



YOUR GUIDE TO

UNDERSTANDING HEPATITIS C

Nebraska Medicine created this guide to help you learn about hepatitis C, the new drugs available, and your treatment options.

www.NebraskaMed.com

888.419.5368

What is hepatitis C?

Hepatitis C is an infection of the liver.

The symptoms are barely noticeable for most people. People often don't even know that they're infected. It's just a little fatigue, then it's over and you feel fine. Those who are infected can live with the virus for decades and not know they have it. It is important to understand the symptoms of hepatitis C.

If you are a baby boomer – born between 1945 and 1965 – or if you have ever injected drugs with a needle, we encourage you to get tested. A simple blood test can diagnose the disease.

Not only will treatment reduce the chance for liver failure and liver cancer, the diagnosis reminds patients of the danger of alcohol use and obesity, which may increase the risk of getting cirrhosis and cancer.

Make an appointment with
Nebraska Medicine's Hepatitis C Clinic:
888.419.5368

About Hepatitis C

How is hepatitis C contracted?

Hepatitis C is primarily a disease of the baby boomer generation. People in the 1960s and 1970s got infected by sharing needles to use drugs like heroin. Others became infected due to contaminated blood transfusions; however, since 1992, we've eliminated hepatitis C from the blood supply.

People wonder whether you get hepatitis C from kissing or from having sex with an infected person. Well, you can never get it from kissing, and it's rare to get it from sex. Of course, if skin gets broken, it's possible to get the virus. But like any infection, a certain amount of virus has to be transferred before it has an effect, so small skin irritations won't be enough to transfer the infection. As a general precaution, we encourage condom use for people not in a committed relationship.

What are the long-term effects?

Hepatitis C does have long-term health implications. As you get older, they can start to show up.

With hepatitis C, it's all about the liver. Over time, there is scarring of the liver – called cirrhosis – and the liver doesn't function like it should. That has multiple effects on your health, although you may not really feel a difference.

You owe it to yourself to get tested if you've ever shared needles. If you've wondered about this – or know there's a strong possibility you're infected – now is the time to get tested and treated.

How would I find out if I am infected? Should I be tested?

You have two options – a blood test or an oral swab. The blood test is actually more accurate. You will have results a few days later. If you test positive for the virus, you will need a confirmation test – another blood test which measures how much virus is in your blood.

Here's the good news. We do have very effective treatments for hepatitis C. Getting tested is the best thing you can do for yourself and your family – if your goal is to live to see old age.

What's the difference between hepatitis A, B and C?

It's an alphabet soup, we know. A lot of people are confused. Each one of the viruses is very different. Let's walk you through it.

Hepatitis A

Hepatitis A is very common in every country, including the U.S. Some cities and some countries are notorious for hepatitis A risk.

This virus is what we call a "fecal-oral virus" – which means you often get it when feces are on food. Yes, ugh! But you wouldn't believe how often it happens. Statistics show that 30 percent of people don't wash hands after going to the bathroom. That might be the person who prepares your food in a restaurant.

The body does have a great mechanism for getting rid of hepatitis A virus and other invaders. Your stomach creates a lot of acid to kill them. In fact, the amount of virus you ingest does matter. Your intestine is pretty tough and able to repel most infections.

If you do get infected by hepatitis A, you'll have a mild flu-like illness. Young children, older people or those who are immune-compromised will have a rougher illness. You may also have jaundice and dark urine, but that's rare.

The vaccine is very effective. People who travel abroad to some areas should get hepatitis A vaccine shots.

However, if you do contract hepatitis A infection, there's no specific treatment. The immune system will get rid of it naturally, and you will then be immune. The virus is transferable through human-to-human contact for six to eight weeks after you first become infected.

Hepatitis B

Hepatitis B is also very common, but typically more prevalent in developing nations. Most people acquire hepatitis B at birth, as it is transmitted from mother to fetus. Hepatitis B is found in saliva, semen and sweat. It is very transmissible via sexual activity if you don't have immunity. It is therefore considered a venereal disease.

Hepatitis B is also transmitted via needles. Symptoms of infection are flu-like, with jaundice, but disappear after the first few weeks. People with a chronic

infection don't likely know they have it, and can easily pass it to others. Over the years, they will develop liver cirrhosis.

Hepatitis B vaccine has been available since 1982. Since then, children in the U.S. get vaccinated as part of their regular vaccination series. Older travelers are advised to get vaccinated if visiting Mediterranean countries, Asia or Africa.

Is there a vaccine for hepatitis C?

No, there is not yet a vaccine for this virus. A vaccine is now being tested in human clinical trials, but it's not yet available to the public. People with hepatitis C should also get the hepatitis A and B vaccines, by the way.

New Drug Information

What drugs are part of this new treatment?

Sovaldi, Harvoni, Olysio, Viekira, Daklinza, Technivie.

Sovaldi (sofosbuvir) is the big wonder drug – and it is quite an advance. This drug has a unique mechanism that prevents the hepatitis C virus from replicating. That's medical-speak for "stops the virus in its tracks." If the virus can't produce new strands of virus, it's dead in the water. Production halted. The virus goes away. This drug is



How the Liver Works

The liver is necessary for digestion – breaking down nutrients in food and sending them into the bloodstream. The liver stores glucose (sugar) and breaks down harmful saturated fat and cholesterol, which helps prevent diabetes and heart disease. The liver produces proteins that help oxygen get transported throughout the body. And the liver acts as a filter, helping the body eliminate drugs, alcohol and toxins.

How to Prevent Hepatitis C

To prevent hepatitis C infection, don't share needles or use dirty needles. If you get tattoos, make sure they take safety precautions with needles. Use condoms when you have sex in an uncommitted relationship.

incredibly effective and amazingly safe. People have little to no side effects. It's a walk in the park compared to previous hepatitis C drugs. Our patients love it!

For patients with the genotype 1 strain of hepatitis C, we prescribe Harvoni (ledipasvir/sofosbuvir) which is a combination drug that includes Sovaldi, and is the preferred option with practically no side effects.

Another option – the Viekira Pak – is four medicines combined that patients take twice daily. Some patients will add a Ribavirin pill with this Pak, which adds up to 9 - 10 total pills per day.

That may sound like a lot of pills, but it's still far fewer than in the past – and with virtually no side effects. This really is a critical improvement.

Is there an actual cure for hepatitis C? How effective is this drug cocktail?

With the drugs we have now, we can eradicate – which essentially means “cure” – the hepatitis C virus without risk of recurrence or reactivation. You would have to be infected again to acquire the virus.

With hepatitis C, your body does not build immunity – unlike with other viruses. So our goal is to kill the virus in your system. That might be considered a cure, but because you can acquire the infection again, it's a little different than mumps, for example. Once you've had mumps, you are immune – in essence, “cured.”

But, the good news is – with these new medications, we estimate that up to 95 percent of hepatitis C patients can get rid of the virus. Not everyone, because of certain factors. But just about everyone. That's amazing news!

How long have these drugs been available?

Sovaldi became available in December 2013; Harvoni in November 2014; Daklinza in July 2015 (yes, very recently); the Viekira Pak since January 2015. As you can see, these are indeed very new medications. We're intent on getting them to our patients ASAP.

How does this new regimen of drugs/medications compare to previous options?

These new drugs are certainly good news for patients with hepatitis C. They now take far fewer pills. In most cases, it's just one pill daily – compared to 30 pills per day in the past. Patients with a less common strain of the hepatitis C virus will take 10 pills, but that's still much better than in the past! Even more importantly, these new treatments are very effective at halting the virus. The virus is eventually destroyed in the body. That's really good news for these patients.

We can actually eradicate this disease with the therapy. No one uses the "cure" word much in medicine, but this treatment truly does remove the virus from the body.

What are the side effects?

The two most common hepatitis C drugs – Sovaldi and Harvoni – have almost no side effects, except a possible slight headache. That's such a relief for patients, as the previous drugs had very harsh side effects.

With the Viekira Pak – there are potential side effects. Anemia and a rash might occur. But those side effects are very treatable – and they're still less harsh than in the past. Don't let them prevent you from getting treatment.

Are these drugs expensive?

These medications are very expensive – to the tune of \$90,000 for the full treatment. It's shocking, but there are high costs in drug development – and these are very new drugs.

But don't panic – there are ways to get financial coverage for your treatment.

Before you get started, you'll need to work with our pharmacy financial counselors to make sure your insurance covers it. They can also help you get additional coverage, if you need it. They know about resources that are available for patients who need financial assistance with hepatitis C treatment. It's their

job to cut through the red tape to help you get financial coverage.

Once all that is squared away, you can start treatment. We can mail your pills when you're ready for a new bottle. It's just that simple.

You'll take that medication for three months. We'll stay in touch with you the whole time – via phone calls – and you can always call us with questions. We're here to help you any way possible. It's important that you take your pills consistently – every single day – in order to beat this virus.

Will these drugs interact with other medications?

Yes, they might interact. You may need to get your dosage adjusted on your other drugs. The pharmacist can help. Be sure you tell the Hepatitis C Clinic exactly what medications you're taking so we make sure we have it all under control.

Doesn't every hospital have access to these drugs? If so, why can't I just visit my local clinic?

Most hospitals have access to these drugs – but not all have the services Nebraska Medicine offers to help patients get the best results with their treatment. We have a dedicated Hepatitis C Clinic, with staff focused on educating patients and answering questions about the disease and the treatment. We are experts in treating liver diseases like hepatitis C and our department was recognized as high-ranking by *U.S. News and World Report's*



2015-16 “Best Hospitals.”

Our specialty pharmacy division also has a dedicated team to help navigate patients through the process of getting financial help to cover medications.

Your local clinic or local hospital won't likely have the expertise (or dedicated staff) to be your advocate with insurance companies, including Medicaid or Medicare, in getting coverage. The process to make your treatment affordable can be very complex.

That's exactly where we can help at Nebraska Medicine. We are often able to get insurance approval and pursue copay assistance that will get most or all of the medication expenses covered.

What are the differences between all these drugs?

All of these medications are new treatments for hepatitis C. Your doctor will determine which therapy is best for you depending on several factors such as the genotype (strain) of hepatitis C you have, your other medical conditions, and your insurance coverage.

Unlike older treatments for hepatitis C, these medications are much better tolerated – and there are no injections. Often, patients don't notice any side effects at all. Sometimes they might feel a little fatigue or a slight headache when starting the medication. Overall, it's a big relief for patients, as the previous



How the Sovaldi Drug Works

This time, the drug developers nailed it. Patients who have taken Sovaldi can't believe the difference.

How it works is interesting. This drug blocks a “gate” we haven't used before. Like the gate to your backyard, these gates are composed of molecules called nucleotides. Sovaldi drug blocks a specific “gate” called the NS5B nucleotide, which prevents the virus from multiplying in the body.

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For some therapies, anemia and a rash might occur. But those side effects are very treatable – and they're still less harsh than in the past.

Treatments

What happens at the Hepatitis C Clinic?

Our team is dedicated to helping people get access to the medications that will cure this infection. When you walk in the door, you'll meet the clinic staff. They know what you've been through with past treatments. If you're new to hepatitis C treatment, they know how lucky you are to start now.

The team will educate you on the disease, answer your questions and help you get settled into your treatment. They will stay in touch during the treatment period, even if you live 100, 200 or more miles away. People come from all over the Midwest to see us!

In fact, if you do need to travel a good distance for your appointments, we can help you find reasonable lodging and help you find your way around Omaha. This is a small town with a friendly atmosphere, some excellent restaurants – and honestly, our patients enjoy their stay. Everything is close to the Nebraska Medicine clinics, so you won't have any trouble getting to the clinic.

How do you figure out what mix of treatments are right for each hepatitis C patient?

The treatment we prescribe is based on the genotype – or strain – of the hepatitis C virus in the patient's body.

There also is the issue of insurance coverage. In some cases, there is coverage only for Viekira Pak because it is slightly less expensive than the other medications. Patients that have coverage for only Viekira Pak end up having to take more pills than others, but get the same result – eradication of the virus.

It's a little more inconvenient, but the Viekira Pak still greatly reduces the number of pills patients took in the past – up to 40 pills per day! So this is still a vast improvement! If insurance covers the substantial cost, patients really should just go ahead and accept the treatment. In the long run, it's only three months of your life. And it will add many more years to your life.

What happens if I have hepatitis C without knowing it and do not get treated?

You may not notice the effects, as they are subtle until you get older. The liver is a necessary part of your immunity – how well you fight disease.

When the liver is scarred, blood has a harder time getting into the liver.

That means the liver can't perform all these critical functions. And, the risk of liver cancer also goes up as you get older. This is serious. A person can die of complications from cirrhosis of the liver and liver cancer.

Some people feel the effects worse than others. Alcohol users get sicker than people who don't drink. That's because drinking alcohol harms the liver. Also, people who are obese are affected more.

Anyone who has had this virus for 40 or 50 years will feel the effects. The damage occurs very slowly, progressively. People who get hepatitis C infection after age 50 are the ones with worst prognosis. They tend to get sick faster as the infection progresses more rapidly.

What is the process for the typical patient to begin treatment?

Once you have been seen in our clinic for an initial evaluation and if your blood test comes back positive for hepatitis C, you'll then come back for a confirmation blood test. You will also have an ultrasound of your liver, so we can see how much damage has occurred. On your next visit, you'll get your prescription for treatment.

Most patients have a particular strain of the hepatitis C virus called Genotype 1. We have two medications that specifically treat that strain of virus. We have another medication series for the other genotypes. Your prescription will be specific to your virus. It's important to follow the pharmacy's directions when taking these medications.

Get More Information

You can find information about hepatitis on the Centers for Disease Control's website:

www.cdc.gov/hepatitis/

Are there other treatment options?

There really aren't other options for hepatitis C. There are no supplements that will get rid of the virus. We're very lucky to have these new drugs—as they do the job they were designed for. They kill the virus.

Costs and Coverage

How much does hepatitis C cost to be cured?

The newer treatments are extremely expensive – with medications that cost more than \$1000 per day. Depending on the treatment duration, the total costs can be \$90,000 or more.

That's a huge expense, but keep in mind that older treatments were far less effective, with a lot more side effects. And they were expensive, too.

The good news: the newest medications for hepatitis C are very effective. Up to 90 percent of patients who take the full treatment become completely free of the virus! They have a much better prospect for a long, healthy life after getting this treatment.

And there's more good news in terms of getting help in covering this huge expense. Our staff of financial counselors – all in the hospital's specialty pharmacy division – are dedicated to helping patients get coverage. They are very knowledgeable about the resources available to help cover this big cost.

Are the treatments covered by insurance?

We have a dedicated pharmacy team that will work hard to get coverage for your medications. This team works with the insurance companies, government programs and pharmaceutical companies – all to help negotiate terms for obtaining (and paying for) the medication.

We cut through the red tape so you can get your medications at an affordable price. We'll help you every step of the way.

We can tell you, persistence pays off. If you stay with the process, and let us help you, you have a very good chance of getting financial assistance.

What to Expect: Visits and Treatments

1

Initial Blood Test

Your first visit will be for an initial blood test. Patients may get this initial testing elsewhere and then come to Nebraska Medicine for confirmation and treatment.

2

Diagnosis

If there is evidence of infection, your second visit is to confirm the diagnosis and determine the virus count in your blood. You will also get an ultrasound of your liver.

3

Treatment

You will talk about treatment at your third visit, and you will get your prescription.

Follow up visits are not necessary once you have your prescription.

We'll stay in touch with you via phone calls to make sure everything is going smoothly. And, you can always call us with questions. Our goal is to help you get rid of this virus and to make your treatment as smooth as possible. Whatever we can do to help with that, we are happy to do.

How is Nebraska Medicine's team particularly suited to helping me get my insurance carrier to cover these drugs?

Our team is dedicated to helping patients get their hepatitis C medication expenses covered. You won't find that at most local clinics or your local hospital. We are committed to minimizing your out of pocket expense. We will explore all options including your prescription insurance, manufacturer programs, grants and copay assistance.

Once a doctor at Nebraska Medicine determines the treatment you need and writes the prescription, you can come to the specialty pharmacy. We'll work with you to get insurance approval, whether it's private insurance, Medicare or Medicaid. We have a pretty high success rate in getting insurance to cover the costs.

With many insurance plans, it can be a little tough to get approval. And every insurance company has different requirements for approval. We coordinate with the doctor's office to make sure the right lab tests are performed so that patients qualify. We also do a lot of follow-up phone calls with the insurance companies.

If the insurance company has limited coverage or denies coverage, we pursue a variety of other options. We'll look at coupons that cover copays, which come from the drug manufacturer. We also look for grants that will cover the expenses. Even when patients don't have insurance coverage, we can try to get them highly discounted medication through the drug manufacturer.

That's where our dedicated staff become extremely valuable. We have worked through the intricacies involved in getting financial assistance. We know which funding is available and are happy to submit all the paperwork.

It's hard for doctors' offices to keep track of these resources. But there are a lot of options if you know where to look.

Are there cheaper alternative treatments or generic versions of these new drugs?

No, there aren't alternatives – unfortunately – and these new treatments won't be generic for 15 or so years.

Does Medicare cover hepatitis C? If not, what are my options for getting this drug?

Yes, Medicare D does cover some of the cost, just like any insurance. However, sometimes patients have extremely high copays, but there are often grants available to help cover those copays. Many people combine several sources of funds to make the medication affordable – and we are devoted to exploring all forms of financial assistance.

Discuss My Coverage

The best way to get started is to make an appointment with a hepatitis C specialist at Nebraska Medicine by calling:

888.419.5368

Talk to the Pharmacy Team

You can also discuss your coverage by speaking with the Nebraska Medicine's Specialty Pharmacy team by calling:

855.299.9283