# ASSESSING THE LIKELY PLACE OF ACQUISITION OF HIV AMONG MIGRANTS TO AUSTRALIA

**Authors:**
King J[1,2], Dobbins T[2], Petoumenos K[1], Guy R[1], Gray R[1], Nigro S[3], Si D[4], Minas B[5], McGregor S[1]

[1] Kirby Institute, UNSW Sydney, [2] School of Population Health, UNSW Sydney, [3] Communicable Diseases Branch, Health Protection NSW, NSW Health, [4] Communicable Diseases Branch, Queensland Department of Health, [5] Western Australia Department of Health

**Background:**
Australia has set the goal to become one of the first countries to virtually eliminate HIV transmission. People born outside Australia have been identified as a priority population to be included as meaningful participants in any strategy aimed at achieving this goal. Accurate assessment of the place of HIV transmission will contribute valuable information to better measure progress towards the virtual elimination of HIV transmission. This study applies a novel method for estimating the place of HIV acquisition among migrants to Australia, using routinely collected HIV surveillance data.

**Methods:**
An algorithm was developed incorporating a CD4+ T-cell decline back projection model as well as clinical data, to estimate whether HIV diagnosed in migrants to Australia was acquired before or after arrival in Australia. This algorithm was applied to HIV notification records with a diagnosis date of between 1 January 2015 and 31 December 2019.

**Results:**
Of the 1,282 migrants notified with HIV included in the study, 682 (53%) were estimated to have acquired HIV after their arrival in Australia, 568 (44%) were estimated to have acquired HIV prior to their arrival in Australia and for 32 (2%), the place of acquisition was uncertain. By region of birth, a higher proportion of migrants born in South or Central America (64%) were estimated to have acquired HIV prior to arrival. By contrast, a higher proportion of migrants born in Europe (76%) and the Pacific (70%) were estimated to have acquired HIV.

**Conclusion:**
The findings indicate that a substantial proportion of migrants living with HIV in Australia acquired HIV prior to migration. Therefore, Australia may be closer to the virtual elimination of HIV transmission than previous modelling has suggested. The results allow for targeted HIV testing and prevention measures to be developed in partnership with key migrant stakeholder groups.

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