelters each year.

The Present Study

The National Shelter Study is the first national-level study to use consistent shelter data collected over an extended period of time to establish a baseline count and description of the characteristics of the shelter-using population in Canada. In this sense, it is comparable in scope and design to the AHAR in the United States. As with any national-level research, where obtaining complete data is not feasible from an economic or practical standpoint, sampling techniques must be employed. The National Shelter Study employs a stratified cluster sample design, where the primary sampling units are emergency shelters.

The primary goal of the National Shelter Study is to use the wealth of data collected by HIFIS and the City of Toronto to estimate the number of unique individuals who use an emergency shelter each year in Canada. Previous attempts to do this have yielded rough estimates with wide confidence intervals. This study goes beyond earlier studies by providing more detail about the age, gender and use patterns of shelter users. The scant data available to previous studies did not allow for national breakdowns for age groups, gender or shelter type. The National Shelter Study is specifically designed to obtain accurate estimates of gender and age group proportions at the national level. Finally, this study provides information about emergency shelters, such as estimates of bed nights used and average occupancy rates, which can be broken down by shelter type. This information is essential for a general understanding of homelessness in Canada as well as for interpreting the client-level results.

Methods

Although there are many types of shelters and other forms of temporary housing, this study focuses specifically on emergency homeless shelters. Within emergency shelters there are several subtypes, thus it was necessary to establish consistent definitions for various types of shelters and apply these criteria to the construction of a sampling frame and strata for the study. The criteria used to define shelter types were established empirically through preliminary research using 2007 to 2009 HIFIS data (Segaert 2010).

The preliminary research looked at usage patterns (length of stay, annual turnover rates and number of stays per year) and found consistent empirical differences among emergency shelters, transitional housing, Violence Against Women (VAW) shelters and family shelters. Stays at emergency shelters tend to be short, often a single night, and many clients have multiple stays over the course of a year. Transitional housing is characterized by much longer stays, from a few months to a few years. As with shelters for individuals, family shelters can be divided into emergency and transitional types; however, family shelters stand out from shelters for individuals. Both transitional housing for families and emergency shelters for families have longer average stay lengths than the corresponding types for individual clients. Another important difference is that unlike emergency shelters for individuals where clients often have multiple stays, it is unusual for families to use emergency shelters more than once over the course of a year.

There are important qualitative differences as well. In contrast to the short-term, crisis-based service at emergency shelters, transitional housing typically involves more structured programs to help clients deal with the problems that contributed to their homelessness. VAW shelters exhibit similar empirical characteristics to emergency shelters for women, with the exception that clients do not usually have multiple stays. The major difference between emergency shelters and VAW shelters is their mandate. VAW shelters were established for women and their children who are fleeing domestic abuse. Although it is known that some VAW shelters will accommodate women who are homeless for reasons other than domestic abuse (Burczycka and Cotter 2011), VAW shelters are not included in this study.

Based on the findings of the preliminary research, the following criteria were used to construct the sampling frame of emergency shelters for this study:

- Over 95 percent of stays are less than three months in duration
- High annual turnover rate (i.e., many clients use each bed over the course of a year)
- Many clients with multiple stays over the course of a year (except at family shelters)
- Crisis based service for those experiencing homelessness, with few barriers to entry (age and gender restrictions notwithstanding): no cost to client, no referral or entry application necessary
- Counselling, treatment and other support programs may be available to the client, but participation is not mandatory. Often, only a place to sleep is provided.

Emergency shelters are further divided into several sub-types based on the type of clients served: general, youth, women/children and family. General shelters are the most common type of shelter, serving a broad clientele of unaccompanied adults and youth. The preliminary research found few empirical differences in usage patterns between youth and general shelters, but youth shelters obviously serve a very specific clientele. They also tend to be much smaller than general shelters, with an average of 16 beds compared to an average of 46 beds at general shelters.

Women's shelters that accept children are given their own category (women/children) and are not included with family shelters because the majority of their clients tend to be single women without children. If included in the family shelter stratum as representative of family shelters, the relatively few children using women/children shelters could lead to underestimating the number of children using family shelters overall. Women/children shelters are similar empirically

to general shelters, which have much shorter average stay lengths than family shelters but including them in the stratum with general women's shelters would lead to overestimating the number of children using shelters. In other words, women/children shelters are not representative of general women's shelters because most general women's shelters do not admit children (there are 42 general women's shelters with 1,186 beds versus 27 women/children shelters with 550 beds, see Table 3).

Table 1 summarizes the types of shelters included or not included in the study. As with VAW shelters, shelters for immigrants and refugees and temporary shelters for extreme weather conditions (such as "out of the cold" shelters) are excluded from the study despite generally meeting the empirical criteria for emergency shelters.

TABLE 1

Types of shelters included and not included in the study

Included in study	Not included in study
General emergency shelters	 Transitional Housing for individuals or families
Youth emergency shelters	 VAW shelters and second-stage housing
Family emergency shelters	 Immigrant/refugee shelters
 Women/children emergency shelters 	 Halfway houses
	 Temporary shelters (e.g. "out of the cold," or "extreme weather")

The second conclusion drawn from the preliminary research on shelter types is that shelter use variables show a great deal of consistency within shelter type. Importantly, there were no consistent differences in average length of stay, turnover rate, number of stays, average client age or occupancy rate for shelters in different provinces. Despite uneven geographic representation in the sample, shelter use patterns are consistent enough to use the available data to make national estimates.

Data and Sources

The National Homelessness Database (NHDB), maintained by the Homelessness Partnering Secretariat, contains administrative shelter data obtained from emergency shelters using HIFIS and emergency shelters in the City of Toronto, ¹ or about 30 percent of emergency shelters in Canada. The study period covers the years 2005 to 2009. Shelters with incomplete annual data were not used in the study. For each year of the study there is complete annual data from a minimum of 96 and a maximum of 123 shelters. The number of annual shelter stays used in the study ranges from 124,206 to 135,301 (see Table 2).

Homeless shelters in the City of Toronto do not use the HIFIS software but have contributed equivalent data.

TABLE 2

Number of shelters and observations for each year of the study

Year	# Shelters	# Observations (shelter stays)
2005	96	124,206
2006	102	130,013
2007	110	135,238
2008	120	135,301
2009	123	130,470

The NHDB contains a small set of client-stay information consisting of the following fields:

- Unique client identifier
- Date of birth
- Gender
- Book-in date
- Book-out date

The unique client identifier is a string of characters created by an algorithm using client information at the shelter sites. The unique identifier allows the Homelessness Partnering Secretariat to identify multiple stays at multiple shelters by the same individual, without divulging the person's identity or any personal information. The book-in and book-out dates describe the beginning and end of each shelter stay.

Each shelter stay is associated with a shelter. The NHDB entries are supplemented by additional information about shelters from the National Service Provider List (also maintained by the Homelessness Partnering Secretariat). These fields include:

- Shelter name
- Number of beds
- City and province
- Target clientele (youth, general, women/children, family)
- Genders served (male, female, co-ed)

The NHDB contains stay-level information, meaning every stay at participating shelters is recorded on a new row in the database. This small set of data was used to construct a more extensive set of client- and shelter-level variables (e.g., length of stay, number of stays, turnover rate, average daily census, occupancy rate, etc.). For each year of the study, three datasets were constructed: a stay-level dataset, a client-level dataset, and a shelter-level dataset. Any consecutive or overlapping stays by a single client were combined into a single stay. Individual clients may appear multiple times in the dataset, and have multiple stays at any given shelter they have used.

Each case (row) in the client-level dataset is a client, unduplicated within shelters but not in the dataset as a whole. What this means is that a client may appear multiple times in the dataset, but is only associated with any particular shelter once. Multiple stays within a shelter are combined into one line in the database. For example, if Client A has

four stays at Shelter X and two stays at Shelter Y, then Client A will appear in the client-level dataset twice, once associated with Shelter X and once associated with Shelter Y. This dataset is used to estimate totals and proportions related to client demographic characteristics, including the overall estimates of the number of clients using shelters.

In the shelter-level dataset, each case (row) is a shelter. This dataset contains aggregate information about the clients and stays at each shelter. This dataset contains shelter-level variables such as Bed Nights Used, Average Daily Census, Turnover Rate, and Occupancy Rate for the shelter.

Sample Design

A stratified cluster sample design was used to produce national estimates. Analysis was conducted using survey procedures in the statistical software Stata to ensure that the complex design of the sample was taken into account for variance estimation. Eight strata, based on the target clientele and gender served at shelters, were used in the sample design (see Table 3). These strata were chosen to ensure that the results account for differences among shelter types and that the estimates reflect age and gender proportions in the population. The primary sampling units (clusters), are shelters which were selected with probability proportional to size (PPS) within each stratum. The measure of size is the number of beds in the shelter (shelter capacity).

With PPS sampling, shelters are randomly selected, but larger shelters have a greater probability of being selected than smaller shelters. This is necessary because some shelters have many more beds than others, which affects the probability of selecting any individual client at the shelter.

The probability of each shelter being selected is equal to:

$$\pi = \frac{\text{(\# of beds in shelter} \times \# of shelters in stratum)}}{\text{\# of beds in stratum}}$$

Within shelters (clusters), a 100 percent sample was taken, resulting in a selection probability of 1 for this stage. Therefore, the base weight (*BW*) for each shelter is equal to the inverse of the probability of selecting the shelter. Sample shelters without data were treated as nonresponse units (missing data), and base weights were adjusted accordingly. There were non-response units in every province, most notably Quebec, where no shelters submitted data. Shelters with available data that were not selected for the sample were included in the study as self-representing units, meaning they were not weighted to represent other shelters in the national estimates. Including these shelters nearly doubled the number of shelters in the analysis, which helped reduce the margin of error. Including the self-representing shelters required downward adjustment of the base weights for sample shelters as they were no longer required to represent the self-representing shelters. Table 4 summarizes the sample size, response rate and number of self-representing shelters for each year of the study.

TABLE 3 List of sample strata

••••	• • • • • • • • • • • • •	• • • • • • • • • • • • • •	Number of shelters	Number of shelters
Strata	Target clientele	Gender(s) served	(number of permanent beds) in Canada	in the study
1	Youth	Male	11 (213)	8
2	Youth	Female	9 (107)	4
3	Youth	Co-ed	76 (1,184)	18
4	General	Male	76 (5,283)	38
5	General	Female	42 (1,186)	18
6	General	Co-ed	120 (5,182)	35
7	Women/children	_	27 (550)	9
8	Family	_	35 (1,807)	18

The sample design does not weight for geographic location. To be sure, homelessness is a greater problem in some communities than others, and there may be differing regional or local trends. The geographic distribution of shelter capacity likely reflects local and regional demand (as well as local and regional social policies). As noted in the preliminary research, within shelter types, use patterns (as measured by average stay length, occupancy rate, etc.) are consistent. This means that communities with a large homelessness problem will not necessarily have busier shelters than other communities, but rather will have relatively more shelter beds. As such, local and regional differences are reflected in the national statistics insofar as they are manifested in the capacity of the emergency shelter system, which informs the sampling frame and in turn influences the weighting of the sample.

TABLE 4
Sampling summary

••••	•••••	•••••	•••••	•••••	• • • • • • • • • • • • • • • • • • • •	••••
Year	Total shelters in Canada	Sample size	Sampled shelters with data	Response rate	Self-representing shelters (non-sample shelters with data)	Total shelters used in study
2005	395	110	56	51%	40	96
2006	394	110	59	54%	43	102
2007	394	110	66	60%	44	110
2008	395	110	69	63%	51	120
2009	396	110	70	64%	53	123

Table 5 shows the number of emergency shelters and beds in each province and territory. It also shows the number of shelters in each province or territory that contributed data to the study. In terms of shelter capacity, Ontario has by far the most emergency shelters and nearly half of all emergency beds in Canada. In terms of data coverage, HIFIS is fully implemented in the Atlantic region (with all emergency shelters contributing data) and has excellent data coverage in Ontario, Manitoba and Saskatchewan. As noted above, no shelters in Quebec were able to contribute shelter data; however, all Quebec shelter information (target clientele, gender served, number of beds) is fully accounted for in the

sampling frame and weighting procedure. About half of the Ontario shelters contributing shelter data were in the City of Toronto. Although Toronto shelters make up a large number of the observations used in the study, their influence on the results is limited since not all of them were selected in the sample (non-selected shelters contributing shelter data are self-representing in the study design). Because the sample is not geographically representative, provincial and territorial breakdowns are not provided in this report.

TABLE 5
Emergency shelters in Canada by province/territory

Province/territory	Number of emergency shelters (2009)	Number of emergency shelter beds (2009)	Shelters contributing data to study (all years)	% coverage within province/ territory	Number of shelter stays used in study (all years)
Newfoundland and Labrador	5	64	5	100%	5,411
Nova Scotia	6	190	6	100%	7,444
Prince Edward Island	2	12	2	100%	167
New Brunswick	6	124	6	100%	9,968
Quebec	88	2,143	0	0%	0
Ontario	132	6,806	95	72%	505,600
Manitoba	13	627	8	62%	9,781
Saskatchewan	18	328	8	44%	13,166
Alberta	37	2,950	6	16%	61,732
British Columbia	80	2,078	9	11 %	24,131
Nunavut	3	16	0	0%	0
Northwest Territories	5	109	4	80%	17,828
Yukon	1	20	0	0%	0
CANADA	396	15,467	149	38%	655,228

The Duplication Factor

The first methodological challenge is reaching the homeless population. The second is that clients may use more than one shelter, and often do. Therefore, in a sample of shelters it is inevitable that some clients will be selected more than once. To obtain the final analysis weights for calculating totals or proportions, the base weights for the client-level dataset require further adjustment by a "duplication factor" to account for clients who use more than one shelter.

Each client in the database has a unique identifier that can be used to determine if they have used multiple shelters. The simplest method to account for client duplication would be to divide the base weight for each client by the number of times the client appears in the database. However, because the national database does not contain every emergency shelter in the country, the full extent of duplication is unknown and would be underestimated using this method. Furthermore, an analysis of the use of multiple shelters by clients revealed that the rate of duplication varies by shelter type and that most duplication occurs within communities. These factors should be considered in the weighting scheme.

The largest between-strata differences are between shelters serving families and shelters serving individuals. There is very little duplication among Women/children and Family shelters. The reasons are twofold. First, usually families only experience a single episode of homelessness. Second, even if a family used a shelter more than once, in most communities there are few shelters (often only one) serving families. By contrast, shelters serving single adults are much more common and individuals are much more likely to experience multiple episodes of homelessness than families. The highest rates of duplication are found in general adult shelters and shelters for male youth. To account for varying rates of duplication among shelter types, duplication factors were calculated separately for each stratum.

Although shelter data coverage is not complete and therefore cannot capture the full extent of multiple shelter use by clients, there were sufficient data to provide an indication of the variations in rates of duplication among geographic levels. The NHDB contains data covering approximately 30 percent of the shelter beds in Canada. Some specific regions, such as Atlantic Canada and the Golden Horseshoe region of Ontario, have complete or nearly complete coverage (see Table 5). Overall, fewer than 1,000 clients—approximately 1.2 percent to 1.6 percent of clients in the NHDB—used shelters in more than one city. Even fewer used shelters in more than one province. Much of the between-cities duplication was found within the Golden Horseshoe region of Ontario. Within communities, especially in large cities with many shelter options, as many as 20 to 30 percent of clients used multiple shelters. Taking into consideration the coverage limitations of the NHDB, given that such a small number of clients were found to have used shelters in more than one community, it is reasonable to assume that the rate of client duplication is most dependent on within-community duplication which is what the study accounts for.

The calculation of duplication factors required several steps. First, unique client identifiers from all shelters in the database were used to identify duplicates, or clients who had used more than one shelter. Clients who appear only once in the database are assigned a weight of one. Clients who appear multiple times in the database are assigned a weight equal to the inverse of the number of times they appear in the database. Because most duplication occurs within communities, including shelters from communities with incomplete shelter coverage would lead to underestimating the degree of duplication. The next step, described in Formula 1, is performed using only data from shelters in communities with complete shelter data coverage. Using information from all shelters in the previous step ensured that known duplication external to the community was accounted for as much as possible. Thus, using only shelters from communities with complete coverage, client weights (w_{client}) were summed for each stratum and divided by the total number of clients who used shelters in that stratum (n_h). The result is the duplication factor for the stratum (DF_h), which is equivalent to the weighted mean of the proportionate share of unique individuals using each shelter in the stratum (see Formula 1).

Formula 1 ● Calculation of the duplication factor

$$DF_h = \frac{\sum_{i=1}^{n_h} w_{client \cdot i}}{n_h}$$

Final analysis weights were obtained by multiplying the base weights for sample shelters by the mean duplication factor for their respective strata. Self-representing shelters, which have a base weight of one, were multiplied by their actual calculated duplication factors rather than the duplication factor for their stratum.

The duplication factor reflects the use of multiple shelters. It does not indicate multiple uses of the same shelter, thus it should not be considered an indicator of the number of shelter visits or homeless episodes. Duplication factors with a value close to one have little effect on the base weights and indicate low rates of client duplication. Duplication factors with lower values indicate high rates of duplication and consequently reduce the final analysis weights for shelters

in strata with high rates of client duplication. Table 6 shows the calculated duplication factor for each stratum. The values range from 0.6188 for male youth shelters in 2007 (indicating a high rate of duplication) to 0.9669 for family shelters in 2009 (indicating a low rate of duplication).

TABLE 6 **Duplication factors by strata and year**

			•••••				
		Duplication factor					
Stratum	2005	2006	2007	2008	2009		
Male youth	0.6839	0.6939	0.6188	0.6222	0.6541		
Female youth	0.8785	0.8943	0.8662	0.8871	0.8951		
Co-ed youth	0.6617	0.6914	0.6289	0.6484	0.6970		
Male general	0.6873	0.6888	0.6811	0.6913	0.7088		
Female general	0.6675	0.6770	0.6599	0.6366	0.6865		
Co-ed general	0.7346	0.7534	0.7794	0.7390	0.7271		
Women and children	0.8793	0.9018	0.9161	0.9432	0.9125		
Family	0.9468	0.9487	0.9565	0.9549	0.9669		
	• • • • • • • • • • • •	• • • • • • • • •	• • • • • • • • •	•••••	•••••		

Results

It is estimated that approximately 150,000 unique individuals spent a night in an emergency homeless shelter during each year of the study. There was no statistically significant variation in the estimates over the 2005 to 2009 period (see Table 7). The 95 percent confidence intervals for each year were within +/- 10 percent of the estimates, which is a good result for this study. One hundred fifty thousand individuals using emergency shelters each year is equivalent to about 1 out of every 230 Canadians.

TABLE 7
Estimated annual number of unique individuals using emergency shelters

*********	*************	• • • • • • • • • • • • • • • • • • • •	•••••
Year	Unique individuals	95% confide	ence interval
2005	156,030	142,804	169,256
2006	150,663	138,015	163,312
2007	146,884	134,177	159,591
2008	151,621	137,265	165,977
2009	146,726	134,224	159,229

ANOVA: F(4,508) = 0.34, p = .849

Table 8 shows demographic characteristics for the sample of shelter users in 2009. The average age of adults 16 or older was 37.2 years (SD=13.04). Most adult shelter users were male. Gender proportions did not change over the study period: females comprised slightly more than one quarter of adult shelter users each year. Most shelter users were between the ages of 25 and 54. Including VAW shelters in the study would likely have had a large impact on the percentage of female shelter users as well as the percentage of children. Appendix A contains a complete gender-by-age group tabulation.

TABLE 8

Characteristics of emergency shelter users (2009)

Average age	Adults (age 16+)	37.2 years
Gender (age 16+)	Male	73.2%
(,)	Female	26.7%
	Other	0.1%
Percent within age groups	Children (under 16)	6.5%
	Youth (16 – 24 years)	20.6%
	Adults (25 – 54 years)	64.6%
	Seniors (55 and over)	8.3%

Looking at gender by age group for 2009 (Figure 1), it can be seen that the proportion of females using shelters decreases for older age groups. Children enter shelters as dependents, therefore the proportion of male and female children using shelters should be the same as in the general population, and this is what was found. Among adult shelter users between the ages of 25 and 54, three quarters are male. Almost four out of five adults over 55 are male and nearly two thirds of youth are male.

FIGURE 1

Gender by age group (2009)

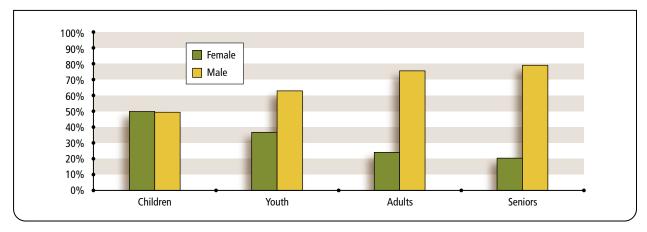
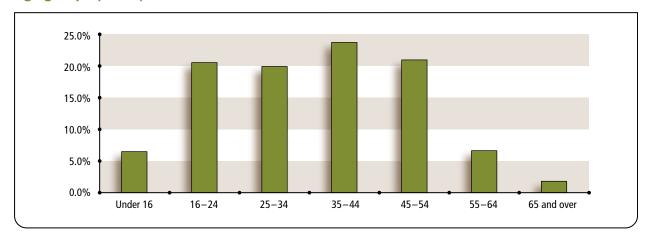


Figure 2 shows a finer breakdown by age group for 2009. Over 85 percent of shelter users are between the ages of 16 and 54 with roughly equal portions in each age group within this range. There are far few shelter users over 55 than in the preceding age brackets. Less than two percent of shelter users are over the age of 65. Homeless individuals are known to have higher mortality rates than the general population. A Canadian study (Hwang et al. 2009) found that remaining life expectancy at age 25 for homeless and marginally housed men was 42 years and that their probability of survival to age 75 was just 32 percent (p. 339). The high mortality rate among homeless individuals probably does not completely explain the small proportion of shelter users over 55—access to income support programs probably plays a role as well—but is likely a contributing factor.

FIGURE 2
Age groups (2009)



Children (Under 16 Years of Age)

In 2009, nearly 9,500 Canadian children used an emergency shelter. The average age of children using shelters was 6.5 years. The median length of stay for children was 24 nights, considerably longer than for any other group. Most children stay at family shelters or women/children shelters, but some youth shelters accept individuals who are under 16 years of age.

The number of children using emergency shelters is increasing (see Table 9), both in absolute numbers and as a proportion of shelter users. The number of children increased by over 50 percent between 2005 and 2009, from 6,205 to 9,459 (t (191)=3.09, p=.002). In 2005, children under 16 made up four percent of all shelter users. In 2009, their proportion rose to 6.5 percent of shelter users (t (203)=3.5, p<.001). This does not include children who stay in VAW shelters, which would add considerably to the total.

TABLE 9 **Estimated annual number of children using emergency shelters**

	• • • • • • • • • • • • • • • • • • • •	•••••	•••••
Year	Unique children	95% confid	ence interval
2005	6,205	5,438	6,972
2006	6,533	5,681	7,386
2007	7,463	6,405	8,520
2008	7,290	6,232	8,348
2009	9,459	7,539	11,378

ANOVA: F(4,496) = 3.07, p = .016

Youth (Ages 16 to 24)

Youth make up a highly visible segment of the homeless population and account for approximately 20 percent of shelter users in Canada. As can be seen in Table 10, the number of youth aged 16 – 24 using emergency homeless shelters was stable over the study period, at approximately 30,000 per year. In 2009, 63.0 percent of shelter users aged 16 to 24 were male, 36.9 percent were female and 0.1 percent reported another gender identity. The median length of stay for youth was four nights for males and five nights for females.

TABLE 10 **Estimated annual number of youth using emergency shelters**

Year	Youth	95% confid	ence interval
2005	31,890	29,410	34,371
2006	30,501	28,010	32,992
2007	30,210	27,906	32,514
2008	29,349	26,761	31,938
2009	29,964	27,394	32,535
	•••••	• • • • • • • • • • • • • • • • • • • •	•••••

ANOVA: F(4,508) = 0.55, p = .698, n.s.

Although there are nearly one hundred emergency shelters in Canada that specifically serve youth, many young people use other types of shelters. Each year, about four to six percent of stays by youth are at family or women/children shelters. In 2005 and 2006, there were more stays by youth at general shelters than youth shelters. Since 2007, stays by youth were split equally between general and youth shelters.

There are gender differences in the proportional use of various shelter types (see Table 11). Male youth are more likely than females to use general shelters. In 2009, 54.9 percent of male stays were at general shelters compared to 36.4 percent of female stays. Only 1.4 percent of stays by males were at family or women/children shelters compared to 14.1 percent for females. Many family shelters do not admit males over 16 unless they have dependent children with them. Young single mothers are much more common than young single fathers.

TABLE 11 Percentage of stays by youth at various shelter types by gender (2009)

Shelter type	Males	Females
Youth	43.7%	49.5%
General	54.9%	36.4%
Family/women/children	1.4%	14.1%
TOTAL	100%	100%

Design-based: F(1.32, 151.28) = 127.36, p<.001

Older Adults (Age 55 and Over)

The proportion of adults 55 and older has increased from 6.9 percent of all shelter users in 2005 to 8.3 percent in 2009 (t(203)=7.07, p<.001); however, the estimated number of individuals each year has not changed significantly (F(4,432)=1.17, p=.322, n.s.). As noted previously (in Figure 2), there are far fewer shelter users over age 55 than those aged 45-54. While 8.3 percent of shelter users are over 55, just 1.8 percent are over 65. The proportion of shelter users over 65 has grown very slightly, from 1.5 percent of shelter users to 1.8 percent (t(203)=7.10, p<.001) but there has not been a significant change in their absolute numbers (F(4,432)=1.06, p=.376, n.s., see Table 12).

Approximately 80 percent of shelter users over 55 are men. Older adults were more likely to have a long shelter stay than adults aged 25 - 54. In 2009, 13 percent of stays by shelter users over 55 were longer than one month, compared to 8.5 percent of stays by adults 25 - 54 (t(113)=10.31, p<.001).

TABLE 12
Estimated annual number of emergency shelter users age 55+ and 65+

										
Year	Age 55+	Age 65+								
2005	10,727	2,273								
2006	11,133	2,214								
2007	10,847	2,338								
2008	11,972	2,467								
2009	12,120	2,567								

Age 55+ ANOVA: F(4,432) = 1.17, p = .322, n.s. **Age 65+ ANOVA:** F(4,432) = 1.06, p = .376, n.s.

Adults (Ages 25 to 54)

The proportion of adults aged 25 to 54 dropped slightly from 67.7 percent in 2008 to 64.6 percent in 2009 (t (227)=2.76, p=.006). Although the number of adults appears to have declined from 106,222 in 2005 to 93,981 in 2009 (see Table 13), this is not statistically significant. In any case, even if absolute numbers are not changing year-to-year, the age composition of the shelter-using population is showing some shifts over the study period. Children and seniors are increasing as a proportion of the total shelter population, while the proportion of youth is stable and that of adults is decreasing.

TABLE 13
Estimated annual number of adults (age 25 – 54) using emergency shelters

	•••••	• • • • • • • • • • • • • • • • • • • •	•••••
Year	Adults	95% confid	ence interval
2005	106,222	96,093	116,351
2006	101,790	92,220	111,360
2007	97,757	88,158	107,355
2008	102,013	90,919	113,107
2009	93,981	84,733	103,228
	•••••	· · · · · · · · · · · · · · · · · · ·	•••••

ANOVA: F(4,508) = 0.89, p = .472, n.s.

Length of Stay

Shelter stays were examined using the stay-level dataset, which describes single shelter visits. Consecutive or overlapping stays by a client were merged into a single stay; however, these are not cumulative lengths of stay (i.e., the sum of stays by a client over the course of a year).

It is important to note that length of stay does not follow a normal distribution. Each year, between 25 percent and 29 percent of stays in the sample lasted only one night and there is an extreme positive skew, with a small number of stays lasting several years. Because of this, mean stay lengths may be misleading and should be considered only along with their standard deviations and median stay lengths. Length of stay has also been divided into categories: short (one week or less), medium (8 - 30 nights), and long (one month or more). A more detailed analysis using appropriate statistics (such as survival analysis) is beyond the scope of this mainly descriptive study.

Using the stay-level dataset and base sampling weights for the shelters, there were an estimated 400,000 to 500,000 stays at emergency shelters during each year of the study. The median length of stay for the sample as a whole was three nights. Looking at a breakdown of mean and median length of stay by shelter type (Tables 14 and 15) reveals that stay lengths were much longer in 2008 and 2009 than in earlier years at family shelters. Other shelter types did not show notable changes in length of stay, though means were slightly higher in 2009 for all shelter types. Note that the skewed distribution results in large standard deviations (Table 14) and that the median stay lengths (Table 15) are much shorter than mean stay lengths (Table 14).

TABLE 14

Mean length of stay (nights) and standard deviation by shelter type

Shelter type	Mean length of stay (standard deviation)									
	2005	2006	2007	2008	2009					
Family	33.4	32.2	31.4	49.8	50.2					
	(73.8)	(74.0)	(68.7)	(137.8)	(124.8)					
General	12.2	11.7	12.7	11.1	13.9					
	(49.8)	(46.2)	(52.0)	(47.1)	(54.9)					
Women/children	11.2	13.9	15.0	14.9	17.4					
	(29.6)	(59.8)	(59.2)	(56.6)	(59.0)					
Youth	18.9	18.2	16.5	15.1	18.8					
	(60.3)	(60.2)	(50.0)	(48.2)	(58.2)					
TOTAL	13.6	13.0	13.8	12.7	16.0					
	(50.7)	(48.2)	(55.9)	(49.0)	(59.8)					

TABLE 15 **Median length of stay (nights) by shelter type**

	•••••	•••••	•••••	•••••	•••••					
	Median length of stay									
Shelter type	2005	2006	2007	2008	2009					
Family	10	9	14	28	29					
General	3	3	3	2	2					
Women/children	3	4	4	4	4					
Youth	6	5	4	4	5					
TOTAL	3	3	3	3	3					
	• • • • • • • • • • • • • • • • • • • •	••••	• • • • • • • • • • • • • • • • • • • •	•••••	•••••					

Table 16 presents the estimated proportion of stays within each category of length of stay. Bearing in mind that single stays are not, in most cases, indicative of duration of homelessness, most stays were very short, with well over half of stays being one week or less. Each year, just 12.6 percent to 16.7 percent of all stays were longer than one month. Other than a slight increase in the proportion of long stays and a slight decrease in the proportion of short stays, Table 16 suggests few major changes in length of stay over the study period for the overall sample.

TABLE 16
Estimated proportion of short, medium and long stays

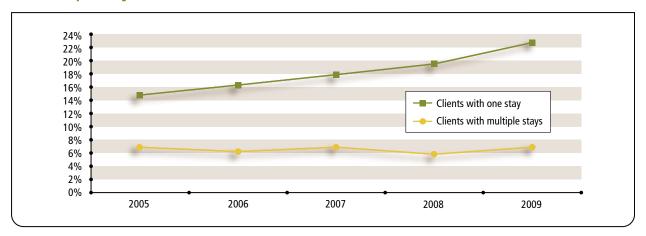
Length of stay	2005	2006	2007	2008	2009
Short (1 week or less)	65.1%	65.2%	66.1%	63.3%	61.4%
Medium (8 to 30 nights)	22.2%	21.7%	21.0%	22.1%	21.9%
Long (1 month or more)	12.6%	13.0%	12.9%	14.7%	16.7%
TOTAL	100%	100%	100%	100%	100%

At family shelters, the percentage of long stays (one month or more) increased from 31 percent to 48 percent while the percentage of short stays (one week or less) decreased from 45 percent to 21 percent over the study period.

The percentage of stays longer than one month was compared for clients with single stays and clients with multiple stays. Figure 3 shows that the percentage of long stays increased over time for single-stay clients (from 14.8 percent to 22.7 percent, F(4,508)=12.79, P<.001) but held steady (around six to seven percent) for multiple-stay clients. This suggests that temporary, one-time shelter users may be finding it increasingly difficult to resolve their homeless episodes.

FIGURE 3

Annual percentage of stays longer than one month by single-stay clients and multiple-stay clients

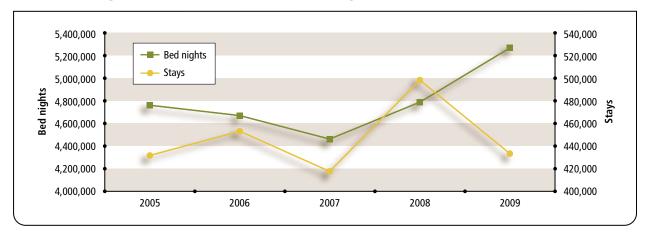


Shelter Level Statistics

The portrait of emergency shelter use is incomplete if we do not look at both individual statistics and shelter statistics. To understand the intensity of shelter use, it is important to look at bed nights used rather than simply the total number of stays. Figure 4 contrasts annual estimates of bed nights used with annual number of stays. The greatest number of bed nights used was in 2009 despite almost 65,000 fewer stays than in 2008.

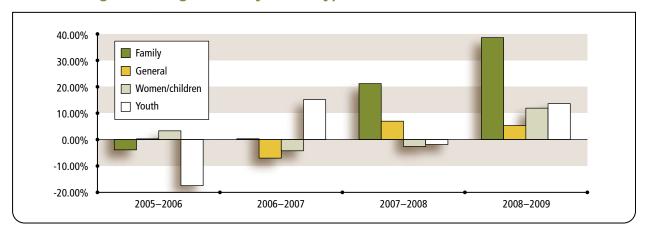
FIGURE 4

Annual bed nights used and annual number of stays



In terms of bed nights used, shelter utilization increased from 2008 to 2009 for all shelter types (Figure 5). The largest percentage increase was for family shelters, which saw a 21 percent increase in bed nights used from 2007 to 2008 and a 39 percent increase from 2008 to 2009, which means nearly 300,000 more bed nights were used at family shelters in 2009 compared to 2007. Bed nights used also increased at general shelters, by seven percent from 2007 to 2008 and by five percent from 2008 to 2009. That translates to over 400,000 additional bed nights used at general shelters in 2009 compared to 2007. In other words, on average, over 2,000 more people slept in shelters each night in 2009 compared to 2007. Youth and women/children shelters also saw increases in bed nights used from 2008 to 2009, by 14 percent and 12 percent respectively. The timing of these increases closely matches the beginning of the recession, though family homelessness seems to have been increasing even before the recession began and may be part of a larger trend.

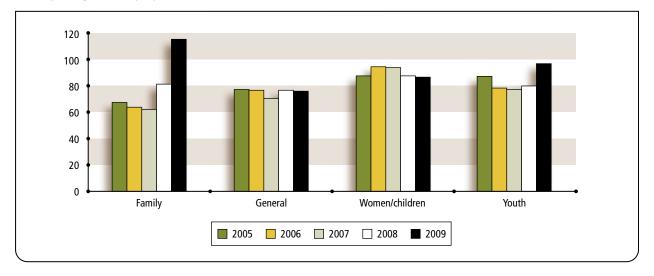
FIGURE 5
Percent change in bed nights used by shelter type



Looking at average occupancy rates for each shelter type (Figure 6), all shelter types are operating at a high capacity (> 75 percent) on average, but youth and family shelters were operating at or above capacity in 2009. The increased utilization at family shelters has caused the occupancy rate to swell above 100 percent.

The rising occupancy rates and increased shelter utilization for all shelter types in 2009 suggest that homeless people are using the shelter system more intensively. This is clearly reflected in the length of stay statistics for family shelters, but average length of stay and stay length by category did not show significant trends for other shelter types or categories of shelter users.

FIGURE 6
Occupancy rates (%)



Discussion

The overarching goal of this study was to estimate the number of unique individuals using emergency shelters each year in Canada. The finding that approximately 150,000 people use an emergency shelter each year is in line with other estimates that have been made. The 1987 CCSD study estimated 130,000 to 250,000 shelter users at all types of shelters. The Homelessness Partnering Secretariat's estimate of 150,000 to 300,000 homeless people included all types of homelessness, not just shelter users. The Annual Homeless Assessment Report (AHAR) published by the U.S. Department of Housing and Urban Development estimates around 1.5 million users of emergency shelters and transitional housing in the United States, with roughly ten times the population of Canada and ten times the number of shelter users estimated by the present study. Other findings, such as the gender and age composition of the sheltered homeless population, were consistent with the research literature. This lends support to the validity and efficacy of the sampling methods used.

To put these findings in context, it is worthwhile to consider who is included and excluded in a period-prevalence study of emergency shelters. The first and most obvious question is what proportion of the total homeless population is accounted for by looking at emergency shelter use? There are two types of homeless people potentially excluded from a study of emergency shelters: those who do not access shelter services and those who use other types of shelters.

Street homelessness It is clear from point-in-time counts that many homeless individuals "sleep rough" and it is known that some prefer not to use shelters. On the other hand, it is likely that due to a variety of circumstances (weather, illness, etc.) many of the chronically homeless access a shelter at some point during the course of a year. The Ottawa Street Needs Assessment (Farrell, Aubry and Reissing 2002) found that 61 percent of the street homeless use emergency shelters only when there is no other option. Seventy-three percent had used a shelter within the past six months but 24 percent had not stayed in an emergency shelter in over a year. Studies in several American cities have found that most homeless individuals had recently used shelter services. The Chicago Homeless Study found 82 percent had used a shelter in the past seven days (Rossi 1987). A 1990 study in Denver found only about two percent of the homeless population did not use services and another study found that just 15 percent of the homeless in downtown LA had not used a shelter or food line in the past month (James 1991: 742-3). These results suggest that a large majority of homeless people are likely to have used a shelter over the course of a year and would thus be included in the present study. On the other hand, it is certain that sampling shelters fails to capture the entire homeless population. It has been found that the non-shelter using street homeless are more likely to be middle aged, male, have lower education, and be more unkempt and confused. Conversely, the newly homeless, families and the economically homeless are more likely to be found in shelters than on the streets (James 1991: 745).

Transitional shelters Few studies have investigated systematic differences among clients of emergency shelters, transitional housing and Violence Against Women shelters. The AHAR includes both emergency shelters and transitional housing (but not VAW shelters), so can provide an idea of the amount of overlap between emergency and transitional services. According to the 2010 AHAR, 79 percent of individuals used only emergency shelter, 17 percent used only transitional shelters and four percent used both. This means that, at least according to the definition used in the United States, over 80 percent of the total shelter population might be accounted for in a study using only emergency shelters.

It might be assumed that, given a long enough study period, transitional housing clients would be captured at the emergency shelter stage of their progression through the shelter system; however, the 2010 AHAR also discovered that only about 29 percent of clients in transitional housing listed "emergency shelter" as their previous living situation. This suggests, as others (Spellman et al. 2010; Kuhn and Culhane 1998) have found, that it is not necessarily correct to assume a linear progression (i.e. emergency shelter \rightarrow transitional housing \rightarrow housed) through the shelter system. The adoption of "housing first" or "rapid re-housing" strategies in many jurisdictions might mean that more clients are being placed directly into transitional housing programs without having prior emergency shelter stays. A similar analysis has not yet been conducted using HIFIS data, but it may be useful to investigate whether the declining proportion of adult shelter users is related to these policies.

Violence Against Women (VAW) shelters It is certain that not including VAW shelters in this study leads to underestimating the number of women and children using shelters. The preliminary research using HIFIS data found that VAW shelters exhibit many of the same characteristics as emergency homeless shelters. Each serves clients in crisis or in acute need of shelter and has nearly identical stay lengths and turnover rates. Anecdotally, there is overlap in the clientele of VAW and homeless shelters. Many service providers within the sector consider clients of VAW shelters to be homeless. Many VAW shelters, due to funding arrangements or due to their mandate, exclusively serve women and their children who are fleeing violent or abusive situations. However, local policies seem to differ significantly on how strict the intake criteria are with regard to violence and abuse. In some communities there is nowhere else to go for women with children who are experiencing homelessness. Conversely, women fleeing violence may also use regular emergency shelters.

Turnaways The incidence of "turnaways" is another situation that can contribute to measures of emergency shelter usage yielding an incomplete or distorted picture of the homeless population. There is a risk that the number and characteristics of shelter users will be influenced by the capacity of the shelter system. Some of those who are turned away due to a lack of space or because they are barred from a specific shelter are likely to be counted at another shelter or at another time. The more important limitation presented by turnaways pertains to those who are turned away because of who they are. Individuals or families who cannot access appropriate services will simply not be counted. There are several situations where this may occur: a community may lack shelters that can accommodate children, family shelters may not admit males over 16, adult shelters may not be able to admit youth under a certain age, there may be a lack of shelters that can accommodate those with certain disabilities, etc. With occupancy rates approaching or exceeding capacity at family and youth shelters (Figure 6), there is an increased risk of undercounting homeless people simply because they are not able to access the services.

Conclusion

The findings of this study are generally consistent with what is known about homeless populations, which has mostly been researched at the local level. For example, it is well established that more males than females use shelters and that the average age of adults using shelters is mid- to late-thirties. It would be surprising if the results suggested otherwise. Perhaps most surprising is that the analysis of client duplication, although incomplete, suggested there may be very little geographic mobility among shelter-using homeless persons.

The importance of this study is not only to estimate the size of the sheltered homeless population, but to establish, in a broad sense, some basic characteristics of this population at the national level.

The study could be improved with better geographic representation and by taking into consideration urban/rural differences in shelter use, especially in the calculation of the duplication factor. Shelters in large cities have higher rates of multiple shelter use than shelters in small communities for the simple reason that small communities often have only one shelter, or at least only one shelter for any client demographic. On the other hand, over 80 percent of Canada's emergency shelters are in large urban centres. Regional and urban/rural factors were not included in the study design for the simple reason that to do so would create many more sample strata, some of which would be empty or would have no shelter data available.

Nevertheless, this study provides a strong starting point for examining national trends in shelter use. There has been no significant change in the total number of individuals using emergency shelters in Canada but there have been shifts in its composition. The proportion of adults is decreasing, which echoes the trend reported by the AHAR in the U.S., while the proportion of children increased, as has the use of family shelters. The 2010 AHAR reported that the number of homeless persons in families increased by 20 percent from 2007 to 2010 and that families made up a growing proportion of the total sheltered homeless population (p. iii). The median stay length for families is identical in this study and the 2010 AHAR, at 29 nights. There has also been a slight increase in the proportion of seniors. It will be interesting to see in the coming years if population aging leads to an increase in the number of homeless seniors, though the effect may be mitigated somewhat by the high mortality rate among homeless individuals. While there have been some shifts in other age groups, the proportion of youth using shelters has remained stable.

The total number of individuals using shelters and the changing composition of this population do not tell the full story about shelter use. Measures of the intensity of shelter utilization must be taken into consideration. Regardless of the overall size of the sheltered homeless population, this population (or components of it) may use shelters more or less intensively. The results in Figures 4 and 5 show that considerably more bed nights were used in 2009 than in previous years, with no corresponding increase in the number of shelter users. Part of this increase is due to the rise in family homelessness, because families consist of more than one person and have much longer shelter stays than individuals. In 2009, families accounted for just four percent of all stays but 14 percent of all bed-nights used. But increasing family homelessness does not account for all of the increase in shelter utilization. Family shelters did see the largest year over year increase in bed nights used in 2009, but all shelter types registered increases in the number of bed nights used from 2008 to 2009. On any given night, an average of 14,400 of the 15,467 permanent emergency shelter beds in Canada are used.

An increasing number of bed nights used without a corresponding increase in the number of clients served suggests that stay lengths are increasing. It was found that, in 2009, females were more likely to have long stays than males, seniors were more likely to have long stays than adults, and clients with single stays were more likely to have long stays than clients with multiple stays. The measures of stay length used here were not sensitive enough to examine the magnitude of specific changes among various types of clients, with the exception of children, whose median length of stay rose from 16 to 24 nights over the study period. A more detailed analysis of stay lengths using methods appropriate to the data may show other changes in length of stay for various types of clients.

Emergency shelters, as an initial point of contact for a broad category of those experiencing homelessness, can be used in a sample study to identify trends and act as an indicator for understanding the size of the homeless population. It is recognized that restricting the study to emergency shelters does not provide a complete picture of the homeless population. A small segment of the street homeless and some users of transitional housing and VAW shelters are excluded. Bearing in mind these limitations, the estimates presented here should be considered the minimum extent of homelessness in Canada: at least 150,000 Canadians experience homelessness each year.

In addition to establishing a baseline estimate of homelessness and introducing a method for sampling shelters at the national level, this study can help guide future research and assist in formulating better research questions. The most obvious avenues for further research surround family homelessness and the increasing number of children using shelters, a more detailed investigation of length of stay, the impact of "housing first" strategies on emergency shelter use, and a typology of homeless individuals and families.

Appendix A

Gender by age group composition (%) of emergency shelter users, 2005 – 2009

	Gender														
Age group		2005			2006			2007			2008			2009	
(years)	Male	Female	Other	Male	Female	Other	Male	Female	Other	Male	Female	Other	Male	Female	Other
0 – 15	50.6	49.4	0.0	48.1	51.9	0.0	49.7	50.3	<0.1	51.9	48.1	<0.1	50.1	49.8	0.1
16 – 24	66.3	33.7	0.0	65.0	34.6	0.2	64.7	35.1	0.3	64.3	35.6	0.1	63.0	36.9	< 0.1
25 – 34	71.1	28.8	< 0.1	68.9	30.8	0.3	70.1	29.3	0.7	71.9	28.0	0.1	71.5	28.3	0.2
35 – 44	75.7	24.3	< 0.1	74.7	24.9	0.4	75.7	23.8	0.6	76.1	23.7	0.2	76.1	23.8	0.1
45 – 54	79.8	20.2	0.0	79.8	20.0	0.2	78.3	21.2	0.6	78.4	21.4	0.2	79.4	20.6	< 0.1
55 – 64	76.7	23.3	0.0	78.4	21.5	0.1	78.7	21.0	0.4	81.0	18.9	0.1	79.1	20.8	< 0.1
65 or older	79.4	20.6	0.0	81.8	18.0	0.2	74.2	25.1	0.7	78.0	22.0	0.0	79.7	20.3	0.0
TOTAL	72.9	27.1				0.3			0.5	72.9	26.9	0.1	72.3	27.6	<0.1

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