

What Is Acute Alcohol-Associated Hepatitis (AH)?

- A **life-threatening acute alcoholic liver disease (ALD)** caused by chronic heavy alcohol use and a recent increase in alcohol consumption (e.g., a binge)^{1,2}
- Characterized by **severe inflammation and destruction of liver tissue** (i.e., necrosis)¹
- AH **may occur suddenly** after binge drinking, potentially leading to life-threatening complications, including liver failure, acute renal injury, and multi-organ failure³



AH causes more than ~137,000 US hospitalizations per year⁴



The cost related to treating AH is estimated at >\$50,000 per patient in the first year⁵



Increasing numbers of young adults have been diagnosed with AH in recent years⁶



Prognosis: Average 28-day overall mortality rate of 26%⁷



AH can affect both women and men⁸



More than half of the people diagnosed with AH are between 40 and 60 years old⁸

AH patients typically have a history of daily alcohol use of⁹

>40 g alcohol/day (female), which is about 3 standard drinks, for 6 months or longer^{7,8}



>60 g alcohol/day (male), which is about 4 standard drinks, for 6 months or longer^{7,8}

Common symptoms include⁸:

- Rapid onset of jaundice (yellowing of skin or eyes)
- Nausea
- Vomiting blood
- Loss of appetite
- Fever
- Fatigue and weakness
- Negative changes in mental state

What Is a Standard Drink?^{10,*}



12 fl oz of regular beer

about 5% alcohol



8-9 fl oz of malt liquor

about 7% alcohol



5 fl oz of table wine

about 12% alcohol



1.5 fl oz shot of distilled spirits

about 40% alcohol

Individuals with a sudden increase in alcohol intake or intermittent heavy drinking may also be affected⁹

AH can also develop in patients with a much shorter history of heavy alcohol use¹¹

Acute severe cases may lead to life-threatening complications, including acute renal injury, liver failure, and multi-organ failure associated with systemic inflammatory responses¹²

Current Treatments

No FDA-approved therapies



Stopping alcohol consumption may not be sufficient for recovery in many moderate and severe patients¹³

Treatments to reduce liver inflammation, such as corticosteroids, do not improve 90-day or 1-year survival (STOPAH Trial) and only 25-45% of patients are eligible for these drugs^{1,14}

ALD, including AH, is now the leading indication for liver transplant in the US; the procedure costs over \$875,000 and patients require lifelong immunosuppressive therapy to prevent organ rejection¹⁵⁻¹⁷

No improvement in AH mortality in >4 decades⁷

1. Singal AK, et al. *J Hepatol*. 2018;69:534-543. 2. Mitchell MC, et al. *Gastroenterol Hepatol*. 2020;16:178-189. 3. Mandrekar P, et al. *Hepatology*. 2016;64:1343-1355. 4. Agency for Healthcare Research and Quality. Healthcare Cost and Utilization Project. Accessed February 22, 2022. <https://hcupnet.ahrq.gov>. 5. Thompson JA, et al. *Alcohol*. 2018;71:57-63. 6. Medscape. Alcoholic hepatitis admissions of young adults spike in pandemic. Accessed February 22, 2022. <https://www.medscape.com/viewarticle/962918>. 7. Hughes E, et al. *PLoS One*. 2018;13:1-10. 8. Cleveland Clinic. Alcoholic hepatitis. Accessed February 22, 2022. <https://my.clevelandclinic.org/health/diseases/17853-alcoholic-hepatitis>. 9. Crabb DW, et al. *Gastroenterology*. 2016;150:785-790. 10. NIAAA. What is a standard drink. Accessed February 22, 2022. <https://www.niaaa.nih.gov/alcohols-effects-health/overview-alcohol-consumption/what-standard-drink>. 11. Friedman SL. Alcoholic hepatitis: clinical manifestations and diagnosis. *UptoDate*. Accessed February 22, 2022. <https://www.uptodate.com/contents/alcoholic-hepatitis-clinical-manifestations-and-diagnosis/contributors>. 12. Michelena J, et al. *Hepatology*. 2015;62:762-772. 13. Singal AK, et al. *Clin Gastroenterol Hepatol*. 2014;12:555-564. 14. Thursz MR, et al. *N Engl J Med*. 2015;372:1619-1628. 15. Cholanteril G, et al. *Clin Gastroenterol Hepatol*. 2018;16:1356-1358. 16. Bentley TS and Ortner N. 2020 U.S. organ and tissue transplants: cost estimates, discussion, and emerging issues. Milliman Report. February 18, 2020. Accessed February 22, 2022. <https://www.milliman.com/en/Insight/2020-us-organ-and-tissue-transplants>. 17. Jiang Y, et al. *Front Immunol*. 2020;11:1-16.

*Each beverage portrayed above represents one drink (or one alcohol drink equivalent), defined in the United States as any beverage containing 0.6 fl oz or 14 grams of pure alcohol. The percentage expressed here as alcohol by volume (alc/vol) varies within and across beverage types. Although the standard drink amounts are helpful, they may not reflect customary serving sizes.⁹