

Screening for Hepatitis C – Clinician Summary

POPULATION

This recommendation applies to asymptomatic adults who are not at elevated risk for hepatitis C. It does not apply to pregnant women or adults who are at elevated risk for hepatitis C, such as:

- Individuals with current or past history of injection drug use
- Individuals who have been incarcerated
- Individuals who were born, travelled or resided in HCV endemic countries (Appendix 6)
- Individuals who have received health care where there is a lack of universal precautions
- Recipients of blood transfusions, blood products or organ transplant before 1992 in Canada
- Hemodialysis patients
- Individuals who have had needle stick injuries
- Individuals who have engaged in other risks sometimes associated with HCV exposure such as high-risk sexual behaviours, homelessness, intranasal and inhalation drug use, tattooing, body piercing or sharing sharp instruments or personal hygiene materials with someone who is HCV positive.
- Anyone with clinical clues suspicious for HCV infection (and above risk factors)

BURDEN OF ILLNESS

In Canada, it is estimated that between 0.64% to 0.71% of the Canadian population or approximately 220,697 to 245,987 individuals were living with chronic HCV infection in 2011 and 44% of these individuals were undiagnosed. Not all people with chronic HCV infection will develop cirrhosis or signs or symptoms indicative of liver disease. It is estimated that approximately 84% of HCV-infected people do not develop cirrhosis 20 years after acute infection and 59% after 30 years.

RECOMMENDATION

We recommend against screening for HCV in adults who are not at elevated risk.
Strong recommendation, very low quality evidence

BASIS OF RECOMMENDATIONS

This recommendation places a relatively lower value on:

- 1) very low quality indirect evidence suggesting a potentially small benefit from screening,
- 2) the low risk of household and sexual transmission of HCV among individuals not at elevated risk, as well as the low risk of transmission through blood products given routine screening of blood and organs, and,

3) the potential risk of developing end stage liver disease and transmitting the infection despite being asymptomatic.

This recommendation places a relatively higher value on:

- 1) the anticipated increase in harm resulting from diagnosing and treating individuals who screen positive but would have never developed HCV related disease during their lifetime,
- 2) false positives and false negatives, which could lead to unnecessary anxiety and/or false reassurance,
- 3) the potential for screening to increase inequity given that amongst those who do not meet current eligibility criteria (e.g. specific comorbidities), only wealthier individuals and/or those with private insurance, would obtain earlier access to treatment not currently funded by government,
- 4) the unknown magnitude of benefit of treatment on reducing risk of transmission, and
- 5) the very large impact that screening and treatment would have on health care budgets, and associated opportunity costs (i.e. limit this would place on the ability to provide other health care interventions that would have to be foregone for lack of funds, despite being supported by better evidence).

CONSIDERATIONS FOR IMPLEMENTATION

The task force recommendation applies to individuals who are not pregnant or at elevated risk for HCV. Subgroups of the population who are at increased risk for HCV (and not included in this recommendation) may require special attention from clinicians. A joint 2009 recommendation from the CFPC and PHAC, although not based on a systematic review of the evidence, addressed those individuals who are at increased risk. That guidance suggests testing for HCV in *“anyone with risk behaviours for HCV, with potential exposure to HCV, and/or with clinical clues suspicious for HCV”*. Populations targeted in the joint CFPC/PHAC 2009 guideline include people who inject drugs (current or past behaviour), individuals who have been incarcerated, individuals who may have been exposed to contaminated blood, blood products or medical equipment, and those who travelled or resided in endemic regions.

Some immigrants are at increased risk for HCV because they are from countries where HCV infection is common. Unlike the non-immigrant population, these persons are at increased risk for HCV due to iatrogenic exposure in their country of origin (lack of standard precautions, medical or dental procedures with contaminated equipment) and not necessarily from injection drug use or other higher risk behaviours. The joint CFPC/PHAC 2009 guidance recommends testing for HCV in *“individuals who were born, traveled or resided in a region in which HCV infection is more common”*. A list of endemic countries and a related map is provided in Appendix 6.

More persons are diagnosed with chronic HCV in sub-groups such as the Indigenous population (3% prevalence) and the cohort born from 1950 to 1975 (0.8% prevalence); these populations have a higher proportion of individuals at higher risk for HCV due to risk behaviours associated with other potential exposures to HCV. If we account for subgroups of individuals at elevated risk due to high risk behaviours or exposures, the prevalence in the rest of these two groups would be similar to the low risk population.

For example, removing people who inject drugs from the indigenous population would reduce the HCV prevalence from 3% to 0.5%. Individuals from the Indigenous population who are not otherwise at increased risk are, therefore, included in the present CTFPHC guidance, which recommends against screening adults who are not at elevated risk. Similarly, the excess risk in the cohort born between 1950 and 1975 is driven by an increased prevalence of risk behaviors or potential exposures rather than birth year per se. In the judgment of the task force, neither indigenous people nor members of the 1950-1975 birth cohort should be screened for HCV in the absence of other characteristics that would place them at increased risk for HCV.

The CTFPHC considered the possibility of screening a birth cohort; that is, one-time testing of all people born, for example, between 1950 and 1975. However, elevated risk in that cohort is due to risk behaviours. Most individuals in the birth cohort who are at elevated risk are included in the joint CFPC/PHAC guideline. Following this risk-based guideline will likely increase the identification of those who will benefit most from testing. Those born from 1950 to 1975, who are not otherwise at increased risk, are included in the present CTFPHC guidance, which recommends against screening adults who are not at elevated risk. More evidence would be needed before making a recommendation about birth cohort testing, separate from adults in the general population.