## Hepatitis C Treatment

In-depth knowledge on hepatitis C treatment for frontline service providers.

éduCATIE.ca

Updated July 2021







### Introduction to Hepatitis C Treatment

#### At the end of this unit, the learner will be able to:

- Understand hepatitis C infection and its progression.
- 2 Understand how hepatitis C is diagnosed.
- 3 Explain drug treatment options and how treatment cures hepatitis C.
- 4 Describe the benefits of direct-acting antiviral treatment in curing hepatitis C.
- 5 Describe what to expect during a typical treatment regimen.
- *b* Explain how to identify when treatment has cured hepatitis C.

#### What is hepatitis C?

Hepatitis C is a liver infection caused by the *hepatitis C virus*.

Hepatitis C is contracted when the hepatitis C virus gets into the blood. Once in the blood, the virus infects the liver. The virus uses the liver to makes copies of itself and cause an infection.

The first six months of a hepatitis C infection is called *acute infection*. For some people who get hepatitis C, the virus goes away on its own within these first six months of infection. This is called *spontaneous clearance*. About 1 in 4 people will spontaneously clear hepatitis C during the acute phase. About 1 in 4 people will spontaneously clear hepatitis C during the acute phase.



For about 3 out of 4 people, the virus remains in the body after six months. At this point, hepatitis C will not go away on its own. This is called *chronic infection*.

During chronic infection, the virus continues to make copies of itself and injure the liver. Injury usually happens slowly over a long period of time. People can live with chronic hepatitis C for 20 to 30 years or more without feeling sick or showing any symptoms. Hepatitis C is sometimes referred to as a "silent" disease because often there are no symptoms until the liver is severely injured.



Hepatitis C causes injury to the liver by creating inflammation in the liver. This inflammation results in scarring, called *fibrosis*. Over a long period of time, scarring affects most of the liver. This is called *cirrhosis*. Cirrhosis can make it hard for the liver to work properly. It can lead to serious health problems and potentially early death.



Chronic hepatitis C infection also increases the risk of developing liver failure and liver cancer. Liver failure or liver cancer may result in needing a liver transplant.

Getting a liver transplant is not a cure for hepatitis C. The hepatitis C virus is still present in the body and can infect the new liver if left untreated.

#### Hepatitis C testing

Testing is the only way to diagnose someone with hepatitis C.

Two tests are required to diagnose a hepatitis C infection: A screening test and a confirmatory test. Sometimes only a confirmatory test is performed to diagnose hepatitis C.

The first test is a *screening test*. It detects the presence of hepatitis C antibodies in the blood.

- The immune system produces antibodies to fight harmful microorganisms including viruses that enter the body.
- If the screening test is reactive (positive), this means that the person has antibodies to hepatitis C and therefore has had a hepatitis C infection at some point in their life.
- The antibody test alone does not mean that the person has a current hepatitis C infection.

If a person tests positive for hepatitis C antibodies, they will need a second test to confirm whether they have a current hepatitis C infection.

The second test is called a *confirmatory test*, which is usually an RNA test. This test looks for the genetic material of the virus in the blood (RNA).

- + A reactive (positive) confirmatory test means that the person has a current hepatitis C infection.
- A non-reactive (negative) confirmatory tests means that the person no longer has hepatitis C (for example, due to spontaneous clearance or cure).

---

#### Hepatitis C treatment

The goal of hepatitis C treatment is to *cure hepatitis C*. Hepatitis C treatments are highly effective with cure rates around 95% or higher.

Hepatitis C medications are called direct-acting antivirals, or DAAs. DAAs stop the virus

from being able to make copies of itself. Hepatitis C treatments are combinations of two or more different types of DAAs. Different types of DAAs attack the ability of the virus to make copies of itself in different ways.

Some hepatitis C treatments can cure any genotype of the virus. These are called *pangenotypic* treatments. Other Hepatitis C treatments are highly effective with cure rates around 95% or higher.

treatments work against specific genotypes of the virus.

Some hepatitis C treatments include a medication called ribavirin, which is taken along with DAAs.

 Ribavirin may be added to treatment in certain situations, such as when a person has severe liver injury.

#### Benefits of hepatitis C treatment

Being cured of hepatitis C has many benefits. Being cured can:

- Prevent the liver from becoming more injured, prevent liver failure and reduce the chances of developing liver cancer or dying.
- Improve a person's quality of life; for example, some people have more energy and less body pain.
- + For some people, liver health may improve over time after cure.

In addition to the health benefits, curing people of hepatitis C leads to decreased opportunities for transmission of the virus, which helps to reduce the number of new infections in Canada and around the world.





## What to expect during hepatitis C treatment

The decision to start treatment is made by the person living with hepatitis C and their healthcare provider.

When choosing a treatment combination, factors to consider include:

- + The amount of liver injury
- Other health conditions or medications that might affect treatment
- + Whether or not the person has been treated before
- The genotype of the virus (determined during diagnosis). They may not be needed for people receive pangenotypic treatments.
- Whether or not the person is pregnant or trying to get pregnant

Depending on the treatment combination:

+ Treatment can last from eight to 16 weeks.



- For most people, treatment means taking their medication once per day. Some treatments involve taking medication twice a day.
- For treatment to effectively cure hepatitis C, it is important that the pills are taken every day for the full length of treatment, as prescribed by the healthcare provider. This is called adherence.

While a person is taking hepatitis C treatment, their health will be monitored by a healthcare provider. This may involve additional tests, including blood tests in some cases. For example, viral load testing during treatment can be used as a measure of adherence. Other tests to monitor a person's liver and overall health may be done throughout treatment.

For most people, hepatitis C treatment causes mild side effects, which usually decrease or stop a few weeks after starting treatment. Side effects from treatment can sometimes be similar to symptoms of hepatitis C or liver injury. The most common side effects experienced by people taking treatment include headache, fatigue (extreme tiredness), nausea and diarrhea.

Side effects are rarely severe enough to make it necessary to stop treatment. People who take ribavirin in addition to DAAs may experience more side effects during treatment.

To learn more about hepatitis C treatments approved in Canada for adults, visit hepatitis-c-drugs-approved-canada-adults

#### **Hepatitis C cure**

Hepatitis C treatments are highly effective at curing hepatitis C infection.

Twelve weeks after a person finishes their hepatitis C treatment, a viral load test will be done to determine whether the virus remains in the body.

- If the viral load test comes back negative (there is no virus in the blood), the person is cured of hepatitis C. There is no more hepatitis C virus in the body.
- If the viral load test comes back positive, treatment did not cure the person's hepatitis C. The healthcare provider will provide information on retreatment options.

Hepatitis C cure is also called a *sustained virological response* (SVR). Sometimes people will say SVR12. The 12 represents the test being done 12 weeks after the end of treatment.

If a person clears the hepatitis C virus (either through successful treatment or spontaneous clearance) they can become re-infected with hepatitis C if they are exposed to the virus again. This is because successful hepatitis C treatment does not provide immunity against re-infection.

(Immunity is the ability of the body to resist disease. In this case, immunity is the body's ability to resist an infection from the hepatitis C virus.)

Since a person who has been exposed to the hepatitis C virus has antibodies in their blood for life, an antibody test is not useful for diagnosing re-infection. Only a confirmatory test can confirm if someone has been re-infected with hepatitis C.

Access to counselling about how

to prevent re-infection as well as resources for safer drug use and safer sex are an important part of hepatitis C treatment.



Successful

hepatitis C

treatment

does not

immunity

re-infection.

against

provide

Service providers will see hepatitis C re-infection among some of their clients who continue to participate in higherrisk drug use and sex after successful treatment. People who are at risk of re-infection after treatment should be regularly tested for hepatitis C. This will help identify a person in the early stages of re-infection and engage them in care as early as possible. If the person does not spontaneously clear the virus after re-infection, they will need to be treated again.





# Factors that may influence decisions on hepatitis C treatment

#### At the end of this unit, the learner will be able to:

- Explain considerations for choosing a treatment combination.
- 2 Understand how a person considering treatment prepares for and is supported to start treatment.



All hepatitis C treatments used in Canada have very high rates of curing hepatitis C.

There are a number of factors a healthcare provider considers before recommending a certain treatment combination for a person with hepatitis C.

Considerations for choosing a hepatitis C treatment combination include:

- + The amount of liver injury
- + The genotype of the virus
- + Whether or not the person has been treated before
- Medications the person is already taking
- Other health conditions

The goal is to make treatment as safe, effective and tolerable as possible for each person.



#### Liver injury

The amount of liver injury a person has will impact decisions about which treatment will be most effective and when to start treatment.

Medical tests will determine the amount of liver injury a person has before starting treatment. These tests can vary. They may include one or more of the following:

- Blood tests these can be done to measure liver function and liver enzymes or to do a FibroTest or FIB-4 test (calculations that include multiple blood tests and other measures such as age to determine the amount of liver injury)
  - (calcultiple neasures ne the
- Ultrasound a scan that uses sound waves to create an image of the liver
- FibroScan a test that measures liver stiffness using ultrasound waves
- Biopsy a procedure in which a small piece of the liver is removed with a needle; a biopsy may be required very rarely

Medical tests can help identify whether a person has *cirrhosis*, which can affect treatment options. Someone with cirrhosis has a lot of scarring in the liver. It usually takes decades of chronic hepatitis C infection for a person to develop cirrhosis.

There are two types of cirrhosis. *Compensated cirrhosis* is when the liver is very injured but is still performing many of its functions. Many people with compensated cirrhosis have few or no symptoms. In a small number of people with cirrhosis, the liver is injured to the point where it can no longer work properly. This is called decompensated cirrhosis. People with *decompensated cirrhosis* are more likely to have symptoms, such as painful swelling of the legs (edema) and abdomen (ascites), bleeding in the food

pipe (esophagus) or stomach, abdominal infections, or problems thinking clearly.

Having cirrhosis can change which treatments will be most effective and how long they need to be taken.



For example:

- Treatment may have to be taken for a longer duration of time, such as 12 or 24 weeks.
- If a person has decompensated cirrhosis they will likely take ribavirin in addition to direct-acting antivirals (DAAs). Certain types of DAAs called protease inhibitors cannot be prescribed because they can be dangerous and make decompensation worse.

If a person's liver is very severely injured (for example, with advanced decompensated cirrhosis), they may need to get a liver transplant before receiving treatment for hepatitis C.

#### Genotype

The genotype of the virus may be considered when choosing a treatment combination. The genotype is often determined when hepatitis infection is diagnosed. Most hepatitis C treatments are approved to treat any genotype of the virus. These are called *pangenotypic* treatments. Other treatments are approved to treat only specific genotypes of the virus.

#### **Treatment experience**

Whether or not a person with hepatitis C has been treated before will be considered when choosing a treatment combination. A person who has never taken hepatitis C treatment before is called *treatment naïve*. A person who has taken hepatitis C treatment before is called *treatment experienced*.

In rare cases, a person takes DAA treatment and is not cured. There are specific treatments to cure hepatitis C that are effective in this situation.

A person who is not cured with initial DAA treatment will usually be offered treatment again. Having discussions about adherence to treatment and drug interactions can be an important part of getting ready for retreatment.

#### **Drug resistance**

Drug resistance refers to hepatitis C virus that can partially or fully escape the effect of a specific medication used to treat hepatitis C.

Drug resistance testing is not usually required before starting hepatitis C treatment, however, there are some situations where a healthcare provider may ask for

In rare cases, a person takes DAA treatment and is not cured. There are specific treatments to cure hepatitis C that are effective in this situation.





resistance testing. For example:

When certain treatment combinations are being considered to treat specific genotypes of the virus, because having a drug-resistant strain of hepatitis C can reduce the likelihood of cure.



 If a person is not cured after taking treatment with DAAs, resistance testing may be considered before re-treatment.

Resistance testing can identify treatment combinations that may not work for a person and can help determine which treatments have a high likelihood of curing hepatitis C.

#### **Drug interactions**

Certain other medications can influence which hepatitis C treatment is recommended, due to the possibility of drug interactions.

A drug interaction occurs when one medication affects how another medication is absorbed, used or eliminated from the body. A drug interaction can make one or both of the medications less effective or it can increase side effects.



A drug interaction can mean:

- + Certain medications should not be used together.
- Certain medications can be used together but they may need to be taken at different times so they don't interact with each other.
- Certain medications can be used together, but their doses may need to be changed

Drug interactions can also occur with over-the-counter medications, supplements and street drugs.

A healthcare provider should know about all the medications (prescribed or not prescribed), supplements and street drugs a person is taking so they can choose hepatitis C treatment that does not have drug interactions or develop a plan to manage drug interactions.

#### Other health conditions

Some people have other health conditions in addition to hepatitis C. This can influence the choice of treatment. The following three health conditions have considerations for hepatitis C treatment:

- Co-infection with HIV
- 2 Co-infection with hepatitis B
- 3 Chronic kidney disease

HIV

HIV (human immunodeficiency virus) weakens the immune system, which is the body's built-in defense against disease and illness. With early diagnosis, treatment

and care, people with HIV can live long and healthy lives. There is no cure for HIV, but highly effective treatments keep the virus under control. Effective

Some of the common ways that HIV is transmitted are the same as hepatitis C, such as sharing injection drug use equipment.

treatment can also prevent onward HIV transmission.

There are a few differences that a person who has both HIV and hepatitis C can experience:

- It may take longer to develop hepatitis C antibodies, so diagnosing hepatitis C may take longer in someone with HIV and repeat testing may be needed to confirm a diagnosis.
- With advanced HIV infection, the hepatitis C antibody test may be negative and RNA testing should be done to diagnose hepatitis C.
- + Spontaneous clearance of hepatitis C during an acute infection is less likely.
- Liver injury can happen more quickly.

Everyone with hepatitis C should be tested for HIV before starting treatment. If a person tests positive for HIV, their healthcare provider will help them determine when to start treatment for HIV and hepatitis C. It is more common to start HIV treatment first. In some cases, there may be an interaction between HIV and hepatitis C treatments and the HIV treatment may need to be changed to allow hepatitis C treatment to be given.

There is no difference in cure rates for hepatitis C in people who are co-infected with HIV.



#### Hepatitis B

Similar to hepatitis C, hepatitis B is a virus that infects the liver and causes injury. In Canada, most hepatitis B infections are passed through sex or through sharing of drug use equipment. This includes all injection, smoking and snorting equipment.



Most adults clear hepatitis B on their own, but some people will develop a chronic infection, which means they have had hepatitis B for six or more months. There is no cure for chronic hepatitis B, but treatment can keep the infection under control. There is a vaccine for hepatitis B.

Everyone with hepatitis C should be tested for hepatitis B before starting treatment. If a person tests positive for a hepatitis B infection, they should start hepatitis B treatment first. This is important because, if untreated, hepatitis B can quickly cause liver injury after hepatitis C treatment is started.

A person who has cleared hepatitis B on their own does not need hepatitis B treatment. A person who has never had or been vaccinated against hepatitis B should be offered a hepatitis B vaccine.

#### Kidney disease

Chronic kidney disease happens when the kidneys are injured and slowly lose their ability to function over time. There are many causes of chronic kidney disease. Hepatitis C infection is a less common cause of kidney disease and kidney failure.

Certain hepatitis C treatment combinations are safe for people with chronic kidney disease. Hepatitis C medications are processed through the liver and/ or kidney. People with more advanced kidney injury will use a treatment that is primarily processed by the liver.



#### Pregnancy & Age

There are very limited situations where hepatitis C treatment is generally not recommended. These include:

- I If a person is pregnant
- 2 If a person is younger than 18 years old

In both cases, hepatitis C treatment is often temporarily

delayed.

#### Pregnancy

Treatment with DAAs is generally not recommended during pregnancy since there is little information on the effects of DAAs during pregnancy. Treatment can be started once a person is no longer pregnant. Clinical trials of hepatitis C treatment during pregnancy are ongoing, and this recommendation may change in the future.

Treatment that includes ribavirin is not recommended for anyone who is pregnant or trying to get pregnant. Ribavirin is toxic to the fetus and can have severe consequences to the development of the fetus. Ribavirin can also be toxic to sperm.

A person who is planning to have a baby should wait six months after treatment with ribavirin has ended. This is true for both the person planning to get pregnant and the person contributing sperm. Birth control should be used during treatment with ribavirin and for six months after treatment has Hepatitis C treatment is not recommended during pregnancy.

stopped. A person taking ribavirin should not breastfeed or chestfeed.

The likelihood of hepatitis C transmission from a pregnant person to their baby (known as perinatal transmission) is about 5% (or one transmission for every 20 cases).

- If the pregnant person is co-infected with HIV and hepatitis C, the likelihood of transmission increases.
- The way a baby is delivered (vaginal delivery or C-section) does not impact the likelihood of transmission.
- Breast milk does not transmit the hepatitis C virus. However, if nipples are cracked or bleeding, breastfeeding should be temporarily stopped until the nipples are healed.

A healthcare provider can help determine a treatment plan and timeline for a person who has hepatitis C and is pregnant or planning to have a baby.

Age

Treatment guidelines recommend involving a specialist when it comes to caring for children with hepatitis C.





Treatment is usually not recommended if a person is younger than 18 years old. It is rare that treatment needs to be started earlier and can usually wait until after a child has completed most or all of their physical and mental development. There are treatment options for children 12-17 years old. Maviret, for example, is a pangenotypic approved for over children over 12. Over time, there may be more treatment options for children.

#### Preparing to start treatment

Canadian hepatitis C treatment guidelines recommend that all people with chronic hepatitis C be considered for treatment. People who use street drugs and/or alcohol have the right to be offered hepatitis C treatment, regardless of whether they plan to continue, reduce or stop their use of substances.

There are a few ways to help a person get ready to start hepatitis C treatment:

- Setting up a supportive routine and network to help a person stick to treatment.
- + Counselling about harm reduction and providing access to harm reduction supplies and services.
- + Creating a plan for birth control.
- Supporting a person to get access and coverage for treatment.

Part of getting ready for treatment is ensuring a person has the support they need to stick to treatment. For treatment to effectively cure hepatitis C, it is important that the pills are taken every day for the full length of treatment, as prescribed by the healthcare provider. This is called *adherence*.

Support will be different for every person. Before starting treatment, everyone should be encouraged to talk about their situation with a healthcare provider or support worker they trust. For example, supporting a person's mental health or holistic well-being can be helpful. This can be done through:

- More frequent check-ins with healthcare providers or support workers.
- Encouraging a person to reach out to family and friends or meet with a supportive person regularly.
- Encourage a person to attend a regular group with peers who are going through treatment, if available.

Supports may also include connecting a person

to housing and other important social supports. Having a safe place to stay can make it easier for a person to keep track of their pills and adhere to treatment. Some people may need help with planning so they can access food or meals on a regular basis. This may be especially important if their medication should be taken with food.

Some people may be able to access supports such as daily or weekly dispensing of treatment, which may make it easier for a person to keep track of pills. Daily or weekly dispensing means that instead of receiving all pills for the entire length of treatment at once, a person receives their pills one day or one week at a time.

People who are actively using street drugs, taking opioid substitution therapy and/or drinking alcohol have the same hepatitis C cure rates as anyone else who receives treatment. Healthcare providers or support workers may ask clients about current drug or alcohol use with the goal of supporting the person through treatment. They can also provide information and resources on harm reduction strategies. For example, some people may choose to start opioid substitution therapy before beginning hepatitis C treatment. Healthcare providers can also offer adherence strategies if drug or alcohol use may create challenges for sticking to treatment. Going on opioid substitution therapy or reducing drug or alcohol use are not a requirement for hepatitis C treatment.

Creating a plan to prevent pregnancy during hepatitis C treatment is important. This is true for both partners in a relationship. If a person is having sex that can result in pregnancy, birth control is recommended.

#### **Treatment coverage**

Getting access and coverage for hepatitis C treatment is easier than it used to be, however, some people may want support to navigate this process with their healthcare provider.

To cover the cost of hepatitis C treatment, most people are covered through provincial or territorial drug insurance plans; some rely on private drug insurance plans (usually through work). Some people are covered under plans from the federal government. These people include refugees, members of the military, federal government employees and retirees, federal prisoners and designated Indigenous people.

Pharmaceutical companies also have programs that help a person with paperwork related to drug coverage and can pay a deductible. Most people don't have to pay out of



pocket for treatment.

Hepatitis C treatment can be a positive and stabilizing factor in a person's life. This experience can build positive relationships with members of a healthcare and outreach team as well as the healthcare system and can support a person to achieve more stability in their life.









#### At the end of this unit, the learner will be able to:

- Explain the importance of adherence to treatment.
- 2 Discuss ways a person can be supported on treatment to manage adherence.
- 3 Explain liver cancer screening recommendations for clients with cirrhosis.
- A Discuss ways to stay healthy after being cured from hepatitis C.
- 5 Discuss ways to prevent re-infection of hepatitis C.
- *b* Understand retreatment options for clients who are re-infected with hepatitis C.

#### Adherence to hepatitis C treatment

All medications work best when they are taken exactly as prescribed. To give treatment the highest/best chance of curing hepatitis C, it is important that a person adhere to treatment.

Adherence means that pills are taken:

- + every day at the right time
- 🕂 in the right way
- 🕂 in the right amount
- for the entire length of treatment
- as directed by the healthcare provider

Skipping doses or stopping treatment altogether means that the treatment may not work and the chance of being cured is lower. If a person misses several doses, they may need more support or a new plan to help them adhere to treatment.





## Supporting a person on treatment to manage adherence

Support for treatment adherence begins before a person starts treatment by ensuring they have what they need to take treatment as prescribed. Supports can be narrow or broad, such as:

- Helping a person access daily or weekly dispensing of treatment, if possible, which may make it easier for them to keep track of pills.
- + Helping a person with a plan to access food or meals on a regular basis, which may be especially important if their treatment should be taken with food.
- Supporting a person's mental health or holistic well-being.
- + Helping a person apply for housing and other important social supports
- + Working with the person to come up with a plan that will work best for them.

If a person is taking opioid substitution therapy (OST), hepatitis C treatment could be taken at the same time as the opioid substitution therapy. This may make it easier to add treatment to a person's routine.

Some additional strategies that a person can use to adhere to treatment include:

- Talking with other people who have been through or are going through treatment for hepatitis C. They may have more tips and sometimes it helps to hear other people's experiences.
- Doing a "dry run" before starting treatment. Practicing the treatment routine using candies or mints.
- + Choosing a specific time to take medication that both follows the instructions and fits their schedule.
- Asking for a written copy of the treatment plan. It should list each medication, when to take it, how much to take and any special instructions in a format that is easy to follow.
- Keeping track of medication using a diary, blister packs, daily dosage pill containers or an app. Writing down the names of the medication in a diary and then checking off each dose as it is taken. Using blister packs or a daily dosage pill container can help keep track of medication as it is taken. There are also apps and other online tools that can send reminders and track medication-taking. These are some options to

prevent missing or taking too many doses.

- Setting timers or alarm clocks for a reminder to take medication.
- Planning ahead. Putting extra doses of medication in a pill container for when a person goes out. This also works well for travelling.
- Developing a support network of family members, friends and service providers who give reminders for taking medication.

#### Liver cancer screening

Hepatitis C can increase a person's chance of getting liver cancer. The likelihood of liver cancer increases if a person has cirrhosis. A person with cirrhosis will need ongoing monitoring for liver cancer, even if their liver health

improves after treatment. Canadian hepatitis C treatment guidelines recommend follow up using ultrasound every six months for the rest of a person's life.



A person without cirrhosis usually does not need specific follow-up for liver cancer screening.

## Staying healthy after being cured

After being cured from hepatitis C, a person should be supported to take care of their health and their liver. This may include:

- + Having an ongoing relationship with healthcare providers and support people.
- + Getting vaccinated for hepatitis A and B.
- + Getting enough rest, eating well, exercising and supporting mental and holistic wellness.
- Limiting or reducing alcohol use, drug use and smoking.
- + Avoiding re-infection with hepatitis C.

Taking hepatitis C treatment can be an opportunity for a positive relationship to develop among healthcare providers, support people and the person going through treatment. A positive relationship with healthcare providers and support people can benefit overall health. For example, a person may be open to discussing other health concerns they are experiencing, receiving counselling or support to reduce the risk of future exposure to hepatitis C and other blood-borne illnesses, or participating in health promotion

HEPATITIS C TREATMENT: UNIT 3 3

programs or other supportive activities.

Healthcare providers can offer vaccines for hepatitis A and B if a person has not already been vaccinated. Being protected from hepatitis A and B through vaccines is an important way to protect the liver from additional injury.

There are some changes a person can make in their life to stay healthy after being cured, though these may not be feasible or realistic for everyone. For example, if possible, encouraging or supporting a person to:

- 🕂 👷 get enough rest
- eat as healthy as possible
- + drink plenty of water
- try to get some exercise every day

be kind to themselves

and do activities that are relaxing and enjoyable, such as spending time with loved ones and friends

Wellness strategies can also include supporting mental health. For some people, this may include getting support to address a mental health issue. Mental health conditions are often manageable with support, which may include

counselling or therapy, medication, psychiatric care or other supportive people when it is appropriate.

Just like when a person is diagnosed with hepatitis C, a person who is cured from hepatitis C may have different or even conflicting feelings. Some of these feelings may include:

- + Feeling relieved and happy that they are cured.
- + Feeling loss because part of their identity or how they

relate to other people with hepatitis C has changed. For example, some people may be part of a hepatitis C support group that is only for people who are diagnosed and on treatment. Having places to go for continuing care, where people who have been cured of hepatitis C can attend regularly, can be a support through this transition.

- Continuing to feel stigmatized, even though they no longer have hepatitis C. This can happen because people around them lack accurate information about hepatitis C and what it means to be cured. However, some people who have hepatitis C do not feel stigmatized before or after they are cured.
- Not having any strong feelings about having hepatitis C or being cured.

There is no right or wrong way to feel about being cured of hepatitis C. Some people may want support to navigate new feelings about being cured. Some people may want support to navigate new feelings about being cured.

People with advanced liver injury may want to avoid alcohol, street drugs and smoking. These are all hard on the liver. If a person is

finding it hard to avoid alcohol, street drugs and smoking, reducing how much and how often they use will still help to prevent further liver injury.

Being cured doesn't protect a person from getting hepatitis C again. Practicing safer drug use and safer sex can prevent re-infection of hepatitis C and exposure to other illnesses.

#### **Preventing re-infection**

A person can be re-infected with hepatitis C if they are exposed to the virus again because it is not possible to develop immunity, whether from being cured by treatment or spontaneously clearing hepatitis C.

The most common route of hepatitis C transmission in Canada is sharing needles/syringes and other drug use equipment. Hepatitis C can be passed on when sharing drug use equipment that has come in contact with blood. New equipment should be used each time a person injects drugs, including needles and syringes, filters, cookers, acidifiers, alcohol swabs, ties (tourniquets), water used for preparing or injecting drugs, pipes, straws or rolled paper for snorting drugs.







Supporting a person to use drugs safely means providing access to harm reduction information and resources for safer drug use. This includes:

- + Counselling about safer drug use, including overdose prevention.
- Resources for safer drug use, such as new drug use equipment through a needle and syringe program.
- + If available, information on the closest supervised consumption site or overdose prevention site.

Sexual transmission of hepatitis C is rare. The risk increases with certain factors such as condomless anal sex, HIV, sexually transmitted infections, sex where blood is present, group sex, and chemsex (using specific drugs to enhance or prolong sex).

Access to counselling and resources on safer sex can lower the likelihood of the sexual transmission of hepatitis C. This includes learning how hepatitis C can be transmitted sexually and how to make safer-sex decisions.

Supporting a person to practice safer sex can include:

- Providing information on and access to safer sex supplies, such as condoms and lube.
- Supporting a person to communicate with their partner about preventing the sexual transmission of hepatitis C.
- Discussing ways to reduce or change use of substances, which may indirectly affect risk by impacting sexual decision-making and risk-taking. Using certain substances may lead to extended sex sessions and types of sex such as fisting that may cause increased chances of rectal trauma.
- Encouraging a person to get tested regularly for other STIs.

Changing behaviour or choosing less risky sexual activities may help to reduce the risk of hepatitis C, but it may not always be effective. It may be difficult for some people because of factors in the relationship with their sex partner or with sex in general. A person may want ongoing support to help navigate these factors. It may not be an effective long-term strategy because it can limit a person's ability to have the type of sex they want to have.

#### **Treatment for re-infection**

Service providers will see hepatitis C re-infection in some of their clients who continue activities that potentially expose them to hepatitis C. People who are at risk of re-infection should be regularly tested for hepatitis C every three to six months. This will help identify a person in the early stages of re-infection and engage them in care as early as possible.

Just like when a person is diagnosed with hepatitis C the first time, they may experience a range of feelings about having hepatitis C again, including feeling upset, ashamed or stigmatized. It is important to maintain a nonjudgmental and supportive environment when providing care and supporting a person through re-infection.

If a person tests positive for hepatitis C and they do not spontaneously clear the virus within six months, they will need to be treated again. Treating a re-infection is the same as treating a person with hepatitis C for the first time. A person goes through the steps to confirm a chronic hepatitis C infection, determine the amount of liver injury they have, potentially determine their virus genotype, consider different treatment combinations and receive treatment to be cured of hepatitis C again.

Public and private drug insurance plans may have different policies for covering treatment for a re-infection. @

