

Metrics for Epidemic Transition: A glossary

Following the 2016 UN High-Level Meeting on HIV/AIDS, UNAIDS undertook work to derive a better definition of what “epidemic control” might look like and how it might be measured. It turns out that out saying the era of seeking the “end of the AIDS epidemic”—a phrase from a few years back—has come to an end. It’s rhetorically powerful but tricky to pin down what this means. Countries and communities need better, more precise ways to track progress. Funders need this information too, in order to see impact and sustain confidence in the effort. With great global diversity in incidence and mortality rates, worldwide measures obscure progress and challenges. The table below summarizes the work to date on identifying metrics that make sense. Civil society must weigh in on what matters to us, which of these terms is meaningful and how to minimize the potential for manipulation and misinterpretation.

| | STATUS | IN PLAIN LANGUAGE | PROS | CONS |
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| Incidence rate per 1,000 uninfected | Existent, one of the Sustainable Development Indicators. | Out of 1,000 people, how many acquired HIV over a given time period (usually a year)? | Compares the number of new infections to total deaths in an HIV population. | Incidence is hard to estimate or routinely measure with confidence. |
| AIDS-related mortality rate | Existent, widely used. | Out of 1,000 people living with HIV, how many died of AIDS-related causes over a given time period (usually a year)? | Compares the number of new infections to total deaths in an HIV population. | Measures a late-stage indicator of disease response. Many people die of AIDS-related causes yet this isn’t listed as the cause of death, nor is an autopsy performed or a death certificate issued. |
| Percent change in new infections from 2010 baseline | Adopted at the UN High-Level Meeting. | Are more or fewer people getting diagnosed with HIV compared to ten years ago? This calculates the percent change. | Simple to explain the concept and how it is calculated. | Hard to calculate with confidence. Very few countries have population-wide incidence measures from 2010; incidence is hard to estimate with confidence. |
| Percent change in AIDS deaths from 2010 baseline | Adopted at the UN High-Level Meeting. | Are more or fewer people dying from AIDS-related causes today, compared to 10 years ago? This calculates the percent change. | Simple to explain the concept and how it is calculated. | Measures a late-stage indicator of disease response. Many people die of AIDS-related causes yet this isn’t listed as the cause of death, nor is an autopsy performed or a death certificate issued. |
| Ratio of incidence to prevalence (IPR) | Proposed. | Compares the number of new diagnoses with the number of people living with HIV. | Measuring IPR is a clear way to track whether epidemic levels of new diagnoses are still ongoing. It’s considered “highly relevant” to measures of epidemic transition by UNAIDS. An IPR of 0.03 would mean the epidemic will decline over time. | IPR is designed as a population-wide measure, and not to be disaggregated by age, sex, sub-geography. |
| Ratio of incidence to mortality (MR) | Proposed. | Compares the number of new infections to total deaths in an HIV population. | UNAIDS says this can be used by countries to identify when AIDS-related health care costs can be expected to decline. An IMR of less than one would mean the size of the population of PLHIV is getting smaller, so health costs will go down. | The size of the population of PLHIV can go down for the wrong reasons: AIDS-related illness, TB, lack of access to ART. IMR only works if there’s a measure of access to, coverage of and virologic suppression on ART for PLHIV. |