

# Local Burden of Disease:

## HIV PREVALENCE



### Mapping HIV prevalence in sub-Saharan Africa between 2000 and 2017: background

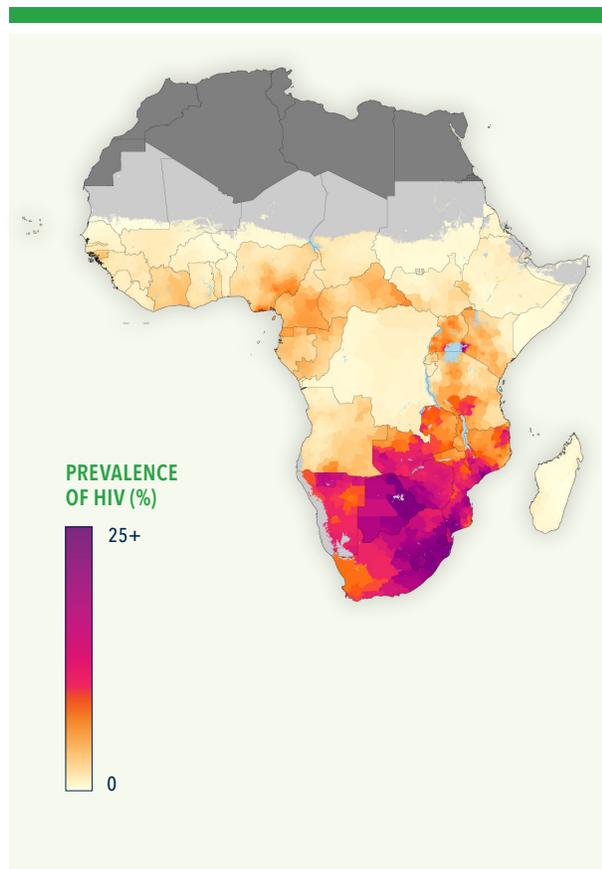
- HIV/AIDS remains the most common cause of death in sub-Saharan Africa. As of 2017, 71% of the world's HIV-positive population lived there.<sup>1</sup>
- In 2017, 34% of people living with HIV in East and Southern Africa and 60% in West and Central Africa were not currently on antiretroviral treatment.<sup>2</sup>
- Global spending on HIV in sub-Saharan Africa peaked in 2013 and has since declined, potentially compromising existing efforts to combat HIV.<sup>3</sup>

### Study relevance

Before this study, differences in subnational HIV prevalence (the percentage of people with HIV) and the number of people living with HIV (PLHIV) had not been examined comprehensively across sub-Saharan Africa at high spatial resolution.

### HIV prevalence

The map illustrates the great variation in prevalence that exists within countries. In 2017, most countries in sub-Saharan Africa had a more than two-fold difference in prevalence between second-level administrative subdivisions, such as districts or counties. In one-fourth of these subdivisions, the largest difference was more than five-fold.



**HIV PREVALENCE  
AMONG AGES  
15 TO 49,  
2017**

Countries not included in this analysis are shaded dark gray, and areas with fewer than 10 people per 1 x 1-km and classified as "barren or sparsely vegetated" are shaded light gray.

#### THE STUDY

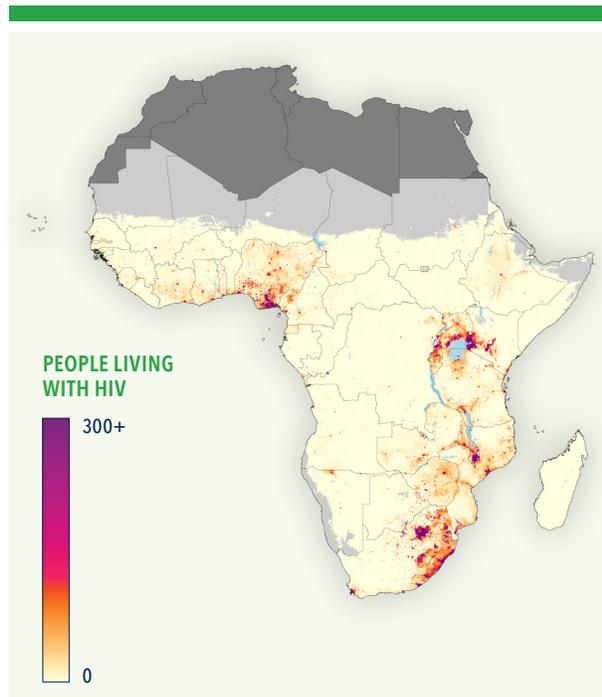
Dwyer-Lindgren, L. et al.  
Mapping HIV prevalence in sub-Saharan Africa between 2000 and 2017. *Nature*. May 2019.  
doi: 10.1038/s41586-019-1200-9

*"Changing the trajectory of HIV/AIDS in Africa requires that we continue to seek better ways to know the epidemic. This paper will support policymakers and health care providers in locating hotspots of HIV/AIDS at national and subnational levels, and will help guide smart investment of scarce resources for diagnosis, prevention, and treatment."*

- **Dr. John Nkengasong**, director of the Africa Centers for Disease Control and Prevention (Africa CDC)

## The number of people living with HIV

The spatial concentration of people living with HIV (PLHIV) varies greatly. While a large number of PLHIV are concentrated in a small number of areas, an equally large number are widely distributed in areas with lower spatial concentrations of PLHIV.



NUMBER OF  
PLHIV AMONG  
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## Policy Implications

Studies have shown that geographically targeted strategies are more efficient in preventing new cases of HIV using the same amount of resources.<sup>4,5</sup>

These local data provide a new tool for policymakers, program implementers, and researchers to use in assessing needs, efficiently targeting interventions, and ultimately bringing HIV infection under control in Africa.

## SOURCES

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## About IHME

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