# Hepatitis B and C Basics





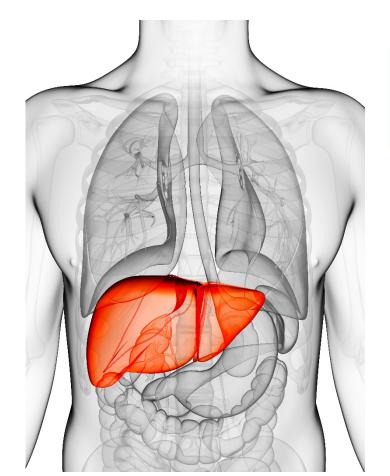
#### What is the liver?

The liver is the largest internal organ that performs many important functions.

Stores nutrients and vitamins

Fights infection

Stores energy



Removes harmful chemicals ("toxins") from your blood

Helps digest food

#### What is Hepatitis **B** and **C**?

Hepatitis B and C (Hep B and C for short)

- Viral infection that attacks the liver
- Can lead to serious health problems
  - Liver damage
  - Liver cancer
  - Liver failure

## Hep B and C?

- In NYC, there are 100,000 people diagnosed with Hep B and 146,500 adults infected with Hep C.
- Hep B and C can live outside of the body for at least 7 days.
  - Hep B and C can survive in a syringe for up to two months.
- Hep B and C can survive on equipment and surfaces for many weeks.

## Hep B and C Transmission

- It only takes a tiny amount of blood to spread Hep B and C.
- Hep B is spread through contact with infected blood or sexual fluids.
- Hep C is spread through contact with infected blood.

## Hep B and C Risk Factors

#### **U.S Hep B and C Transmission**

#### • Hep B

- During child birth
- Unprotected sex (semen and vaginal fluids)
- Sharing personal care items (nail clips, razors or injectable equipment)
- Sharing drug equipment and supplies
- Unlicensed tattoo and piercing

#### Hep C

- During child birth
- Sharing drugs equipment and supplies (snort or inject)
- People who received blood transfusion or transplant before 1992
- Unprotected sex in HIV-positive men who have sex with men
- From unlicensed tattoo and piercing

#### **Hep B and C possible transmission in Africa**

#### Hep B

- During child birth
- Unprotected sex (semen and vaginal fluids)
- Sharing personal care items (nail clips, razors or injectable equipment)
- Cultural methods of circumcision
- Barbershops and salons
- Piercing shops
- Blood transfusion
- On long term dialysis
- Exposed to blood or stuck by a needle
- Unsterilized Hospital equipment

#### Hep C

- During child birth
- Sharing personal care items (nail clips or razors)
- Cultural methods of circumcision
- Barbershops and salons
- Blood transfusion
- On long term dialysis
- Piercing shops
- Exposed to blood or stuck by a needle
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#### **B** and **C** Infection Progression Hep









**Acute infection** 

**Chronic infection** 6 months or less more than 6 Months

May develop serious liver disease

Cirrhosis or Liver cancer



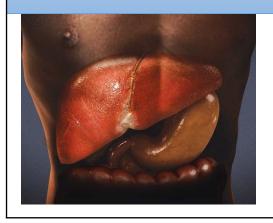
Immune system clears virus

## Risk of Chronic Hep B and C

 About 1 in 4 people with chronic Hep B and C will develop serious liver damage over a period of 20-30 years.

#### Progression Of Liver Damage

#### **Healthy Liver**



A healthy liver is able to perform its normal functions effectively.

#### Scarring Of The Liver



The formation of scar tissue within the liver - continuous inflammation of the liver caused by hepatitis B and C can lead to fibrosis.

#### Severe Liver Damage



Extensive scarring can block the flow of blood through the liver and cause liver function to deteriorate over time.

#### **Liver Cancer**



The formation of a deadly tumor in the liver.

## Hep B and C symptoms

- Many people with chronic Hep B and C do not experience symptoms unless the liver becomes severely damaged.
- Symptoms of Hep B and C can take up to 30 years to develop.



#### **symptoms**

- Jaundice (yellowing of skin and eyes)
- Loss of appetite
- Nausea, vomiting, abdominal pain
- Joint and/or muscle pain
- Dark urine
- Fatigue, tired, fever
- Grey-colored stools





The only way to know if someone has Hep B and C is to get tested!

## Countries with High Hep B Prevalence

Region	Countries
Africa	All (sub-Saharan Africa) <b>High (≥8%):</b> Benin, Burkina Faso, Cameroon, Cape Verde, Chad, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, São Tomé and Príncipe, Senegal, Sierra Leone, Togo.
Asia	All (Central and South East Asia, and China)
Australia & South Pacific	All except Australia and New Zealand
Middle East	All except Cyprus and Israel
Eastern Europe	All except Hungary
Western Europe	Malta, Spain, and indigenous populations in Greenland
North America	Alaska natives and indigenous populations in northern Canada
Mexico & Central America	Guatemala and Honduras
South America	Ecuador; Guyana; Suriname; Venezuela; and Amazonian areas of Bolivia, Brazil, Colombia, and Peru
Caribbean	Antigua and Barbuda, Dominica, Grenada, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, and Turks and Caicos Islands

## Hep B Tests

Test Results		What You Should Do
Surface Antigen	Surface Antibody	
Positive	Negative	You are infected with Hep B and should see a doctor.
Negative	Positive	You are immune to Hep B and don't need to do anything.
Negative	Negative	You are not immune to Hep B and may need to receive three or two doses of the Hep B vaccine for protection.

## Hep C Tests

Test Results		What You Should Do
Antibody	RNA	
Positive	Negative	You have been exposed to Hepatitis C but not currently infected (cleared the virus, or was cured through treatment)
Positive	Positive	You are currently infected with Hepatitis C and you should see a doctor for treatment.
Negative	Negative	Never exposed to Hepatitis C

## Children and Hep B

- Babies are at high risk of getting Hep B at birth if their mother has Hep B.
  - 90% of them will develop Hep B if not vaccinated.
- Mothers with high viral load should receive treatment at their 3rd trimester to lower the chance of transmission.
- Hep B infection can be prevented if the baby gets the Hep B vaccine and immune globulin (HBIG) immediately after birth within 12 hours after delivery
- Children must be tested for Hep B after completing the Hep B vaccine series if their mother is Hep B infected at 9 months of age.
- If you have Hep B, do not share food that has been in your mouth and do not pre-chew food for babies.







## Hep B Treatment

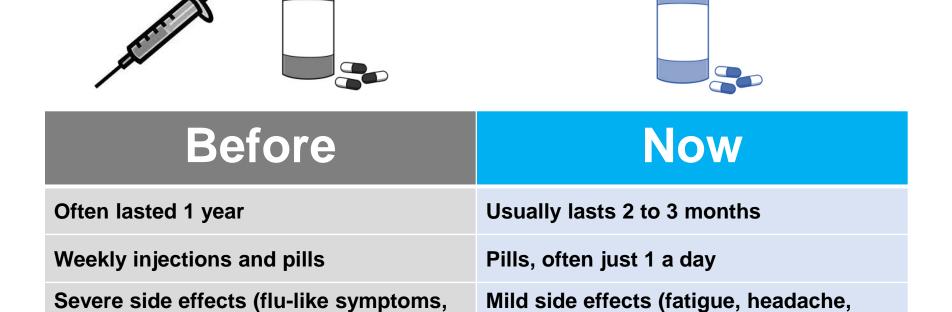
#### Hep B is manageable and treatable

- Lifelong monitoring is required.
- Generally requires evaluation by experienced provider every 3 to 6 months.
- There is no cure for hepatitis B, although viral suppression can be achieved with treatment.
- Liver cancer screening every 6 months is often recommended to prevent premature death from liver disease.





## Hep C Treatment



depression, anemia)

Almost everyone can be cured.

nausea, insomnia)

## You can get treated for Hep B and C!

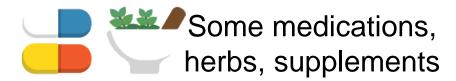


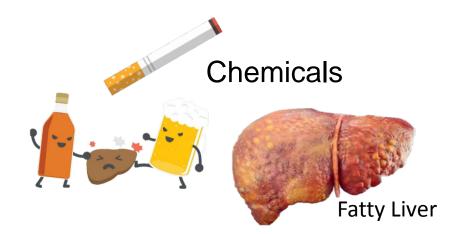
- Health insurance covers the cost of Hep B and C tests and treatment.
- Hep B and C medications can be free for people who are uninsured.
- Free Hep B screening or vaccination is provided at certain sites.
- If you do not have health insurance, there are programs in NYC that can offer free or low-cost Hep B and C care and treatment.
- Free Hep C testing and treatment is available for the uninsured through HepCap: <a href="https://hepfree.nyc/nys-doh-hep-c-comprehensive-care-programs/">https://hepfree.nyc/nys-doh-hep-c-comprehensive-care-programs/</a>
- Visit <u>www.nyc.gov/health/hepatitis</u> or contact <u>hep@health.nyc.gov</u> to learn more.

#### **Protect Your Liver**

## What else damages the liver?







## How to protect your liver

Get the Hep A and B vaccines; Get cure for Hep C

Tell doctors about any medications, herbs or supplements taken

Avoid exposure to toxins

Eat healthy and avoid any alcohol consumption

#### **Prevention**

Hep C can be treated and cured, but it is always possible to get re-infected.

- There is no vaccine for Hepatitis C
- People never develop immunity

Hep B can be prevented with vaccine and treated to limit disease progression.

• 90% of infants born to an infected mother who did not receive the vaccine series will develop Chronic Hep B.

## Hep **B** is Prevention



There is a safe and effective vaccine that protects against Hep B.

If you are not infected and you are not immune to Hep B, GET VACCINATED NOW!

## **Hepatitis B** Story



## Hepatitis C Epidemic In Egypt





## 5 Facts About Hep B and C

- 1. "Chronic Hepatitis B and C can lead to cirrhosis and liver cancer."
- 2. "Even if you feel healthy, hepatitis B and C may be damaging your liver."
- 3. "Even if you have been told that your liver is healthy or your infection is not active, you should still see a doctor regularly."
- 4. "Alcohol can damage the liver."
- 5. "Over-the-counter medications, vitamins, and supplements can be dangerous for your liver."

## Hep B vs. Hep C

#### Hep B

- Sexually transmitted
- There is no cure
- It is preventable with vaccine
- Your body can develop immunity after an acute infection and vaccination
- It is manageable with treatment
- Prevalence is higher in people of western Africa and China

#### **Similarity**

- Hep B and C is transmitted through blood to blood contact and mother to child
- Chronic Hepatitis B and C can lead to liver cancer.
- Hepatitis B and C can damage your liver even if you feel healthy.
- Symptoms are signs of severe liver damage and it can take 30 years to develop.

#### Hep C

- It can be treated and cured
- There is always possible reinfection
- You can never develop immunity
- Prevalence is higher with drug users and MSM

#### True or False?



"Hep B and C virus spread through casual contact, such as sneezing, kissing, or talking."



"My baby will not get Hep B or C at birth if my baby is delivered by C-section."



"I cannot get Hep B and C treatment because my insurance won't cover it."



"I am diagnosed of Hep B, so I need to get the vaccine for Hep B."

## Questions

