

## What needs to change for Australia to be on track to reach our hepatitis B elimination targets?

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**Background:** Australia hasn't met the National Hepatitis B Strategy targets for 2022. If current trends continue, the targets won't be reached until 2037 for diagnosis, 2047 for care, 2036 for treatment and after 2050 for mortality. Significant progress must occur across the entire cascade of care to bring our elimination efforts on track. To do this, a thorough and detailed evaluation is needed on where we currently stand and exploration of possible future outcomes.

**Methods:** Detailed analyses were undertaken of diagnosis, monitoring and treatment of hepatitis B by using surveillance and Medicare data. Estimates of those living with hepatitis B, mortality and the exploration of future projections were simulated through mathematical modelling. A range of scenarios were explored to quantify the potential impact of increasing diagnosis and treatment.

**Results:** In 2022 25.5% of people living with hepatitis B were engaged in care. Even among those, the majority require increased frequency of ongoing monitoring to meet standard clinical recommendations. Only 11.0% of people had at least 6 viral load tests between 2016–2022, which reflects viral load testing about once per year. Modelling reveals that a substantial amount of people who require treatment are not yet diagnosed - and for those who have, new treatment initiations have stagnated and are not keeping pace with the number who are eligible, especially in younger age groups. Many of these care elements vary substantially according to demographics and across jurisdictions. Exploration of future projections show that to meaningfully reduce mortality, both diagnosis and treatment must substantially increase.

**Conclusion:** To reach hepatitis B elimination targets, improvements across the entire hepatitis B response are required. A detailed and in-depth review and analysis allows for a more evidence-based and directed approach to guide policy makers and the entire sector where our efforts should best be focused.

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