




What can the Immigration Medical Examination teach us on migrant health?

Que nous apprend l'examen médical d'immigration sur la santé des nouveaux arrivants ?

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 Immigration, Refugees and Citizenship Canada / Immigration, Réfugiés et Citoyenneté Canada 

CONFLICT OF INTEREST

The presenters have no actual or potential conflict of interest in relation to this program/presentation.

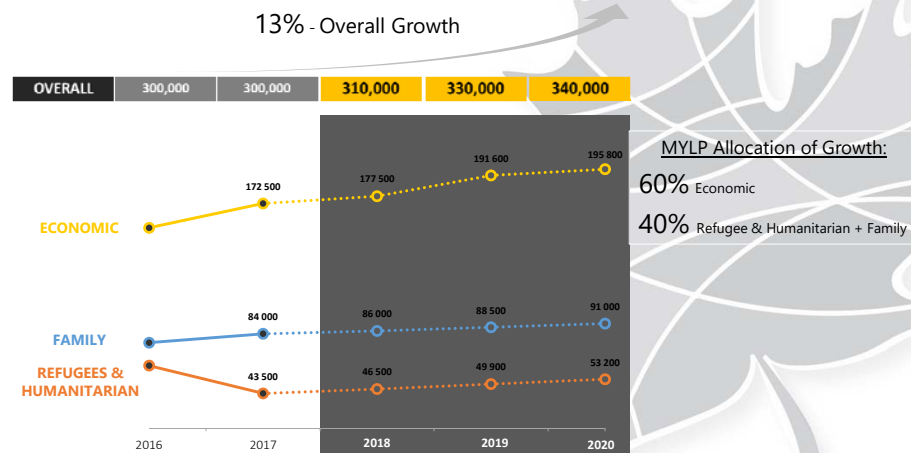


 Immigration, Refugees and Citizenship Canada / Immigration, Réfugiés et Citoyenneté Canada 

PURPOSE

- Describe current migration context in Canada
- Present Migration Health Branch's mandate and programs
- Provide an overview of MHB health screening practices
- Provide an overview of the data linkage project which helps address data gaps
- Discuss upcoming changes to hepatitis health screening practices

2018-2020 MULTI-YEAR LEVELS PLAN (FOR PERMANENT RESIDENTS)



GLOBALLY, MIGRATION FLOWS ARE INCREASING IN MAGNITUDE ...

- The number of migrants world-wide is at an all-time high.
- Migration flows are of growing complexity.
- Patterns are changing in the Americas.
- Canada's geography has provided isolation from global migratory movements, but this is changing.
- The number of asylum seekers are increasing.

...and exerting pressure on Canada's immigration system.

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MIGRATION HEALTH BRANCH (MHB)

THE GOVERNMENT OF CANADA'S CENTRE OF EXPERTISE FOR THE MANAGEMENT OF HEALTH-RELATED ASPECTS OF MIGRATION

Mandate	Expertise	Functions	Global Network
Contribute to the protection of the health of Canadians and promote the integration of migrants through leadership in migration health policies and programs	Specialized medical expertise including medical doctors, registered nurses, epidemiologists, as well as program, policy and administrative staff	A unique "full-service" branch with its own policy, business, and operations functions	Staff at NHQ and in four Regional Medical Offices (RMOs): <ul style="list-style-type: none"> • Ottawa • London • Delhi • Manila



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MIGRATION HEALTH BRANCH PROGRAMS

Health Screening

- MHB manages health screening of migrants to
 - prevent the arrival of infectious diseases (e.g. tuberculosis (TB)), and
 - to reduce impacts on Canada's publicly funded health and social services
- Health screening requirement under the *Immigration and Refugee Protection Act (IRPA)*
- MHB oversees the Immigration Medical Examination (IME) process. MHB receive IMEs from Panel Physicians and Radiologists and conducts Immigration Medical Assessments (IMA)

Medical Surveillance and Notification

- Medical surveillance stems from the final assessment of an IME, and must be undertaken once the client is in Canada
- Surveillance required for clients latent or previously-treated TB are
 - admitted to Canada with conditions on their visa, and
 - referred on arrival to provincial/ territorial public health authorities for medical surveillance
- Certain provinces/territories are notified of the arrival of HIV-positive applicants in order to support their continuity of care

Interim Federal Health Program (IFHP)

- Quasi-statutory Program; authorities do not fall under *IRPA*; exercise of Crown's prerogative relating to spending authority
- Limited, temporary health-care coverage for refugees, asylum claimants, and other vulnerable groups in Canada
- Pre-departure medical services for refugees destined to Canada
- In 2017-18:
 - ~177,000 beneficiaries
 - 1,900,000 claims
 - \$124M total estimated expenses

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WHY FOCUS ON TB?

Condition of possible inadmissibility for “danger to public health”	Current criteria		
	Infectious	Potentially fatal	Reportable communicable disease in Canada
Active TB	✓	✓	✓
Untreated Syphilis	✓	✓	✓

- Health screening of migrants is a key tool in the **Government-wide commitment to lower Canadian TB rates to less than 1 case per 100,000 people by 2035** (current rate is 4.8/100,000)
- IRCC also tests for:
 - **HIV:** Systematic testing of all applicants (allows those who are HIV+ to seek treatment and counselling, and to support continuity of care in Canada)
 - **Latent TB:** Testing of close contacts and those showing signs of illness
 - **Hepatitis:** Testing on a risk-identification basis (allows those with advanced infection to be identified and treated)

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HEALTH SCREENING PROGRAM: THE IMMIGRATION MEDICAL EXAMINATION (IME)

- Conducted to screen for medical conditions relevant for determining medical admissibility to Canada under *IRPA*
- Is a single health assessment at a specific point in time and caution should be exercised in using this data to draw conclusions on the health status of groups of individuals.
- Some individuals may not have received treatment for, or even be aware of, a health condition detected during the IME.
- The IME consists of a medical history, physical examination, age-specific laboratory tests and age-specific chest x-ray.

The **IME** consists of:

- Medical history (all)
- Physical Examination (all)
- Functional inquiry (all)
- Urinalysis (Age ≥ 5 years)
- Chest X-ray (PA) (Age ≥ 11 years)
- HIV, Syphilis testing (Age ≥ 15 years)
- LTBI IGRA/TST (5 high risk groups)
- Hepatitis testing (Risk based)



The **IMA** is the final decision made by a medical officer on medical admissibility including:

- Medical code
- Surveillance code (specifically for inactive TB)

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HEALTH SCREENING PROGRAM: THE IMMIGRATION MEDICAL ASSESSMENT (IMA)

Table 1: Description of Medical codes in the IME

Medical Code	IME - Medical Code Description
1	No health impairment sufficient to prevent admission for medical reasons under Section 38(1)(a)
2	Has a condition for which the degree of risk to public health is not sufficient to exclude admission under Section 38(1)(a)
3	Has a condition for which the potential demand on health or social services is not sufficient to exclude admission under Section 38(1)(c)
4	Has a condition for which the degree of risk to public health is sufficient to exclude admission under Section 38(1)(a)
5	Has a condition for which the potential demand on health or social services is sufficient to exclude admission under Section 38(1)(c)
6	Has a condition for which the degree of risk to public health is sufficient to exclude admission under Section 38(1)(b)

Table 2: Description of immigration categories

Type	Class	Category
Permanent Resident	Family	Spouse
		Children
		Parents & Grandparents
	Refugee	Resettled refugees
		Asylum seekers
Economic	Economic categories	
Temporary Resident	Temporary Resident	Students
		Workers
		Visitors

Refugees and most family class applicants are Excessive Demand exempt

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ADDRESSING DATA GAPS TO SUPPORT HEALTH SCREENING POLICY CHANGES

In the context of recent significant changes in health admissibility policy, MHB is developing relevant evidence to better frame and understand the role of IRCC in the response to Viral Hepatitis using:

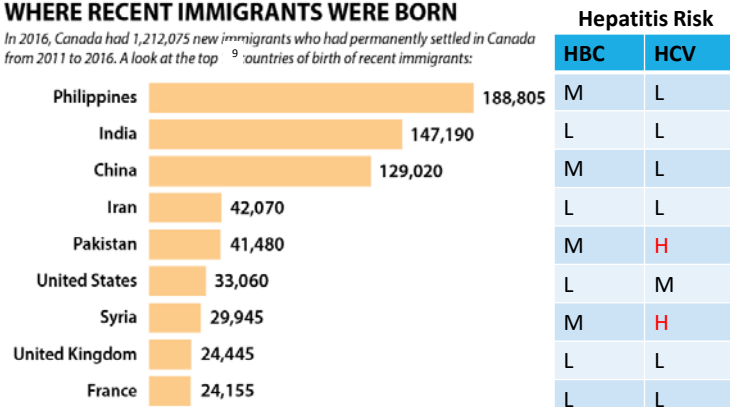
1. Viral hepatitis risk by source countries
2. Research projects with Statistics Canada to conduct a data linkage using the immigrant landing file and database on hospital discharges in Canada
3. External evidence on Viral Hepatitis in immigrants and their health outcomes

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VIRAL HEPATITIS RISK OF SOURCE COUNTRIES OF RECENT IMMIGRANTS

WHERE RECENT IMMIGRANTS WERE BORN

In 2016, Canada had 1,212,075 new immigrants who had permanently settled in Canada from 2011 to 2016. A look at the top 9 countries of birth of recent immigrants:



Source: Statistics Canada – 2016 Census

Note: immigrant's birth country risk level in this study was derived from published prevalence rates for HBV and HCV for positive serology. Additional prevalence rates identified for major source countries/region with missing information

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DATA LINKAGE PROJECT ON HEPATITIS-RELATED HOSPITALIZATIONS

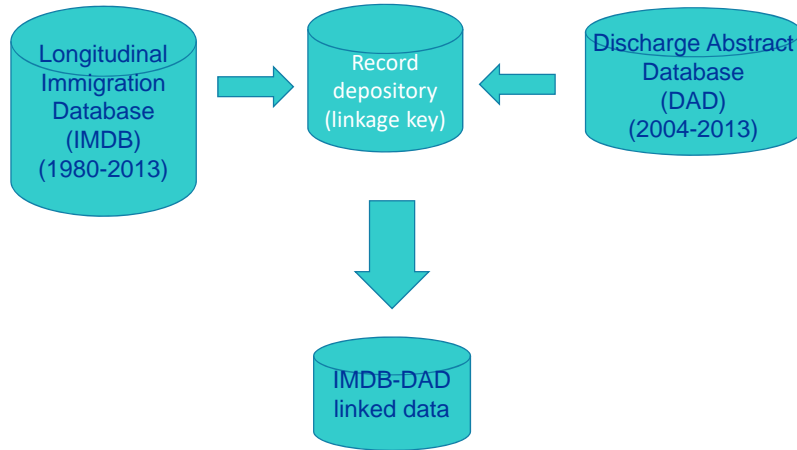
A descriptive analysis was performed by conducting a data linkage between the immigrant landing file to the Diagnostic Abstract Database (DAD) to better understand the health care utilization of immigrants with viral hepatitis infection by:

- Assessing the burden of HBV and HCV in immigrants to Canada and the related burden to the Canadian health care system
- Evaluating the immigrant hospitalization stays and number of hospitalization per case for liver specific disease
- Comparing the above findings to those of the Canadian-born population/ Long Term-Residents

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ADDRESSING GAPS: DATA LINKAGE PROJECT USING THE SOCIAL DATA LINKAGE ENVIRONMENT

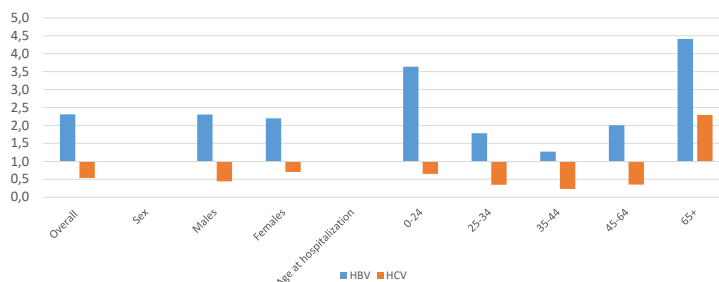
- In an effort to better inform HBV and HCV health screening policy, IRCC collaborated with Statistics Canada to perform an analysis on the pattern of HBV and HCV related hospitalizations among recent immigrants to Canada (foreign born) compared to long-term Canadian residents.



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SUMMARY OF RESULTS

- The majority of hepatitis-related hospitalization were from immigrants who came from medium and low risk source countries, reflecting volumes of source countries among recent immigrants.
 - 21% and 17% of HBV- and HCV- related hospitalized recent immigrants, respectively, were from high-risk countries;
- Recent immigrants represent 16% of the Canadian population
- Recent immigrants incurred 37% of HBV- and 9% of HCV-related hospitalizations
 - Relative burden ratio for HBV-related hospitalizations = 2.3 and HCV= 0.6. These ratios were higher among the elderly (4.4 and 2.3, respectively).



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GUIDELINES FOR IMMIGRANT HEALTH

Appendix 7: Screening for hepatitis C infection: evidence review for newly arriving immigrants and refugees

Christina Greenaway MD MSc, David K.H. Wong MD, Deborah Anayag MD, Marc Deschenes MD, Charles Hui MD, Erin Ueffing BSc MSc, Kevin Pottie MD MSc, Anasua Santos BS MPH, Meh Rashid MD, Jenny E. Heathcote MD; for the Canadian Collaborators for Immigrant and Refugee Health

Appendix 5: Hepatitis B: evidence review for newly arriving immigrants and refugees

Christina Greenaway MD MSc, Lavanya Narasiah MD MSc, Pierre Plourde MD, Erin Ueffing MHS, Kevin Pottie MD MSc, Marc Deschenes MD, David K.H. Wong MD, Susan Kuhn MD MSc, Jenny E. Heathcote MD; for the Canadian Collaborators for Immigrant and Refugee Health



ORIGINAL ARTICLE

September-October, Vol. 16 No. 5, 2017: 720-726

Hepatitis C Virus Infection Outcomes Among Immigrants to Canada: A Retrospective Cohort Analysis

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Disease burden of chronic hepatitis B among immigrants in Canada

William W. Wong MD^{1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100}

ABSTRACT

Background: Immigrant populations have higher mortality from chronic viral hepatitis and from hepatocellular carcinoma than the Canadian-born population. The greatest part of this burden is likely attributable to undetected chronic infections with hepatitis B, most often acquired in the perinatal period or early childhood. Despite this, there are no organized screening programs in Canada for chronic infections with hepatitis B, and immigrants are not routinely offered hepatitis B screening.

Methods and main results: We used a retrospective cohort design to determine the prevalence of hepatitis B among immigrants in Canada. We used a cross-sectional design to determine the prevalence of hepatitis B among immigrants in Canada.

Results: The prevalence of hepatitis B among immigrants in Canada was 1.1% (95% CI 0.8-1.4%). The prevalence of hepatitis B among immigrants in Canada was 1.1% (95% CI 0.8-1.4%).

CONCLUSIONS: The prevalence of hepatitis B among immigrants in Canada was 1.1% (95% CI 0.8-1.4%).

Immigration and viral hepatitis

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sons, Little (DAA) HCV Viral Hepatitis and compared using 22% immunoscan/liver tests ratio of HCV (DAA) re-Conclusion: Under H. treat and therapeutic

PROPOSED ENHANCED HEPATITIS SCREENING

- MHB is re-examining current screening practices for hepatitis B and C virus (HBV and HCV, respectively)
 - Review is informed by recent evidence from IRCC and Statistics Canada
- Systematic screening for HBV and HCV being considered in applicants who require an IME
 - Will benefit newcomers by allowing them to seek treatment and prevent complications, in support of their continuity of care pending P/T discussions
- This work supports IRCC's desire to advance global elimination targets (UN, WHO, and GoC action plan on Sexually Transmitted and Blood Borne Infections)
- P/Ts will be consulted to assess capability to receive Hepatitis results, similar to the HIV model
 - Those provinces and territories (P/Ts) that agree to receive the Hepatitis screening results will be notified of migrants who test positive for HBV and HCV, similar to the process currently in place for HIV positive clients.
- Pre/post test counseling

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QUESTIONS?

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