

# Mental Health Statistics, 1982-83 to 1993-94

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Since the early 1980s, in relation to the size of the population, general and psychiatric hospitals have seen a drop in separations for mental disorders. This trend reflects a tendency throughout the 1980s and early 1990s to hospitalize only patients with more serious mental disorders. As a result, the average length of stay in both types of institution has risen, as has the total number of days of care for mental disorders (see *Data source and definitions*).

## Shift toward general hospitals

Most mental disorders requiring hospitalization are treated in general hospitals. And since the early 1980s, this has increasingly been the case (Chart 1). From 1982-83 to 1993-94, the number of separations for mental disorders from general hospitals rose 12%, while separations from psychiatric hospitals fell 8%. By 1993-94, general hospitals accounted for 85% of all separations for mental disorders, up from 82% in 1982-83.

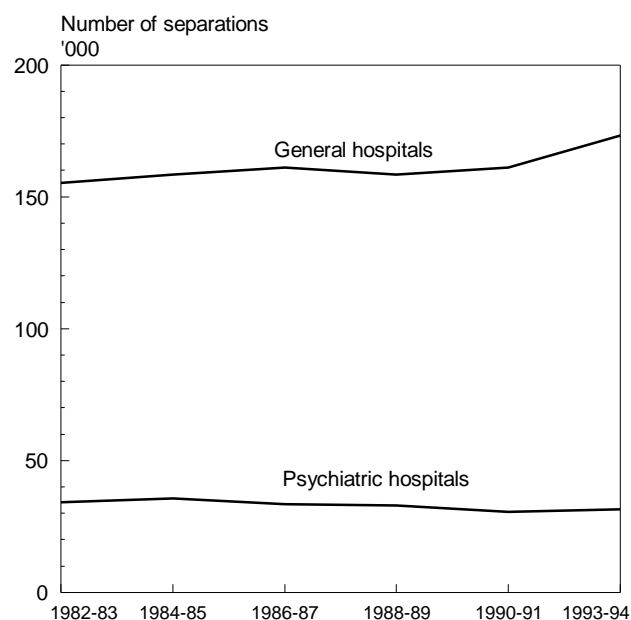
## Separation rates falling

Calculated per 100,000 population, separations for mental disorders from both types of institution have fallen (Table 1). The rate for general hospitals in 1993-94 was 598 per 100,000 population, down from 630 in 1982-83. Separation rates from psychiatric hospitals fell to 116 per 100,000 in 1993-94 from 150 in 1982-83.<sup>a</sup>

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Chart 1

Separations for mental disorders, general and psychiatric<sup>†</sup> hospitals, Canada, 1982-83 to 1993-94



Source: Health Statistics Division, Catalogue 83-245

<sup>†</sup> Excludes New Brunswick and Manitoba.

Rates did not decline in all provinces. In fact, between 1982-83 and 1993-94, general hospital separation rates for mental disorders rose in Prince Edward Island, New Brunswick, British Columbia, and Quebec (Chart 2). Of the eight provinces for which psychiatric hospital data are available, Prince Edward Island and Newfoundland recorded rising rates (Chart 3). These provincial differences may be attributable to factors including the availability of alternative treatment facilities, such as residential

<sup>a</sup> Data for psychiatric hospitals exclude New Brunswick and Manitoba.

## Data source and definitions

Data on hospitalization for mental disorders come from admission/separation forms completed by psychiatric and general hospitals for each individual who is admitted and separated. These forms are sent to the provincial ministries of health, which forward the information on computer file to Statistics Canada. The Yukon and the Northwest Territories are not covered. As well, data for psychiatric hospitals in New Brunswick and Manitoba are available only for 1993-94. For this reason, the trend analysis of psychiatric hospitals excludes these two provinces. Annual figures refer to the April to March fiscal year.

The data pertain to inpatients in general hospitals and psychiatric hospitals, and therefore, exclude people treated for mental disorders as hospital outpatients, in day and night centres, and in offices of private practitioners. Also excluded are patients treated in residential care facilities such as treatment centres for emotionally disturbed children, institutions for the mentally retarded, facilities for the mentally handicapped, and alcohol/drug treatment agencies. Data on patients in these institutions are published in *Residential Care Facilities* (Catalogue 82-237).

The diagnostic classification is based on the International Classification of Diseases, ninth revision (1977) (ICD-9) and refers to the diagnosis responsible for the longest hospital stay.<sup>1</sup> Secondary, tertiary, etc. diagnoses are listed on the data file, but are not published. Definitions of specific mental disorders are available in ICD-9.

### Codes for selected mental disorders, International Classification of Diseases, ninth revision, 1977

Mental disorder	ICD number
Alcoholic psychoses	291
Schizophrenic psychoses	295
Affective psychoses	296
Neurotic disorders	300
Personality disorders	301
Alcohol dependence syndrome	303
Adjustment reaction	309
Depressive disorders	311

**General hospital:** An institution where patients are accommodated on the basis of medical need and are provided with continuing medical care and supporting diagnostic and therapeutic services, and which is licensed or approved as a hospital by a provincial government, or is operated by the Government of Canada.

**Psychiatric hospital:** A hospital which provides for the diagnosis and treatment of patients with psychiatric conditions.

**Inpatient:** A person who has been admitted to a hospital for medical reasons and hospital services, and who has been assigned an inpatient bed.

**Separation:** The discharge or death of an inpatient. Separations are counts of cases, not individual patients. For example, one patient admitted and separated three times during the reporting year would be counted as three separations. Consequently, an increase in the number of separations may not reflect an increase in the number of patients; it may be attributable to an increase in the number of separations per patient.

**Discharge:** The release of a patient from the supervision of hospital authorities. Patients on probationary leave, boarding out, or otherwise absent are not considered discharged until their name has been officially removed from the books.

**Patient-day:** The period of service to an inpatient between the census-taking hours on two successive days. The day of admission is counted as a patient-day, but the day of separation is not.

More detailed data at the national and provincial levels are available in *Mental health statistics, 1993-94* (Catalogue 83-245). To order, see page 77.

care institutions for the psychiatrically disabled, community mental health clinics, and hospital psychiatric outpatient departments. Separation rates are also affected by provincial policies and practices for hospitalization of the mentally ill.

### Long stays in psychiatric hospitals

Although psychiatric hospitals serve a small share of the total number of patients with mental disorders, they account for the majority of patient-days (64% in 1993-94), largely because of much longer average stays. In 1993-94, psychiatric

hospitals provided 10.2 million days of care for mental disorders.

Since 1982-83, the average stay in psychiatric hospitals rose from 193 to 326 days (Table 2). This high average reflects long-stay patients (hospitalized over a year), who made up 8% of all psychiatric hospital patients in 1993-94, and whose average stay was 11 years. By contrast, the average for short-stay patients (less than a year) in psychiatric hospitals was 40 days.

Table 1

**Separations and patient-days for mental disorders, by sex, general and psychiatric hospitals, Canada, 1982-83 to 1993-94**

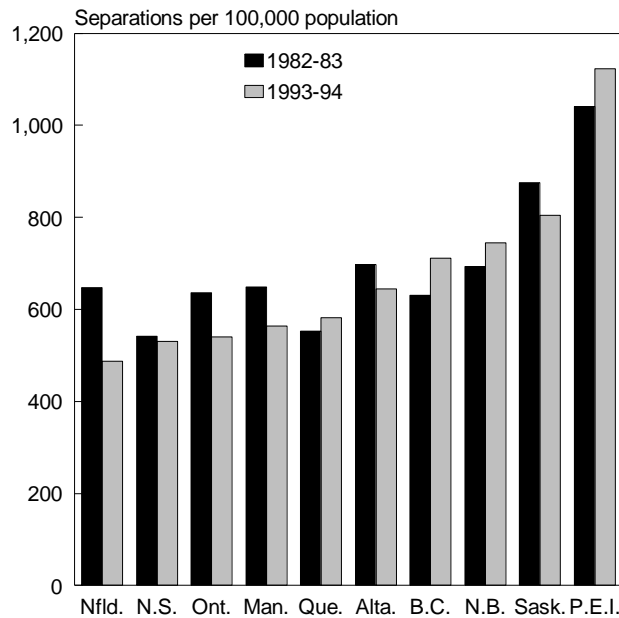
	Total			General hospitals			Psychiatric hospitals <sup>†</sup>		
	Separations		Patient-days Number '000	Separations		Patient-days Number '000	Separations		Patient-days Number '000
	Number	Per 100,000 population		Number	Per 100,000 population		Number	Per 100,000 population	
<b>Both sexes</b>									
1982-83	189,517	769	10,783	155,261	630	4,176	34,256	150	6,608
1983-84	192,534	773	11,883	158,796	638	4,226	33,738	146	7,657
1984-85	193,998	772	11,682	158,399	630	4,451	35,599	152	7,231
1985-86	190,562	757	11,662	156,622	623	4,619	33,940	145	7,043
1986-87	194,524	767	11,391	161,036	635	4,916	33,488	142	6,475
1987-88	194,306	758	12,820	160,434	626	5,091	33,872	142	7,728
1988-89	191,424	738	13,658	158,405	610	5,109	33,019	137	8,549
1989-90	187,625	714	11,792	155,991	594	4,885	31,634	129	6,907
1990-91	191,655	717	12,193	161,093	602	5,376	30,562	123	6,817
1991-92	196,922	728	15,071	167,273	618	5,740	29,649	118	9,331
1992-93	199,685	727	13,673	170,040	619	5,547	29,645	116	8,126
1993-94	204,617	707	15,946	173,220	598	5,698	31,397	116	10,248
<b>Males</b>									
1982-83	90,574	742	5,405	70,304	576	1,806	20,270	179	3,600
1983-84	91,757	745	5,835	71,588	581	1,787	20,169	176	4,048
1984-85	92,942	749	6,076	71,651	576	1,836	21,291	184	4,241
1985-86	91,944	740	5,801	71,493	576	1,939	20,451	177	3,862
1986-87	93,537	748	5,512	73,358	586	2,026	20,179	174	3,486
1987-88	92,336	730	6,142	72,232	571	2,051	20,104	171	4,091
1988-89	91,947	719	6,698	72,389	566	2,123	19,558	164	4,575
1989-90	90,267	697	5,727	71,560	552	1,976	18,707	155	3,752
1990-91	91,576	695	6,132	73,381	557	2,156	18,195	148	3,976
1991-92	93,880	704	7,210	76,335	572	2,320	17,545	141	4,890
1992-93	94,218	696	6,912	76,773	567	2,185	17,445	138	4,727
1993-94	96,204	671	8,021	77,920	543	2,251	18,284	136	5,770
<b>Females</b>									
1982-83	98,943	795	5,378	84,957	683	2,370	13,986	121	3,008
1983-84	100,777	802	6,048	87,208	694	2,439	13,569	116	3,609
1984-85	101,056	795	5,606	86,748	683	2,615	14,308	121	2,991
1985-86	98,618	774	5,861	85,129	668	2,680	13,489	114	3,181
1986-87	100,987	786	5,879	87,678	682	2,890	13,309	111	2,989
1987-88	101,970	784	6,678	88,202	679	3,041	13,768	114	3,637
1988-89	99,477	756	6,960	86,016	654	2,986	13,461	110	3,974
1989-90	97,358	731	6,065	84,431	634	2,909	12,927	104	3,156
1990-91	100,079	738	6,061	87,712	647	3,220	12,367	98	2,841
1991-92	103,042	751	7,861	90,938	663	3,420	12,104	95	4,441
1992-93	105,467	757	6,761	93,267	670	3,362	12,200	94	3,399
1993-94	108,413	742	7,925	95,300	652	3,447	13,113	96	4,478

Source: Health Statistics Division, Catalogue 83-245

<sup>†</sup> Excludes Manitoba and New Brunswick.

**Chart 2**

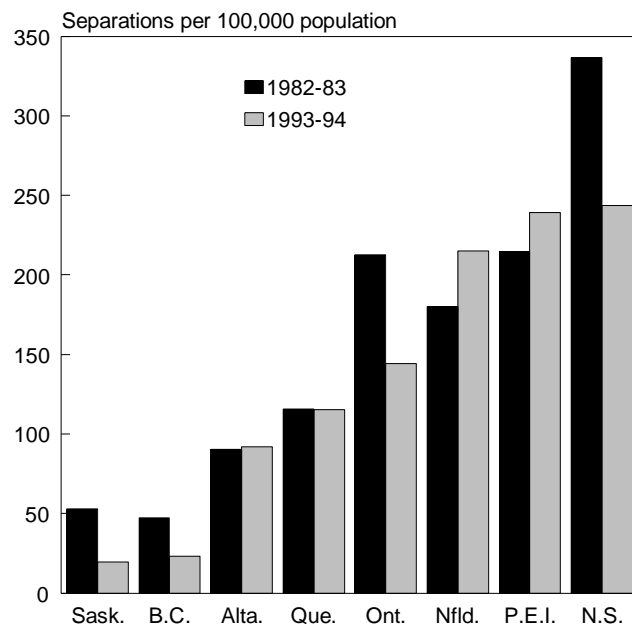
**Separation rates for mental disorders, general hospitals, by province, 1982-83 and 1993-94**



Source: Health Statistics Division, Catalogue 83-245

**Chart 3**

**Separation rates for mental disorders, psychiatric hospitals, by province, † 1982-83 and 1993-94**



Source: Health Statistics Division, Catalogue 83-245

† Excludes New Brunswick and Manitoba.

There was, however, considerable provincial variation in average stays. For short-stay patients in psychiatric hospitals, averages varied from 24 days in Saskatchewan to 79 days in British Columbia. For long-stay patients, the range was from 1 year in Prince Edward Island to 20 years in Saskatchewan. This wide variation for long-stay patients results, for the most part, from provincial differences in the use of psychiatric hospitals for chronic mental illness, instead of alternatives such as residential care facilities. As well, in a given year, large numbers of long-stay patients in a particular province may be discharged, thereby creating substantial year-to-year fluctuations in average length of stay.

**Shorter stays in general hospitals**

In general hospitals, the treatment of mental disorders accounted for 5.7 million patient-days in 1993-94. As a proportion of total patient-days in general hospitals, those for mental disorders rose from 10% in 1982-83 to 15% in 1993-94.

Like psychiatric hospitals, general hospitals saw a rise in the average stay for the treatment of mental disorders from 27 days in 1982-83 to 33 days in 1993-94. The relatively brief stays in general hospitals reflected the small proportion of long-stay patients (just over 1% of those treated for mental disorders in general hospitals). Long-stay patients in general hospitals averaged 3 years, much less than did those in psychiatric hospitals. Short-stay patients, too, tended to spend less time in general than in psychiatric hospitals: an average of 19 versus 40 days.

Nonetheless, average stays of patients treated for mental disorders in general hospitals varied considerably in different provinces. In 1993-94, averages for short-stay patients ranged from 15 days in Prince Edward Island to 29 days in Quebec. For long-stay patients, the range was from 1.1 years in Nova Scotia to 3.6 years in Quebec and Saskatchewan.

**Different patterns for males and females**

Since 1982-83, the average stay in general hospitals for female patients with mental disorders rose faster than for male patients (30% versus 12%). By 1993-94, female patients averaged 36 days, compared with 29 days for male patients.

**Table 2****Average length of stay for mental disorders, by sex, general and psychiatric hospitals, Canada, 1982-83 to 1993-94**

	General hospitals	Psychiatric hospitals <sup>†</sup>
	(Days)	
<b>Both sexes</b>		
1982-83	27	193
1983-84	27	227
1984-85	28	203
1985-86	30	208
1986-87	31	193
1987-88	32	228
1988-89	32	259
1989-90	31	218
1990-91	33	223
1991-92	34	315
1992-93	33	274
1993-94	33	326
<b>Males</b>		
1982-83	26	178
1983-84	25	201
1984-85	26	199
1985-86	27	189
1986-87	28	173
1987-88	28	204
1988-89	29	234
1989-90	28	201
1990-91	29	219
1991-92	30	279
1992-93	28	271
1993-94	29	316
<b>Females</b>		
1982-83	28	215
1983-84	28	266
1984-85	30	209
1985-86	32	236
1986-87	33	225
1987-88	35	264
1988-89	35	295
1989-90	35	244
1990-91	37	230
1991-92	38	367
1992-93	36	279
1993-94	36	342

**Source:** Health Statistics Division, Catalogue 83-245

<sup>†</sup> Excludes Manitoba and New Brunswick.

Throughout the period, the majority of patients treated for mental disorders in general hospitals were female (55% in 1993-94). As well, in 1993-94, females received 60% of the total days of care that general hospitals provided for mental disorders. Women aged 75 and over accounted for a large share of the female excess in average length of stay and total days of care.

A different picture emerges for psychiatric hospitals. The average stay for male patients rose faster than that of female patients: 78% versus 59%. Nonetheless, female patients still had longer stays—in 1993-94, an average of 342 days, compared with 316 days for male patients. However, males accounted for the majority of patients and patient-days in psychiatric hospitals throughout the period (58% and 56%, respectively, in 1993-94).

### Leading causes of hospitalization

The leading causes of hospitalization for mental disorders in psychiatric and general hospitals were somewhat different, with larger shares of patients in psychiatric hospitals having more serious diagnoses (Table 3).

In 1993-94, the leading diagnosis for females in psychiatric and general hospitals was affective psychoses, accounting for 26% and 23% of female separations, respectively. Schizophrenia was diagnosed for 24% of female patients in psychiatric hospitals, but only 10% in general hospitals. Personality disorders, which accounted for 7% of females in psychiatric hospitals, did not figure among the five leading causes in general hospitals. On the other hand, 13% of females in general hospitals had neurotic disorders, more than double the proportion (7%) in psychiatric hospitals.

The leading causes of hospitalization for males differed from those for females, but again, the more serious illnesses tended to predominate in psychiatric hospitals. In 1993-94, schizophrenia accounted for 33% of male separations from psychiatric hospitals, compared with 16% from general hospitals. In both types of institution, affective psychoses ranked second, followed by alcohol dependence syndrome. Personality disorders were one of the five leading diagnoses for males in psychiatric hospitals, but not in general hospitals.

**Table 3****Five leading diagnoses of mental disorders, general and psychiatric hospitals, separations by sex, Canada, 1982-83 and 1993-94**

		1982-83			1993-94
<b>General hospitals</b>					
<b>Males</b>			<b>Males</b>		
Total number of separations		70,304	Total number of separations		77,920
%		100	%		100
Alcohol dependence syndrome		21	Schizophrenic psychoses		16
Neurotic disorders		14	Affective psychoses		15
Schizophrenic psychoses		13	Alcohol dependence syndrome		11
Affective psychoses		10	Neurotic disorders		8
Alcoholic psychoses		6	Adjustment reaction		7
Subtotal		64	Subtotal		57
<b>Females</b>			<b>Females</b>		
Total number of separations		84,957	Total number of separations		95,300
%		100	%		100
Neurotic disorders		26	Affective psychoses		23
Affective psychoses		17	Neurotic disorders		13
Schizophrenic psychoses		10	Schizophrenic psychoses		10
Depressive disorders		10	Adjustment reaction		9
Adjustment reaction		5	Depressive disorders		9
Subtotal		68	Subtotal		64
<b>Psychiatric hospitals<sup>†</sup></b>					
<b>Males</b>			<b>Males</b>		
Total number of separations		20,270	Total number of separations		18,284
%		100	%		100
Schizophrenic psychoses		30	Schizophrenic psychoses		33
Alcohol dependence syndrome		15	Affective psychoses		14
Personality disorders		12	Alcohol dependence syndrome		10
Affective psychoses		10	Adjustment reaction		6
Neurotic disorders		5	Personality disorders		5
Subtotal		72	Subtotal		68
<b>Females</b>			<b>Females</b>		
Total number of separations		13,986	Total number of separations		13,113
%		100	%		100
Schizophrenic psychoses		25	Affective psychoses		26
Affective psychoses		19	Schizophrenic psychoses		24
Neurotic disorders		11	Adjustment reaction		8
Personality disorders		9	Personality disorders		7
Adjustment reaction		5	Neurotic disorders		7
Subtotal		69	Subtotal		72

**Source:** Health Statistics Division, Catalogue 83-245

<sup>†</sup> Excludes Manitoba and New Brunswick.

## More serious diagnoses

The development of new therapies for mental disorders since the early 1980s (for example, improved drugs) and the establishment of alternative facilities has meant that only the more serious cases are hospitalized. As a result, in both types of institution, there has been a shift toward more serious diagnoses as causes of hospitalization. For example, affective psychoses was the diagnosis of larger shares of female patients in 1993-94 than in 1982-83. On the other hand, the proportion of females diagnosed with a neurotic disorder in 1993-94 was about half the 1982-83 figure.

The pattern was similar for men. In 1993-94, schizophrenia and affective psychoses represented larger proportions of male separations from general and psychiatric hospitals than had been the case in 1982-83. By contrast, the proportion of males diagnosed with alcohol dependence syndrome decreased.

## Summary

The shift toward greater use of general hospitals for the treatment of mental disorders reflects the tendency to admit patients with the most serious diagnoses to psychiatric hospitals. However, admissions to both types of institution now tend to involve more serious cases than in the early 1980s. To some extent, the increase in the number of patient-days provided for mental disorders, despite declining separation rates, is attributable to the time required for the treatment of disorders such as schizophrenia and affective psychoses.

There is also growing emphasis on community care. Increasingly, mental disorders are treated on an outpatient basis without admission to hospital. The substantial annual fluctuations in the national number of separations—as many as 5,000 or 6,000 from one year to the next—may be due to the development of alternative facilities such as community health clinics. The opening of such a facility in one province could have a noticeable impact on national figures on hospitalization for mental disorders.

## Reference

1. World Health Organization. *Manual of the International Classification of Diseases, Injuries, and Causes of Death. Based on the Recommendations of the Ninth Revision Conference, 1975*. Geneva: World Health Organization, 1977.