HEPATITIS C & INJECTION DRUG USE*

The Hepatitis C Virus

- Hepatitis C is a virus (HCV). The virus was first identified in 1989.[1]
- HCV affects the liver. It causes hepatitis (inflammation in the liver), which can progress to cirrhosis (extensive scarring so the liver cannot perform its normal functions).
- Most newly infected persons (60 to 70%) have no symptoms and are unaware of their infection. Nonetheless, they are still infectious to others.[2]
- Approximately 15 to 25% of all persons infected with HCV appear to resolve their infection.[17]
- Approximately 75 to 85% of all persons infected with HCV progress to chronic infection. The course of the chronic disease is generally slow, without symptoms for two or more decades after infection.[3]
- Approximately 3 to 20% of infected persons will develop cirrhosis of the liver after 20 years of infection.[2]
- At present, there is no vaccine available.[4]
- There are at least six types, and more than 90 subtypes of HCV.[4,5]
- The current recommended treatment for HCV infection is a combination of the drugs interferon and ribavirin.[6]
- Presently, treatment is not effective in all infected people.[6]
- It is possible to become re-infected with HCV.

Rates of Hepatitis C

- It is estimated that approximately 240,000 persons in Canada are infected with HCV, with rates higher among males than females.[3,9]
- To date, HCV infection rates are very low in infants and children, gradually climbing to a peak rate among those 30-39 years of age and declining thereafter.[3]
- It is estimated that 4,000 new cases of HCV infection will occur in Canada each year, 63% of which will be related to injection drug use.[3]

Transmission of Hepatitis C

- HCV is primarily transmitted through exposure to infected blood.
- Compared to HIV, HCV is 10 to 15 times more highly transmissible by blood.[8]

At Greatest Risk

- Sharing needles, syringes, swabs, filters, spoons, tourniquets and water for injection drug use represents the highest risk behaviour.[5]

At Lower Risk

- Sexual transmission of HCV is estimated between 0 to 10%. Having multiple sexual partners may increase the risk of infection.[2]
- Infection of infants from an infected mother occurs in about 5 to 10% of cases.[2]
- Evidence shows that HCV can be transmitted through tattooing.[7]
- There is potential risk of infection through the sharing of household articles that may be contaminated with blood (e.g., toothbrushes, razors).[7]
- Transfusion of blood or blood products account for approximately 10% of existing cases. However, the risk of infection through blood has been substantially reduced by the introduction of universal testing of blood donors in May 1990. The current risk of infection is estimated to be approximately 1 in 100,000 units.[2]
- Canadian Blood Services and Héma Québec are currently investigating a new blood screening method that is expected to decrease the risk of HCV transmission to 1 in 500,000 units.[10]

Injection Drug Use

- It is estimated that 63% of new HCV infections in Canada each year are related to sharing needles, syringes, swabs, filters, spoons, tourniquets and water related to injection drug use.[2,7]
- It has been estimated that there are up to 125,000 people in Canada who inject drugs.[11]
- People involved in injection drug use are geographically and socially diverse.[11]
- Currently, a young, single person at the low end of the economic scale is characteristic of those at greater risk of sharing needles and other drug equipment.[11]
- HCV spreads quickly. Consistently, research shows high rates of HCV among short-term users of injection drugs who share drug-injecting equipment.[12,13]
- Worldwide estimates of HCV infection range from 50 to 100% among drug-injecting populations. People who inject drugs are central to the persistence of HCV in Canada.[8]
- A 1996 study of injection drug users in British Columbia showed that 88% were infected with HCV. The results also revealed high levels of needle sharing, with 40% of participants having lent used needles and 40% having borrowed used needles.[14]

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- The use of cocaine poses particular health risks. Cocaine use often involves up to 20 injections per day. This increases the likelihood that drug equipment will be shared.[15]
- There are various injection practices that increase the risk of transmission. For example, in a practice called 'front loading or back loading', the drug is mixed in one syringe and then divided by squirting some of the solution into one or more syringes. Although the needle is not shared, HCV can be transmitted if the syringe used for mixing has been previously contaminated.[16]
- Limited research suggests that people with a history of intra nasal or inhaled drug use may be at risk for HCV. Because users of cocaine often have nasal erosions and ulcers, sharing of cocaine straws can transmit HCV. Dehydrated and cracked lips, another common side effect of injection drug use, makes pipe sharing a potential risk.[17]
- People living in Canada who inject drugs are stigmatized and often rejected by society. This has significant implications for efforts to reach this population.[18]

High-risk drug behaviours occur more frequently in certain groups, due to complex social, economic and cultural factors.

- Prisoners have relatively high rates of HCV infection (28 to 40%) and injection drug use with shared needles is the main risk factor underlying their higher risk.[19]
- Street-involved youth are at high risk. One study conducted in Montreal in 1995/96 found that 12.6% were infected with HCV.[20]
- There is evidence to suggest that females are being initiated into injection drug use at a younger age than males. Women are often less able to resist pressure by their male partners to share needles.[11]
- Although there are little data currently available, Aboriginal people in Canada are over-represented in groups at risk for HCV, such as inner city injection drug-using populations and prisoners.[11]

Personal Safety

- Never share needles, syringes, swabs, filters, spoons, tourniquets and water related to injection drug use.
- Exchange all used needles.
- Do not share toothbrushes, razors or other personal care articles as they may have blood on them.
- Consider the health risks in tattooing, body piercing or other personal services that involve breaking the skin and that may not follow recommended guidelines.

Prevention Efforts

- Discouraging individuals from being initiated into injection drug use is critical to preventing the spread of HCV infection.
- Using peer networks, where those involved with injection drug use provide education and intervention to others, has produced positive outcomes.[21]
- Harm reduction strategies, such as needle exchange programs and methadone maintenance programs, reach a population that is difficult to access through more traditional channels. Such contact allows for the provision of education regarding the effects of harmful drug practices, and provides an opportunity to link individuals to other social and health services.
- Strategies directed at people who inject drugs need to use a comprehensive prevention and harm reduction approach that gives attention to the psycho social factors associated with injection drug use, the environment in which unsafe behaviour occurs, and the provision of basic life necessities.

*Fact sheet also available in French.

April 2001

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