Impact of an international HIV funding crisis on HIV infections and mortality in low- and middle-income countries: a modelling study

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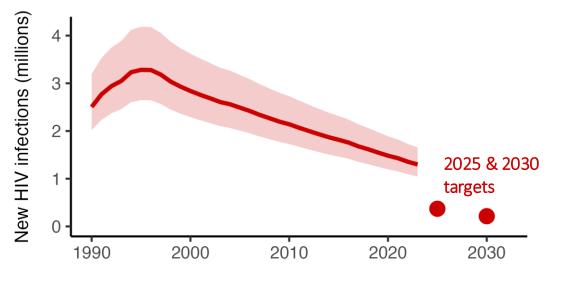
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Context in 2024: Remarkable progress in reducing the global burden of HIV

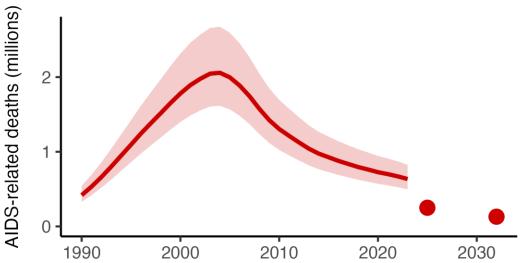




39% reduction in new infections and 51% reduction in AIDS-related deaths (2010 to 2023)

Continued reductions at historic rates could reach targets by 2035

Most progress has been in sub-Saharan Africa



Source: UNAIDS 2024 epidemiological estimates; https://aidsinfo.unaids.org



Significant cuts to foreign aid announced end 2024 and early 2025

Devex Newswire: The two major donor countries facing billions in aid cuts

Germany and the U.K. are slashing billions from aid. Plus, global gender equality setbacks threaten 2030 SDG targets.

By Helen Murphy // 11 September 2024

First development budget cuts announced: overhaul of grants for NGOs

News item | 11-11-2024 | 08:00

The government is reducing the budget for cooperation with NGOs from 2026. The government wants to simplify and sharpen the focus of policy.

Trump aid freeze disrupts global HIV/AIDS fight

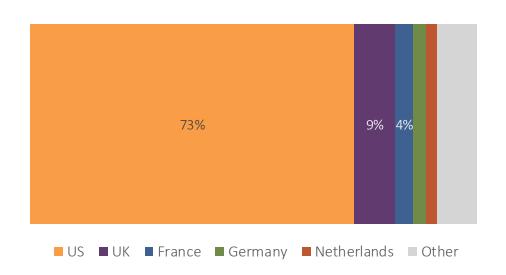




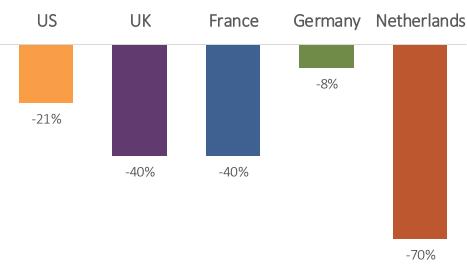
Significant cuts to foreign aid announced end 2024 and early 2025

FIVE COUNTRIES MAKE UP >90% OF INTERNATIONAL HIV FUNDING¹

% of international HIV spending by country



FUNDING CUTS COULD RESULT IN 24% CUT TO INTERNATIONAL HIV FUNDING



Anticipated funding cuts by 2026



Modelling global HIV funding cuts from 2025 onwards



Used 26 existing, country-validated, **Optima HIV** models



Within low- and middle-income countries (LMICs), these represent:

43%–50% of people living with HIV

49% of all reported international aid and 54% of all reported PEPFAR funding



Used Global AIDS Monitoring reporting (% international/PEPFAR) to estimate country-specific funding cuts



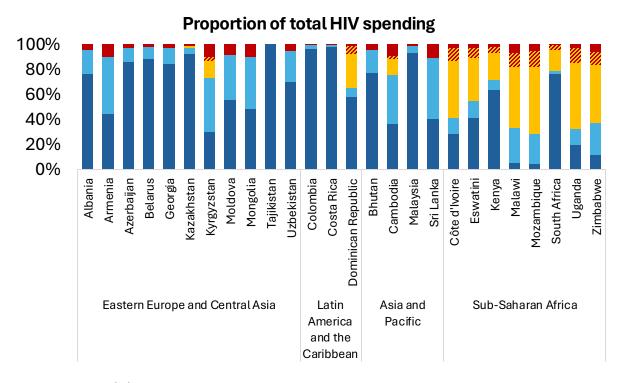
Outcomes **extrapolated to all LMICs** using multiplier methods based on modelled funding relative to reported global HIV funding in LMICs.







Vulnerability to funding cuts greatest in sub-Saharan Africa



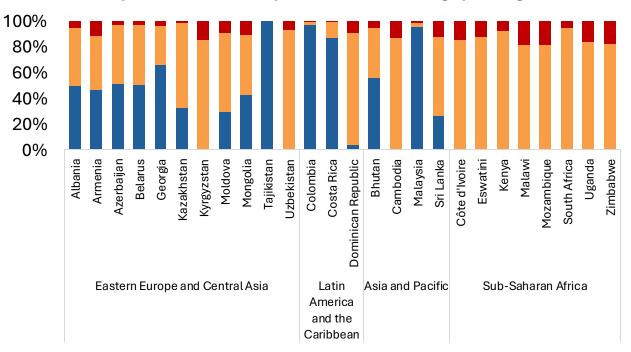
- Anticipated non-PEPFAR cuts
- Anticipated PEPFAR cuts vulnerable to earlier discontinuation
- Other PEPFAR vulnerable to discontinuation
- International spending continued
- Domestic spending

 Countries in sub-Saharan Africa are most exposed to international funding cuts



Vulnerability to funding cuts in all countries for prevention and testing





- HIV prevention and testing spending with anticipated proportional cuts
- HIV prevention and testing spending vulnerable to reallocation
- Continued HIV prevention and testing spending

- Countries in sub-Saharan Africa are most exposed to international funding cuts
- Globally, HIV treatment and facility-based testing will be prioritized as life-saving within national health systems
- HIV prevention and other testing services are more likely to be funded through international sources, and may experience the majority of cuts

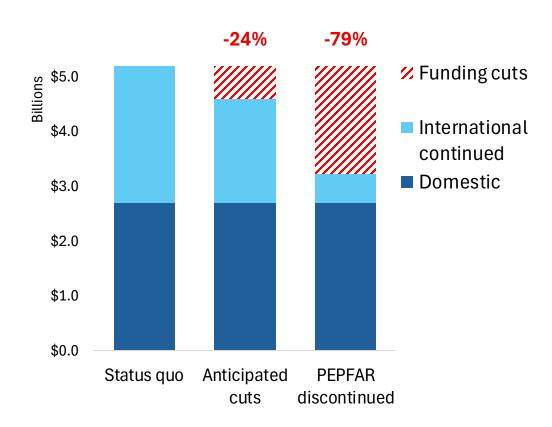
(*) **Spending includes** modelled HIV prevention, testing, and treatment support interventions, excluding facility-based testing and treatment:

Condom programs, community-based testing, HIV self-testing, HIV prevention and testing for key populations, needle and syringe programs, PrEP, treatment linkage, retention, and adherence programs, viral load monitoring, voluntary medical male circumcision



Funding scenarios modelled

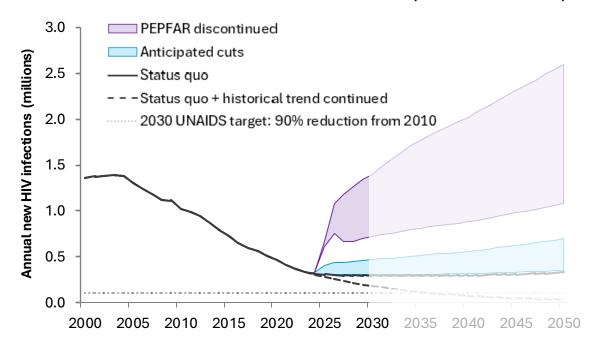
SPENDING IN 26 MODELLED COUNTRIES

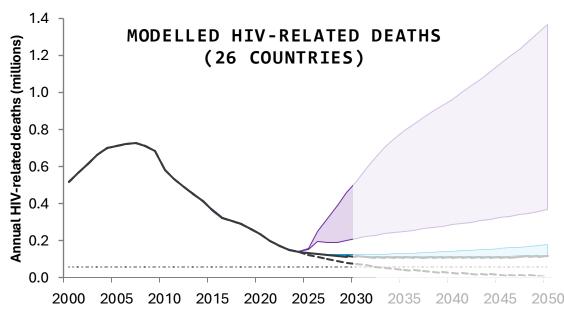


- Status quo: fixed spending on HIV testing and prevention + fixed proportion treated
- 2. Anticipated 24% cuts to international aid by 2026
 - Prevention and testing reduced by 24%*proportion of international funding received by country
 - Treatment and facility-based testing assumed to be maintained domestically
 - Modelled with and without mitigation
- 3. Immediate PEPFAR discontinuation plus anticipated cuts
 - Impacts to all HIV services including treatment and facility-based testing
 - Modelled with and without mitigation and recovery over 12-24 months

MODELLED NEW HIV INFECTIONS (26 COUNTRIES)







An inflection point for global HIV spending

Extrapolated global impact in lowand middle-income countries 2025-2030 compared to status quo

PEPFAR discontinued + anticipated cuts:

4.4–10.8 million additional infections depending on mitigation efforts & recovery

770,000–2.9 million additional deaths

Anticipated cuts:

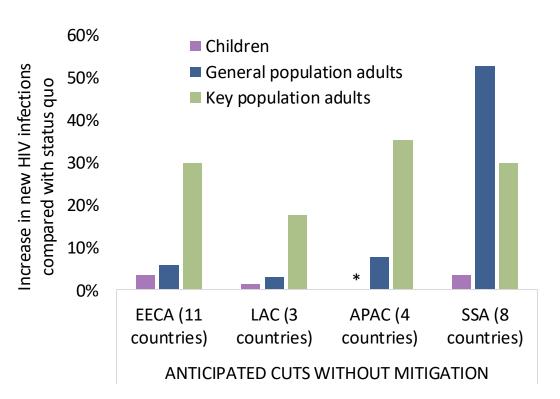
71,500–1.7 million additional infections (a potential 50% increase in new HIV infections over status quo)

5,000–61,000 additional deaths





Key populations experienced 1.3 to 6-fold higher relative increases in new HIV infections compared to other populations outside of sub-Saharan Africa



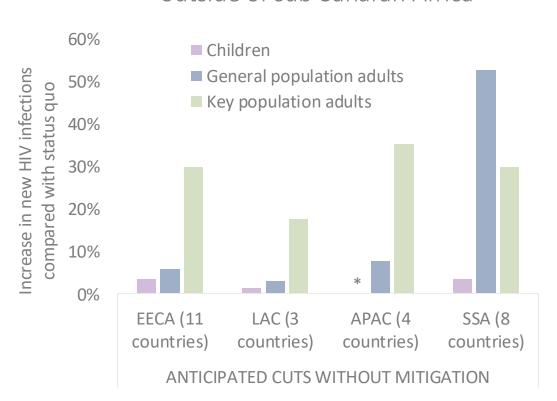
Status quo:

- SSA: HIV services reaching all adults based on higher HIV prevalence/incidence rates e.g.
 VMMC, condom distribution, and HIV adherence programs
- Other regions: most HIV prevention services are targeted to support key populations

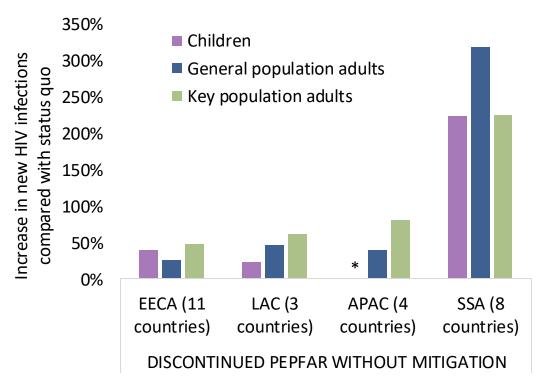




Key populations experienced 1.3 to 6-fold higher relative increases in new HIV infections compared to other populations outside of sub-Saharan Africa

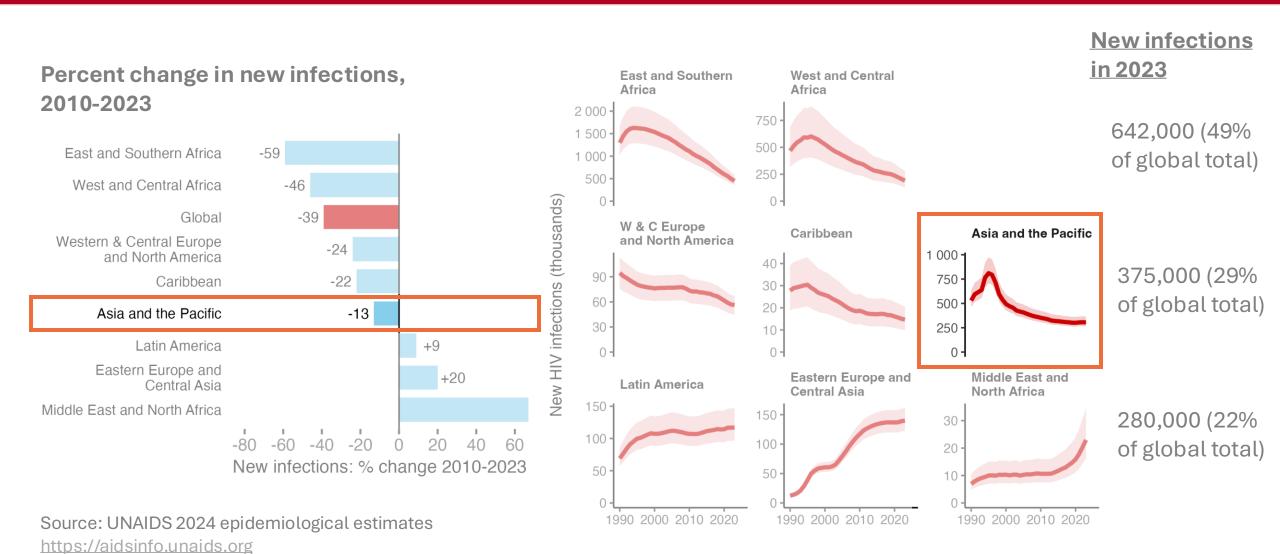


If PEPFAR is discontinued with no mitigation, 880,000 new HIV infections and 120,000 deaths projected in **children** across all LMICs 2025-2030





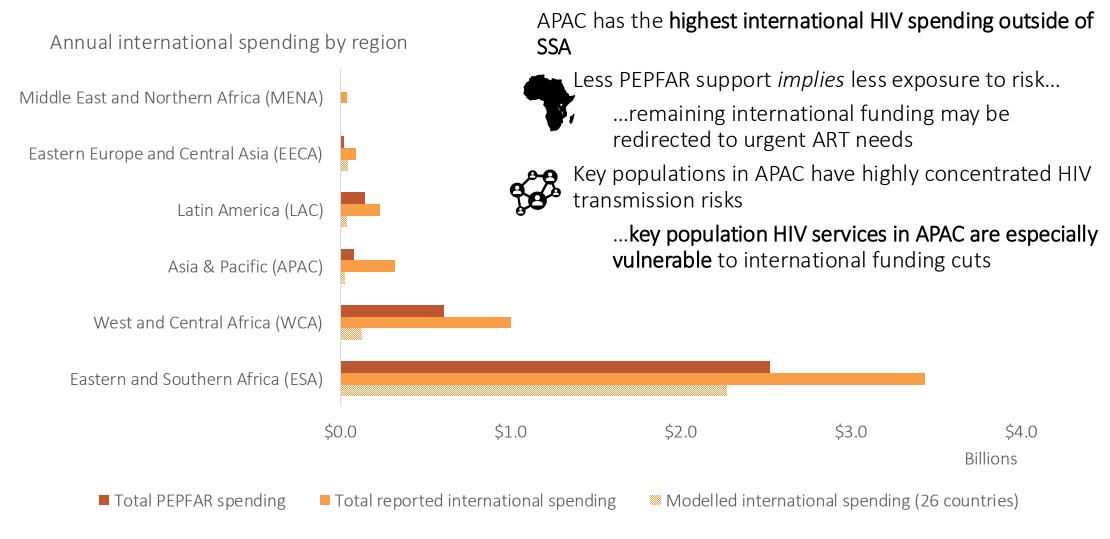
In context: diverging progress across global regions



CROI 2025

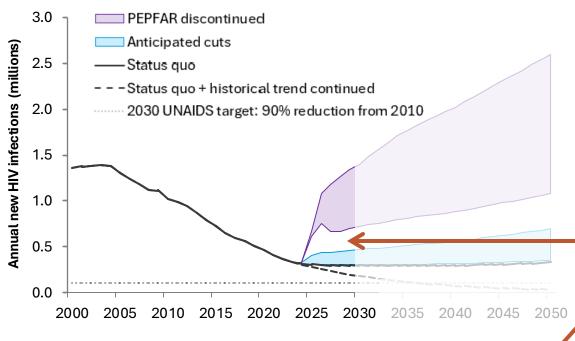


HIV funding risks for the pacific?



MODELLED NEW HIV INFECTIONS (26 COUNTRIES)





1.4 | MODELLED HIV-RELATED DEATHS (26 COUNTRIES) | 1.0 | 0.8 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0

Unpredictable fiscal space

Latest budget proposals estimated here

Trump's proposed budget details drastic cuts to biomedical research and global health

CDC takes a bigger hit than expected; support for international HIV, malaria, TB, and vaccine efforts zeroed out

2 JUN 2025 · 4:25 PM ET · BY SCIENCE NEWS STAFF

<u>The Department of State request</u> would cut funding for global health programs by 62%, from \$10 billion to \$3.8 billion. That includes a proposed 30% reduction in funding, to \$2.9 billion, for the President's Emergency Plan for AIDS Relief (PEPFAR), one of the world's



Critical need to maintain continuity of HIV services

Study limitations most likely to lead to under-estimation of impact

Other modelling has projected impacts with the same order of magnitude

An abrupt or severe funding reduction for HIV could reverse decades of gains, particularly in sub-Saharan Africa

- Other regions including Asia & Pacific highly vulnerable to reallocation of international funding
- Globally, key populations and children are likely to be disproportionately affected by funding cuts

Marginal or carefully managed funding cuts could potentially be absorbed without substantial increases in new HIV infections and deaths



Thank you

Additional queries: Rowan Martin-Hughes, <u>rowan.martin-hughes@burnet.edu.au</u>

Further information:

ten Brink D, Martin-Hughes R, Bowring A, Wulan N, Burke K, Tidhar T, Dalal S, Scott N. Impact of an international HIV funding crisis on HIV infections and mortality in low-income and middle-income countries: a modelling study. Lancet HIV. 2025;12(5):e346-e54.









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