

Estimating the potential impact of HIV response disruptions



The recent decision by the US Government to pause foreign aid is having a profound impact on the HIV response. Modelling the impact of possibly temporarily or permanently discontinuing HIV response activities currently funded by the US Government is important to quantify the human cost of policy decisions for advocacy efforts and to support governments and communities in prioritizing and acting quickly to ensure continuity of life-saving services. UNAIDS and other partners have been releasing data on the projected impacts to help countries and partners take action. This note explains why there might be differences in the projected impact when using different models.

KEY MESSAGES

- Different models, applied to different countries, over different time frames, and assuming different future service delivery scenarios, will produce different estimates of the impact—especially as service delivery stops, then some aspects resume. However, while estimates of the impact of the financial cuts to the United States President’s Emergency Plan for AIDS Relief (PEPFAR) have varied according to assumed future scenarios, the key messages are consistent: **Millions of lives will be lost and millions of new infections are anticipated if the PEPFAR-funded programmes are permanently discontinued.**
- While some US funding for HIV programmes has been maintained, communities and national HIV programmes are taking steps to mitigate the impact of the funding cuts. As a result, the modelled estimates do not represent the true situation at any given time, but rather hypothetical scenarios of what would happen under various alternative scenarios that collectively should be avoided or mitigated.
- The short-term impacts on HIV service delivery and programme coverage will become clearer as countries report on their respective situations in the coming weeks. Impacts on health, livelihoods and HIV transmission will accumulate over longer time horizons. These may not be directly measurable or observable in the space of weeks or months, but models illustrate how short-term programme and policy disruptions have long-term consequences.

UNAIDS PROJECTED ESTIMATES

The permanent discontinuation of HIV programmes currently supported by PEPFAR (including treatment and prevention) would, between 2025 and 2029, lead to

- An **additional 6.6 million new HIV Infections:**
 - About 2300 additional new HIV infections per day
- An **additional 4.2 million AIDS-related deaths**
 - Over 600 additional AIDS-related deaths per day

These estimates were produced using country-specific Goals models produced by Avenir Health. This represents an update of initial rapid modelling estimates, relying on more detailed epidemiological and programme funding data for each country (see below for further details).

METHODS

The Goals model was used to estimate the potential impact of the funding cuts by country for each of the 55 countries supported by PEPFAR, incorporating the underlying demographic and epidemiological situation.¹ It estimated the people reached in national programmes based on the proportionate HIV funding provided by PEPFAR in that country, an important update to the assumptions made in the initial workbook calculations applied to PEPFAR programme totals (described above).

These country-specific models have subsequently been used in a UNAIDS Cost of Inaction analysis and in regional estimates.

The projections included three scenarios: (1) countries maintain 2023 coverage levels of treatment and prevention; (2) countries permanently discontinue all PEPFAR supported activities; and (3) a waiver allowing treatment and prevention of vertical transmission programmes to continue.²

Initial UNAIDS calculations released in February 2025

In February 2025, UNAIDS and partners produced rapid calculations of the potential impact of a complete cut in both HIV prevention and treatment services as a result of the stop work order for PEPFAR support on AIDS related deaths and new HIV infections between 2025 and 2029. This initial estimate suggested the cuts could result in an additional 6.3 million AIDS-related deaths, 3.4 million additional children orphaned by AIDS, 350 000 additional new HIV infections among children and 8.7 million additional new HIV infections.

The calculations used a mortality rate applied to the number of people supported through PEPFAR treatment programmes to estimate the number of AIDS-related deaths. Similarly, the number of people reached by PEPFAR prevention programmes was applied to an incidence rate to estimate the impact on new HIV infections. These estimates are for 2025–2029 in the 55 countries supported by PEPFAR.

¹ Stover J, et al. Modeling the epidemiological impact of the UNAIDS 2025 targets to end AIDS as a public health threat by 2030. *PLoS Med.* 2021;18(10):e1003831. doi: 10.1371/journal.pmed.1003831.

² For information by country or different regions, contact strategicinformation@unaids.org.

OTHER STUDIES

A number of other studies have also projected the potential impacts of ending PEPFAR and other international aid for HIV programmes without transition or mitigation.

For example, Avenir Health summarizes the impact of the U.S. foreign aid cut on multiple public health conditions. For the impact on HIV, the study uses the results from the Goals model, described above, along with five other HIV models that collaborate in the HIV Modelling Consortium. The authors calculate an average impact estimate across the models for each country. This study provides slightly different estimates as they average across HIV models but are consistent in their overall conclusions with those reported by UNAIDS from the Goals model. This paper summarizes the impact from 2025 to 2040.³ A summary of the HIV models and their attributes is available from the HIV Modelling Consortium (<http://hivmodelling.org/hiv-models>).

In March 2025, *Lancet HIV* published a study authored by the *Burnet Institute* that uses the Optima model to project the discontinuation of international aid (beyond PEPFAR) on HIV epidemic trends. This model is included in the HIV Modelling Consortium study mentioned above. Their calculations are based on 26 countries, of which 14 are PEPFAR supported countries and the remaining 12 are countries with lower HIV prevalence. The study also considered planned funding cuts in addition to those from PEPFAR, including funding cuts by five donor countries comprising 90% of international aid for HIV. The findings are extrapolated to all low and middle income countries and cover the period from 2025 to 2030.⁴

New projections will be developed as data from countries become available. This will allow national governments and modellers to better estimate the impact of the programme disruptions caused by these funding cuts and service delivery stoppages.

³ https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5199076.

⁴ Brink DT, Rowan MH, Bowring AL, Wulan N, Burke K, Tidhar T. 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;0:0: March. [https://www.thelancet.com/journals/lanhiv/article/PIIS2352-3018\(25\)00074-8/abstract](https://www.thelancet.com/journals/lanhiv/article/PIIS2352-3018(25)00074-8/abstract).

Comparison of projected impact

Summary of results from different models

	Workbook	Goals model from Avenir Health	Optima model from Burnet Institute	HIV Modelling Consortium
Period covered	2025–2029	2025–2029	2025–2030	2025–2040
Countries covered	55 PEPFAR supported countries	55 PEPFAR supported countries	26 countries, 14 of which were supported by PEPFAR	55 countries used for Goals, 13 for Optima and 1–4 countries for the other models
Assumed change	All PEPFAR supported activities are permanently discontinued	All PEPFAR supported activities are permanently discontinued	All PEPFAR and other funding sources are reduced	Complete cessation of US funding and programmes
Additional new HIV infections	8.7 million	6.6 million	4.4 million–10.7 million	15 million
Additional AIDS-related deaths	6.3 million	4.2 million	0.8 million to 2.9 million	28 million
Comments	This calculation used the number of people reached with services to determine impact	This model used the proportion of total HIV expenditure paid for by PEPFAR to reduce prevention and treatment coverage	Results also provided if mitigation efforts are undertaken	This model used the averages from six HIV models (including Goals and Optima).

For further information, see <https://www.unaids.org/en/impact-US-funding-cuts>.



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