

LIVER DISEASE

TOOLKIT FOR CHWs
2023



TEXAS
Health and Human
Services

Texas Department of State
Health Services

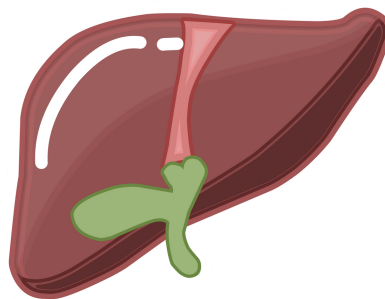
Office of Border Public Health
**Community
Health Worker**
TRAINING CENTER



INTRODUCTION

This toolkit is part of the “Liver Health-A CHWs Guide to understanding Liver Function and Diseases ” training for CHWs/CHWIs developed by the [OBPH CHW Training Center](#).

Information for this toolkit was gathered from credible sources to help CHWs educate the community.

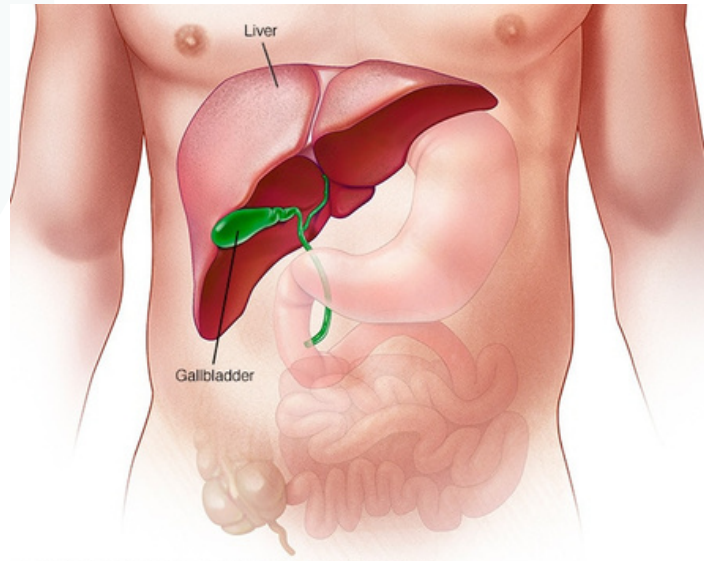


Last update: September 2023

BASICS ABOUT THE LIVER

The liver is in the **upper right-hand** of the abdominal cavity, **beneath** the diaphragm, and on **top** of the stomach, right kidney, and intestines.

- Weighs 3 pounds (for adults)
- It is about the size of a football



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FUNCTION OF THE LIVER

The liver filters and cleans the blood.



It breaks down substances such as:

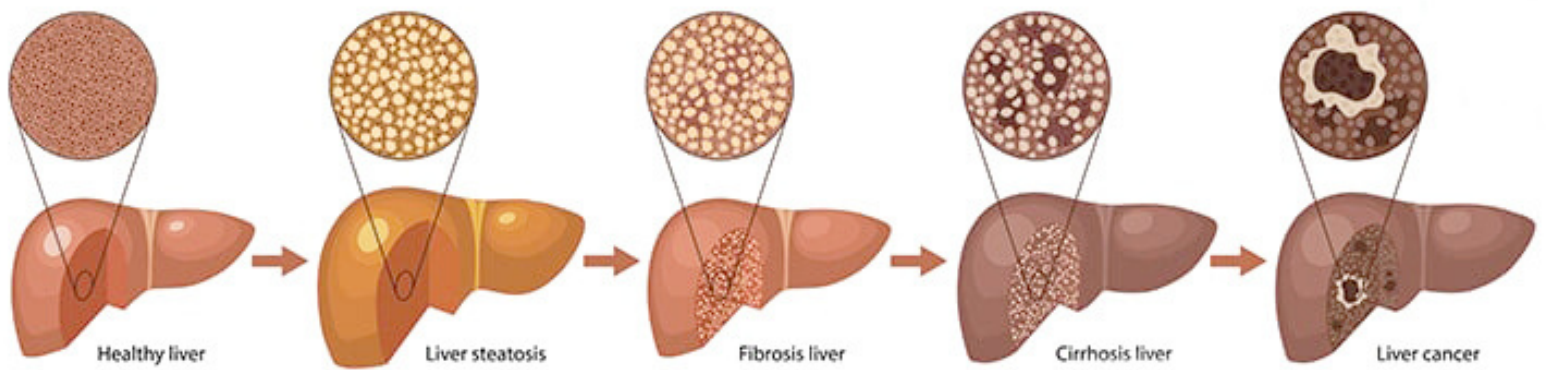
- Alcohol
- Caffeine
- Naturally produced harmful chemicals
- Prescription or over the counter drugs
- Street drugs



COMMON LIVER DISEASES

- Liver failure
- Different types of hepatitis (A, B, & C)
- Alcohol related liver disease (ARLD)
- Non-alcohol fatty liver disease (NAFLD)
- Liver cancer

STAGES OF LIVER DAMAGE



Source: [Kauvery Hospital](#)

CIRRHOSIS

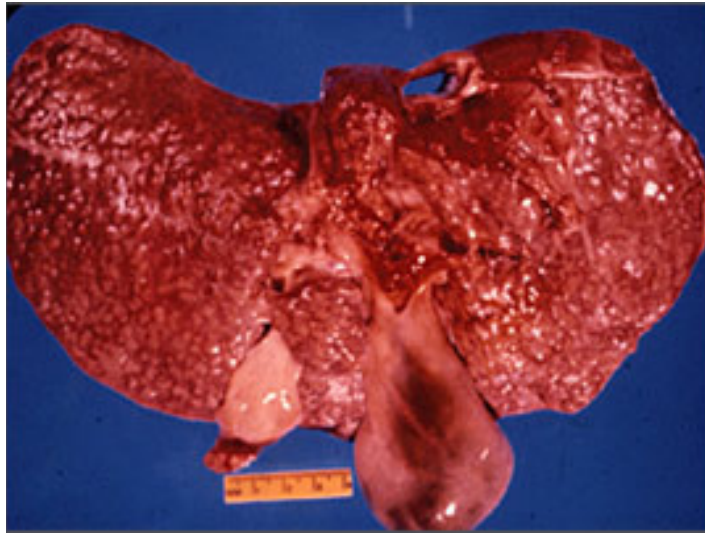
Most severe form of liver damage, it's the scarring of the liver, where hard scar tissue replaces soft healthy tissue.

CAUSES

- Excessive alcohol use
- Chronic viral hepatitis
- Bile duct disease
- Genetic diseases

SYMPTOMS

- Gathering of fluid in the abdomen (ascites)
- High blood pressure in the liver (portal hypertension)
- Bleeding from veins in the esophagus (esophageal varices)
- Behavior changes and confusion
- Enlarged spleen



Source: [American Liver Foundation](#)

PREVENTION

- Gathering of fluid in the abdomen (ascites)
- High blood pressure in the liver (portal hypertension)
- Bleeding from veins in the esophagus (esophageal varices)
- Behavior changes and confusion
- Enlarged spleen

ACUTE LIVER FAILURE

Acute liver failure happens when severe liver injury takes place without any signs of preexisting liver disease.

CAUSES

- Drug overdose
- Alcohol overdose
- Viral hepatitis
- Autoimmune hepatitis

COMPLICATIONS

- Too much fluid in the brain (cerebral edema)
- Bleeding and bleeding disorders
- Infections
- Kidney failure

PREVENTION

- Follow instructions on medications
- Tell your provider about all your medicines
- If you drink alcohol, do it in moderation
- Avoid risky behaviors
- Get vaccinated
- Avoid contact with other people's blood and body fluids
- Don't eat wild mushrooms
- Take caution with aerosol sprays
- Watch what gets on your skin
- Maintain a healthy weight

SYMPTOMS

- Skin and eyes that appear yellowish (jaundice)
- Pain in your upper right abdomen
- A swollen belly (ascites)
- Nausea
- Vomiting
- A general sense of feeling unwell
- Disorientation or confusion
- Sleepiness
- Breath may have a musty or sweet odor
- Tremors



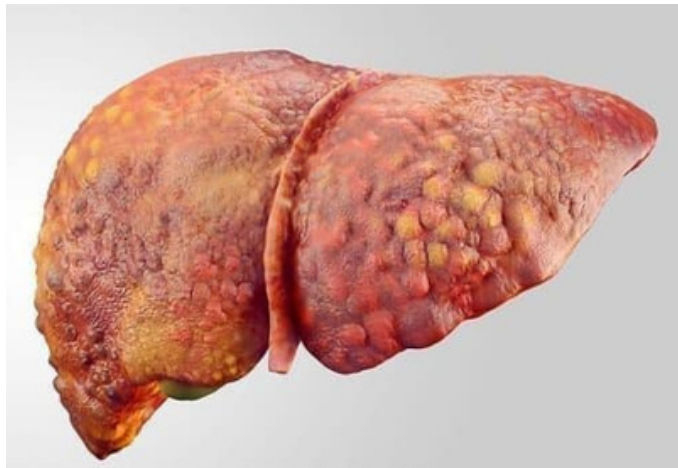
TREATMENT

- Medications to reverse poisoning
- Liver transplant
- Relieving pressure caused by extra fluid in the brain
- Checking for infections
- Preventing severe bleeding
- Providing nutritional support

ALCOHOLIC RELATED LIVER DISEASE (ARLD)

Liver damage caused by excess alcohol intake.

There are several stages of severity and a range of associated symptoms.



Source: [American Academy of Family Physicians](#)

ARLD doesn't usually cause any symptoms until the liver has been severely damaged.

SYMPTOMS

- Feeling sick
- Weight loss
- Loss of appetite
- Yellowing of the eyes and skin (jaundice)
- Swelling in the ankles and abdomen
- Confusion or drowsiness
- Vomiting blood or passing blood in your stools

NONALCOHOLIC FATTY LIVER DISEASE (NAFLD)

NAFLD is a condition in which there is excess fat in your liver. Condition occurs over time.

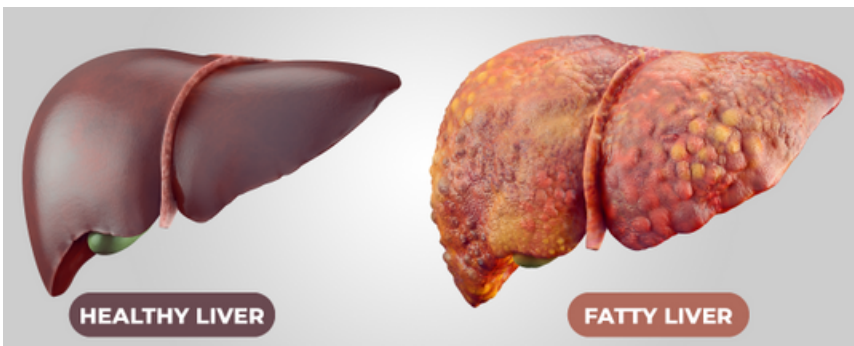
Study suggests that some health situations, genes, diets, and the digestive system might make you more likely to develop this.

CAUSES

- Overweight and obesity
- Insulin resistance or type 2 diabetes
- High levels of blood fats (triglycerides)
- High levels of plaque builder (bad) cholesterol (LDL)
- Low levels of good cholesterol (HDL)
- Metabolic syndrome

SYMPTOMS

- Silent disease with few or no symptoms
- It might not show symptoms even after developing cirrhosis



Source: [Hunterdon Gastroenterology Associates](#)

COMPLICATIONS

- Fibrosis and cirrhosis
- Liver failure
- Liver cancer
- Cardiovascular disease/
type 2 diabetes

PREVENTION

- Maintain a healthy weight
- Eat a healthy diet
- Exercise regularly
- Limit alcohol intake
- Only take medicines that you need and follow dosing recommendations

TREATMENT

- No FDA approved treatments for NAFLD

LIVER CANCER

Cancer is a disease in which cells in the body grow out of control. When cancer starts in the liver, it is called liver cancer.















Source: [Medimage/science](#)

SYMPTOMS

- Discomfort in the upper abdomen on the right side
- A swollen abdomen
- A hard lump on the right side just below the rib cage
- Pain near the right shoulder blade or in the back
- Jaundice
- Easy bruising or bleeding
- Unusual tiredness

HEPATITIS A, B, C

Viral infections that causes liver inflammation and damage.

Virus	Transmission Routes	Vaccine	Cure	Incubation
A	 Fecal/Oral	 Yes	 Recovery from illness results in lifelong immunity	 15 to 50 days
B	 Blood to blood & sexual contact	 Yes	 No cure (treatment available)	 1 to 4 months incubation Most adult patients clear infection (~90%)
C	 Blood to blood	 No	 Curable (8-12 week treatment)	 2 weeks to 6 months incubation

Source: [Cumberland County \(NC\) Department of Public Health](#)

SYMPTOMS OF HEPATITIS A, B, C

Acute

- Fever
- Fatigue
- Loss of appetite
- Nausea
- Vomiting
- Abdominal pain
- Dark urine
- Light-colored stools
- Joint pain
- Jaundice

Chronic

Can take decades to develop and may include developing cirrhosis and liver cancer

HEPATITIS C

PREVENTION

- No sharing drug needles or other drug materials.
- Avoid contact with others person's blood if open sores.
- Sterilize needles for tattoos, body piercings, etc.
- Do not share personal items such as toothbrushes, razors, and nail clippers

COMPLICATIONS

- Cirrhosis
- Liver failure
- Liver cancer

SCREENINGS

You should get tested for hepatitis C if you:

- Are 18 years of age and older (get tested at least once in your lifetime)
- Are pregnant (get tested during each pregnancy)
- Currently inject drugs (get tested regularly)
- Have ever injected drugs, even if it was just once or many years ago
- Have HIV
- Have abnormal liver tests or liver disease
- Are on hemodialysis
- Received donated blood or organs before July 1992
- Received clotting factor concentrates before 1987
- Have been exposed to blood from a person who has hepatitis C
- Were born to a mother with hepatitis C

DIGITAL RESOURCE



LIVER HEALTH APP

FREE OR LOW-INCOME ASSISTANCE RESOURCES

Adult Care Services

Cameron County

Immunizations - Cameron County Public Health

Cameron County Public Health

El Paso County

31 Federally Qualified Health Centers near El Paso, TX

Hidalgo and Starr Counties

Nuestra Clínica del Valle

Maverick County

Maverick County Hospital District

Val Verde County

The Mary L. Pierce HOPE Cancer Resource Room

Val Verde Regional Medical Center



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