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No. 21 - SUMMER 1991

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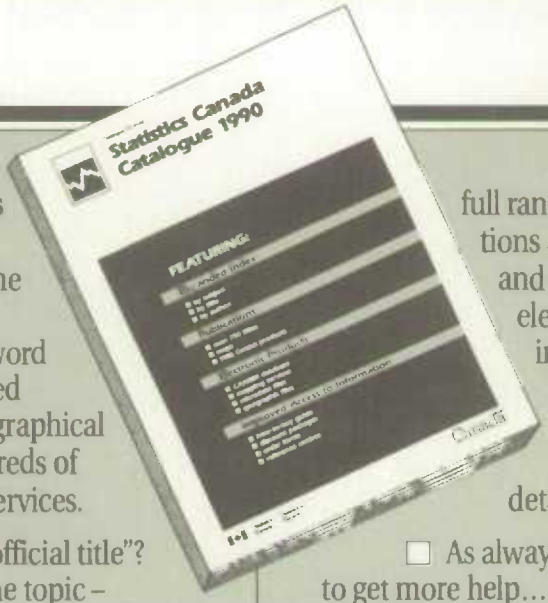

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Cover: ***Sunnyside, Toronto*** (1923) oil on canvas, 91.8 x 99.8cm. Collection: National Gallery of Canada.

About the artist:

Born in England, **Mary Evelyn Wrinch** (1878-1969) immigrated to Toronto in 1885. A landscape painter and printmaker, she studied at the Central Ontario School of Art, Toronto and the Grosvenor Life School, London. Miss Wrinch also took up studies in miniature painting in London and New York.

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CANADA'S CHILDREN

by Alain Crégheur and Mary Sue Devereaux

Although their parents might not agree, children constitute a silent minority in the Canadian population — silent because they are neither voters nor taxpayers who can command attention from politicians and policy-makers. Yet many children are confronting serious problems, and all are affected by social change.

By world standards, of course, Canadian children are among the fortunate few. Child mortality rates are low and have fallen significantly in the past decade. Virtually all children attend school, and most live in homes with an array of modern conveniences and entertainment equipment.

On the other hand, substantial numbers of children, particularly those in lone-parent families headed by women, are in a low-income situation. Limited finances can have implications for their health, educational attainment, and emotional well-being.

A large minority

As of 1990, Canadian boys and girls under age 15 numbered some 5.6 million. This was a slight increase from 1986, when the total had been 5.4 million.

Even so, the 1990 figure marked a steep decline from 6.4 million in 1971. As well, projections indicate that by 2001, the number of children in Canada will not have changed substantially, remaining stable at around 5.5 million.[1]

Children account for a declining proportion of all Canadians. In 1990, they made up 21% of the total population, down sharply from 30% in 1971. Moreover, it is projected that by 2001, children's share of the population will have fallen to 19%.

Death rates falling

By many measures, Canadian children are in a favourable situation. For instance, child mortality rates are low and have dropped substantially during the 1980s.

Of all Canadian children, infants face the greatest risk of death. In 1988, for every 100,000 boys under age 1, there were about 800 deaths, and for girls, 630 deaths. However, in 1981, the comparable figures had been almost 1,200 deaths for boys and more than 900 for girls.

While these rates may seem high, they are among the lowest in the world. For example, in some African countries such as Mozambique, Angola, and Sierra Leone, 1988 infant mortality exceeded 15,000 per 100,000 children under age 1.

Mortality rates among older Canadian children are much lower than among infants. In fact, death rates at ages 1-14 were all under 50 per 100,000 in 1988. As well, these rates were down from levels in the early 1980s.

[1] This is a medium-growth projection which incorporates the most recent course of events. It assumes a fertility rate of 1.67 births per woman by 2011 and average annual immigration of around 200,000.

Causes of death among children vary at different ages. For infants, the two leading causes in 1988 were perinatal conditions and congenital anomalies such as spina bifida, Down's syndrome, and fetal alcohol syndrome. Together, perinatal conditions and congenital anomalies accounted for seven out of ten infant deaths.

For older children, accidents were the main cause of death in 1988. Congenital anomalies were the second leading cause at ages 1-4, while at ages 5-14, cancer ranked second.

At school

Another positive aspect of the lives of Canadian children is their access to education. In fact, compulsory education laws and the wide availability of kindergarten mean that virtually all children aged 5-14 attend school. As well, by 1988, 46% of children aged 4 were enrolled, up from 28% in 1977.

The majority of children are learning the country's two official languages. In Canada outside Quebec, the proportion

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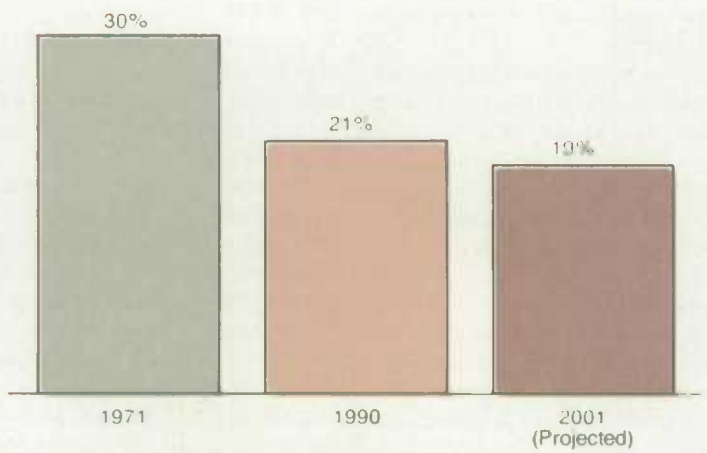
Children as a percentage of total population, 1971-2001



Source: Statistics Canada, 1971 Census of Canada and Catalogues 91-210 and 91-520.

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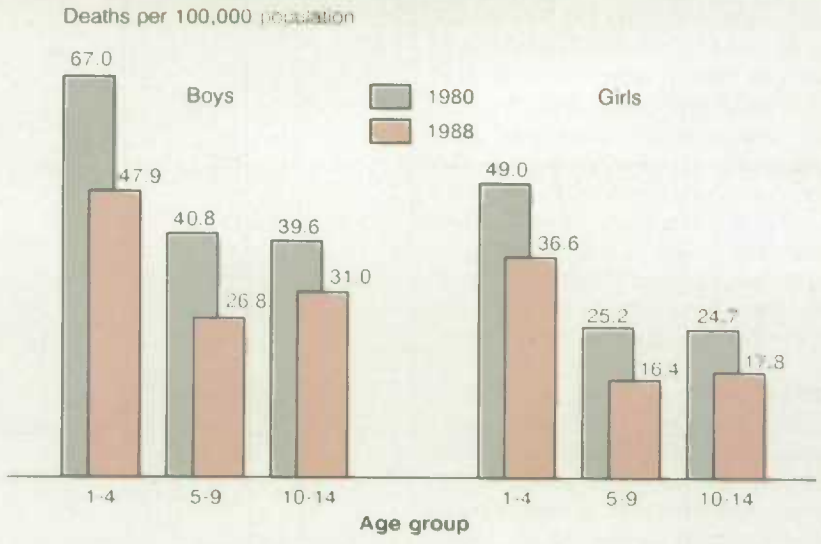
Mortality rates for children aged 1-14, by age and sex, 1980 and 1988



Source: Statistics Canada, Catalogues 82-003s and 84-206.

of pupils learning French as a second language rose from 54% in 1983 to 62% in 1988. Figures for Quebec pupils learning English are not comparable, as English instruction does not begin until Grade 4. But from then until the end of high school, all Quebec pupils are enrolled in classes to learn English.

At home

The homes of most Canadian children contain a number of features designed for enjoyment or to enhance convenience and safety.

In 1989, almost every Canadian child (98%) lived in a household equipped with a colour television set. Around three-quarters (76%) of children could tape programs and watch movies on videocassette recorders, and 70% of children were able to watch programs brought to their homes by cable television.

Television viewing, in fact, accounts for a substantial segment of children's leisure. Nonetheless, they actually spend less time watching TV than do adults. In 1989, children aged 2-11 watched television an average of 20.3 hours a week, compared with 23.4 hours for adults aged 18 and over.

Computers are less common, but by 1988, 20% of Canadian children were in households that had a home computer.

Microwave cooking facilitates meal preparation in the majority of households with children. In 1989, 75% of children lived in homes equipped with a microwave oven.

More in lone-parent families

The proportion of children who live in lone-parent families is growing. In 1986, 13% of all children were in lone-parent families, up from 9% in 1976. By contrast, 85% of children were in husband-wife families in 1986, a decline from 89% in 1976. A small proportion, just 2%, were living with relatives other than their parents and/or non-relatives in 1986. This percentage was unchanged from 1976.

As well, in recent years, custody awards arising from divorces have involved an annual total of around 50,000 children. In 1988, custody of 50,200 children was granted after their parents had divorced.

Parents at work

The majority of parents, even those who are partners in husband-wife families, have jobs outside the home. Moreover, the percentage of children with working parents rose substantially throughout the 1980s.

In 1988, both parents of 64% of children in husband-wife families were employed, compared with 51% in 1981. Furthermore, the proportion of children with both parents working full-time year-round rose from 20% in 1981 to 29% in 1988.

Children in lone-parent families were also more likely to have that parent employed in 1988 than in 1981. By 1988, the lone parent of 69% of all children in such families was working, compared with 66% in 1981. However, only about half of these jobs were full-time.

The situation of children with working parents is affected by the availability of day care. In 1989, there were around 7,000 day care centres in Canada with just over 298,000 spaces. These spaces could accommodate only 14% of children potentially in need of some form of care.

Low income

A considerable number of Canadian children live in families that are below the official low-income cut-offs. Such families spend at least 58.5% of their income on food, shelter, and clothing.

In 1988, 15.4% of all children were in low-income families, roughly the same proportion as in 1981 (15.6%). However, during the recession in the early 1980s, the incidence of low income among Canadian children had risen to 20%.[2]

Children are more likely than people aged 16-64 to be in low-income situations. In 1988, the proportion of 16-64-year-olds below the official low-income cut-offs was 11.7%, almost the same level as in 1981 (11.8%).

On the other hand, children are somewhat less likely than people aged 65 and over to be in straitened circumstances. In 1988, 17.2% of the elderly were classified as low-income, about two percentage points above the level for children. But since 1981, the income situation of the elderly has improved substantially, while that of children has scarcely changed. In 1981, 26.3% of elderly people were below the low-income cut-offs, compared with 15.6% of children.

Low income and lone-parent families

By far, the incidence of low income among children is highest in families headed by a female lone parent. In 1988, 58% of children in female-headed lone-parent families were in a low-income situation. This figure, however, was unchanged from 1981. The incidence of low income is not as high among children in families headed by a male lone parent. In 1988, 32% of children in male-headed lone-parent families were in the low-income category. Nonetheless, this was up substantially from 22% in 1981.

Low income is much less prevalent among children in husband-wife families. In 1988, 10% of these children were in a low-income situation, a slight drop from 11% in 1981.

[2] The proportion of children below the low-income cut-offs refers to the 0-15 age group; low-income data by family type refer to children aged 0-14.

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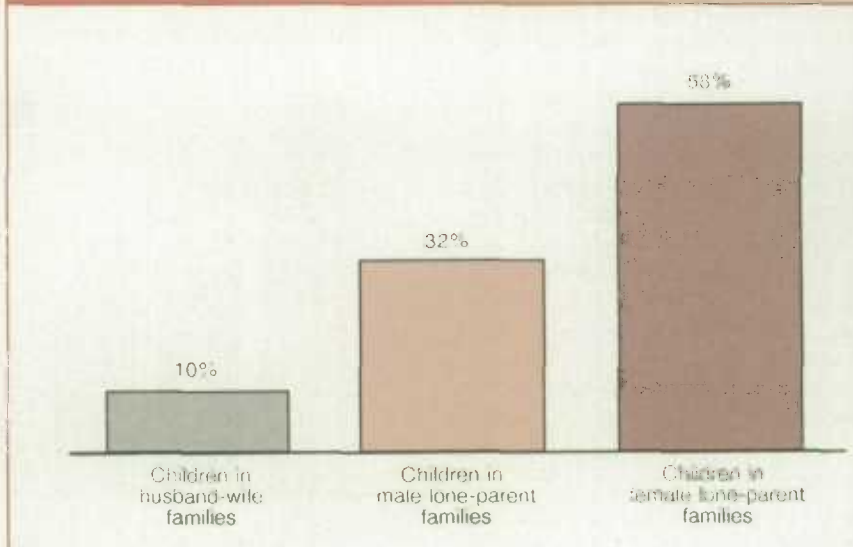
Incidence of low income among children, by family type, 1988



Source: Statistics Canada, Household Surveys Division.

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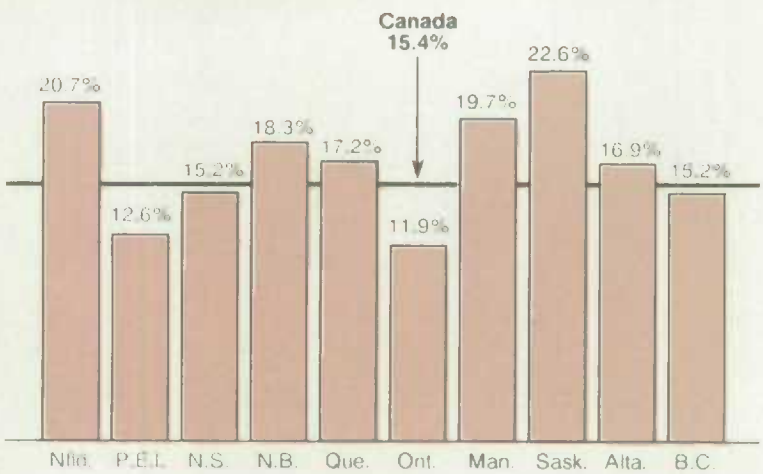
Incidence of low income among children, by province, 1988



Source: Statistics Canada, Household Surveys Division.

Wide provincial variations

The incidence of low income among children varies widely in different provinces. The national level for low-income children in 1988 (15.4%) was strongly affected by the largest province, Ontario, where the figure was just 11.9%. In fact, the incidence of low income among children was below the national level in just three other provinces: Prince Edward Island, Nova Scotia, and British Columbia.

By contrast, low income among children was most prevalent in Saskatchewan, where 22.6% were below the cut-offs in 1988. Rates were also high in Newfoundland, Manitoba, and New Brunswick, while proportions in Quebec and Alberta were closer to the national average.

Conclusion

In dealing with summary statistics concerning five and a half million children, it is possible to become overly focused on the problems of the disadvantaged one in six. Living in a lone-parent family can take both an emotional and economic toll. As well, low-income situations may be related not only to the lack of material goods, but also to school problems and poor health. The presence of poverty amidst plenty, especially graphic in the case of young children, attests to the perpetuation of pronounced inequality of conditions for some young Canadians.

Yet undeniably, the majority of Canadian children lead comfortable lives. They are growing up in secure households with an abundance of facilities and opportunities that children in other parts of the world can scarcely imagine.

Alain Crégheur *and* **Mary Sue Devereaux** *are senior analysts with the Housing, Family and Social Statistics Division, Statistics Canada.*

• More information on children can be found in Statistics Canada's *A Portrait of Children in Canada*, Catalogue 89-520.

EARLY CHILDHOOD MORTALITY, 1926-1986

by Margaret Penny Denton and Frank Trovato

Since early in the century, deaths among young children have decreased dramatically as a proportion of all deaths in Canada. This is mainly because of a significant drop in the mortality rate of children under 5 years old. Over the same period, deaths from infectious diseases have been largely brought under control in Canada and non-infectious diseases and conditions have replaced them as the major cause of death in early childhood.

Childhood deaths down

Early childhood deaths have declined as a proportion of total deaths since at least the 1920s. From 1981 to 1985, only 2% of deaths occurred among children aged less than 5 years, down sharply from 27% in the 1926-1930 period.

Most early childhood deaths occur in the first year of life. During the 1981-1985 period, infant deaths (those among children under 1 year) accounted for 83% of all deaths of children under 5 years old. Although down slightly from the peak of 86% in the 1956-1960 period, the proportion was still much higher than in the late 1920s when it was 76%.

Declining proportion of young children

By 1986, Canada's population numbered 25.4 million, up from 9.5 million in 1926. Between those years, the proportion of the population under 5 years old fluctuated considerably, reaching a low of 7.1% in 1986. After declining from 11.5% in 1926 to 8.9% in the late 1930s, the percentage of children this age peaked at 12.6% in 1958, reflecting baby-boom fertility. Since then, the proportion has been declining.

Major reasons for the recent decline in the proportion of the population under 5 years old are falling birth and death rates and the increasing longevity of Canadians.

The birth rate per 1,000 population fell from 24.6 births in 1926 to 19.9 in 1937, before rising to 28.7 in 1947. It remained high throughout the baby-boom period, before resuming its decline in the early 1960s. By 1986, the birth rate had dropped to 14.7 per 1,000 population.

The death rate per 1,000 population declined to 7.3 deaths in 1986 from 11.4 in 1926, with occasional reversals in the overall trend.

Canadians live much longer now than they did early in the century. For example, the life expectancy for girls born in 1986 was 80 years and for boys, 73 years. This was considerably higher than 62 years for girls and 60 years for boys in 1931.

As birth rates decline and the population ages, immigration may provide a way to bolster overall population. In addition, the age of immigrants will have an increasing effect on the age distribution of Canada's population.

Neonatal deaths (those among infants under 4 weeks old) now account for most infant deaths, a change of the pattern that prevailed early in the century. In the 1920s, there was a preponderance of postneonatal deaths (those among infants 4 weeks and older). During the following two decades, the proportions of postneonatal and neonatal deaths were generally equal. From 1981 to 1985, however, 65% of infant deaths occurred among children under 4 weeks old, down from a high of more than 70% in the 1966-1970 period.

Mortality rates

A main reason why early childhood deaths now account for a lower proportion of total deaths is that mortality rates among young children, particularly infants, have dropped very quickly.

By 1986, only 7.9 infants died per every 1,000 live births, compared with 101.8 in 1926. The decline in the rate was irregular, however, because of periodic infectious disease epidemics in this vulnerable segment of the population.

The magnitude of the decline in mortality rates among postneonatal and neonatal infants has been similar. Postneonatal rates, however, dropped somewhat faster, to 2.8 deaths per 1,000 live births in 1986 from 54.1 in 1926. Among infants under 4 weeks, the rate was 5.1 in 1986, down from 47.7 in 1926.

Among children aged 1-4 years, mortality rates also have declined throughout the century. However, within this age group, rates consistently have been highest among children 1 year old, declining with each subsequent year of age.

Stillbirths (fetal births occurring after 20 weeks gestation) are still considered less responsive to medical intervention but also show a steady decline. By 1986, only 6.2 stillbirths occurred per 1,000 live births, down considerably from 30.5 in 1926.

Male rates still higher

Throughout the 60 year period, death rates for both boys and girls plummeted. Male mortality rates remained higher than those of females but the gap has narrowed considerably. For example, in 1986, among infants aged 4 weeks and over, the rate for boys was 2.9 deaths per 1,000 live births, compared with a rate of 2.6 for girls. In 1926, male and female postneonatal mortality rates were 59.0 and 48.8, respectively.

Similarly, in 1986, 5.8 deaths occurred for every 1,000 live births among males under 4 weeks old, compared with a rate of 4.5 for females. Sixty years earlier, the comparable rates were 53.9 for males and 43.1 for females.

Infectious and non-infectious diseases

Mortality rates for the broad categories of both infectious and non-infectious diseases have been declining since early in the century. Death rates from infectious diseases, however, have dropped much more sharply than those for non-infectious diseases.

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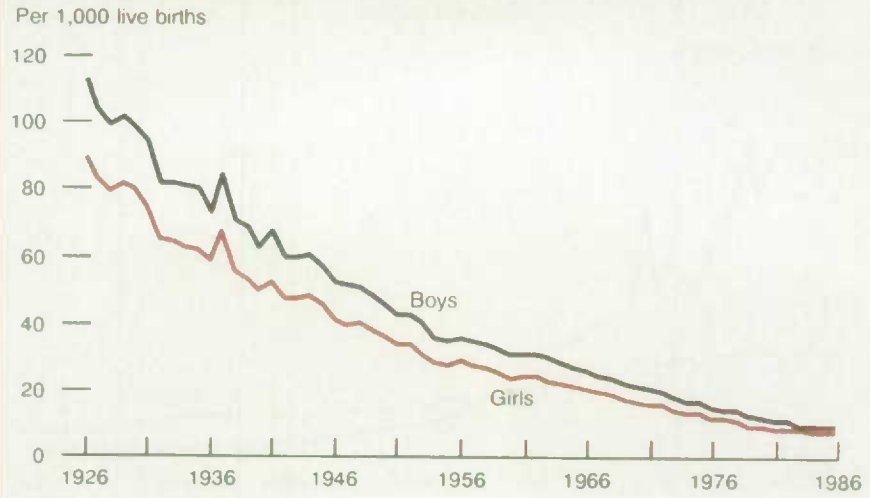
Infant[1] mortality rates, by sex, 1926-1986



[1] Children under 1 year.
Source: Statistics Canada, Vital Statistics and Causes of Death as published from 1926-1986.

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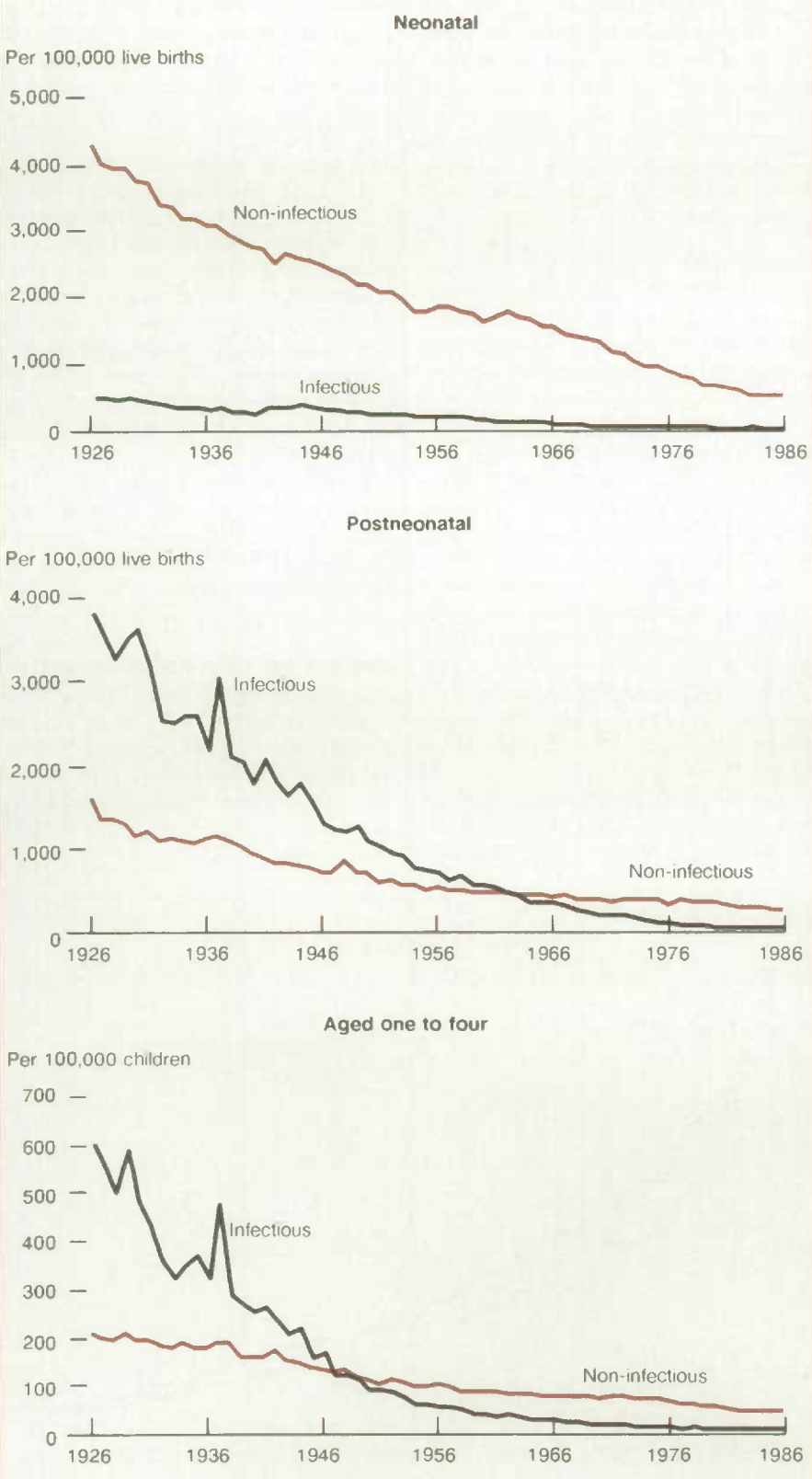
Early childhood mortality rates, by age and type of disease, 1926-1986



Source: Statistics Canada, Vital Statistics and Causes of Death as published from 1926-1986.

Consequently, non-infectious diseases and conditions (including accidents, congenital anomalies, prematurity, cancer, and others) now account for most deaths among children under 5 years old. This reverses the pattern of earlier in the century when infectious diseases caused most early childhood deaths.

From 1981 to 1985, non-infectious diseases caused 90% of both deaths among children aged 1-4 years and postneonatal deaths. In contrast, in the 1926-1930 period, non-infectious diseases caused only 28% of deaths in this age range.

Unlike the pattern among other young children, non-infectious diseases have consistently accounted for most neonatal deaths. In the 1981-1985 period, such diseases caused 97% of neonatal deaths, up from 90% in the late 1920s.

Leading non-infectious causes of death

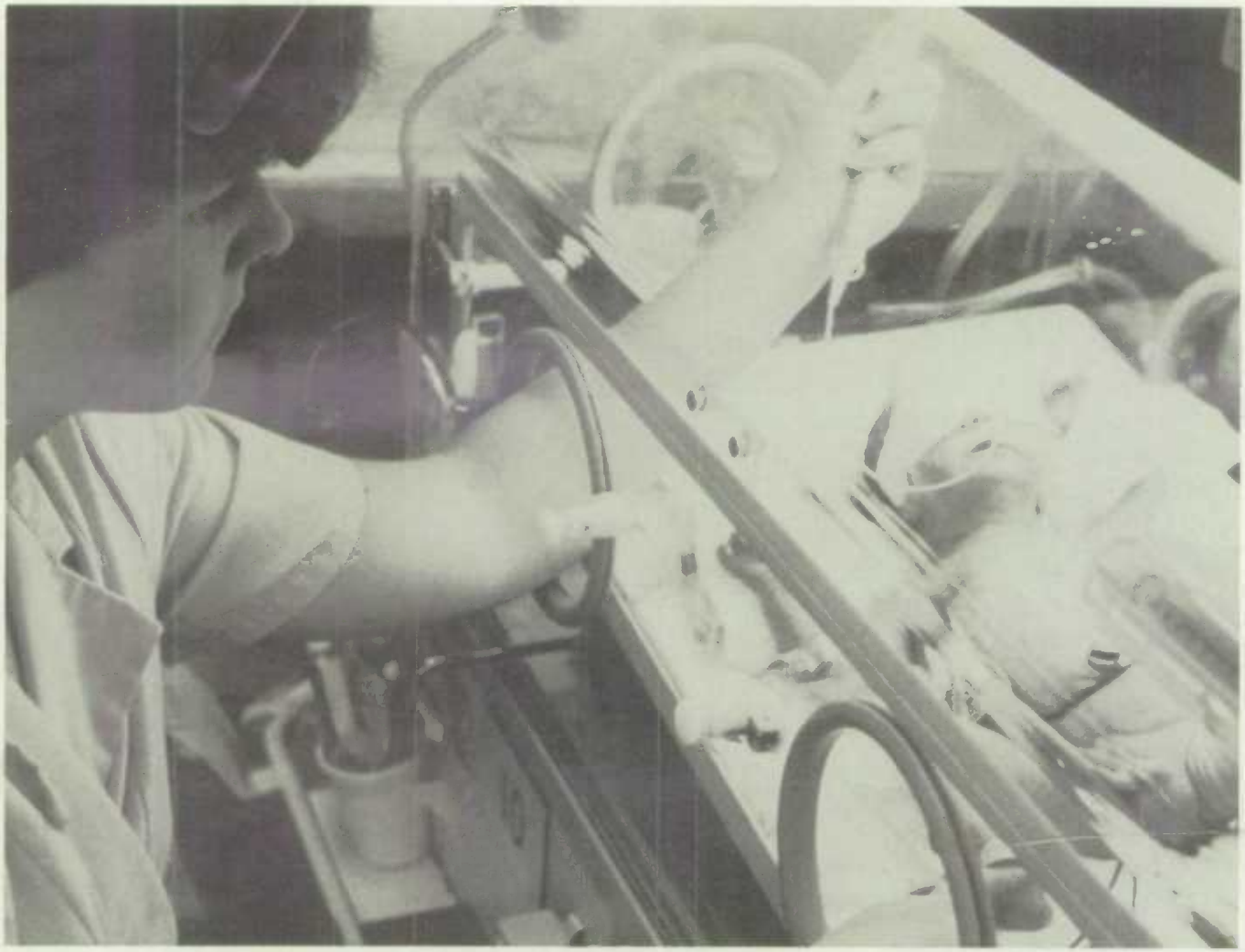
Among young children, mortality rates for all non-infectious diseases except cancer have declined sharply over the century. Differences in the magnitude of declines

Communicable childhood diseases

From 1926 to 1985, epidemics of communicable diseases (infections transmissable from person to person) have sometimes caused short-term reversals in the overall decline in mortality rates among young children. Tuberculosis and influenza epidemics influenced mortality rates early in this period. At various times, epidemics of measles, mumps, chicken pox, whooping cough, and scarlet fever also affected rates.

Nonetheless, mortality rates for all communicable diseases have dropped throughout the century. In fact, such diseases now cause very few childhood deaths. However, rates of illness from whooping cough are rising again due to decreased levels of immunization.

Of all infections, those of the gastrointestinal area and the respiratory tract accounted for most deaths in children under 5 years old since 1926. Although major outbreaks of gastrointestinal infections occurred several times up to 1941, the overall decline in mortality rates for such infections has been rapid. For respiratory infections, rates were high and fluctuating for children under 5 until 1945, but dropped off sharply after that.



have resulted in shifts in the leading causes of death.

Children aged 1-4 years: Accidents have been the leading cause of death among children aged 1-4 years since the 1960s. For example, in the 1981-1985 period, they accounted for 42% of deaths in this age range. In contrast, only 8% of deaths among 1-4-year-olds resulted from accidents in the 1926-1930 period, even though there were fewer actual deaths from accidents from 1981 to 1985.

Congenital anomalies, such as an incompletely formed nervous system or major organ, have accounted for a growing proportion of deaths as the decades advanced, and are now the second leading cause of death among children aged 1-4 years. From 1981 to 1985, 16% of young children died as a result of congenital anomalies, compared with only 1% in the late 1920s.

Cancer accounts for a larger proportion of deaths among children aged 1-4 years now than in the early 1930s. From 1981 to 1985, 11% of deaths among children this age resulted from cancer. Although

Percentage of deaths among children aged 1-4 due to selected causes, 1926-1985

	Infectious diseases	Non-infectious		
		Accidents	Congenital anomalies	Neoplasms
		%		
1926-1930	72.6	8.4	1.3	0.8
1931-1935	66.8	11.1	1.7	1.6
1936-1940	64.8	12.0	2.3	2.0
1941-1945	58.5	17.1	4.0	3.1
1946-1950	49.6	23.2	5.8	5.0
1951-1955	41.2	29.2	7.1	7.3
1956-1960	33.3	32.6	10.4	9.5
1961-1965	26.9	37.3	11.2	10.6
1966-1970	22.0	41.1	13.2	11.1
1971-1975	15.6	44.4	14.7	10.4
1976-1980	12.5	45.0	14.8	10.3
1981-1985	10.2	41.5	16.3	11.0

Source: Statistics Canada, Vital Statistics and Causes of Death as published from 1926-1985.

Percentage of infant deaths due to selected causes, 1926-1985

	Infectious diseases		Non-infectious diseases							
			Congenital anomalies		Prematurity		Accidents		Neoplasms[1]	
	Neo-natal	Post-neo-natal	Neo-natal	Post-neo-natal	Neo-natal	Post-neo-natal	Neo-natal	Post-neo-natal	Neo-natal	Post-neo-natal
					%					
1926-1930	10.3	72.0	8.9	4.0	41.1	2.9	0.7	1.2		
1931-1935	9.5	71.1	9.7	5.1	41.0	3.3	0.8	1.5		
1936-1940	8.5	67.9	11.2	6.9	40.6	4.3	0.6	2.1		
1941-1945	11.6	68.5	14.1	9.4	37.9	2.4	0.9	3.1		
1946-1950	10.4	62.7	14.0	11.3	38.1	2.1	1.0	5.1		
1951-1955	9.3	60.8	15.2	14.5	23.1	1.7	1.0	7.0	0.1	0.6
1956-1960	8.7	56.1	15.3	16.7	25.1	1.7	0.8	9.6	0.1	0.7
1961-1965	6.3	48.6	16.1	20.3	26.5	1.1	0.7	13.3	0.1	0.8
1966-1970	4.8	40.0	17.7	23.9	23.0	0.5	0.7	15.4	0.1	1.0
1971-1975	3.9	28.8	21.4	23.4	14.5	0.2	0.6	13.9	0.1	1.1
1976-1980	3.5	16.2	27.9	25.4	12.0	0.2	0.5	9.7	0.2	1.0
1981-1985	3.0	10.4	34.5	23.5	10.5	0.1	0.5	7.5	0.2	1.2

[1]Data not subdivided into neonatal and postneonatal age groups until 1950.
Source: Statistics Canada, Vital Statistics and Causes of Death as published from 1926-1985.

this proportion has been relatively stable since the late 1950s, it is up considerably from 1% in the 1926-1930 period.

Infants: Since the early 1930s, congenital anomalies have accounted for an increasing proportion of infant deaths. Now the leading cause of death, these anomalies made up about one-quarter (24%) of postneonatal and one-third (35%) of neonatal deaths in the 1981-1985 period. These figures were up from 4% and 9%, respectively, in the 1926-1930 period.

Among neonatal infants, deaths due to prematurity have dropped sharply in recent decades. In the 1981-1985 period, only 11% of neonatal deaths resulted from prematurity; until the 1950s, the proportion was around 40%.

Margaret King *is a doctoral candidate in the Department of Sociology,* **John Gartrell** *is a Professor of Sociology and* **Frank Trovato** *is an Associate Professor of Sociology at the University of Alberta.*

SURGERY AMONG ELDERLY PEOPLE

by Mary Beth Maclean and Jillian Oderkirk

An increasing elderly population is placing greater demand on the health care system. Surgery, in particular, is becoming far more common among elderly people. From 1975 to 1987, the number of people aged 65 and over rose 46%, while the growth in the number of their surgical procedures was more than double that rate. In addition, among elderly people, surgery has increased as a percentage of all hospital procedures. Within the 65 and over age group, men have surgery more often than women, but women stay longer in hospital. For most major types of surgery among elderly people, rates have increased, with digestive and abdominal region surgery remaining most common.

Surgery increasing

Elderly patients are now more likely to have surgery as part of their hospitalization. Between 1975 and 1987, the number of surgical separations increased 104%, compared with a 59% increase in hospital separations. Consequently, surgical separations increased to 37% of all hospital separations among elderly people in 1987, up from 29% in 1975. For the non-elderly population, surgical separations rose to 55% of all hospital separations in 1987 from 50% in 1975.

Elderly/non-elderly gap widening

Surgery rates are higher for elderly people than for the younger population, and the difference has increased over time. From 1975 to 1987, the surgical separation rate for elderly people rose 40% to 13,800 per 100,000 elderly people. In contrast, the rate for non-elderly Canadians declined 12% to 6,400 per 100,000.

Elderly men have more surgery

Elderly people — particularly elderly men — are much more likely than those under 65 to have surgery. In 1987, elderly men had a surgical separation rate of 17,000 per 100,000, compared with 4,200 per 100,000 for non-elderly males. For elderly females, the surgery rate was 11,700 per 100,000 and 8,500 per 100,000 for non-elderly females.

There is less difference between the rates for elderly and non-elderly females than for elderly and non-elderly males. This is partly because obstetrical procedures are performed only on non-elderly females, increasing their surgery rates. When obstetrical procedures were excluded, the 1987 separation rate for non-elderly females fell to about 5,800 per 100,000.

Rate higher among very old

People aged 75 and over were more likely to have surgery than were those

Out-patient surgery

Surgical separation rates exclude out-patient surgeries. In 1987, there were more than 1.3 million visits to surgical out-patient programs in Canadian hospitals, a 93% increase from the 1976 total. By comparison, the number of surgical separations increased 12% over the same period to 1.8 million. As a result, the difference between in-patient surgical separations and total surgeries performed has grown.

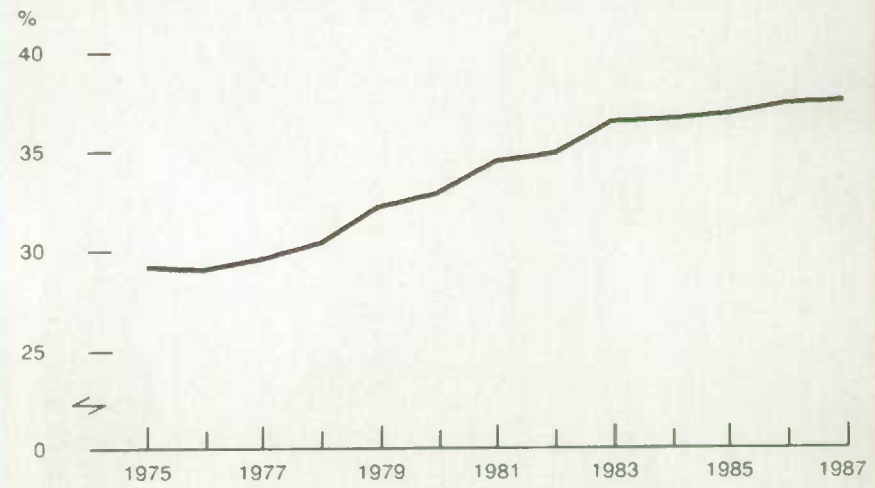
Hospital and surgical separations

A hospital separation is the discharge or death of an in-patient (a person admitted into a hospital). When an in-patient has surgery, this is counted as a surgical separation. Counts of surgical separations represent surgical procedures, not patients; thus, a patient having two kinds of surgery during a single hospital stay would be counted as two surgical separations.

Surgical separations exclude the Eighth Revision of the International Classification of Diseases Chapters XVIII to XXIII for the years 1975 to 1978 and the Canadian Classification of Diagnostic, Therapeutic, and Surgical Procedures Chapter I, Certain Diagnostic and Therapeutic Procedures, for the years 1979 to 1987.

CANADIAN SOCIAL TRENDS

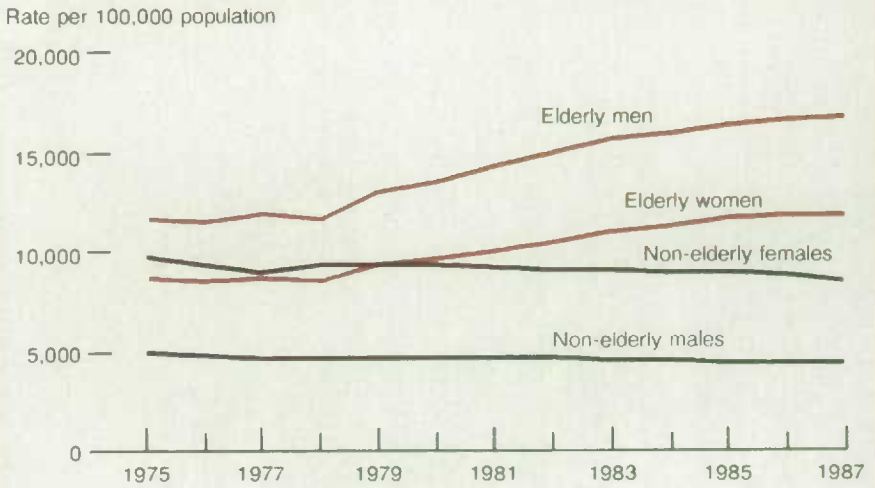
Surgical separations as a percentage of total hospital separations among elderly people, 1975-1987[1]



[1] Prior to 1979, data were collected for the calendar year. Since then, data have been collected from April 1 to March 31.
Source: Statistics Canada, Catalogues 82-003s, 82-206 and 82-208.

CANADIAN SOCIAL TRENDS

Surgical separations, by age and sex, 1975-1987[1]



[1] Prior to 1979, data were collected for the calendar year. Since then, data have been collected from April 1 to March 31.
Source: Statistics Canada, Catalogues 82-003s and 82-208.

aged 65 to 74. In 1987, the surgical separation rate was about 15,700 for every 100,000 people aged 75 and over, compared with 12,800 for those aged 65 to 74.

In addition, the rate for the 75 and older age group has increased more rapidly in recent years than the rate for the 65 to 74 group. From 1984 to 1987, the 75 and over group had a 10% increase; for the 65 to 74 group, the increase was 5%.

Days of hospital care

Elderly surgery patients stay longer in hospital than their younger counterparts. In 1987, the average number of days elderly surgery patients stayed in the hospital (17.3) was more than 10 days longer than the average for non-elderly surgery patients (6.6).

However, from 1981 to 1987, the average number of days elderly surgery patients spent in hospital declined 6%. This was a reversal of the trend from 1975 to 1981 when the number of days increased 4%.

In the 65 and over age group, female surgery patients spend more days in hospital than their male counterparts. In 1987, elderly women undergoing surgery stayed an average of 18.7 days, compared with 15.9 days for men. This 2.8 day difference was more than three times larger than the 0.8 day gap in 1975.

Types of surgery

Operations on the digestive system and abdominal region were the most common types of surgery for both elderly men and women in 1987: 3,800 surgeries of this type were performed for every 100,000 elderly men, and 2,400 for every 100,000 elderly women. Within this broad category, for elderly men, the highest rates were for hernia operations (1,100 per 100,000). For elderly women, gall bladder surgery rates were highest (just under 500 per 100,000).

The ranking of other leading surgeries differed for elderly men and women. The highest rates for elderly men included those for surgery on the genital organs (3,000 per 100,000), on the cardiovascular system (2,600), and on the eyes (1,700). For elderly women, high rates included those for surgery on the musculoskeletal system (2,300), on the eyes (2,100), and on the cardiovascular system (1,300).

Growth by type

The surgery rates for most major surgery groupings increased from 1979 to 1987. For elderly males, cardiovascular surgery rates were the fastest growing (up 71%), followed by respiratory surgery (up 59%) and eye surgery (up 54%). For elderly women, surgery on the respiratory system was the fastest growing, increasing 77% from 1979 to 1987. Other rapidly growing surgery types for elderly women were operations on the eyes (up 67%) and the cardiovascular system (up 61%).

In contrast, surgery rates declined from 1979 to 1987 for operations on the ears, nose and mouth, male breast, female urinary tract and female subcutaneous tissue. The largest decline for females was a 13% drop in nose and mouth surgery. For males, the largest surgery rate decline was for breast surgery, which fell 31%.

Mary Beth Maclean *is an analyst with the Canadian Centre for Health Information, Statistics Canada and* **Jillian Oderkirk** *is an Assistant Editor with* Canadian Social Trends.

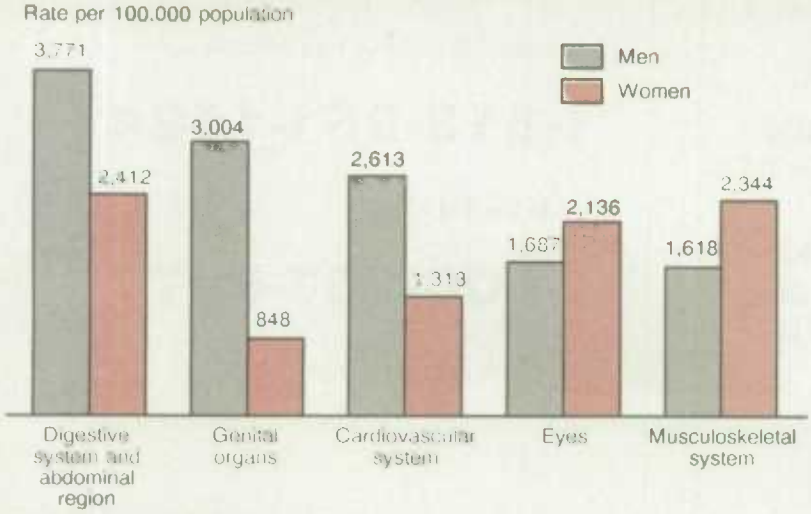
CANADIAN SOCIAL TRENDS

Average hospital stay of elderly surgery patients, by sex, 1975-1987[1]

[1] Prior to 1979, data were collected for the calendar year. Since then, data have been collected from April 1 to March 31.
Source: Statistics Canada, Catalogues 82-003s and 82-208.

CANADIAN SOCIAL TRENDS

Surgical separations among elderly people, by major surgery group, 1987[1]



[1] Data collected from April 1, 1987 to March 31, 1988.
Source: Statistics Canada, Catalogues 82-003s and 82-208.

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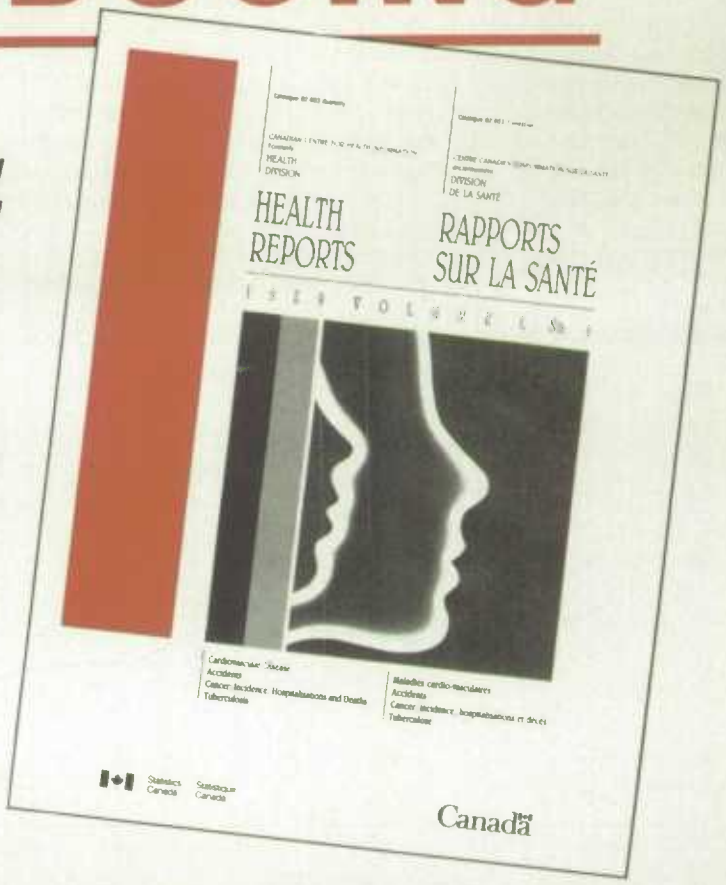

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MARRIED AND UNMARRIED COUPLES: THE TAX QUE$TION

by Richard J. Morrison and Jillian Oderkirk

Since the mid-1960s, income taxes have grown to be the single largest expense for families. In 1986, urban Canadian families and unattached individuals devoted 20% of average expenditures to income taxes, up from 9% in 1964.

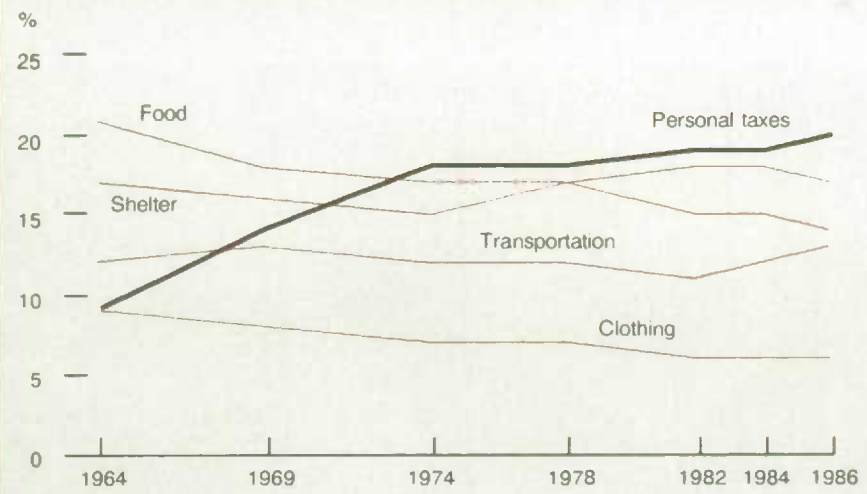
Over the same period, Canada's system of tax and transfer payment programs has changed considerably. New transfer payment programs, such as the Guaranteed Income Supplement and the Child Tax Credit, were introduced. Many changes were specifically designed to aid the economically disadvantaged, particularly lone-parent families and elderly individuals. While current programs have moved toward this goal, another effect has been to place a relatively greater financial burden on married couples than on those who remain unmarried.

Statistics Canada's Social Policy Simulation Database and Model (SPSD/M) was used to estimate the average difference between the disposable income of married-couple families and comparable families where spouses were not legally married. From this, the aggregate amount of these income differences was also estimated. While the calculation is hypothetical and based on specific assumptions, it illustrates how program legislation and couples' living arrangements interact to generate large financial effects. (See box: Using the SPSD/M).

Most married-couple families have lower disposable incomes than unmarried couples living together in similar circumstances. This is particularly the case for elderly married couples and married couples with young children. This discrepancy reflects the effects of current transfer payment programs, and to a lesser extent tax programs, which tend to provide proportionately greater benefits to persons living alone and to lone parents than to married-couple families. Therefore, when two lone-parent families or two elderly people live together without being married, their combined transfer payment benefits, all other things being equal, will generally be greater than those received by comparable married-couple families.

CANADIAN SOCIAL TRENDS

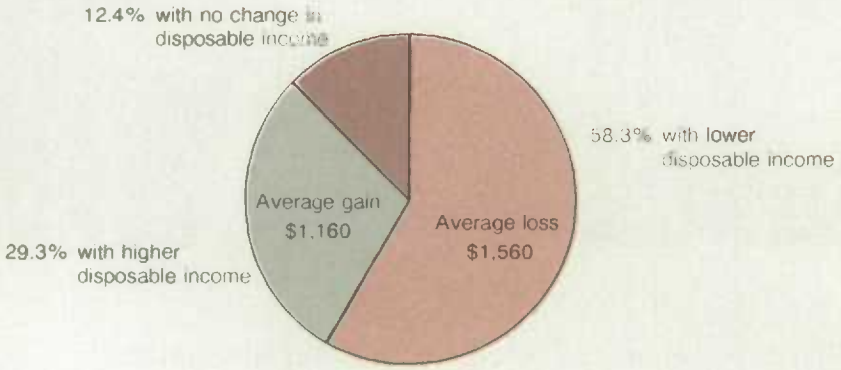
Percentage of total expenditure on selected items, by urban families and unattached individuals, 1964-1986



Source: Statistics Canada, Catalogue 62-555 and Household Surveys Division, unpublished data.

CANADIAN SOCIAL TRENDS

Financial impact on married-couple families, 1989



Source: Statistics Canada, Social Policy Simulation Database and Model, version 4.0.

Most couples affected

According to the 1989 SPSD/M estimates, 58% of married-couple families had less disposable income than if they were an unmarried-couple family under the provisions of the tax and transfer payment system. The amount involved for these families totalled $5.6 billion or an average of $1,560 per family.

On the other hand, 29% of married-couple families received an increase in their disposable income relative to their unmarried counterparts. This increase totalled $2.1 billion or $1,160 per family. A minority of married-couple families, 12%, would have maintained essentially the same level of disposable income if the partners had been unmarried.

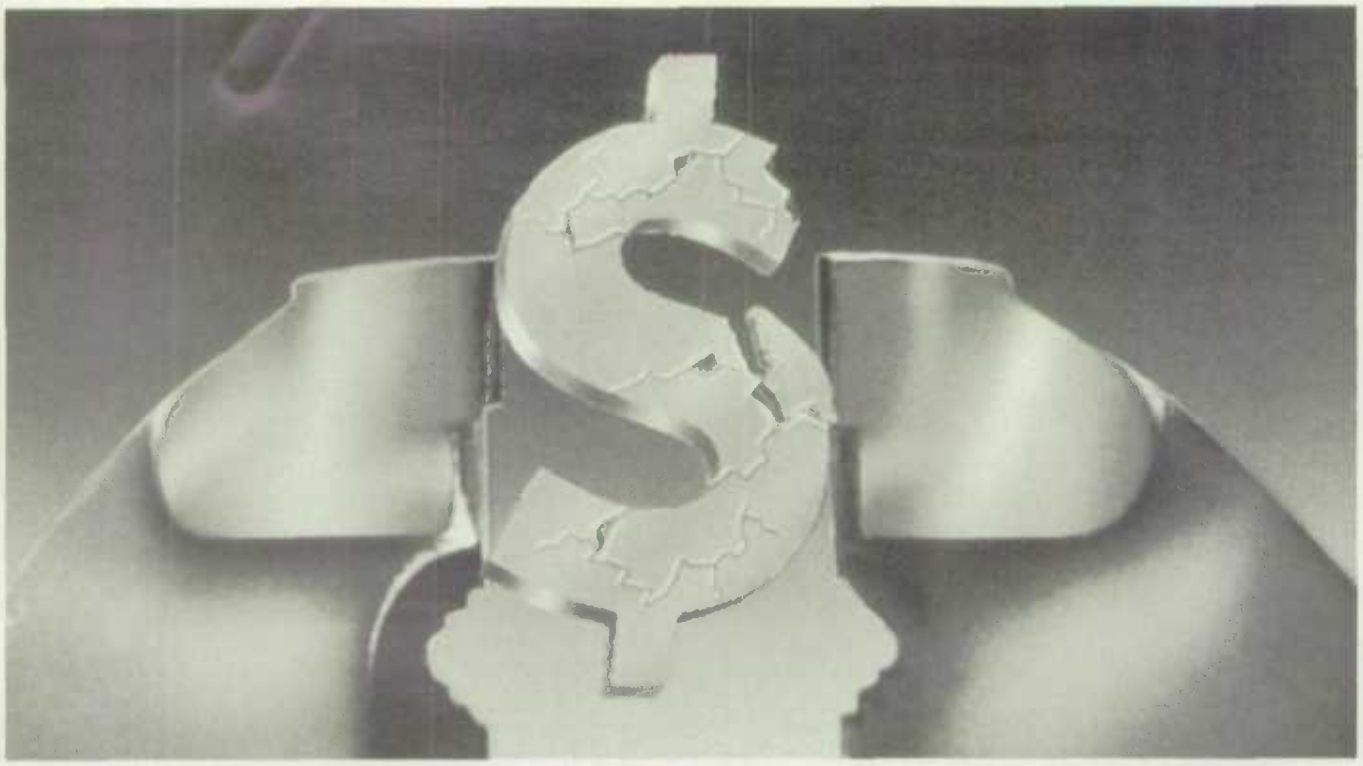
Family structure variations

On average, unmarried couples appear to fare better under the income tax system than married couples. However, whether or not a co-habitating couple will have

Common-law unions

In 1986, 487,000 couples were living in a common-law relationship, a 37% increase over 1981. Common-law unions accounted for 8% of couples in 1986, up from 6% in 1981.

The proportion of people aged 15 and over who were living in a common-law union rose from 3.9% in 1981 to 5.0% in 1986. In contrast, over the same period, the proportion of people who were legally married declined from 57.3% to 55.6%.



Average financial impact of the tax and transfer system, by family type and income group, 1989

	Number of married-couple families				Average decrease of families with less income	Average increase of families with more income	Net average difference (all families)
	Total	Who would have less income	Whose income remains unchanged	Who would have more income			
		000s				$	
Family type							
Married couples:							
With no children	1,573	586	516	472	-150	1,010	250
With children aged 18 or less	2,998	2,058	68	873	-1,670	950	-870
With all children over age 18	632	232	136	264	-430	1,100	300
With at least one elderly spouse	944	708	42	194	-2,780	2,540	-1,560
Family income group[1]							
$10,000 and under	85	18	49	17	-450	570	20
10,001-20,000	699	325	70	303	-2,540	1,670	-460
20,001-30,000	1,208	612	15	580	-1,550	1,290	-170
30,001-40,000	1,420	861	72	487	-1,200	910	-410
40,001-50,000	1,083	739	149	195	-1,520	910	-870
50,001-60,000	719	471	146	102	-1,700	980	-980
60,001-70,000	374	230	100	44	-1,650	1,010	-900
70,001 and over	561	327	161	74	-1,450	900	-730
All married-couple families	**6,148**	**3,584**	**762**	**1,803**	**-1,560**	**1,160**	**-570**

[1]Income after direct and indirect taxes.
Source: Statistics Canada, Social Policy Simulation Database and Model, version 4.0.

more (or less) disposable income after marriage depends heavily on family structure. Elderly couples and couples with young children are more likely than other family types to have less disposable income following marriage.

Couples with at least one person aged 65 or older are the most likely to have less disposable income following marriage and their disposable income reduction is the largest. In 1989, 75% of married-couple families with an elderly spouse had less disposable income than comparable unmarried-couple families. Had the spouses in these families been unmarried and living together, their disposable family income would have been higher by approximately $2,780 per family, totalling over $1.9 billion for all such families.

Similarly, married couples with children aged 18 years and under are also likely to have lower disposable incomes than comparable unmarried couples. In 1989, 69% of these married-couple families had less disposable income than their unmarried counterparts, averaging $1,670 less per family. Thus, all other things being equal, the disposable income for all these families was $3.4 billion lower than if the couples had not been married.

In contrast, relatively few married couples with no children or with children over 18 had lower disposable incomes as a result of the provisions of the tax and transfer payment system. Just 37% of each of these family types experienced such

How it happens: tax and transfer programs

Provisions of various tax and transfer programs can result in differences in disposable income for married and unmarried couples. Provisions are often based on a person's legal marital status.

- Some benefits, such as the Equivalent to Married Credit, are not available to married couples. The Equivalent to Married Credit is a non-refundable amount available to a tax-payer who is single, divorced, separated, widowed, or living in a common-law relationship and who supports one relative, such as a child, whose annual income is less than a specified amount.
- Transfer payments from many programs, such as the Child Tax Credit and the Guaranteed Income Supplement, are based on the incomes of adult family members; benefits are reduced for married couples based on the sum of the two partners' incomes. In programs such as the Guaranteed Income Supplement, the guarantees per person may be larger for an unattached individual than for a spouse.
- The tax system stipulates which member of a couple must claim certain forms of income, such as Family Allowance, or certain deductions, such as child care expenses and credits related to dependant children. This may increase income tax payable.
- Other provisions may benefit married couples: Spouse's Allowance benefits, the Married Credit in the tax system, and various transferrable tax credits.
- Some transfer payments, such as Family Allowances and Old Age Security benefits, do not depend on marital status.

Calculations for an example couple

To see how differences could have occurred in 1989, consider the following example: two lone parents in Ontario are considering marriage. They live next to each other in semi-detached housing and they do not plan to move after marriage.

Assume that each parent earns $25,000 a year, has one pre-school child, pays $2,500 per year for child care, and $350 per month for rent. Their income taxes as a married couple exceed the income taxes they paid as two separate lone-parent families. As a married couple, the two would pay an additional $2,474 in federal and provincial income taxes, and receive $1,284 less in refundable tax credits. The decline in their disposable income following marriage, all other things being equal, would be $3,758, corresponding to a 96% drop in tax credit transfers, and a 43% increase in income taxes payable before refundable credits.

Income taxes paid and benefits received by example couple, 1989

	Each lone-parent family	Combined lone-parent families (not married)	Married-couple family	Married-couple family net difference
			$	
Income				
Employment income before deductions	25,000	50,000	50,000	0
Family Allowance payments	393	786	786	0
Non-refundable tax credits				
Amount for dependant children	0	0	133	133
Equivalent to Married Credit	859	1,718	0	-1,718
Income taxes (before refundable credits)				
Federal	1,912	3,824	5,473	-1,649
Ontario	956	1,912	2,737	-825
Total	2,868	5,736	8,210	-2,474
Refundable tax credits				
Child Tax Credit	565	1,130	58	-1,072
Federal Sales Tax Credit	0	0	0	0
Ontario Tax Credit	106	212	0	-212
Total	671	1,342	58	-1,284
Total income taxes (less refundable tax credits)	2,197	4,394	8,152	- 3,758

effects in 1989 and the effects were not as great. Of married-couple families who had lower disposable incomes, those with no children averaged $150 less per family, while married couples with children over 18 had averaged $430 less per family.

Families with two or more earners were more likely than one-earner families to have lower disposable incomes as a consequence of being married. In 1989, two-thirds (67%) of families with two or more earners had less disposable income because of the tax and transfer payment system, compared with one-third (32%) of one-earner families.

Most income groups affected

In most income groups in 1989, between one-half and two-thirds of all married-couple families had lower disposable incomes than comparable unmarried couples. However, just 21% of families with incomes under $10,000 (after direct and indirect taxes) had lower disposable incomes than their unmarried counterparts.

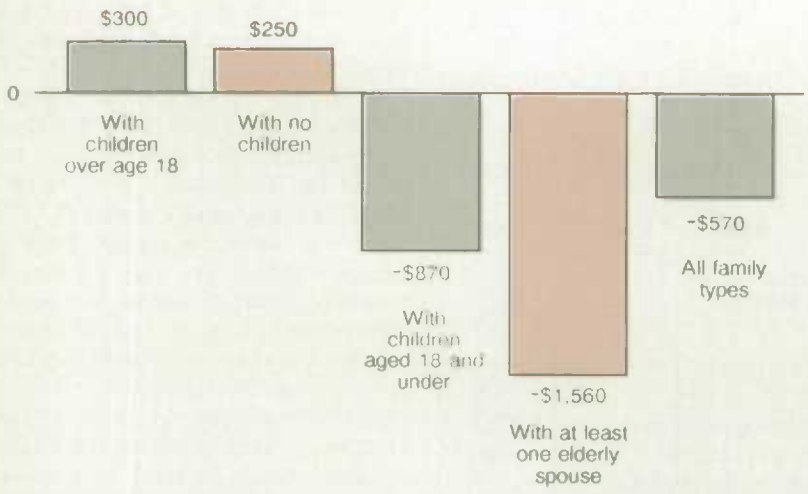
Married-couple families with incomes between $10,000 and $20,000 who had lower disposable incomes averaged $2,540 less per family. In other income groups (except incomes under $10,000), the reduction ranged from $1,200 to $1,700.

Transfer payments have largest impact

The relative disadvantage of married

CANADIAN SOCIAL TRENDS

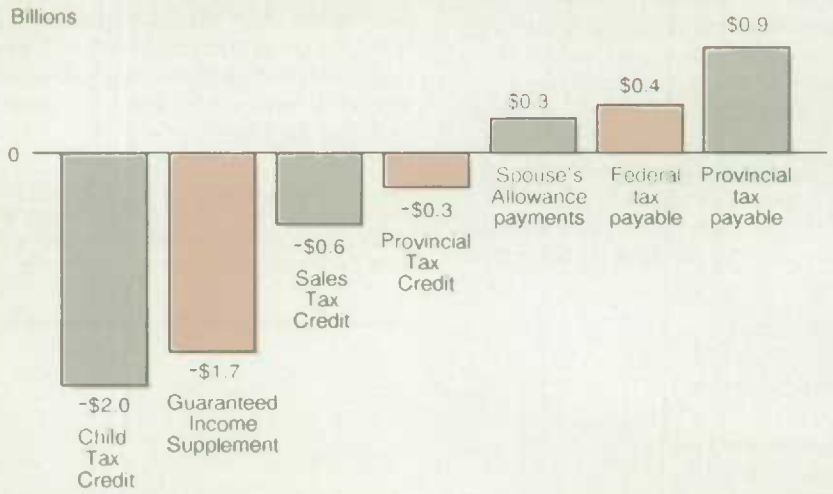
Average net financial impact[1] on married-couple families, by family type, 1989



[1] Represents the difference between the average disposable income of married-couple families and their unmarried counterparts.
Source: Statistics Canada, Social Policy Simulation Database and Model, version 4.0.

CANADIAN SOCIAL TRENDS

Net financial impact[1] on married-couple families, by major government program, 1989



[1] Represents the difference between the components of disposable income for married-couple families and their unmarried counterparts.
Source: Statistics Canada, Social Policy Simulation Database and Model, version 4.0.

couples compared to their unmarried counterparts stems more from reduced transfer payments than increased income taxes. Under current transfer payment programs, had all married-couple families been unmarried in 1989, they would have received an estimated $4.7 billion more federal and provincial government transfer payments. Couples with young children would have received 54% of this amount and elderly couples, 40%. In 1989, two federal government transfer payment programs, the Child Tax Credit ($2.0 billion) and the Guaranteed Income Supplement ($1.7 billion), accounted for over 80% of the estimated transfer payments married-couple families would have received.

Net financial impact on married-couple families, by tax and transfer payment programs and federal and provincial government programs, 1989

	Net difference from				
	Transfer payment programs[1]	Tax programs	Federal programs	Provincial programs	Government programs
			$000,000		
Family type					
Married couples:					
With no children	-157	550	227	166	393
With children aged 18 or less	-2,528	-78	-2,822	215	-2,607
With children over age 18	-133	324	81	111	192
With at least one elderly spouse	-1,845	374	-1,310	-162	-1,472
All married-couple families	**-4,663**	**1,170**	**-3,824**	**330**	**-3,494**

[1] Transfer payment programs include the refundable Child Tax Credit and Sales Tax Credit.
Source: Statistics Canada, Social Policy Simulation Database and Model, version 4.0.

Using the SPSD/M

Statistics Canada's Social Policy Simulation Database and Model (SPSD/M) was used to estimate differences between the disposable income of married-couple families and unmarried-couple families. The SPSD/M, version 4.0 is a publicly accessible PC-based microsimulation model of the principal federal and provincial taxes and cash transfer programs. Cash transfer programs include the Canada and Quebec Pension Plans, Old Age Security, Guaranteed Income Supplement, Spouses Allowance, Unemployment Insurance, Family Allowance, and refundable income tax credits in the personal tax system such as the Child Tax Credit, Federal Sales Tax Credit, and Provincial Tax Credit.

The SPSD/M calculated all relevant taxes and transfers for couples in the sample of the Canadian population. Then, each marriage was "dissolved"; that is, it was assumed that all couples were not married. Any children from the original family were arbitrarily assigned to the mother, resulting in a lone-parent family. The taxes and transfer payments for both of the family units created by the split couples were then recalculated. The difference in the total disposable incomes, calculated across the intact and split units, measured the income increase or decrease for that family. This mechanism is, of course, not perfect. For example, it does not adjust for the changed expenditure patterns that would result if the marriages were really dissolved; it misses changes in some transfer programs such as Social Assistance; it omits some effects that would occur over time; and it fails to capture the effects that could accrue if some children were assigned to the father. But, it has the advantage of being easy to compute, and has a generally conservative bias, i.e., by its omissions, it tends to understate the income difference between married and unmarried couples.

For more information on the Social Policy Simulation Database and Model contact:

Steve Gribble
Chief, SPSD/M Project,
Statistics Canada,
24-M R.H. Coats Bldg.,
Tunney's Pasture,
Ottawa, Ontario
K1A 0T6

The federal transfer payment programs whose provisions enable unmarried couples to benefit more than comparable married couples are relatively new. The Guaranteed Income Supplement program, which contributes to the income difference among the elderly population, was introduced in 1966. The Child Tax Credit, which affects parents with young children, was implemented for the 1978 tax year. Even more recently, the Sales Tax Credit was introduced.

In contrast to the overall effects of transfer payments, federal and provincial government tax programs tend to provide net savings for married couples. In 1989, married-couple families received $1.2 billion more disposable income from tax programs than if they were not married. However, married couples with young children received an estimated $78 million less because of tax programs. This is largely because the Equivalent to Married Credit is unavailable to married-couple families and because the Income Tax Act stipulates which member of a married couple must claim dependant children, and report child-related expenses and income received from Family Allowance payments.

Twenty-five years ago, the Income Tax Act did not include these stipulations. Also, more families then had only one earner and were eligible for the financial bonuses associated with the Married Exemption (now the Married Credit). In 1967, the proportion of families with both a husband and a wife earning a salary was just 34%; however, by 1987, this proportion had increased to 62%.

Dr. Richard J. Morrison *is the Co-ordinator for the CPP Policy Model at Health and Welfare Canada and* **Jillian Oderkirk** *is an Assistant Editor with* Canadian Social Trends.

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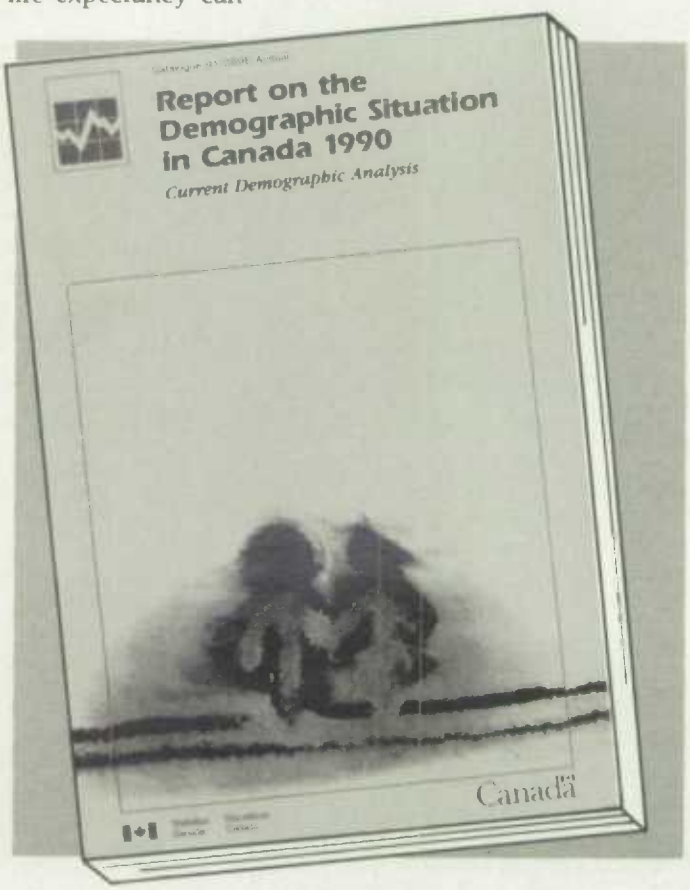

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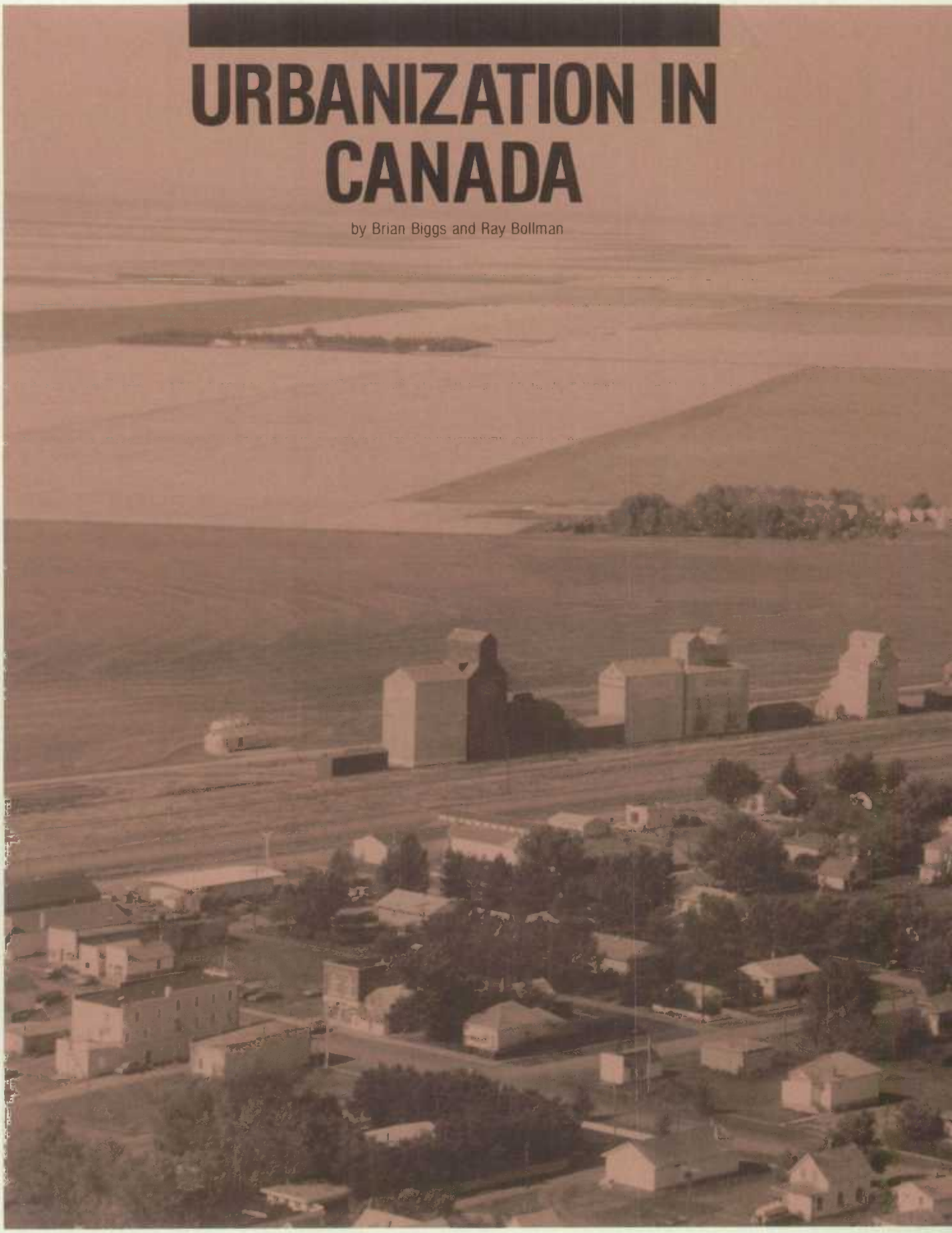
URBANIZATION IN CANADA

by Brian Biggs and Ray Bollman



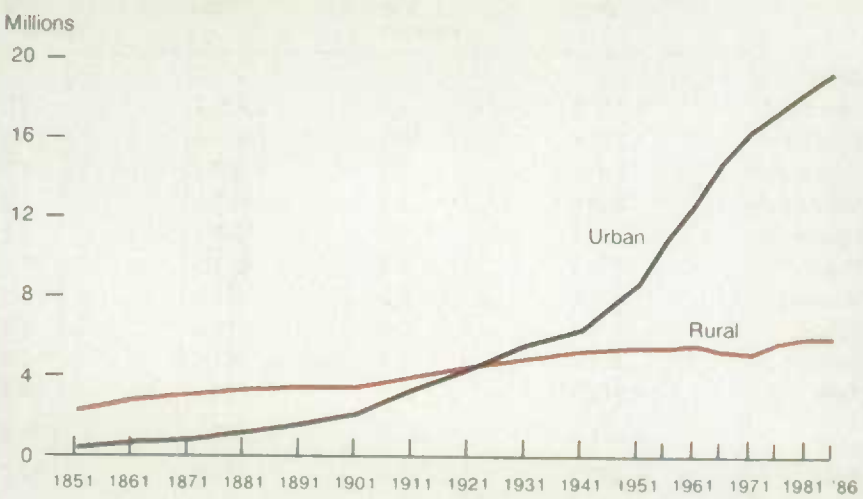
SPECIAL CONTRIBUTION

Exerpted from a paper prepared for the Rural and Small Town Canada: Economic and Social Reality Conference organized by Statistics Canada in October 1990.

Urbanization has been a persistent feature of Canada's demographic history since Confederation. It can be viewed as both a cause and an effect of socioeconomic change. Migration from rural to urban areas has occurred largely in response to perceived greater economic opportunities in cities. And while concentration of population in large cities is presumed to foster economic expansion through the creation of agglomeration economies (e.g. provision of specialized financial services, the availability of an experienced workforce), it has also led to growing societal problems such as crime and declining social cohesion. Cause and effect aside, the changing distribution of population growth between rural and urban Canada is central to concerns about the viability of rural areas, and the magnification of social problems associated with urban size.

CANADIAN SOCIAL TRENDS

Urban population majority since 1931



Source: Statistics Canada, Census of Canada.

Urban transformation

Population has grown in both urban and rural Canada since 1851. Undeniably, however, the major trend has been towards urbanization. Canada's transformation from a rural to an urban society occurred less than 70 years ago: the switch took place between 1921 and 1931.

By 1986, the 19 million people living in urban areas accounted for 77% of the total Canadian population, and the remaining 6 million (24%) lived in rural areas. This contrasts sharply with the distribution of the population in 1851 when 87% of Canadians lived in rural areas, and just 13% lived in urban centres.

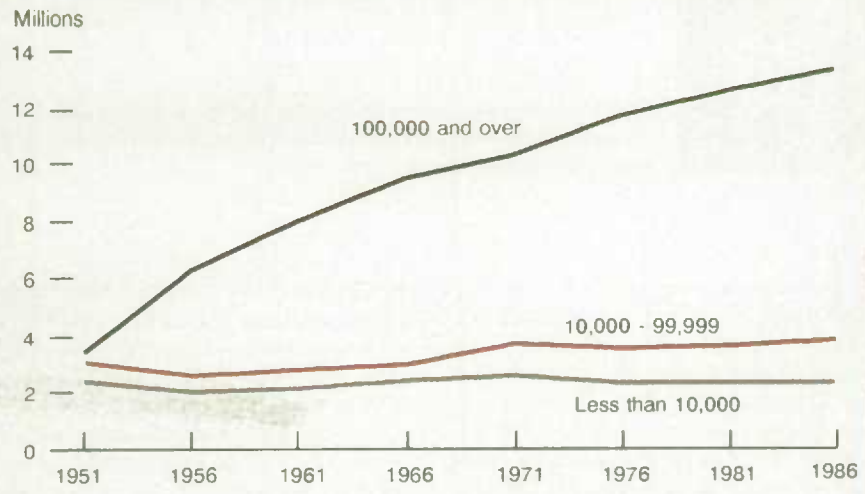
Metropolitan growth

Urban population growth from 1951 to 1986 varied by size of the urban area. Large centres grew more quickly than smaller centres. Most of the growth occurred in centres with populations of 100,000 and over, resulting in an increasing concentration of population in Canada's Census Metropolitan Areas (CMAs).

By 1986, more than half of the Canadian population lived in large CMAs. In fact, that year, the nine largest CMAs (Toronto, Montreal, Vancouver, Ottawa-Hull, Edmonton, Calgary, Winnipeg, Quebec City and Hamilton),[1] accounted for 47% of the Canadian population, and the top three CMAs for 31%. This compared with the 1951 figures of 32% for the top nine CMAs and 22% for the top three.

CANADIAN SOCIAL TRENDS

Urban areas with populations of 100,000 and over growing fastest



Source: Statistics Canada, Census of Canada.

Population in the top nine CMAs, and urban and rural Canada, 1951 and 1986

	1951		1986	
	000s	% of population	000s	% of population
CMAs				
Toronto	1,117.5	8.0	3,427.2	13.5
Montreal	1,395.4	10.0	2,921.4	11.5
Vancouver	530.7	3.8	1,380.7	5.5
Ottawa-Hull	281.9	2.0	819.3	3.2
Edmonton	173.1	1.2	785.5	3.1
Calgary	139.1	1.0	671.3	2.7
Winnipeg	354.1	2.5	625.3	2.5
Quebec	274.8	2.0	603.3	2.4
Hamilton	259.7	1.9	557.0	2.2
Total	**4,526.3**	**32.3**	**11,790.9**	**46.6**
Urban	8,628.3	61.6	19,352.1	76.5
Rural	5,381.2	38.4	5,957.2	23.5
Canada	14,009.4	100.0	25,309.3	100.0

Source: Statistics Canada, Census of Canada.

Components of growth

Population growth results from two things: natural increase (the surplus of births over deaths) and net migration (immigration minus emigration). Changes in rural/urban population ratios are a function of the differences in birth/death rates, migration between rural/urban areas, immigrant settlement patterns, and the reclassification of areas (from urban to rural and vice versa) resulting from changes in population density.

[1] Since 1956, these CMAs have remained the nine largest.

From 1981 to 1986, 65% of population growth occurred in the Toronto, Montreal and Vancouver CMAs.[2]

And, in fact, population in the top nine CMAs grew more sharply than the overall urbanization trend. The top nine CMAs grew by 10%, and the top three by 9%, compared with just 5% for all urban areas.

Most of the population growth took place in the urban cores. In fact, between 1981 and 1986, 75% of the total population growth occurred in the urban cores of Canada's CMAs and Census Agglomerations.

Rural growth

The rural population has increased in number since the mid-1800s. In 1986, 6 million people lived in rural areas, compared with 4.8 million in 1931 and just 2.1 million in 1851. In recent years, much of the growth has occurred among the non-farm population living in the rural fringes of large urban centres.

The number of people living on farms declined sharply from 1931 (the year statistics were first compiled on the farm population) to 1986, whereas the rural non-farm population showed an equally strong rise.

Since 1956, most rural Canadians have lived in non-farm areas. By 1986, the rural

[2] When the effect of boundary expansion on population growth is removed, this decreases to 48% of total population growth.

Urban/rural definitions

Since 1931, urban populations have been defined in terms of residence in incorporated cities and towns. The definition has increasingly incorporated density measures to account for the urban sprawl. This is reflected in the current definition of the urban population as persons living in continuously built-up areas with a population of 1,000 or more and a population density of 400 per square kilometre.

The definition of urban used by Statistics Canada has changed several times since 1931. These changes have not added a directional bias to the urbanization trend. However, reversals of trends lasting only one or two intercensal periods may have been largely because of these definitional changes.

For Canada, Census Metropolitan Areas (CMAs) and Census Agglomerations (CAs) are defined as the main labour markets for urbanized cores with a population of 100,000 and over and 10,000 and over, respectively.

CMAs and CAs contain rural as well as urban population. Urban or rural fringes are urban or rural areas within CMAs or CAs, but outside the urban core.

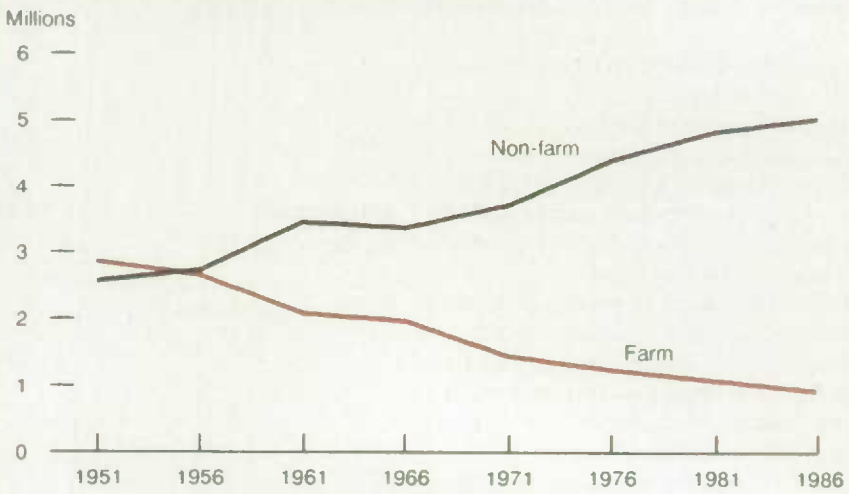
The rural population is composed of residents of non-urban areas. Within this population are people who live on farms as well as non-farm residents.

The rural farm population comprises members of a household of a farm operator who live on his/her farm for any length of time during the twelve-month period prior to the census. Only one operator is assigned to each census farm.

In 1986, a census farm was an agricultural holding with sales of agricultural products of $250 or more during the previous twelve months.

CANADIAN SOCIAL TRENDS

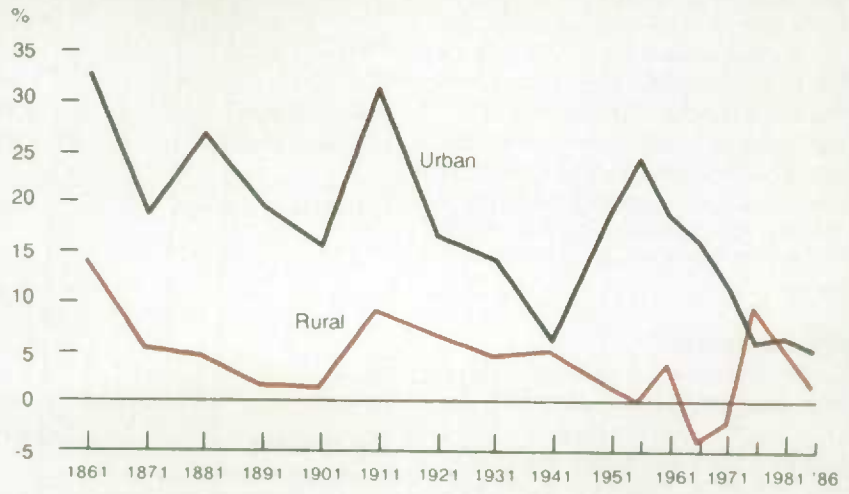
Farmer minority in rural Canada since 1956



Source: Statistics Canada, Census of Canada.

CANADIAN SOCIAL TRENDS

Urban growth rates exceeded rural except in 1971-1976



Source: Statistics Canada, Census of Canada.

farm population numbered 890,480, down from 2.6 million in 1956 and 3.2 million in 1931. In contrast, the rural non-farm population numbered 5 million people in 1986, up from 2.7 million in 1956 and 1.6 million in 1931. By 1986, the rural non-farm population accounted for 85% of rural Canadians, up from 32% in 1931.

Urban/rural growth rates

Urban growth rates exceeded rural growth rates from 1861 to 1986, except during the early 1970s. From 1971 to 1976, the urbanization trend was reversed and rural growth rates narrowly exceeded those for urban expansion. While rural non-farm population increased sharply, farm population actually declined by 14%. Indeed, the growth rates for rural non-farm population exceeded increases for all sizes of urban areas.

The interruption of urbanization, which also occurred in the United States and other developed nations, sparked speculation of a rural renaissance and provoked research into the reasons for, and even the existence of, a turnaround.

In Canada, much of rural population growth during this period occurred close to major urban centres, suggesting that some of the measured rural growth could be attributed to urban spill-over. Other reasons are less clear.

While a significant movement of people from urban to rural areas occurred during the 1970s, the effect on urbanization was largely offset by the influx of international migrants to Canadian urban areas. As well, the growth rate of the rural population in Canada differed depending upon whether or not rural areas that had been reclassified to urban were included in the calculation.

Rural growth rates were again below those of urban areas in the 1976-1981 and 1981-1986 periods. Thus, the rural renaissance appears to have been ephemeral. Nevertheless, differences between rural and urban growth rates have been smaller since 1971 than they were in the 1950s and 1960s, suggesting that while urbanization is not reversing, it has slowed markedly.

Urban/rural migration

Most Canadians move to urban areas, either from rural areas or other urban areas. However, from 1971 to 1986, there was also a net gain in the rural population due to internal migration. This occurred because people moving from urban to rural areas outnumbered those moving from rural to urban areas.

The net internal transfer of population to rural areas reached its peak of 256,000 people from 1976 to 1981, and declined to 77,000 in the 1981-1986 period. This reflected less movement into rural regions rather than an increasing level of migration out of rural areas.

International comparisons

The phenomenon of urbanization is not isolated to Canada. Population concentration in urban centres has been evident in much of the world since at least the 1950s.[3]

By 1985, 41% of the world's population lived in urban areas. The United Nations projects that the proportion will increase to more than 60% by 2025. In the more developed regions, where urbanization is proceeding more slowly than in the less developed regions, the urban proportion of the population is projected to increase to 78% by 2025, from 72% in 1985. In contrast, in the less developed regions, where overall population growth is still high, the

Urban/rural migration, 1966-1986

1966 Place of residence	1971 Place of residence		
	Urban	Rural	Total outmigrants
		000s	
Urban[1]	2,281	524	2,805
Rural	550	226	776
Total inmigrants	**2,831**	**750**	**3,582**
Net internal migrants	26	-26	

1971 Place of residence	1976 Place of residence		
	Urban	Rural	Total outmigrants
		000s	
Urban	1,771	707	2,478
Rural	571	255	826
Total inmigrants	**2,342**	**962**	**3,304**
Net internal migrants	-136	136	

1976 Place of residence	1981 Place of residence		
	Urban	Rural	Total outmigrants
		000s	
Urban	2,786	863	3,649
Rural	607	256	863
Total inmigrants	**3,393**	**1,119**	**4,512**
Net internal migrants	-256	256	

1981 Place of residence	1986 Place of residence		
	Urban	Rural	Total outmigrants
		000s	
Urban	2,488	702	3,190
Rural	625	232	857
Total inmigrants	**3,113**	**935**	**4,048**
Net internal migrants	-77	77	

[1]1966-1971 data classified CMA rural population as urban.
Source: Field, Neil C. (1988) "Migration Through the Rural-Urban Hierarchy: Canadian Patterns," *Canadian Journal of Regional Science.*

urban population is projected to increase to 57% of the total population by 2025, up from 31% in 1985.

Rates of urbanization vary depending on a nation's development. For example, the Canadian experience of a slowing rate of urbanization is common to the more developed regions of the world (Europe, North America, Japan, Australia/New Zealand, and the USSR). This slowdown is to be expected because rural migrants have less scope to contribute to urban growth in countries that are already predominantly urban.

Over the past forty years, slowing in urbanization in the more developed regions has been accompanied by an overall drop in the rural population. Since 1975, Canada and the United States, however, have been exceptions to this pattern, as they have both experienced growing rural populations. Rural growth in Canada, however, has been consistently higher than in the United States during this period.

In contrast, urban population is still increasing sharply in the less developed regions. Between 1950 and 1985, growth rates of urban areas with populations greater than two million, were highest by far in the less developed regions. For example, the population in Mexico's largest urban areas grew by about 20% from 1980 to 1985, compared with a 3% increase in comparable areas in Canada and the United States.

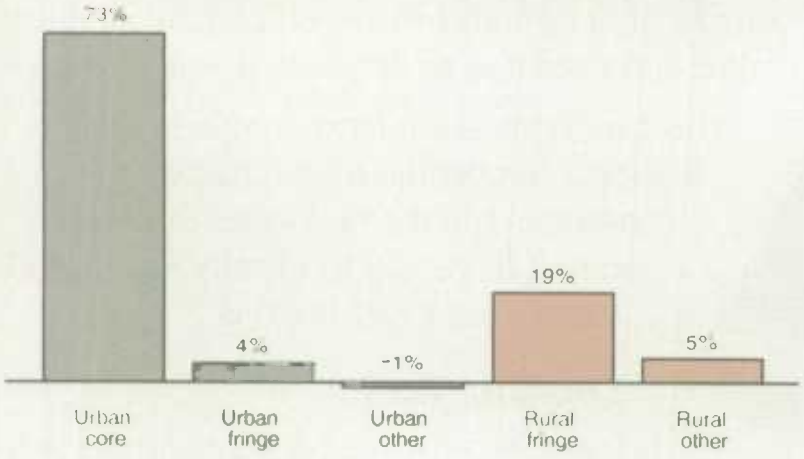
Nevertheless, the urban areas' share of population growth has been consistently higher in Canada than in the United States. Just two Canadian CMAs — Toronto and Montreal — have populations of more than two million. Between 1950 and 1985, these two Canadian urban areas have had a higher cumulative growth rate than their American counterparts. However, the gap has narrowed from over ten percentage points in earlier years, to just one point during 1980 to 1985.

[3] Based on United Nations data which accept the definitions used within each member nation. Population thresholds defining urban populations are generally higher than those used in Canada.

Both authors are with the Agriculture Division, Statistics Canada; **Brian Biggs** *is an analyst and* **Ray Bollman** *is a research economist.*

CANADIAN SOCIAL TRENDS

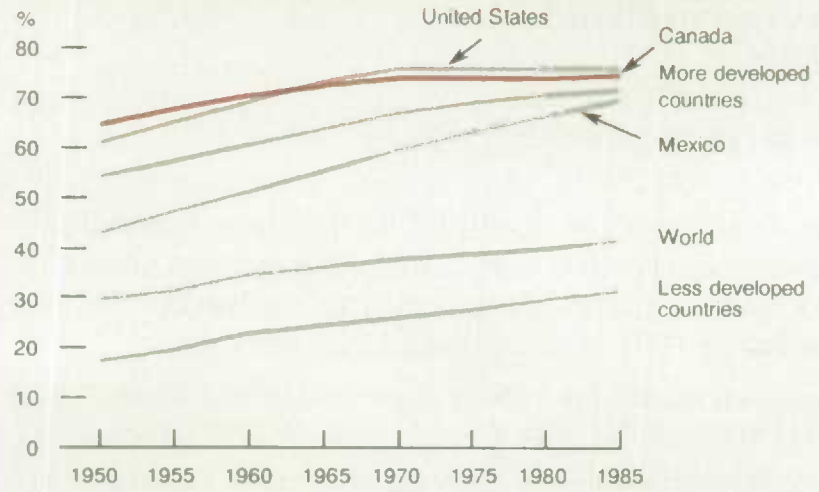
Nearly 3/4 of population growth 1981-1986 in urban cores



Source: Statistics Canada, Census of Canada.

CANADIAN SOCIAL TRENDS

Urban population distribution, by world area, 1950-1985



Source: United Nations, *Prospects of World Urbanization*, 1987.

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CANADIAN SOCIAL TRENDS

CUMULATIVE INDEX OF ARTICLES
Summer 1986 - Spring 1991

CANADIAN SOCIAL TRENDS

CUMULATIVE INDEX OF ARTICLES - Concluded
Summer 1986 - Spring 1991

SOCIAL INDICATORS

	1983	1984	1985	1986	1987	1988	1989	1990
POPULATION								
Canada, June 1 (000s)	24,787.2	24,978.2	25,165.4	25,353.0	25,617.3	25,909.2	26,223.2	26,584.0
Annual growth (%)	0.8	0.8	0.7	0.7	1.0	1.1	1.2	1.4
Immigration[1]	105,286	87,504	84,062	88,051	125,696	152,285	161,024	207,067
Emigration[1]	50,249	48,826	46,252	44,816	51,040	40,528	37,314	37,915
FAMILY								
Birth rate (per 1,000)	15.0	15.0	14.8	14.7	14.4	14.5	15.0	*
Marriage rate (per 1,000)	7.4	7.4	7.3	6.9	7.1	7.2	7.3	*
Divorce rate (per 1,000)	2.8	2.6	2.4	3.1	3.4	3.1	3.1	*
Families experiencing unemployment (000s)	1,066	1,039	990	915	872	789	776	841
LABOUR FORCE								
Total employment (000s)	10,675	10,932	11,221	11,531	11,861	12,244	12,486	12,572
- goods sector (000s)	3,317	3,404	3,425	3,477	3,553	3,693	3,740	3,626
- services sector (000s)	7,359	7,528	7,796	8,054	8,308	8,550	8,745	8,946
Total unemployment (000s)	1,434	1,384	1,311	1,215	1,150	1,031	1,018	1,109
Unemployment rate (%)	11.8	11.2	10.5	9.5	8.8	7.8	7.5	8.1
Part-time employment (%)	15.4	15.3	15.5	15.5	15.2	15.4	15.1	15.4
Women's participation rate (%)	52.6	53.6	54.6	55.3	56.4	57.4	57.9	58.4
Unionization rate - % of paid workers	35.7	35.1	34.4	34.1	33.3	33.7	*	*
INCOME								
Median family income	30,986	32,739	34,736	36,858	38,851	41,238	44,460	*
% of families with low income	13.8	13.9	12.6	11.8	11.3	10.5	9.6	*
Women's full-time earnings as a % of men's	64.6	65.6	64.9	65.8	65.9	65.3	65.8	*
EDUCATION								
Elementary and secondary enrolment (000s)	4,974.9	4,946.1	4,927.8	4,938.0	4,972.9	5,024.1	5,074.7[p]	*
Full-time postsecondary enrolment (000s)	766.7	782.8	789.8	796.9	805.4	817.1	831.9	865.3[p]
Doctoral degrees awarded	1,821	1,878	2,000	2,218	2,384	2,415	2,600	*
Government expenditures on education - as a % of GDP	6.2	5.8	6.0	5.8	5.6	5.5	5.3	*
HEALTH								
% of deaths due to cardiovascular disease								
- men	43.8	42.8	41.7	41.4	40.5	39.5	39.1	*
- women	47.2	46.6	45.3	44.9	44.0	43.4	42.6	*
% of deaths due to cancer - men	24.4	25.5	25.4	25.9	26.4	27.0	27.2	*
- women	24.8	25.5	25.7	25.5	26.1	26.4	26.4	*
Government expenditures on health - as a % of GDP	6.0	5.7	5.7	6.0	5.8	5.8	5.8	*
JUSTICE								
Crime rates (per 100,000)								
- violent	692	714	749	808	856	898	950	*
- property	5,717	5,607	5,560	5,714	5,731	5,630	5,514	*
- homicide	2.7	2.7	2.8	2.2	2.5	2.2	2.5	2.4[p]
GOVERNMENT								
Expenditures on social programmes[2] (1989 $000,000)	142,862.8	143,725.3	148,347.9	152,023.5	154,460.2	157,281.5	161,734.0	*
- as a % of total expenditures	57.2	55.6	55.8	56.9	56.3	56.5	56.2	*
- as a % of GDP	27.3	26.2	26.1	26.3	25.6	24.8	24.8	*
UI beneficiaries (000s)	3,396.1	3,221.9	3,181.5	3,136.7	3,079.9	3,016.4	3,025.2	*
OAS/GIS beneficiaries[m] (000s)	2,425.7	2,490.9	2,569.5	2,652.2	2,748.5	2,835.1	2,919.4	3,005.8
Canada Assistance Plan beneficiaries[m] (000s)	1,832.9	1,894.9	1,923.3	1,892.9	1,904.9	1,853.0	1,856.1	1,930.1
ECONOMIC INDICATORS								
GDP (1986 $) - annual % change	+3.2	+6.3	+4.8	+3.3	+4.0	+4.4	+3.0	+0.9
Annual inflation rate (%)	5.8	4.4	4.0	4.1	4.4	4.1	5.0	4.8
Urban housing starts	134,207	110,874	139,408	170,863	215,340	189,635	183,323	150,620

- Not available * Not yet available [p] Preliminary estimates [m] Figures as of March.

[1] For year ending May 31st.

[2] Includes Protection of Persons and Property; Health; Social Services; Education; Recreation and Culture.

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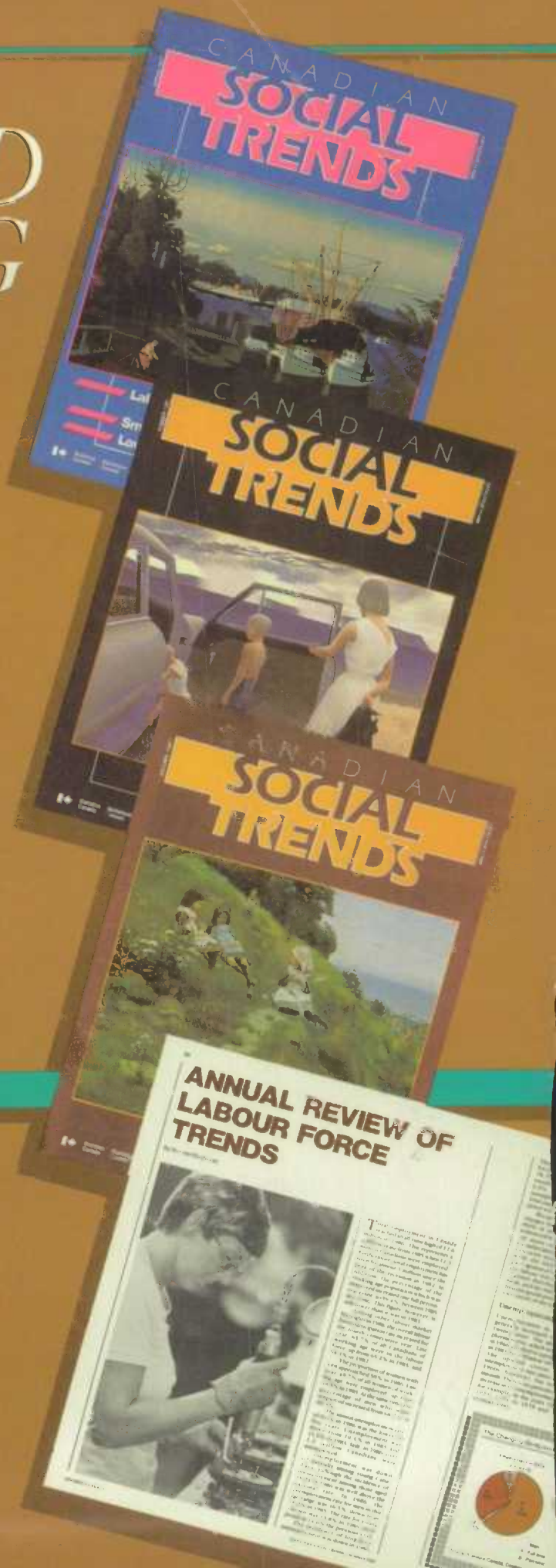

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