Hepatitis C:
An Introductory Guide for Patients
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First Impressions

Hepatitis C can affect various parts of your life. Many people are surprised to learn that they have been infected with hepatitis C. Some people feel overwhelmed by the changes that they may need to make in their lives.

The purpose of this booklet is to let you know what it means to have hepatitis C and what you can do to keep your liver healthy. It may answer some of the questions you have now. Importantly, this booklet is only the beginning and contains only a small amount of the information available. Talk to your health care provider and ask questions whenever you can.
Your Liver

To understand your hepatitis C infection, there are a few things you should first learn about your liver and how it works.

What is my liver?
Your liver is one of the largest and most important organs in your body. The liver is located behind the lower right part of your ribs, which helps to protect your liver.

What does my liver do?
Your liver is very important to your health. Your liver literally does hundreds of things for you! Some of the things your liver does for you:

- Processes and stores vitamins, sugars, fats, and nutrients from the food that you eat
- Makes substances that your body needs to stay healthy and balanced
- Breaks down harmful products in your body, such as alcohol and toxins
- Removes wastes from your blood
- Plays an important role in your immune system

What happens when the liver is damaged?
When the liver does not work well, you can get very sick. Fortunately, we are all born with lots of "extra" liver, and most people with hepatitis C do not develop severe liver disease. When the liver does get injured, one of the earliest ways we can tell is by blood tests that show high levels of liver enzymes in the blood, and sometime by a yellowing of the skin, known as jaundice.
What are some of the diseases that can affect my liver?

Many diseases can affect your liver. If you have one of these diseases, your liver may not work as well as it should. These are some of the most common diseases that can affect your liver:

- Hepatitis C
- Hepatitis B
- Alcoholic liver disease
- Liver cancer
- Obesity

We will explain these in more detail later.

Other things that can irritate the liver

Other things besides hepatitis C can make your liver unhealthy or put more strain on your liver. Talk with your provider if you use any of the items listed below:

- Alcohol
- Over-the-counter drugs (especially pain relievers)
- Prescription drugs
- Street drugs
- Marijuana
- Tobacco
Lab Tests for Your Liver

When trying to determine the health of your liver, your health care provider will order a series of lab tests that can give information about whether or not damage to your liver has occurred.

What are some of the tests I will be given?
The most common tests that are used to check how well your liver is working are called Liver Function Tests (LFTs). The most common tests that your provider will order, called a liver panel, are:

- Alanine Aminotransferase (ALT/SGPT)
- Aspartate Aminotransferase (AST/SGOT)
- Total Bilirubin (TBil)
- Albumin
- Prothrombin Time/INR (PT/INR)

The ALT/SGPT Test
This is an enzyme made in the liver. Basically, if the liver is damaged, higher levels of ALT are released into the bloodstream.

The ALT level is tracked in patients with hepatitis C. ALT levels can vary significantly and DO NOT always reflect the degree of liver damage nor do they assess actual function of the liver.

AST/SGOT Test
This enzyme, much like ALT, is also made in the liver. High levels of AST can indicate liver injury. However, factors not related to liver disease can also cause higher AST levels. With regard to your liver health, your provider will be most concerned about higher AST levels when they rise alongside higher ALT levels.
The TBil Test
TBil is short for Total Bilirubin. Bilirubin is removed from the blood by the liver. When the liver is not working well, bilirubin levels can rise. This test is a true liver function test, and higher levels suggest the liver is not working well. Signs of higher levels of bilirubin include yellowing of the skin and whites of the eyes (called jaundice).

Albumin
Albumin is a protein made only in the liver. If the amount of albumin in the blood is low, that suggests the liver may not be functioning well.

Prothrombin Time/INR
This test measures how well your blood clots. If the prothrombin time is elevated, that may mean the liver is not producing enough clotting proteins.

Normal Enzyme Levels
The ranges for normal enzyme levels vary at each VA medical center and laboratory. Ask your medical provider for the normal ranges at your facility.

Other Lab Tests
Undoubtedly, your provider will order other lab tests. Tests of the virus are explained in the next section. If you do not understand a lab test that is ordered, you should ask your provider for more information. It is important to keep in mind that, just because you may have abnormal test result, it doesn't mean your liver is failing. Your provider is there to interpret these tests and to make sure that you remain healthy. For more information on the meaning of lab tests, there is much more information to be found on hepatitis.va.gov.
The Hepatitis C Virus

At this point, you are probably wondering, "What is hepatitis C?" That's understandable. Let's talk about the hepatitis C virus.

**What is hepatitis C?**
Hepatitis C is a disease that affects your liver. It is caused by a virus, called the hepatitis C virus, or HCV for short. Approximately 3.2 million people in the United States are thought to have chronic hepatitis C, making it the most common infection of the blood in the United States.

**How does hepatitis C cause problems?**
Hepatitis C replicates in the liver. During this process, parts of the virus trigger your immune system into action. In the process of trying to rid your body of the HCV infection, the immune system actually kills infected liver cells. Over a slow process of many years, the interaction between the immune system and your liver can result in scarring of the liver and loss of liver function.

**What are the symptoms of hepatitis C?**
The symptoms of hepatitis C infection are often very mild. Most people can carry the virus for years and do not notice any symptoms. The most common symptoms are vague abdominal discomfort, fatigue, and joint pains. Even if you do not have any symptoms, hepatitis C can be a serious illness. Over time, it can cause other health problems, such as cirrhosis and liver cancer. Finally, because it stays in your body, you can give hepatitis C to someone else if you had contact with someone else’s blood.

**What happens to people with hepatitis C?**
Most people who are infected with hepatitis C develop a chronic infection with the virus. But for some people, their body gets rid of the virus on its own very early after they are first infected. For every 100 people with hepatitis C, around 15 people are able to
get rid of the virus with their own immune system, but around 85 will develop chronic, or long-term, infection.

For people who develop chronic infection, the virus slowly causes liver damage over a number of years. About 1 out of 5 people with chronic infection will develop severe damage to the liver (cirrhosis). For people who develop cirrhosis, there is a small but real chance that they will develop a liver cancer over time.

- Chronic hepatitis C is a disease of the liver that remains active throughout the course of an individual's life, unless the infection is cured with treatment.
- Cirrhosis is a term that means severe scarring of the liver and is the end result of damage to the liver. Cirrhosis can be caused by many things including viral hepatitis, alcohol, and other conditions.
- Liver Cancer, also known as hepatocellular carcinoma (HCC), may develop from cirrhosis related to hepatitis C.

How is hepatitis C diagnosed? Two main tests are used to diagnose and confirm the presence of hepatitis C (HCV) infection: the antibody test and the RNA test (the "viral load").
Tests of HCV infection

HCV Antibody
The HCV antibody test can be either positive or negative. A positive result means that you have been infected with HCV at some point. Once you are positive for the antibody, this test will remain positive, even if you are successfully treated.

HCV RNA test
This is a test of the hepatitis C virus (HCV) itself. It detects the virus in the bloodstream and can measure how many units of virus are present. The RNA test is also known as the “viral load.” The result is usually a number of international units. When the viral load is “undetected” it means that there is no measurable virus in the blood.

HCV Genotype test
The HCV genotype is the strain of hepatitis C that you have. The genotype is important in determining the medications used for treatment. The most common genotype in the U.S. is genotype 1, but worldwide there are genotypes 1-6.
How the Virus is Spread

How did I get hepatitis C?
You got hepatitis C by coming in contact with the blood or body fluid of another person who is infected with hepatitis C. Some of the ways this might have happened include the following:

- Receiving a blood transfusion or organ transplant before 1992
- Sharing needles or "works" to inject drugs, even if it was only once in your life.
- Sharing straws or bills for intranasal cocaine
- Being exposed to the virus as a result of long-term kidney dialysis
- Having accidental contact with infected blood
- Having a mother who had hepatitis C when she gave birth to you (rare)
- Being exposed to the virus during sexual contact (this is not very common).
- Being exposed to the virus during tattooing and body piercing (rare)

How can I protect others from getting hepatitis C?
Hepatitis C is spread through contact with blood. To protect others from getting hepatitis C, follow these rules:

- Do not donate blood, or sperm.
- Do not let anyone else use your razor, toothbrush, toothpicks, or other personal care items (these items can have small amounts of blood on them).
- Cover open cuts or sores that have not healed.
- Don't inject drugs. If you use drugs, talk with your doctor
about trying to stop. If you can't stop, don't share your needles or works with anyone else

- The hepatitis C virus is not easily transmitted by sexual contact but it can happen. It is more likely to be transmitted during sexual contact if you have more than one sex partner, have HIV or another sexually transmitted infection, engage in anal sex, or have sex when blood is present.

**But what if I sneeze, or cough, on someone I care about?**

No, you won't spread hepatitis C by sneezing or coughing on someone. In addition, you cannot give hepatitis C to someone else by:

- Holding hands
- Hugging or kissing (unless you have mouth sores or bleeding gums)
- Sharing food or water
- Sharing eating utensils
- Sharing drinking glasses
Hepatitis A & B

People with hepatitis C infection are at greater risk of getting very sick if they contract another liver infection, such as hepatitis A or hepatitis B.

**What is hepatitis A?**

Hepatitis A is a virus that affects your liver. The virus is usually spread by poor hygiene or eating something that is contaminated by another person with hepatitis A. It is usually spread through:

- Household contact with an infected person
- Sexual contact with an infected person
- Eating or drinking contaminated food or water
- Sharing eating utensils that are contaminated
- Touching contaminated surfaces and then placing your hands near or in the mouth

Most people infected with the virus get well within 6 months. However, hepatitis A can be serious for older people and people who already have liver disease.

**What can I do to prevent hepatitis A?**

Get vaccinated!

- The best way to prevent hepatitis A is to get vaccinated. The vaccination is very effective and can keep you from getting hepatitis A. You cannot get hepatitis A from the vaccination. If you have already been vaccinated or if you are not sure, talk with your provider. Your provider can check to see if you are protected from hepatitis A.

Practice good personal hygiene

- Because so many cases of hepatitis A are caused by close contact with an infected person, you should always practice good personal hygiene, especially by washing your hands.
Can I get the hepatitis A vaccination at my VA medical center?
Yes! Speak with your health care provider to inquire about hepatitis A testing and whether you need the vaccination.

What is hepatitis B?
Hepatitis B is a virus that infects the liver. In the United States, hepatitis B is primarily spread through sexual contact and intravenous drug use. Fortunately, most adults who get hepatitis B will get rid of the virus on their own. A small portion of adults will develop lifelong infection with hepatitis B after being exposed.

How can I protect myself against hepatitis B?
Get vaccinated!
- There is a vaccination that protects you from getting hepatitis B. You get it in three different shots. If you already got vaccinated or if you are not sure, talk with your provider. Your provider can check to see if you are protected against hepatitis B.

Avoid high-risk behaviors
- High-risk behaviors increase the chance of infection. These include contact with (or by touching) the blood of a person who has the disease. You can also get hepatitis B by sharing IV or tattoo needles, works, or cocaine straws, and through contact with the blood, semen, or vaginal fluids of an infected person.
Practice safer sex
- Use condoms every time you have sex, unless you are in a long-term, monogamous relationship with a partner who does not have hepatitis B.

Don't shoot/inject street drugs
- If you are using drugs now, try to get help to stop. The VA has programs to help you. If you cannot stop, then don’t share needles and works.

Don't share personal care items
- Personal care items such as razors, toothbrushes and nail clippers can sometimes contain small amounts of infected blood.

Is hepatitis B serious?
Yes. Although many people who are exposed to hepatitis B will be able to get rid of the virus, some people can develop chronic (or lifelong) infection. This may lead to liver damage, cirrhosis, liver cancer, and death.

Is there a cure for chronic hepatitis B?
There are a number of FDA-approved treatments available for hepatitis B, but there is no reliable cure for it.

Can I get vaccinated against hepatitis B at my VA medical center?
Yes! Speak with your provider about your risk of hepatitis B. Your provider can check to see if you are protected against hepatitis B, and if not, can vaccinate you. It is especially important to get vaccinated against hepatitis B if you have HIV or hepatitis C.

Can I get medicine to treat chronic hepatitis B?
There are a number of treatment options for patients with hepatitis B. If you have chronic hepatitis B you should speak with your provider to see if treatment is right for you.

Hepatitis C: An Introductory Guide
Telling Others

Getting through this time in your life may be difficult and you may want to turn to others for support. But how do you go about that?

**Why should I tell people that I have hepatitis C?**

If you share your diagnosis with people in your life, they might be able to:
- Offer you support and understanding
- Understand better how hepatitis C is spread and work with you to prevent the virus from spreading

**Who should I tell?**

Sharing your diagnosis with others is an important personal decision. It can make a big difference in how you cope with the disease. If you decide to share your diagnosis, it is best to tell people you trust or people directly affected by this condition.

People you may want to tell include:
- Sex partner(s)
- Past or present needle-sharing partners
- Roommates or family members
- Anyone who may come in contact with your blood
- All your health care providers, such as doctors, nurses, and dentists

**What sorts of things should I say?**

You may want to begin by talking about when and how you found out that you have hepatitis C. You may want to give information on how the virus is and isn't spread. This booklet may be helpful in informing others. In particular, you should discuss:
Any shared risk factors that might have led to your hepatitis C infection, or that might lead them to have hepatitis C.

The risk of getting hepatitis C through sex and sexual contact so that they can be better informed. This topic will be covered more in-depth in the next section.

Medicines you are taking for hepatitis C so that they can better understand any side effects you might experience.

Lifestyle changes that you have to make to ensure a healthier liver.

When should I tell them?
Many people share their diagnosis as soon as they find out. Others wait for some time to adjust to the news and get more information. You should share your diagnosis as soon as possible with people who may be directly affected by your diagnosis, such as sex partners or needle-sharing partners. Encourage sex partners and past or present needle-sharing partners to get tested for hepatitis C. When you decide to tell someone, choose a quiet moment when you will have time to talk and ask each other questions.

Do I have to tell?
While we have mentioned that it can be very helpful to share your diagnosis of hepatitis C with others, for support and guidance, you may find yourself in a situation where you feel uncomfortable sharing. Despite the fact that casual day-to-day interactions do not spread the hepatitis C virus, other people might still feel uneasy. It is important to remember that it's OK not to tell people who don't need to know, including employers and co-workers who aren't at risk for getting hepatitis C through their interactions with you.
Many patients wonder if you can get or give the disease through sex. The answer to that is a little complicated...

**Basics**
If you have hepatitis C, it is not very likely that you will spread the virus through sex, but it is still a small possibility. In addition, some things do increase the risk of transmitting hepatitis C sexually: having more than one sex partner, having HIV or another sexually transmitted infection, engaging in anal sex, or having sex when blood is present. That is why it is very important to talk honestly and openly with your sex partner(s). Also, talk to your health care provider to get more information about sex and hepatitis C.

**Can I give hepatitis C to my sex partner?**
Yes, but it is not likely. It has been reported that higher rates of hepatitis C infection from sexual transmission are found in HIV-positive men who have sex with men. Compared with the hepatitis B virus and HIV, it is less likely that you will spread the hepatitis C virus to your sex partner.

If you have only one long-term sex partner, even if you have hepatitis C and your partner does not, you do not necessarily need to change your sex habits. Partners of people with hepatitis C should be tested for the virus if they are concerned that they also have the virus. If the result is negative, future sexual contact means it is possible, but not likely to be passed to the negative partner. The HCV-negative partner can be retested in the future which is reasonable to check if HCV infection has occurred.
If you have more than one sex partner, you are more likely to spread the virus. In this case, we recommend you know the status and health of your partners well, practice safer sex and be tested for potential HCV exposure.

**Can I get or give hepatitis C through oral, anal, or other types of sex?**
We do not know if the virus can be spread by oral sex. There is no proof that anyone has ever spread the virus through oral sex, although it may be possible.

Anal sex may damage the lining of the rectum and make it easier to pass the virus through the blood. Using condoms during anal sex may help prevent spreading the hepatitis C virus. Condoms certainly will protect you against other sexually transmitted diseases, such as HIV and hepatitis B. The presence of blood or a sexually transmitted disease, including HIV, can make it easier to spread the hepatitis C virus during sex.

You **cannot** spread the hepatitis C virus through more casual contact. Hugging or kissing someone on the cheek will not spread HCV.

**Can my partner get pregnant, and if so, what is the risk that the baby will get hepatitis C?**
It is possible to get pregnant if you or your partner has hepatitis C. If you are a male with hepatitis C, and your female partner does not have hepatitis C (throughout the entire pregnancy), then there is no chance that the baby will contract the virus, from the mother. If you are a pregnant female who already has hepatitis C (or gets hepatitis C at some point during the pregnancy), there is a less than 1 in 20 (5%) chance of passing the virus to your baby. The risk becomes greater if the mother has both hepatitis C and HIV. With proper care before the birth, babies born to hepatitis C-positive mothers or fathers are usually quite healthy.
Hepatitis C Treatment

Now that you know a little about hepatitis C you’re probably curious about the treatment available for it:

**What is the treatment for hepatitis C?**
Several medications exist for the treatment of hepatitis C. Although interferon used to be required for HCV treatment, it is now much more uncommon that interferon would be used. Current anti-viral therapy are tablets or capsules, taken by mouth, for 2-6 months. In some cases, antiviral medications need to be combined with ribavirin, another hepatitis C drug. Antiviral medications can eliminate the hepatitis C virus in over 90% of patients.

**How can treatment help me?**
Antiviral treatment aims to eliminate the virus. This will help:
- Eliminate the hepatitis C virus from my body
- Stop any further damage to my liver
- Lower the risk of liver cancer
- Lower my liver enzyme levels
- Prevent possible transmission of my HCV to another person

**What happens if I take the treatment and it does not work?**
If antiviral treatment is not successful for you and does not permanently eliminate the virus, there may be possibilities for you to be treated again with other medications in the future.
What are the side effects of treatment?

In general, the hepatitis C treatments today have very few and very mild side effects.

Typical side effects of antivirals with ribavirin:
- Fatigue
- Nausea
- Itching
- Rash
- Sleep problems

Typical side effects of antivirals without ribavirin:
- Nausea
- Itching
- Sleep problems
- Changes in vision
- Decreased white blood cells and platelets
- Sore throat
- Thyroid problems
- Rash
- Bad taste in the mouth
- Diarrhea

Is treatment right for me?

Every patient with hepatitis C should talk to their provider about hepatitis C treatment. Sometimes patients or providers discuss when is the best time to start this treatment, but it is always “right” to be seeing your provider and learning about the hepatitis C treatment plan that is best for you.

What about alternative and complementary therapies?

Currently there is not enough research to tell if alternative treatments really help people with hepatitis C. In fact, some herbal supplements can be dangerous for people with liver disease. Various forms of relaxation through meditation or yoga can have an overall positive impact on your health and well-being. If you want to try an alternative therapy, we recommend you first discuss alternative therapies with your health care provider.
A Healthier You

Being diagnosed with hepatitis C may mean you have to make some changes in your lifestyle, such as:

**Alcohol and hepatitis C**

Alcohol use can be damaging to the liver. Reducing or abstaining from alcohol use if you have hepatitis C is recommended. Here is why reducing or avoiding the use of alcohol is important:

- Alcohol causes direct liver damage and is associated with a more rapid progression of liver disease in those who drink and have hepatitis C infection.
- Alcohol use has been shown to reduce the benefit of hepatitis C treatment, decreasing your chances of clearing the virus.
- If you avoid alcohol, you increase your chances of having milder liver disease. If you are interested in reducing the amount you drink, or just figuring out how much you do drink, there are some useful tools in the back of this booklet that may help.

**Your medications**

If you start hepatitis C treatment, then it is important to take your medication as directed. The treatment can be much less effective and can create viral resistance if you do not take your hepatitis C medications every day. If you are concerned about side effects or whether you can take medication every day, talk with your health care provider.
Eating healthy

Because your liver breaks down everything that you eat, it's important for you to eat well. Try to:

- Eat a well-balanced, low fat diet
- Drink plenty of water
- Have adequate protein intake
- Have at least 5-9 servings of fruits and vegetables a day
- Restrict your salt intake
- Eat smaller meals when you are hungry
- Strive to maintain a healthy weight
- Avoid alcohol, tobacco, and iron supplements (iron supplements may be taken if your provider says it is OK)

Getting out and staying active!

Exercise can lead to an overall improvement in the quality of your life! An exercise program should be concise and realistic. A good goal is lifelong exercise to improve strength, endurance, health, lower stress and fatigue. Here are some great tips:

- Exercise regularly (at least 3 times per week for 30 minutes)
- If you aren't used to exercising, it's not too late: start small
- Check with your provider before beginning an exercise routine
- Find something you enjoy doing to stay active
- Keep an exercise journal to track your progress
- Activities like walking or gardening count too!
Getting some rest and relaxation!
Rest and relaxation are important for our physical, mental, and emotional health. Getting the right amount of sleep helps replenish our bodies. Relaxation reduces stress, which is a major factor in most illnesses. Lack of sleep and relaxation can cause mood problems, low energy, and difficulties with thinking, memory, and concentration. Regular rest can help manage pain and insomnia.

Some good tips for getting good sleep:
• Avoid stimulants, like caffeine, before bedtime
• Avoid alcohol or illicit drug use
• Maintain a regular sleep schedule by going to sleep and waking up at the same times every day
• Don't take naps during the day
• Keep the bed for sleep and sex only
• Make sure your bedding is comfortable
• Don't exercise before bed
• Perform pre-bedtime rituals to ready your mind for sleep (brushing teeth or reading)
• Ask your provider about sleep medications
• Talk to a therapist about thoughts that are keeping you up

Some useful tips for relaxation include:
• Drink a hot, non-caffeinated beverage
  • Listen to relaxing music
  • Find an activity that relaxes you
  • Take a hot bath or shower
  • Use aromatherapy: nice smells, like oils, and fresh flowers can relax the body
  • Try "movement arts" such as yoga and tai chi
  • Meditate
  • Practice other relaxation exercises
Having support
Patients with hepatitis C sometimes feel isolated, not realizing how many others have their same condition. Here at the VA, and in many hospitals and communities, there are support groups that you can seek out to discuss some of your questions and concerns. There are even online resources now with e-mail bulletin boards and chat groups where individuals share their experiences with hepatitis C. During treatment for hepatitis C, having a support system of friends and family or participating in a patient support group can be particularly helpful.

Ask questions!
One thing that we cannot stress enough is, if you don't know about something, don't be afraid to ask. That is what your health care provider is for. If you are unsure about whether something is healthy for you, check with your provider first. Write down any questions you might have as you think of them, and take your list of questions to your next appointment.
Useful Resources

On the following pages, you will find some useful resources that can be used to keep track of your liver health, help make a change in your lifestyle to keep your liver functioning, and provide you with more information on hepatitis C. In the back of this booklet, you will find a space to keep other notes and information that may come up during your visits with your primary care provider or liver specialist.
Herbs to Avoid!

If you are curious about alternative and complementary therapies, then you should ask your health care provider whether it would be safe for you to try them.

The herbs listed below are known to be dangerous, which means that they are bad for your liver, especially since you have hepatitis C. You will want to avoid these!

- Artemisia
- Atractylis gummifera
- Bush tea
- Callilepis laureola
- Chaparral leaf (creosote bush, greasewood)
- Comfrey (Symphytum officinale)
- Crotalaria
- Germander
- Gordolobo yerba tea
- Heliotropium
- Jin-Bu-Huang
- Kava
- Kombucha mushroom (tea)
- Ma-Huang (Ephedra sinica)
- Margosa oil
- Mistletoe
- Pennyroyal (squaw mint oil)
- Tansy Ragwort (variation of Ragwort)
- Sassafras
- Senecio aureus
- Senna
- Skullcap
- Symphytum
- Valerian root
Making a Change Plan

Setting clearly defined goals can be helpful in making a difficult lifestyle change, such as quitting drinking or smoking. Try filling in the blanks below:

My specific goal is to:

________________________________________________________________________________________

________________________________________________________________________________________

The steps I plan to take in changing are:

________________________________________________________________________________________

________________________________________________________________________________________

Challenges that might interfere are:

________________________________________________________________________________________

________________________________________________________________________________________

How I will handle these challenges:

________________________________________________________________________________________

________________________________________________________________________________________

I will know my plan is working if:

________________________________________________________________________________________

________________________________________________________________________________________
Definitions

**Advanced Liver Disease**
Symptoms of advanced liver disease include: fatigue, difficulty concentrating, yellow jaundice, fluid in the abdomen, bleeding and poor blood clotting.

**Chronic Hepatitis C**
Disease of the liver that remains throughout the course of the individual's life.

**Cirrhosis**
Advanced scarring of the liver. It is the end result of damage to the cells in the liver. Cirrhosis can be caused by many things, including viral hepatitis or alcohol, or both.

**Fibrosis**
Mild to moderate scarring of the liver.

**Genotype**
There are six different "strains" of the hepatitis C virus, called genotypes (genotype 1, genotype 2, and so on). If you are treated for hepatitis C, your genotype will determine your treatment plan, such as which medications are prescribed and how long the treatment will be.

**Liver Biopsy**
A procedure in which a small piece of liver is removed with a needle and examined to find out exactly how much liver damage is present. The biopsy is often rated on a scale from 0 (normal liver) to 4 (cirrhosis).

**Liver Cancer**
A type of cancer, also known as hepatocellular carcinoma, that develops in the liver as a result of viral hepatitis, cirrhosis or alcohol.

**Viral Load**
A measure of how much virus can be found in a test tube of blood. It is affected by many things, including alcohol.
Information on the Internet

Information On Hepatitis C and Liver Health

Veteran's Administration Viral Hepatitis Website
http://www.hepatitis.va.gov

Centers for Disease Control and Prevention
http://www.cdc.gov/hepatitis

HCV Advocate
http://www.hcvadvocate.org

American Liver Foundation
http://www.liverfoundation.org

Information on Alcohol Use and Misuse and Liver Health

Alcoholics Anonymous
http://www.aa.org

Centers for Substance Abuse Treatment
http://csat.samhsa.gov/about/csat.aspx

National Institute on Alcohol Abuse/Alcoholism
http://www.niaaa.nih.gov

Alcohol Screening
http://www.alcoholscreening.org
Quick Notes

This space can be used to write down quick notes and information that may be provided to you that is not in this booklet.