Recognizing Patients at High Risk for MASH

Metabolic dysfunction-associated steatotic liver disease (MASLD) and its more severe form, metabolic dysfunction-associated steatohepatitis (MASH), are subcategories within steatotic liver disease (SLD).[1]

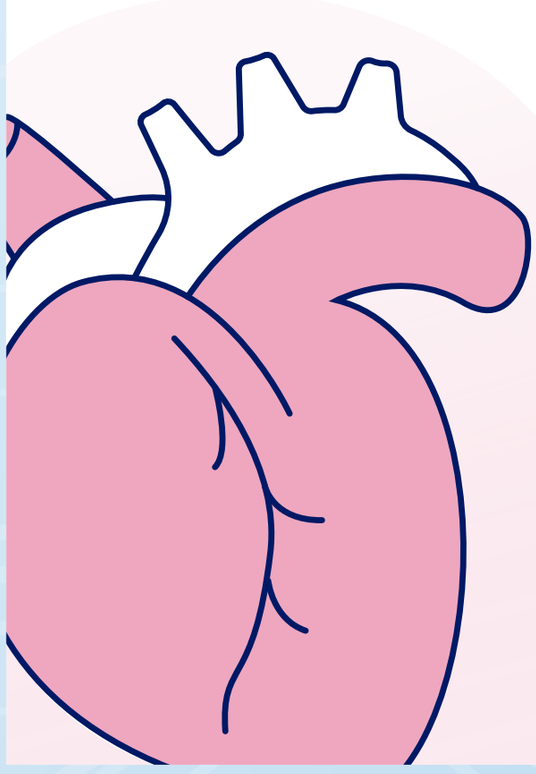
Globally, nearly **2** in **5** people have MASLD[2] & **1** in **20** people have MASH[2]

The number of MASH cases in the US is projected to increase by **63%** to **27 million** cases by 2030.[3]

Certain cardiometabolic risk factors contribute to the burden of MASLD/MASH

MASLD/MASH is defined by the presence of hepatic steatosis and one or more cardiometabolic risk factors, including:[1]

- **Obesity**
- **Type 2 diabetes**
- **Hypertension**
- **Dyslipidemia**
  Hypertriglyceridemia and/or low HDL



People living with these cardiometabolic disorders, particularly type 2 diabetes and obesity, are at high risk of developing MASH[4–7]

More than **1 in 3** people with type 2 diabetes may have MASH[4,5*]

More than **1 in 3** people with obesity may have MASH[6,7†]

Genetic and social determinants increase susceptibility to MASLD/MASH in certain populations

Certain genetic variants, such as *PNPLA3*, *TM6SF2*, *HSD17B13*, are associated with increased risk and severity of MASLD[9]

MASLD and MASH are disproportionately prevalent in certain sex, racial and socioeconomic groups[10,11]

Men have 19% higher MASLD prevalence than women. Although both sexes face similar risks for MASH, postmenopausal women are more prone to developing advanced fibrosis

Hispanic populations have a higher genetic predisposition to MASH and higher rates of MASH than White or Black individuals

Socioeconomic factors like poverty, poor access to nutritious food, and food insecurity can contribute to MASLD disease burden

People in high risk populations, including those with certain cardiometabolic diseases, genetic risk factors or from racial or ethnic subpopulations, should be evaluated for MASLD/MASH to optimize health outcomes for affected patients.

**Global MASH prevalence estimates in the T2D population from 2019 applied to the 2022 global population living with T2D.*
† Global MASH prevalence estimates in the obesity population from 2006 applied to 2022 global population living with obesity.
HDL, high-density lipoprotein; HSD17B13, 17B-hydroxysteroid dehydrogenase 13; MASH, metabolic dysfunction-associated steatohepatitis; MASLD, metabolic dysfunction-associated steatotic liver disease; PNPLA3, patatin-like phospholipase domain-containing protein 3; T2D, Type 2 diabetes; TM6SF2, transmembrane 6 superfamily member 2.

1. Rinella ME et al. Hepatology. 2023;78:1966–1986; 2. Younossi ZM et al. Hepatology. 2023;77:1335–1347; 3. Estes C et at. Hepatology. 2018;67:123–33; 4. Younossi ZM et al. J Hepatol. 2019;71:793-801; 5. World Health Organization. Diabetes – Overview. Available at: https://www.who.int/health-topics/diabetes. Accessed August 2024; 6. Quek J et al. Lancet Gastroenterol Hepatol. 2023;8:20–30; 7. World Health Organization; News Release. Available at: https://www.who.int/news/item/04-03-2022-world-obesity-day-2022-accelerating-action-to-stop-obesity. March 2022. Accessed August 2024; 8. Rinella ME et al. Hepatology. 2023;77:1797–1835; 9. Yip TCF et al. Hepatology. 2022;00:1–24; 10. Rich NE et al. Clin Gastroenterol Hepatol. 2018;16:198–210; 11. Kardashian A et al. Hepatology. 2023;77:1382–1403.