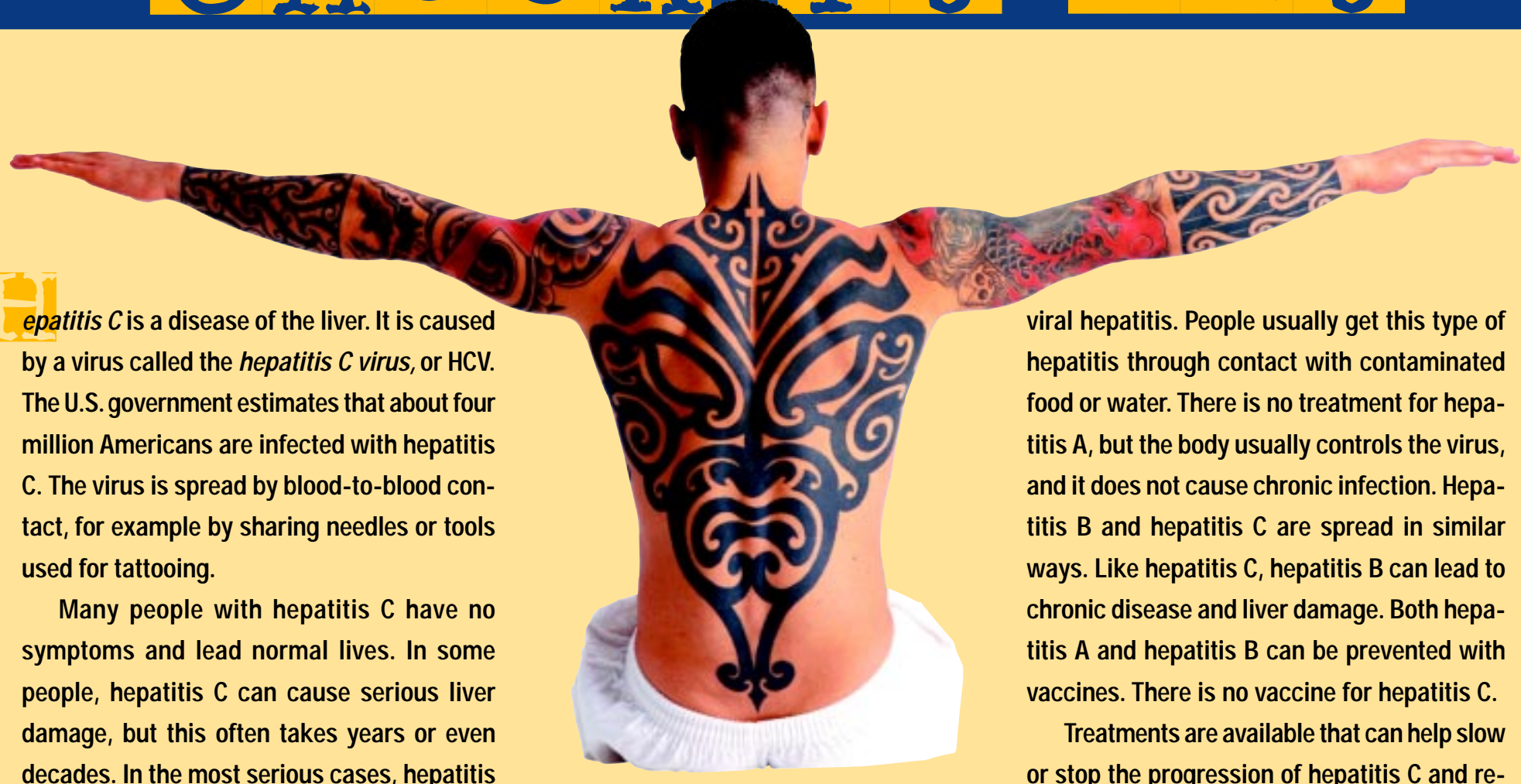


Check it out



Hepatitis C is a disease of the liver. It is caused by a virus called the *hepatitis C virus*, or HCV. The U.S. government estimates that about four million Americans are infected with hepatitis C. The virus is spread by blood-to-blood contact, for example by sharing needles or tools used for tattooing.

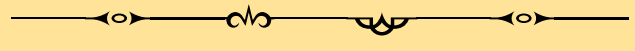
Many people with hepatitis C have no symptoms and lead normal lives. In some people, hepatitis C can cause serious liver damage, but this often takes years or even decades. In the most serious cases, hepatitis C can cause liver failure and death. It is the most common reason for liver transplants.

Your *liver* is your largest internal organ, and is responsible for many vital body functions. It processes the foods you eat, filters

out drugs and poisons, and stores vitamins, minerals, and sugars for later use. Hepatitis is an inflammation of the liver. There are other viruses that cause different types of hepatitis. Hepatitis A is the most common type of

viral hepatitis. People usually get this type of hepatitis through contact with contaminated food or water. There is no treatment for hepatitis A, but the body usually controls the virus, and it does not cause chronic infection. Hepatitis B and hepatitis C are spread in similar ways. Like hepatitis C, hepatitis B can lead to chronic disease and liver damage. Both hepatitis A and hepatitis B can be prevented with vaccines. There is no vaccine for hepatitis C.

Treatments are available that can help slow or stop the progression of hepatitis C and reduce the risk of liver damage. Besides treatment, there are other things you can do – like eating a healthy diet and avoiding alcohol and drugs – to improve the health of your liver.



STAYING HEALTHY

In addition to medical treatments, there are other things you can do to help manage hepatitis C and improve the health of your liver. Many factors such as alcohol, drugs, chemicals, smoking, and emotional stress can be harmful to the liver.

Good nutrition is important to keep the liver functioning properly. A well balanced diet that includes a healthy mixture of fruits and vegetables and that is low in fat, salt and sugar is important. High doses of vitamin supplements that contain iron, vitamin A, or vitamin D can harm the liver and should be avoided. Moderate exercise can help to control stress and fatigue. But avoid exercise if you are feeling very ill.



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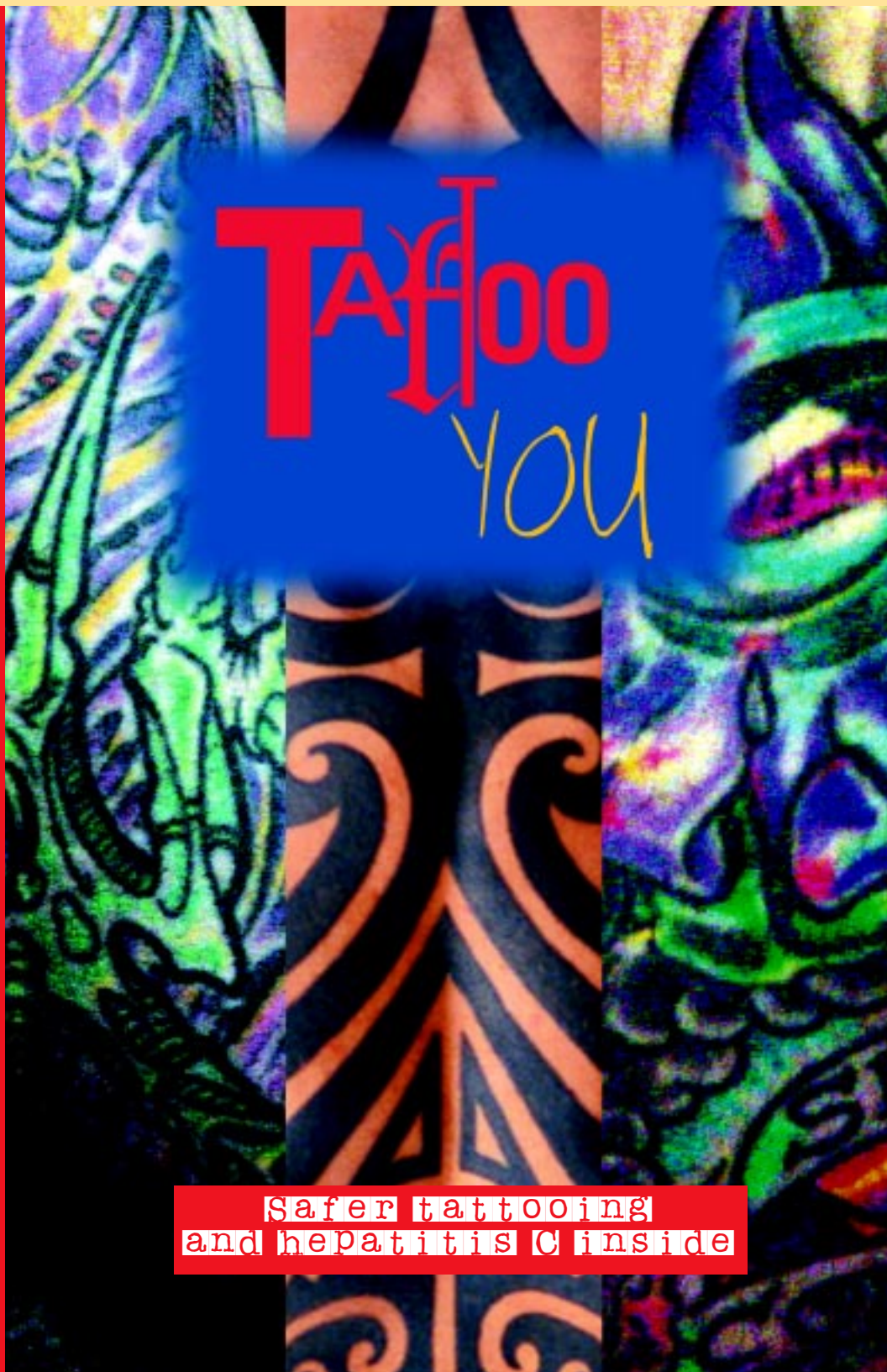


This information is provided by the Hepatitis C Support Project, a non-profit organization providing HCV and HIV/HCV coinfection education, support and advocacy.

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Visit our web site to learn more about hepatitis C:

www.hcvadvocate.org



safer tattooing
and hepatitis C inside

SAFE TATTOOS

The transmission of HCV by tattooing practices has not been well documented, but there is a very real possibility that a person could become infected this way if precautions are not followed carefully. Because it is harder to obtain sterile tattooing tools in prisons or on the streets, getting a tattoo in these settings carries a much greater risk of transmitting HCV. We recommend only commercial tattoo parlors that practice the following precautions:

- Use disposable or new needles.
- Use separate tattoo ink pots for each person.
- If re-using needles, sterilize them using an autoclave (a machine that sterilizes using heat and pressure).
- Sterilize any equipment that may come into contact with blood.
- Use clean latex gloves.
- Clean and disinfect surfaces
- Cover fresh tattoos with a dressing to prevent infection or HCV transmission.
- Properly dispose of all equipment that may have come into contact with blood; use a "sharps" bin or a puncture-proof container.

MORE SAFETY

Never share injection drug equipment, tools used for tattooing or body piercing, or personal items such as razors or toothbrushes that may come into contact with blood.

We do not know if bleach will kill HCV, but some experts believe that cleaning all shared tools with bleach for ten minutes will help reduce the chance of transmitting HCV.

Cover any open cuts or sores to prevent other people from coming into contact with your blood.

Even though sexual transmission is rare, you can reduce your risk of catching hepatitis C by using latex condoms. If you are a woman with HCV, talk to your doctor if you are thinking about becoming pregnant.

WHAT'S RISKY?

Hepatitis is a *blood-borne* disease. This means it is spread through contact with blood. A person can get hepatitis C by sharing used needles to inject drugs. This happens when a small amount of infected blood stays in the needle after it is used by one person, and is injected into the bloodstream of the next person who uses the needle. The hepatitis C vi-

rus can also be spread by small amounts of blood in cookers, cottons, and other equipment used to inject drugs. Other tools that come into contact with blood can also spread the hepatitis C virus. These include tools for tattooing and body piercing, and personal items like razors and toothbrushes. Equipment used for non-injection drugs, such as crack pipes and

cocaine straws, can also spread hepatitis C.

Sometimes doctors and nurses get hepatitis C when they accidentally stick themselves with used needles. Before 1992, many people got hepatitis C through blood transfusions. Today donated blood is tested and transfusions are safe.

Hepatitis C may also be spread through sexual ac-

tivity, but this is rare. Mothers with hepatitis C can pass the virus on to their babies before or during birth, but this is also uncommon. Hepatitis C is not spread through casual contact such as sneezing, coughing, hugging, or sharing drinking glasses. For about 1 in 10 people with hepatitis C, doctors can not determine how they became infected.

WHAT HAPPENS?

After the hepatitis C virus enters the body, it begins to multiply. The earliest stage of hepatitis C is called *acute* hepatitis. This stage usually lasts 2-12 weeks. Most people with acute hepatitis C do not have symptoms. Others have a flu-like illness with nausea, fatigue (extreme tiredness), loss of appetite, and pain in the abdomen. Some people may get jaundice (yellowing of the skin and whites of the eyes) or have dark colored urine.

In some people, the body's immune system can fight off the virus. But in about 80% of people infected with hepatitis C – or about 8 out of 10 – the body cannot completely get rid of the virus. In these cases, the virus stays in the body, a condition called *chronic hepatitis C*.

Most people with chronic hepatitis C do not have symptoms and lead normal lives. But some people do experience symptoms. The most common are flu-like illness, fatigue, fever, headaches, loss of appetite, nausea, pain in the abdomen, or pain in the muscles or joints.

About 10-20% of people with chronic hepatitis C virus – about 1 or 2 out of every 10 – will develop more serious liver damage. This process usually takes at least 10 years, and may take as long as 40 years. These people may develop scarring of the liver, called *cirrhosis*. There are two stages of liver cirrhosis. In people with *compensated cirrhosis*, the liver is damaged but can still function. In people with *decompensated cirrhosis*, the liver does not function properly, leading to complications such as internal bleeding and brain damage. People with brain damage related to hepatitis may experience mood swings or find it hard to concentrate.

Some people with hepatitis C develop liver cancer. In severe cases, liver failure can occur, and a person may need a liver transplant. Hepatitis C is the most common reason for liver transplants in the U.S.

HEP CAT ? ? ? ? ?

There are different tests doctors use to tell if a person has hepatitis C. One kind of test measures *antibodies* in the blood. Antibodies are made by the immune system when it responds to a foreign invader like a virus. If your blood has hepatitis C antibodies, you have been exposed to the hepatitis C virus. The two antibody tests that may be done are called *ELISA* and *RIBA*. Having antibodies to

hepatitis C – also known as being *HCV positive* – does not mean you will develop liver damage.

Another kind of test measures how much hepatitis C virus is in your blood. This is called a *viral load* test. Common viral load tests include the *PCR*, *branched DNA* and the *TMA* tests. If you are being treated for hepatitis C, viral load tests can help your doctor tell how well your medications are working.

There are several different types of hepatitis C virus called *genotypes*. Genotype tests can help determine how well treatment might work.

Liver function tests measure how well your liver is working. These tests measure levels of *liver enzymes* and other substances in the blood. People with chronic hepatitis C often have increased levels of two liver enzymes called

ALT and *AST*. Changes in liver enzyme levels can help your doctor tell whether your liver is damaged and whether your medications are working.

Finally, a *liver biopsy* is a test that can help your doctor determine the health of your liver and how much it is damaged. In this test, the doctor inserts a long needle into the liver and takes a sample to examine under a microscope.

WORK IT

Today, the current standard treatment for hepatitis C is a combination of two medications. One is called *interferon*, a manufactured version of a substance produced by the body's immune system. The second is called *ribavirin*, an antiretroviral drug that kills specific types of viruses. Interferon must be injected. Ribavirin is a pill.

Combination treatment with interferon and ribavirin was approved by the U.S. government three years ago. Before then, many people were treated with interferon alone. Treatment with a single drug is called *monotherapy*. Studies have shown that the combination of interferon and ribavirin usually works better than interferon monotherapy. But interferon alone works well for some people with mild hepatitis who have little liver damage.

Recent studies have shown that a new type of interferon – called *pegylated interferon* – works better with ribavirin than standard interferon. Pegylated interferon lasts longer in the body and does not have to be injected as often.

In addition to "western" medications like interferon and ribavirin, there are also several *alternative therapies* that people have used to manage hepatitis C. These include milk thistle and licorice root. The Hepatitis C Support Project has a

separate brochure on alternative treatments.

Not everyone with hepatitis C needs treatment. Your doctor will decide whether you should receive treatment based on various factors such as what genotype of hepatitis C virus you have and how much your

liver is damaged.

Treatment for hepatitis C does not work for everyone. But for many people, treatment with interferon plus ribavirin can keep the hepatitis C virus under control. Treatment works best for people who have been infected with hepatitis C for a shorter time, have little liver damage, and have less virus in their blood.

Hepatitis C treatment usually continues for one year. The drugs used to treat hepatitis C can cause *side effects* in some people. The most common side effects of interferon include flu-like symptoms, headache, nausea, fatigue, loss of appetite, muscle and joint pain, dry skin, and mental anxiety or depression. The most serious side effects of ribavirin are low levels of certain types of blood cells (*anemia* and *thrombocytopenia*). There are medications available to control these conditions. Ribavirin can cause birth defects and miscarriages. Both women and men taking ribavirin should use effective birth control during their treatment and for six months after treatment ends.