Weekly Checkup

Liver Cancer: Avoiding the 2050 Surge

JOHN WALKER | AUGUST 15, 2025

The incidence of liver cancer is projected to more than double globally by 2050, according to a recent study conducted by The Lancet. While not as dire as the total international picture, the United States can do more to avert the growth of this highly preventable and deadly disease. **To better understand this study's findings, let's start by analyzing some data on the three leading risk factors of liver cancer** – obesity, alcohol misuse, and a chronic or prior hepatitis infection – **and then look to what the United States can do to keep its liver cancer incidence low**.

The Lancet's study forecast the global death toll from liver cancer will double from 830,200 in 2020 to roughly 1.3 million by 2050. This prospective doubling is tied primarily to an increase in alcoholic and non-alcoholic fatty liver disease, which are precursors to liver cancer. An increasing number of people are developing one or both forms of these liver diseases, subsequently increasing the number of people developing, and dying from, liver cancer. **While an alarming trend, these figures are not broadly reflective of the United States' liver cancer incidence. In some sense, we are both behind and ahead.**

Global percentages of non-alcoholic liver disease are broadly reflective of U.S. population-level ratios, with roughly 30 percent of U.S. adults experiencing the disease. Since the primary driver of this type of liver disease is obesity, this isn't surprising. **Roughly 45 percent of U.S. adults are clinically classified as obese, with an additional 10 percent of adults classified as severely obese.** While reporting has indicated a decline in the U.S. obesity rate for the first time in more than a decade, the reaction to this shift has been overly laudatory. The only category to show a decrease in 2024 was severe obesity, which declined by just 0.4 percent. Meanwhile, the percentage of individuals with a clinically healthy weight has actually declined by 4.5 percent since 2010. Increases in

weight over a body mass index of 30 (categorically obese) are positively correlated with increases in liver cancer risks, and the broader population trend away from clinically healthy weights puts an increasing number of the population at risk.

Meanwhile, just under 1 percent of the total U.S. population experiences alcoholic liver disease. **Recent data identified a notable drop in population-level drinking habits in the United States** – specifically among younger generations – **with polling data showing a 10-percent decrease in the number of adults under the age of 35 who say they ever drink, from 72 percent in 2001–2003 to 62 percent in 2021–2023.** While these data might suggest that the prevalence of this disease and its associated complications would also decrease, that is not the case. Among those adults who reported binge drinking, the total age-adjusted annual number of drinks consumed per adult increased by over 12 percent. An increase of this size in the quantity of alcohol consumed by self-reported binge drinkers is problematic, especially considering episodic binge drinking is associated with a higher risk of developing liver cancer compared to regular moderate alcohol consumption.

Although global hepatitis B (HBV) rates are high, the United States does not experience chronic HBV at the same rate as the rest of the world. The inclusion of the hepatitis B vaccine in the U.S. infant immunization schedule, as well as cultural, population-based behaviors, has resulted in less than 0.5 percent of the U.S. population (approximately 2 million individuals) suffering from a chronic HBV infection. The population least vaccinated against an HBV infection are those over the age of 50, with less than 17 percent of these patients receiving all three recommended doses of the hepatitis B vaccine. **Not only is this older population the least vaccinated of all other age populations, but those over the age of 55 are also at the highest risk of developing liver cancer. This highlights the importance of vaccinating against HBV: early protection mitigates debilitating chronic health issues later.**

The United States' current approach to managing liver cancer incidence – through liver disease prevention – is a mixed bag. While early actions to increase infant vaccinations, encourage healthier drinking patterns, and reduce population-level weight gain have had a positive preventive effect on this long-term forecast, growing trends in vaccine nonadherence, increased binge drinking, and reductions in healthy BMI may negate this effect. **To further lessen forecasted liver cancer cases, the United States should improve hepatitis education and awareness to strengthen national vaccine adherence, encourage providers to screen for excessive alcohol consumption during checkups** – currently only one in six providers does so – **and consider policies that could decrease population-level obesity rates.** These could include efforts to avoid subsidizing junk food consumption, encourage healthy lifestyles, and improve nutrition guidelines.

Taken together, these actions could reduce future liver cancer deaths in the United States.