

# THE PATH TOWARDS VIRTUAL ELIMINATION: AN EPIDEMIOLOGICAL REVIEW OF HIV IN WA FROM 2019-2023 AND INSIGHTS FOR FUTURE APPROACHES

## Authors:

CAITLIN WILSHIN<sup>1</sup>, BYRON MINAS<sup>1</sup>, AND SIÂN CHURCHER<sup>1</sup>

<sup>1</sup> *Communicable Disease Control Directorate, Western Australian Department of Health, Perth, Western Australia*

## Background/Purpose:

An examination of the HIV epidemiology in Western Australia (WA) from 2019-2023, with an overview of key trends in notifications, WA's linkage to care processes, and how the state's epidemiology informs policy alongside highlighting issues for virtual elimination.

## Approach:

HIV notifications data from 2019 to 2023 were sourced from the WA HIV Database and analysed by risk exposure, gender, place of birth and acquisition, stage of infection and viral load.

## Outcomes/Impact:

From 2019 to 2023, the number of HIV notification in WA decreased by 37% to 66 cases. In this period, Australian-acquired HIV notifications decreased by 50% to 22 cases in 2023, a trend which was mainly seen among men who have sex with men (25 to 11 cases). In contrast, the number of overseas-born HIV cases who acquired HIV overseas remained stable over this period (34 to 31 cases), representing nearly half (47%) of all new notifications in 2023. In 2023, 44% (n=29) of new HIV cases were diagnosed with late-stage infection, an increase from 38% (n=39) in 2019. In 2022 an estimated 98% of people living with HIV (PLHIV) on treatment had achieved viral suppression, exceeding the 95% HIV elimination target.

## Innovation and Significance:

The changing epidemiology in WA highlights considerations for the prevention and testing of people in WA, particularly for HIV acquired overseas, and for people living with HIV that are diagnosed late. Over the term of the 2019-2023 WA HIV Strategy, a considerable decrease in local HIV transmission was achieved, particularly among MSM. However, this decrease was not observed among people from overseas who acquired HIV overseas. Similarly, late diagnosed cases with high HIV viral loads represent a challenge in reducing WA's overall community viral load. Early detection remains pivotal, with WA having rapid linkage to treatment and growing antiretroviral options to improve adherence.

## Disclosure of Interest Statement:

None