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Acute care hospitalization, by immigrant category: Linking hospital data and the Immigrant Landing File in Canada

Rates of hospitalization are higher among family-class immigrants and refugees than among economic-class immigrants.

These findings are from a new study that linked data from the Canadian Immigrant Landing File with the Hospital Discharge Abstract Database to calculate age-standardized hospitalization rates for all-cause and leading causes of hospitalization from 2006/2007 to 2008/2009, by immigrant category, at the national level (excluding Quebec).

Economic-class immigrants consist of principal applicants, selected for their ability to establish themselves economically, and their dependants. Family-class immigrants are admitted to Canada for family reunification, while refugees are admitted for humanitarian and compassionate reasons.

Among male immigrants overall, the all-cause age-standardized hospitalization rate for the 2006/2007-to-2008/2009 period was 303 per 10,000 population. Male economic-class principal applicants and their dependants had a much lower all-cause rate (less than 265) than did family-class immigrants (327) or refugees (337).

Among female immigrants, all-cause age-standardized hospitalization rates were 606 per 10,000 population including pregnancy-related admissions, and 313 excluding pregnancy-related admissions. With and without pregnancy, female refugees had higher hospitalization rates (603 and 335) than did economic-class principal applicants (587 and 297). However, this difference was significant only when pregnancy was not included.

The four leading causes of hospitalization for male immigrants overall were (in descending order): circulatory diseases, digestive diseases, injury and cancer. Male refugees had higher hospitalization rates for each of the four leading causes than did economic-class principal applicants.

For female immigrants, the four leading causes of hospitalization (other than pregnancy) were the same as they were for male immigrants, but the order differed: cancer, digestive diseases, circulatory diseases and injury. Female economic-class principal applicants had low rates for digestive diseases and injury compared with female refugees, but a higher rate for cancer than did female refugees and female family-class immigrants.

The relationship between immigration and hospitalization depends on a number of pre- and post-migration factors, such as place of birth and reason for migration. For example, pre-migration factors that may contribute to higher hospitalization rates among refugees include the stress of war and hardships encountered in refugee camps, such as poor sanitation and nutrition and lack of medical care. Post-migration factors could include language difficulties and lack of knowledge of the health care system.

According to the study, hospitalization rates (excluding pregnancy) increased with years since arrival in Canada. Moreover, rates were found to be lowest for immigrants from East Asia and highest for those from the United States.





Note to readers

The Immigrant Landing File–Hospital Discharge Abstract Linked Database (sample size of 2.6 million immigrants) was used to calculate age-standardized hospitalization rates per 10,000 population for all-cause and leading causes of hospitalization during the 2006/2007-to-2008/2009 period, by immigration category, landing year and world region at the national level (excluding Quebec).

The Immigrant Landing File (ILF) contains data on immigrants who arrived in Canada since 1980. The Discharge Abstract Database (DAD) contains information on hospital discharges, which is provided annually to Statistics Canada by the Canadian Institute for Health Information.

The ILF-DAD linked cohort was composed of 2,594,600 ILF records for new immigrants linked to 359,400 hospital discharges over the three years of follow-up. The study focused on inpatient acute care hospitalization of immigrants from April 1, 2006, to March 31, 2009. Hospitalizations were classified by most responsible diagnosis.

The article, "Acute care hospitalization, by immigrant category: Linking hospital data and the Immigrant Landing File in Canada," is available in the August 2016 online issue of *Health Reports*, Vol. 27, no. 8 (82-003-X), from the *Browse by key resource* module of our website, under *Publications*.

This issue of *Health Reports* contains a second article: "Acute care hospitalization by Aboriginal identity, Canada, 2006 through 2008."

Also released today is "Linking the Canadian Immigrant Landing File to Hospital Data: A New Data Source for Immigrant Health Research," as part of *Analytical Studies: Methods and References*, no. 2 (11-633-X). This report explains the details of how information from the Canadian Immigrant Landing File was linked to the Hospital Discharge Database. It is available from the *Browse by key* resource module of our website, under *Publications*.

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