

Mental Health Conditions May Heighten Liver Cancer Risk in Veterans Due to Increased Hepatitis C

UCLA study found veterans with mental health diagnoses, especially alcohol use disorder, were more likely to develop liver cancer.

December 12, 2025 By Denise Heady and UCLA Health

Mental health conditions are common among veterans and may play a larger role than previously recognized in raising liver cancer risk for those with hepatitis C.

A new study led by [UCLA Health Jonsson Comprehensive Cancer](#) investigators found that mental health conditions, especially alcohol use disorder and post-traumatic stress disorder (PTSD), significantly increase the likelihood of developing liver cancer among U.S. veterans living with cirrhosis of any cause.

[The findings](#), published in *Clinical Gastroenterology and Hepatology*, suggest that these disorders may raise cancer risk by limiting access to hepatitis C care, therefore reducing the likelihood of a cure. Other complex pathways, such as the body's stress response, immune function, or lifestyle factors, may also contribute, underscoring the need for comprehensive care that addresses both mental and physical health.

"The research highlights the ongoing challenges faced by veterans even after advances in hepatitis C treatment and points to the critical need for integrated mental health and liver care," said [Dr. Jihane Benhammou](#), assistant professor of medicine and digestive diseases at the David Geffen School of Medicine at UCLA and senior author of the study. "Addressing mental health is essential to reducing liver cancer risk. Integrated systems that introduce pharmacotherapy, for instance, for alcohol use disorder may also decrease the risk of liver cancer."

Liver cancer, specifically hepatocellular carcinoma, is one of the deadliest cancers worldwide and has been rising among veterans over the past two decades. Between 2001 and 2013, the incidence of liver cancer in veterans more than doubled, and deaths from the disease tripled during that time.

Although hepatitis C virus infection has long been recognized as a leading cause, and the introduction of highly effective antiviral therapies has dramatically reduced infection rates, many

veterans continue to face an elevated risk of liver cancer. Researchers suspect that coexisting mental health conditions may be an overlooked factor driving this trend, despite universal access to hepatitis C therapies introduced in 2014 in the VA healthcare system.

To better understand this issue, researchers analyzed data from a large national cohort of 221,712 U.S. veterans with liver cirrhosis from 2000 to 2021. About 80% of the participants had hepatitis C infection and 61% had some form of mental health condition, with alcohol and substance use disorders being the most common.

The team examined the relationship between mental health disorders and the subsequent development of liver cancer, taking into account factors such as age, race, cause of liver disease, alcohol use, and antiviral treatment history. By identifying patterns across this population, the investigators aimed to clarify how mental health conditions contribute to liver cancer risk and to inform strategies for prevention and early intervention.

The researchers found that veterans with mental health conditions faced a significantly higher risk of developing liver cancer, even after accounting for demographic factors and hepatitis C treatment status. The associations were strongest for certain diagnoses, suggesting that both behavioral and biological pathways may contribute to the increased risk.

Key findings from the study include:

- Veterans with any mental health disorder had a significantly elevated risk of developing liver cancer compared to those without such conditions.
- Nearly two-thirds of veterans with cirrhosis had a mental health diagnosis, most commonly alcohol or substance use disorder (19.6%), followed by depression, anxiety and PTSD.
- Veterans with at least one mental health diagnosis were significantly more likely to develop liver cancer than those without mental health conditions.
- Veterans with active hepatitis C infection and mental health disorders faced the highest risk, even after the introduction of highly effective hepatitis C treatments in 2014.
- Veterans with more than one mental health disorder faced the greatest increase in risk, underscoring the cumulative burden of mental illness on physical health outcomes.
- Living in rural areas did not increase liver cancer risk, likely due to the VA's comprehensive healthcare access.

The study underscores that even when hepatitis C is cured, mental health conditions can leave veterans vulnerable.

"Curing hepatitis C alone is not enough," said Benhammou, who is also a member of the UCLA

Health Jonsson Comprehensive Cancer Center. “The study advocates for a multidisciplinary approach where liver specialists, mental health providers and case managers work together to support veterans. Integrating mental health support into liver disease treatment is a critical step toward protecting our veterans from liver cancer.”

The study’s first author is Dr. Nguyen Pham, an internal medicine resident at UCLA Health. Other authors, all from UCLA, are Dr. Rajat Singh, Mei Leng, Dr. Steven-Huy Han, Dr. Folasade May and Dr. Jasleen Singh.

The work was supported by a VA Career Development Award.

This [news release](#) was published by UCLA Health on December 3, 2025.

© 2026 Smart + Strong All Rights Reserved.

<http://beta.docker.cancerhealth.com/article/mental-health-conditions-may-heighten-liver-cancer-risk-veterans-due-increased-hepatitis-c>