

- Deaths from liver cancer are on the rise and it is now the sixth leading cause of cancer deaths in Michigan. ¹
- In 2019, it is estimated that there will be **1,160 new cases** of liver cancer and **920 deaths** from liver cancer in Michigan. ²

Liver Cancer Risk Factors

➤ Hepatitis C

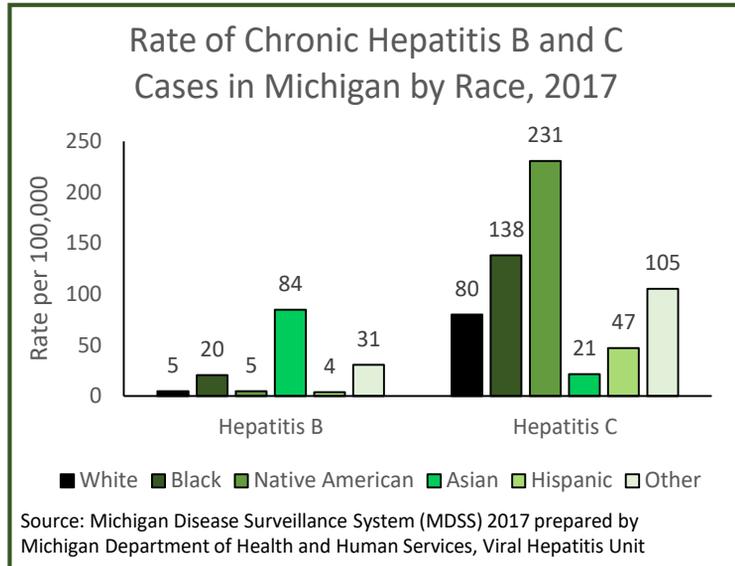
- Hepatitis C is the **leading cause of liver cancer**; approximately 50% of liver cancers are related to Hepatitis C. ³
- There are currently no vaccines to prevent hepatitis C; however, there are highly effective treatment options with minimal side effects available to cure Hepatitis C.
- The rate of chronic Hepatitis C is higher in males than in females (143 per 100,000 vs 100 per 100,000) (data not shown). ⁴
- **Native Americans** have the **highest rate** of chronic Hepatitis C compared to other racial and ethnic groups in Michigan.
- People at risk for Hepatitis C include people who: were born from 1945 to 1965, have ever injected drugs, have a known exposure, are infected with HIV, or were born to mothers with Hepatitis C. ³

➤ Hepatitis B

- Approximately 15% of liver cancers are related to Hepatitis B. ³
- Hepatitis B is **preventable**. The vaccination is part of the standard infant vaccine schedule. ³
- The rate of chronic Hepatitis B is higher in males than in females (15 per 100,000 vs 10 per 100,000) (data not shown). ⁴
- **Asians** have the **highest rate** of chronic Hepatitis B. Hepatitis B is the leading cause of liver cancer for this population.
- People at risk for Hepatitis B include people who: inject drugs, have a household contact, have an occupational exposure, have an infected sex partner, are a hemodialysis patient or are born to a mother with Hepatitis B. ³

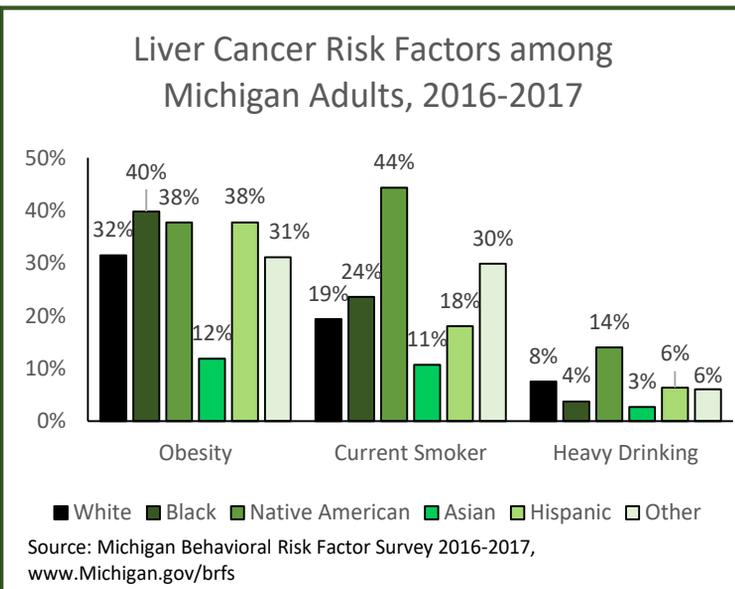
➤ Other risk factors:

- Cirrhosis, obesity, smoking, excessive alcohol use, and Type 2 diabetes. ⁵



Early Detection of Hepatitis B and C ³

Hepatitis B and C often have no symptoms and most people are not aware of their infection. People at risk for Hepatitis B and C should be screened. Early diagnosis and treatment can help prevent liver cancer and protect people from other severe health complications, including fibrosis and cirrhosis.



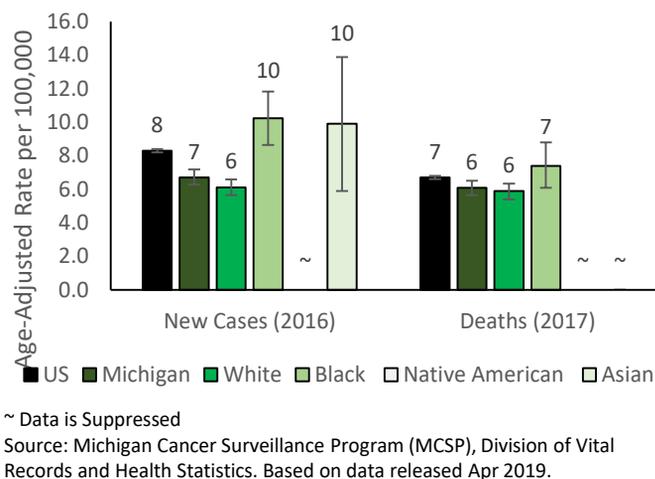
Liver Cancer Trends and Disparities

- **New cases** of liver cancer **have increased** from 5 per 100,000 people in 2000 to 7 per 100,000 people in 2016. ⁶ (data not shown)
- New cases of liver cancer are **highest among Black and Asian adults** (10 per 100,000 people).
- **Deaths** from liver cancer **have increased** from 5 per 100,000 people in 2000 to 7 per 100,000 people in 2016. ⁶
- In 2014-2016 the death rate in Michigan was highest among Native American residents (10 per 100,000 people) compared to Black residents (9 per 100,000 people), Asian and Pacific Islander residents (8 per 100,000 people) and White residents (6 per 100,000 people) (data not shown). ⁶

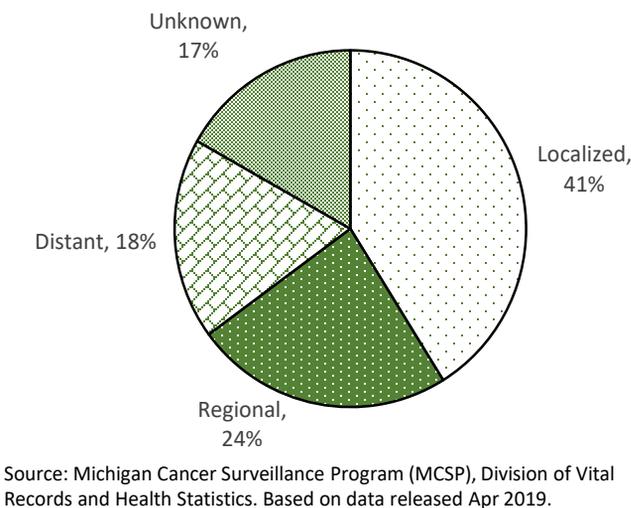
Early Detection of Liver Cancer

- Currently, there is **no recommended screening** for liver cancer. ⁵
- Some experts recommend those who are at higher risk of liver cancer due to cirrhosis or chronic Hepatitis B infection be screened for liver cancer with alpha-fetoprotein (AFP) blood tests. ⁵
- The five-year survival rate for liver cancer is 18%. Liver cancer has the **third lowest survival rate** of any type of cancer. ⁷
- When liver cancer is diagnosed at the localized stage the survival rate is 31%. ⁷ In Michigan 41% of cases are diagnosed at the localized stage.
- The five-year survival rate drops to 2% when diagnosed at the distant stage; ⁷ 18% of cases were diagnosed at the distant stage.

Liver Cancer New Diagnoses and Deaths in U.S. and Michigan by Race, 2016 and 2017



Stage at Diagnosis for Liver Cancer in Michigan, 2016



Signs and Symptoms of Liver Cancer ⁵

Signs of liver cancer often are not present until the later stages of the disease. Some of the most common symptoms are: weight loss, loss of appetite, nausea, enlarged liver, enlarged spleen, pain in abdomen or near the right shoulder blade, swelling of the abdomen, yellowing of the skin and eyes. Some liver tumors may cause high blood calcium levels, low blood sugar levels, or high cholesterol levels.

References: 1) Cancer Stat Facts: Liver and Intrahepatic Bile Duct Cancer. National Cancer Institute. Retrieved at: <https://seer.cancer.gov/statfacts/html/livibd.html> 2) American Cancer Society. Cancer Statistics Center: Michigan at a Glance 2017. Retrieved at: <http://cancerstatisticscenter.cancer.org/#/state/Michigan>. 3) Viral Hepatitis and Liver Cancer: CDC Fact Sheet. Centers for Disease Control and Prevention. 2016. 4) 2017 Hepatitis B and C Annual Surveillance Report. Division of Communicable Diseases. Michigan Department of Health and Human Services. Retrieved at: https://www.michigan.gov/documents/mdhhs/VH_Annual_Report_2017_FINAL_630629_7.pdf 5) Liver Cancer. American Cancer Society. Retrieved at: <https://www.cancer.org/cancer/liver-cancer.html> 6) Michigan Resident Cancer Incidence File. Updated with cases processed through April 2019. Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services. Retrieved at: <http://www.mdch.state.mi.us/pha/osr/Cancer/Stateinc.asp?CDxID=IncTrendsBreast>. 7) Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov) SEER*Stat Database: Incidence - SEER 18 Regs Research Data + Hurricane Katrina Impacted Louisiana Cases, Nov 2017 Sub (2000-2015), National Cancer Institute, DCCPS, Surveillance Research Program, Surveillance Systems Branch, released April 2018, based on the November 2017 submission.