

What effect are HIV programs having in Africa ?

A quick guide

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There are various HIV interventions being delivered currently in East, Central, Southern and West Africa

What effect are they having ?

Here we consider just 4 main interventions

- **Antiretroviral therapy** (ART) to treat people living with HIV, which also acts to prevent onwards transmission, including to babies of pregnant and breastfeeding women
- Use of antiretroviral drugs in people without HIV to prevent HIV acquisition (pre-exposure prophylaxis; **PrEP**)
- Voluntary Medical Male Circumcision (**VMMC**) to reduce risk of HIV acquisition in men
- Making **condoms** freely available in public places

We use a well-established simulation model (HIV Synthesis) to estimate what would be the effects of stopping some of these interventions

<http://hivmodeling.org/hiv-models>

These simulations are done over a range of setting scenarios across the region – not for one specific country – they broadly represent patterns seen in the region as a whole.

The point to note from the graphs on the following slides are the relative changes in numbers of outcomes, such as new infections and HIV deaths, not the absolute numbers.

Illustration of progress to date for HIV related deaths in Africa

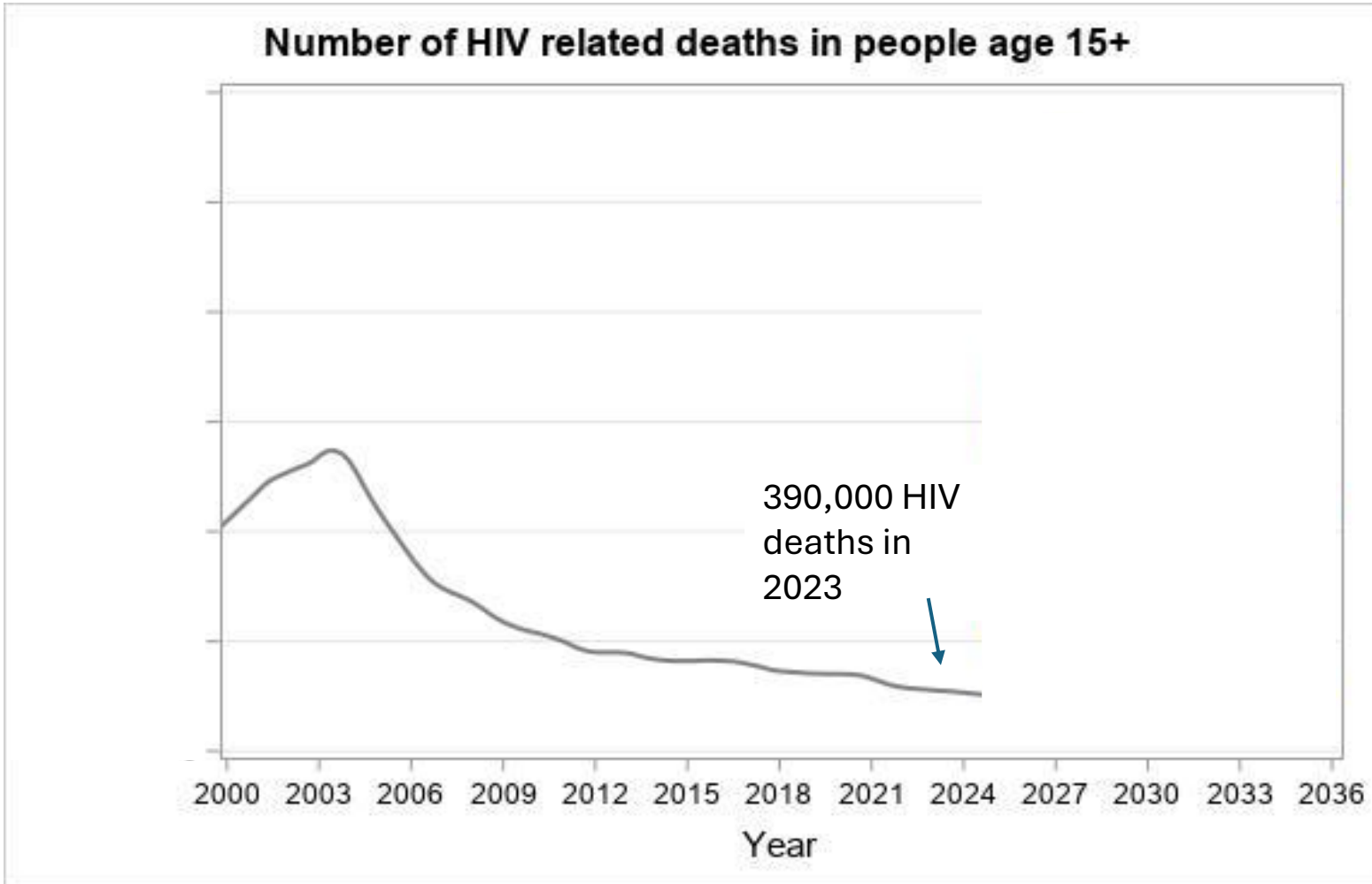


Illustration of progress to date in incidence of new HIV infections Africa

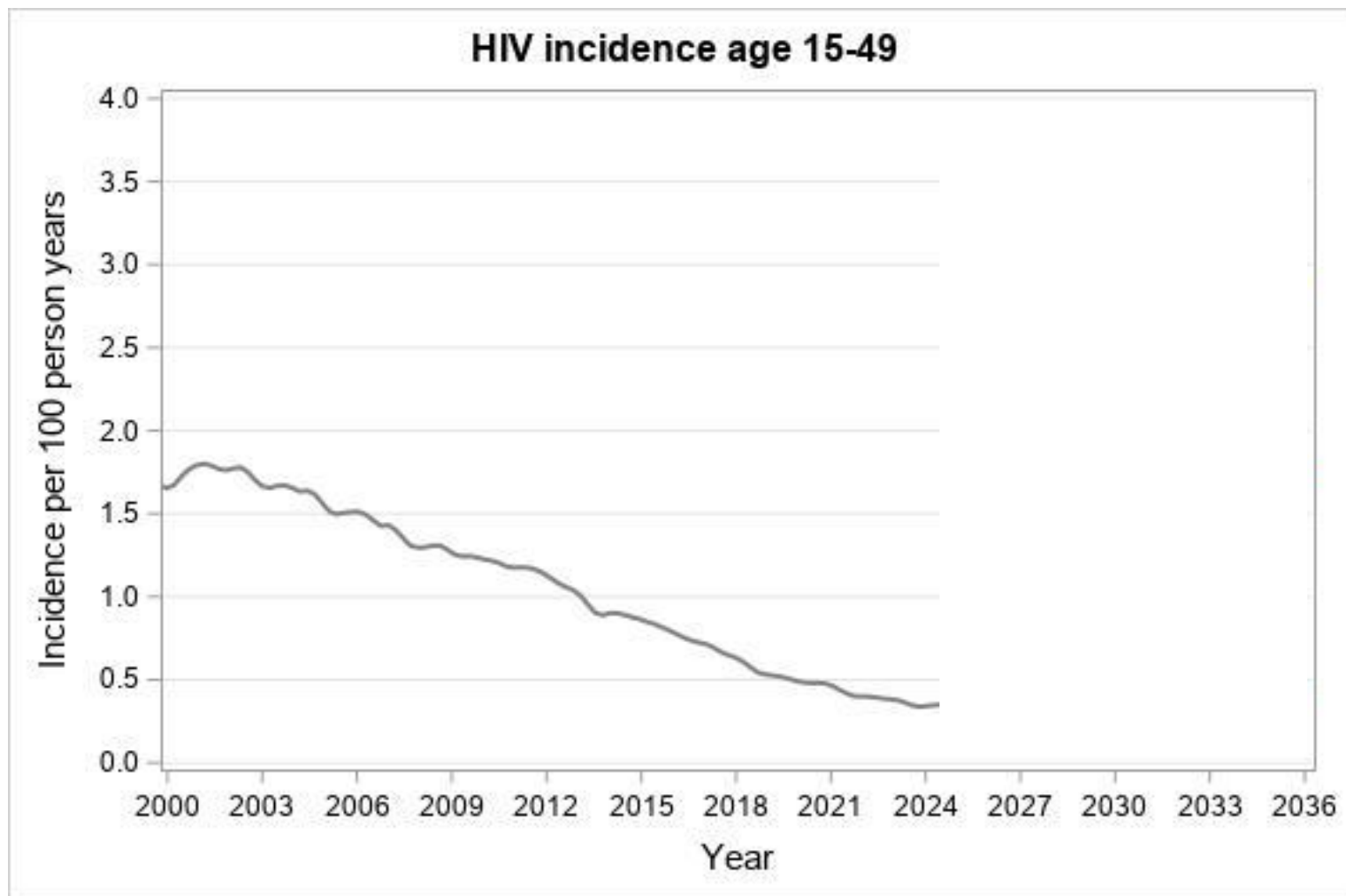
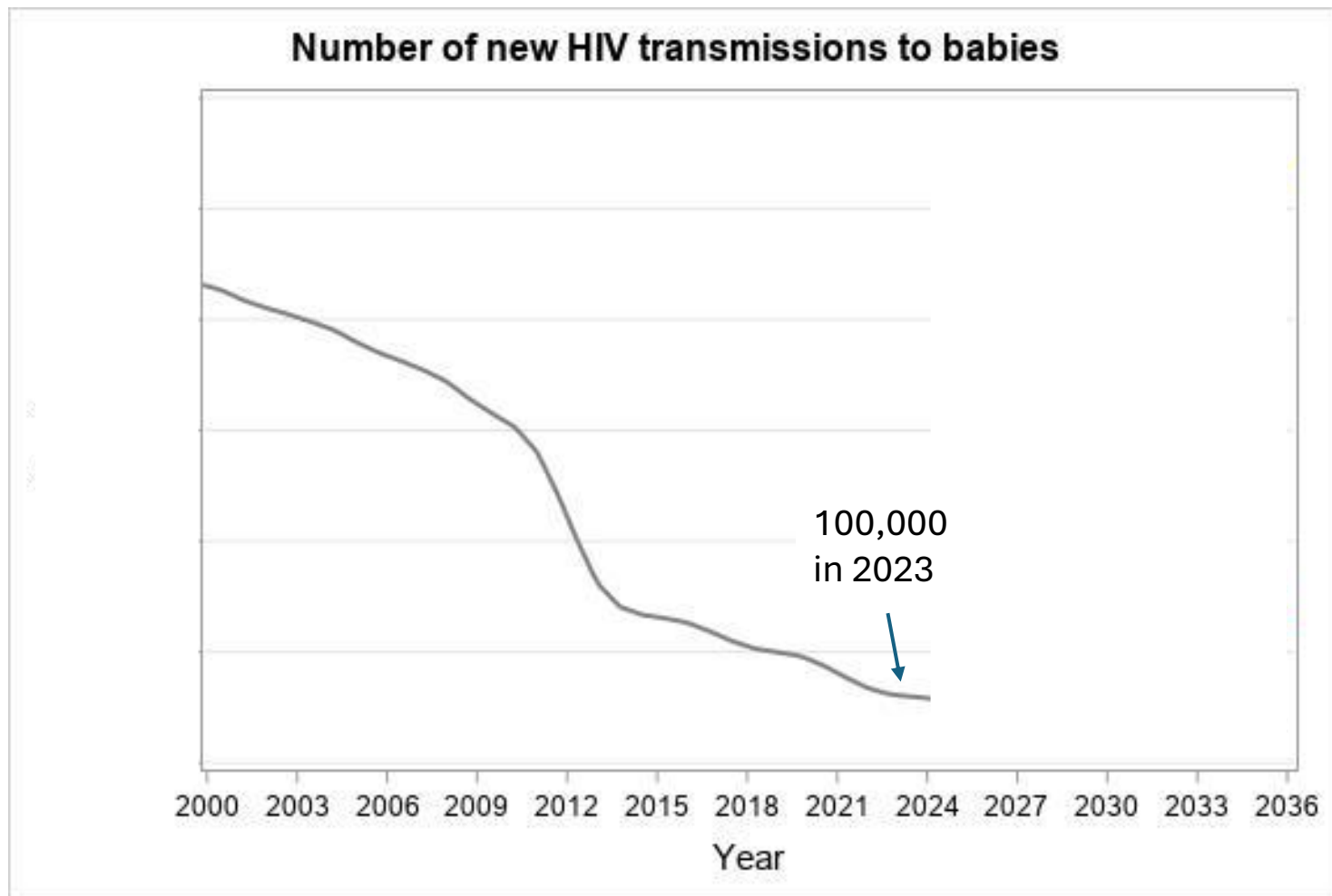


Illustration of progress to date in new HIV transmissions to babies in Africa

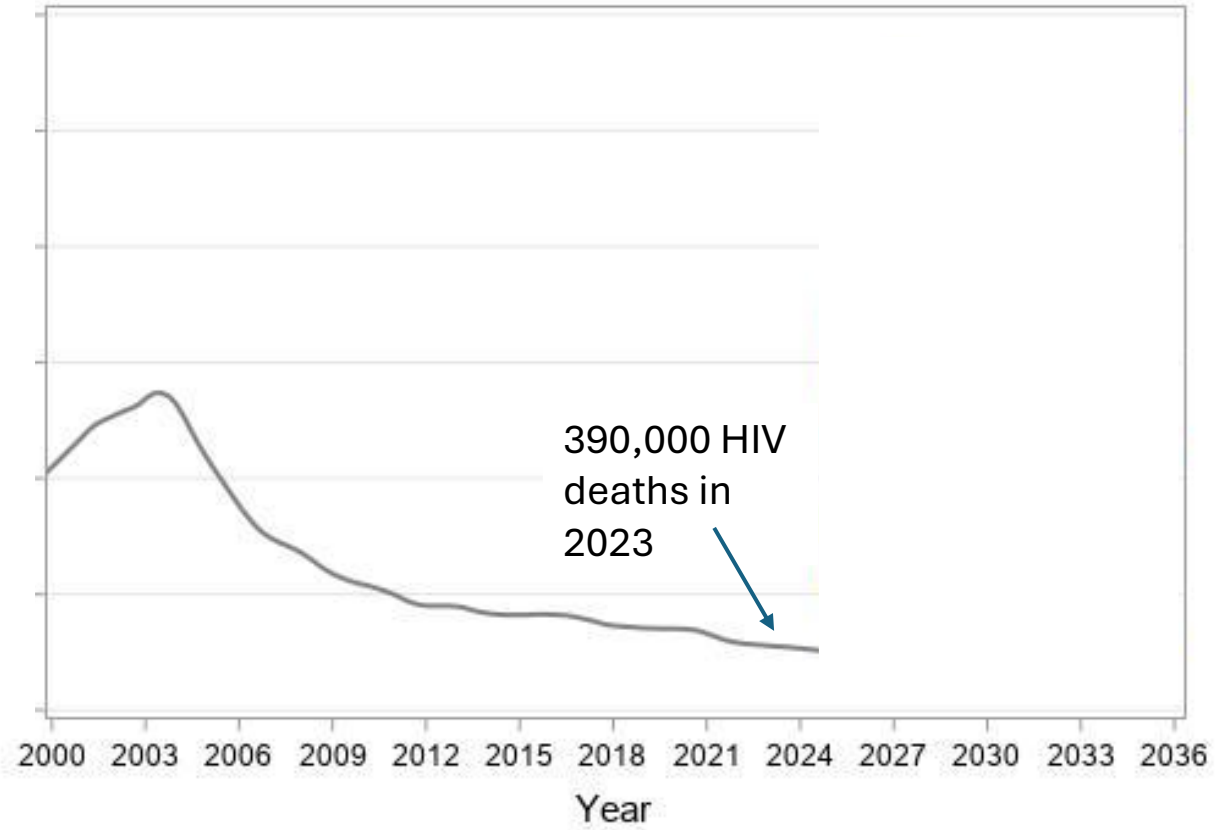


To illustrate the effects interventions are currently having we consider **effects over 10 years to 2035 of removing interventions in 2025**

We compare:

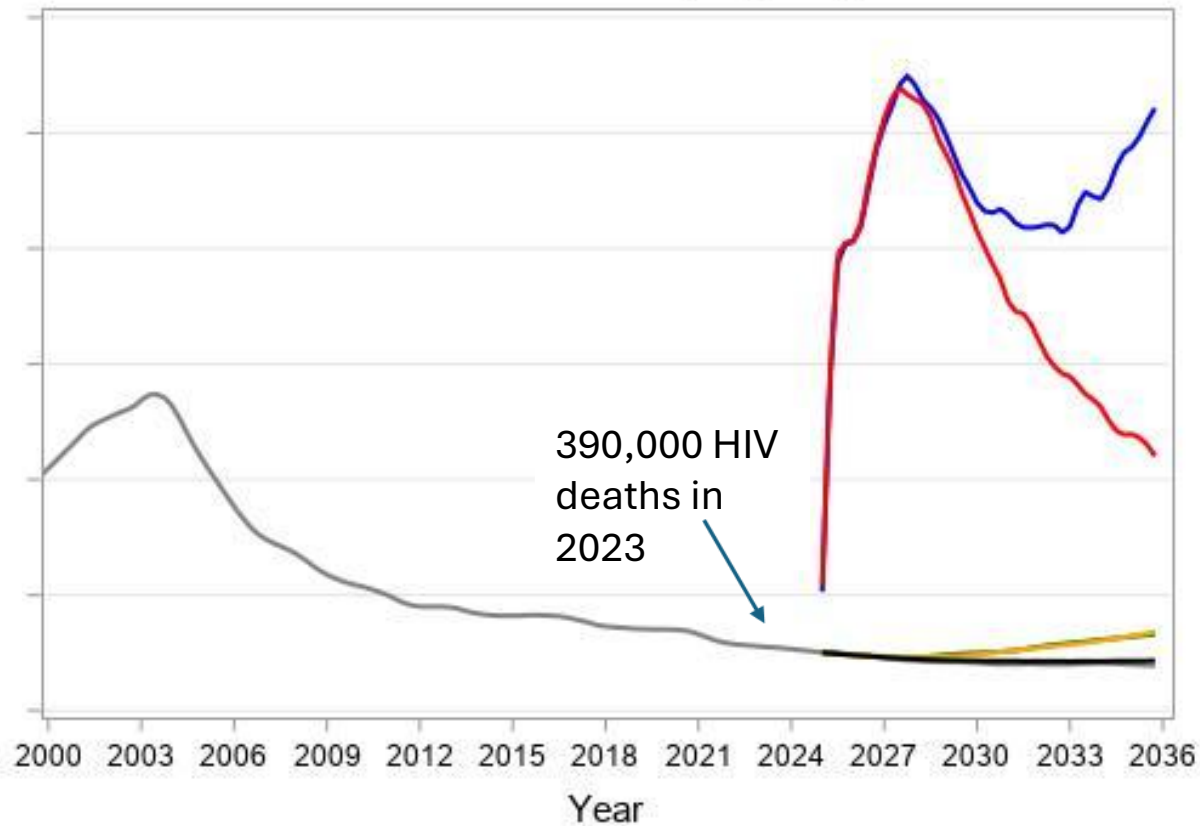
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Number of HIV related deaths in people age 15+



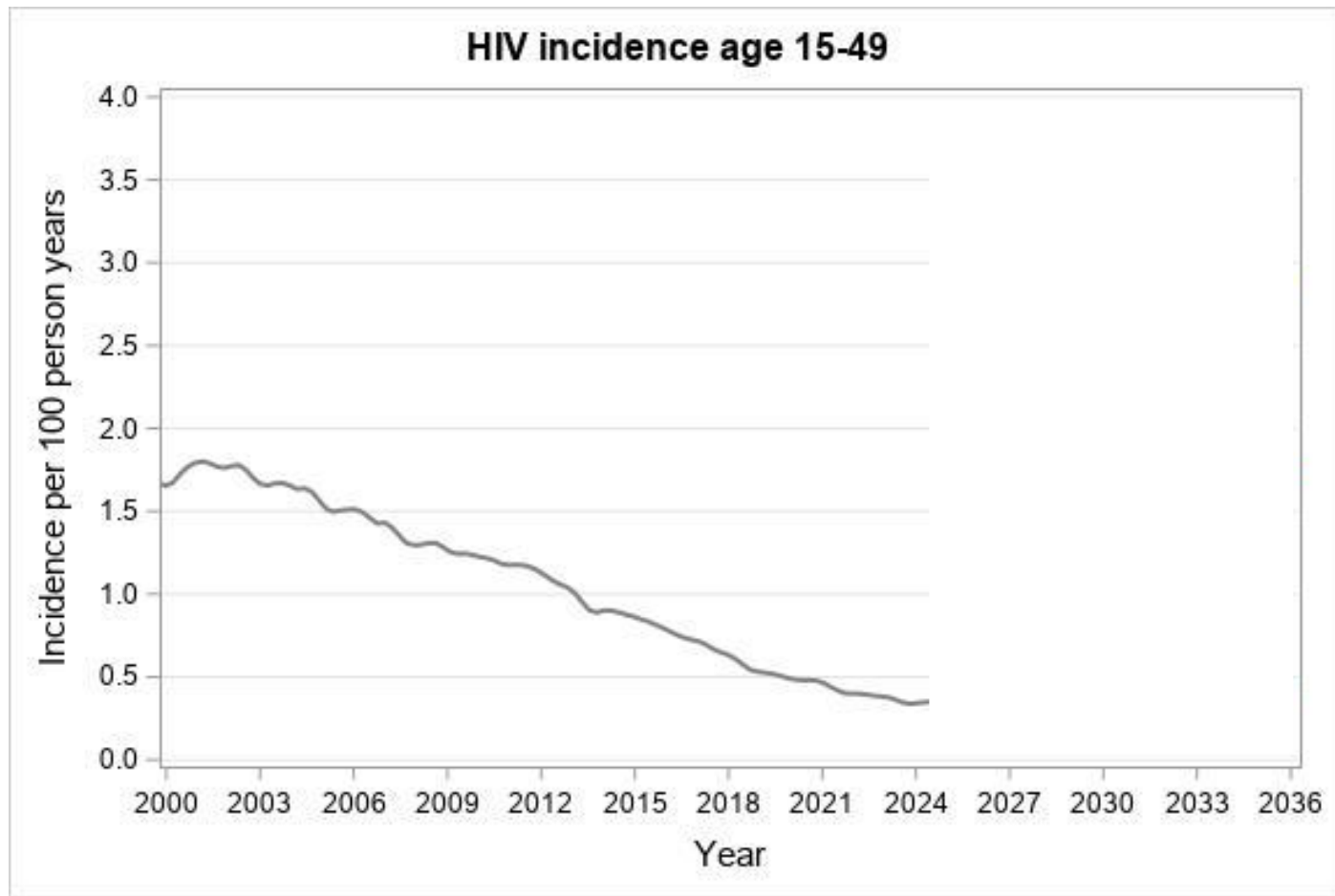
This graph shows the trend in the number of HIV related deaths as shown earlier

Number of HIV related deaths in people age 15+

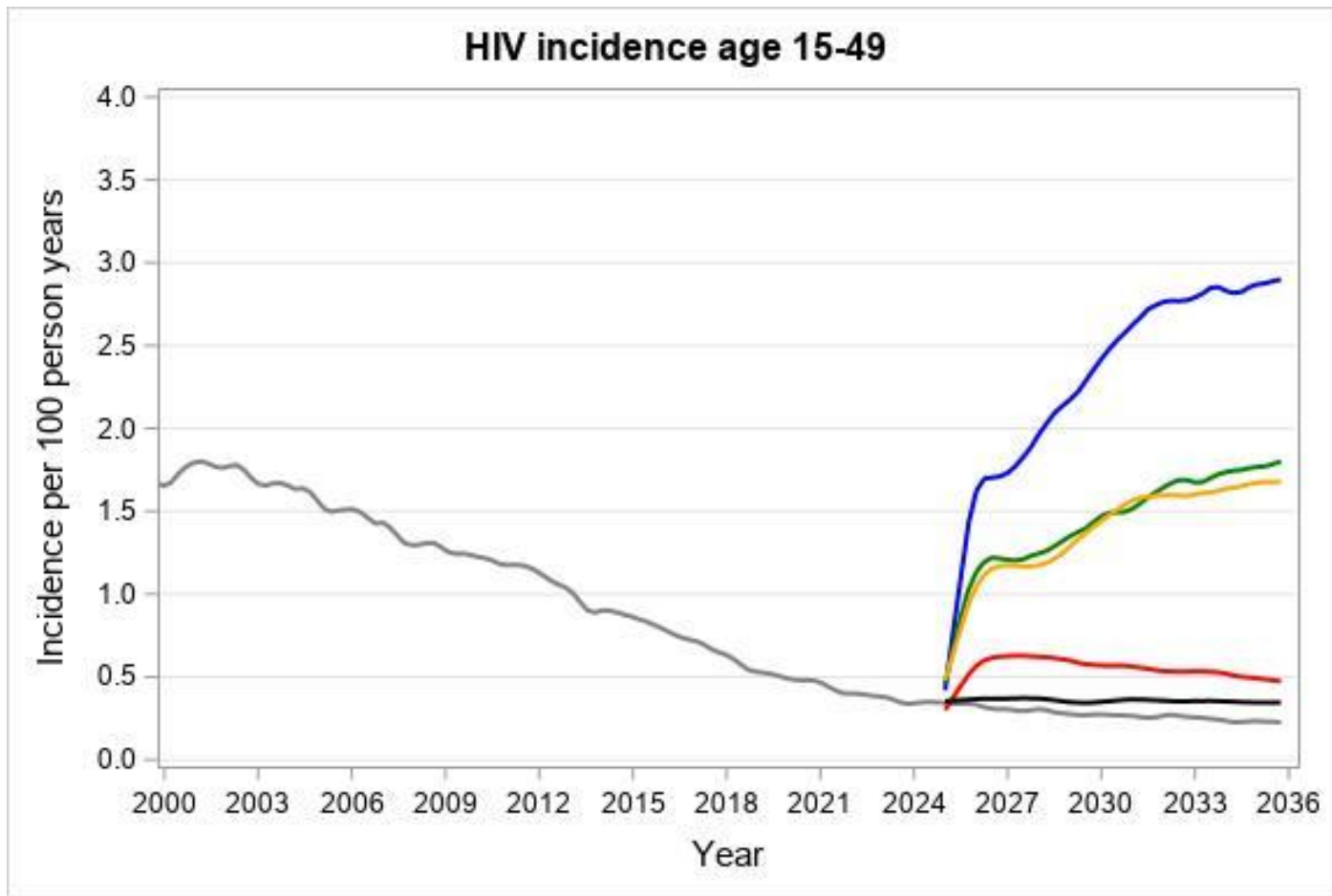


Now we can see the impact of removing the various interventions on HIV-related deaths

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This graph shows the trend in the incidence of new HIV infections as shown earlier

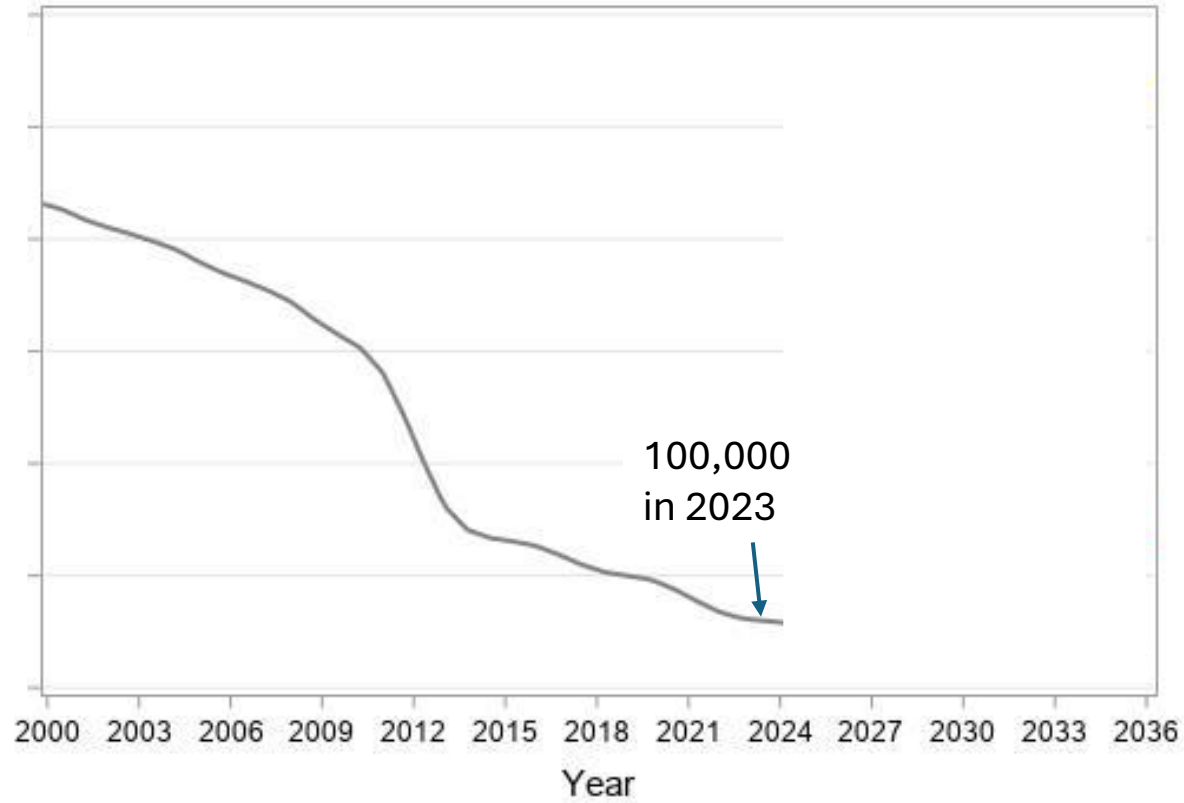


Now we can see the impact of removing the various interventions on HIV incidence

Note: In some countries PrEP use is relatively high and the impact of removing it will much greater.

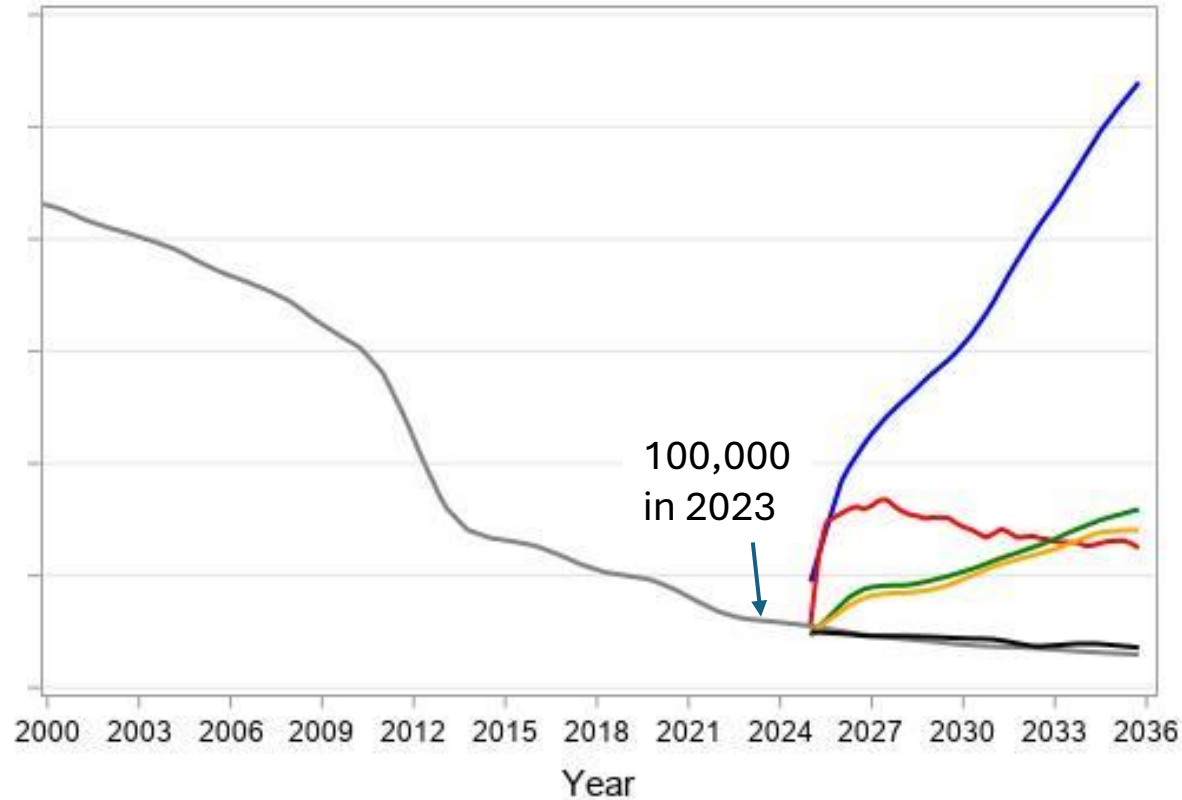
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Number of new HIV transmissions to babies



This graph shows the number of new HIV transmissions to babies as seen earlier

Number of new HIV transmissions to babies



And finally the impact of removing the various interventions on the number of new transmissions to babies

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This is just a quick guide to illustrate what effect HIV programs are having in Africa

email andrew.phillips@ucl.ac.uk if you would like further details of methods.

