



**Sierra Leone**

**HIV Epidemiology Report  
2016**



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## Summary Report for 2015

|  |                                       |        |
|--|---------------------------------------|--------|
| Number of people living with HIV                   | Total*                                | 50,882 |
|  | Females*                              | 30,438 |
|  | Males*                                | 20,444 |
|  | Children <15*                         | 4,398  |
| People newly infected with HIV in 2015 (estimated) | Total*                                | 2,470  |
|  | Total Females*                        | 1,401  |
|  | Total Males*                          | 1,069  |
|  | Children <15*                         | 304    |
| AIDS related deaths in 2015                        | Total*                                | 2,505  |
|  | Total Females*                        | 1,154  |
|  | Total Males*                          | 1,351  |
|  | Children <15*                         | 333    |
| ART  | Adults in need*                       | 27,582 |
|  | Adults receiving <sup>+</sup>         | 13,466 |
|  | Children in need*                     | 1,898  |
|  | Children receiving <sup>+</sup>       | 575    |
|  | ART Coverage**                        | 30%    |
| PMTCT  | Pregnant women in need*               | 3,854  |
|  | Pregnant women receiving <sup>+</sup> | 3,212  |
|  | PMTCT Coverage                        | 83.4%  |
| Rate   | Incidence*                            | 0.40   |
|  | Prevalence (15+)*                     | 1.25%  |

**Table 1: Summary Table of 2015 Epidemiological Data for Sierra Leone**

\* Value gathered from Spectrum

<sup>+</sup> Value gathered from programmatic data

\*\* Based on estimated number of all PLHIV

## **Executive Summary**

- Despite decreasing incidence rates, the estimated number of PLHIV decreased in 2015. This indicates high mortality rate among PLHIV
- Females aged 15 – 19 are most vulnerable to HIV transmission; this is a concern given the increased reports of teenage pregnancy and sexual gender based violence since 2014
- ART coverage remains low at 30%, with paediatric ART coverage at 13% (for all PLHIV)
- PMTCT coverage of 83% is laudable but quality monitoring of option B+ must be upheld in order to ensure quality service delivery
- Although total AIDS related deaths are decreasing, AIDS related deaths among males is estimated to be increasing
- New infections and deaths averted continue to increase, which can be attributed to strengthened HIV programmes

## **Background**

Since the first case of AIDS reported in Sierra Leone in 1987, the Government of Sierra Leone has taken great efforts to ensure adequate programs and policies are in place to address the epidemic within the country. Part of these efforts includes routine and rigorous monitoring and evaluation of these programs to ensure their continued efficacy and effectiveness. Although programmatic data is gathered every year, the most recent behavioural and epidemiological study related to HIV and AIDS is from the 2013 Demographic Health Survey<sup>1</sup>, the 2014 ANC Sentinel Surveillance report and the 2013 Bio-Behavioural Sentinel Survey. This information provides valuable insight into the state of the epidemic and the actions that must be taken in order to “Get to Zero” in a post-Ebola era in Sierra Leone.

## **Purpose**

This document summarizes the epidemiological findings from the programmatic data collected for 2015 and the HIV estimations produced for the 2016 Global AIDS Response Progress Report (GARPR).

## **Methodology**

Programmatic data was collected from the facilities and reported to the regional and national level for complete aggregation. The HIV estimations were produced using the “Spectrum v5.411”, an epidemiological software provided by UNAIDS.

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<sup>1</sup> Sierra Leone Demographic Health Survey 2013, accessible at <http://dhsprogram.com/pubs/pdf/FR297/FR297.pdf>

## Epidemiological Estimates

Table 3 summarizes the estimates produced by EPP/Spectrum for 2015.

| Indicator                          | Estimated Value |
|------------------------------------|-----------------|
| HIV Population (Adults + Children) | 50,885          |
| HIV Population (Adults 15+)        | 46,486          |
| HIV Population (Children)          | 4,399           |
| Prevalence Adult (15+)             | 1.25            |
| New HIV infections- Adult          | 2,166           |
| New HIV infections- Children       | 304             |
| Need for ART- Adult (15+)          | 27,594          |
| Need for ART- Children             | 1,894           |
| Mothers needing PMTCT              | 3,854           |
| AIDS orphans                       | 22,870          |
| Annual AIDS deaths                 | 2,502           |

Table 2: Key HIV Estimates for 2015

During 2015, it is estimated that there are 50,885 people living with HIV in Sierra Leone, over half of which are female over the age of 15. Figure 1 illustrates the HIV population.

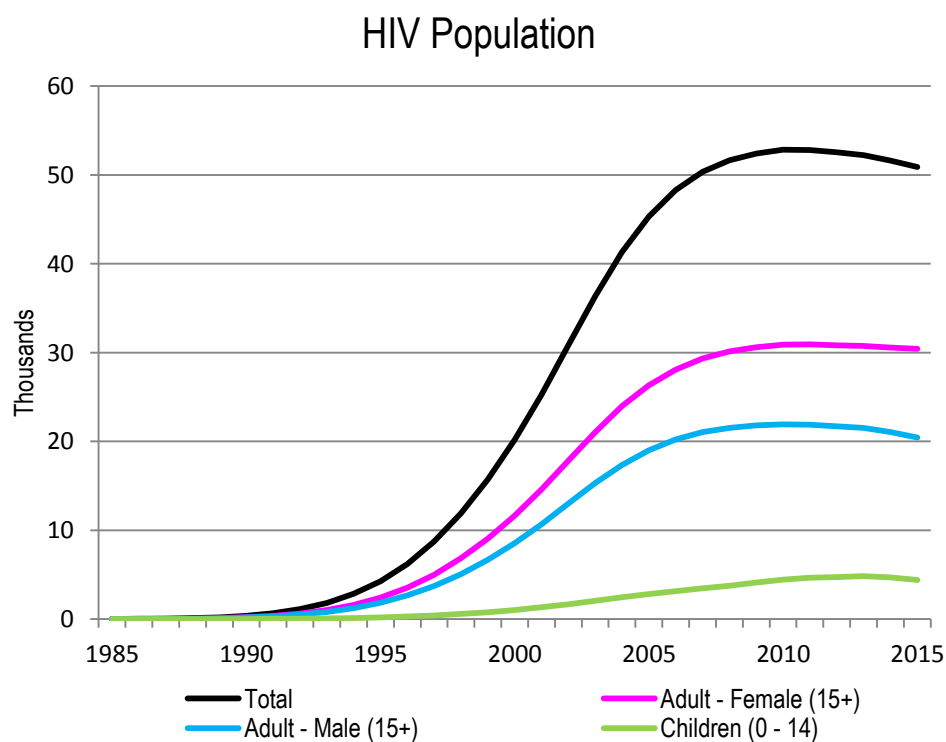


Figure 1: Estimated number of people living with HIV in Sierra Leone

The number of people with HIV is decreasing and estimates affirm that the number of new infections is also steadily decreasing (Figure 2). The most dramatic decrease appears to be within the ages of 0 – 14. However, it is clear from Figure 3 that females are more vulnerable than males to HIV infection, with females from 15 to 19 years of age being the most vulnerable (Figure 3).

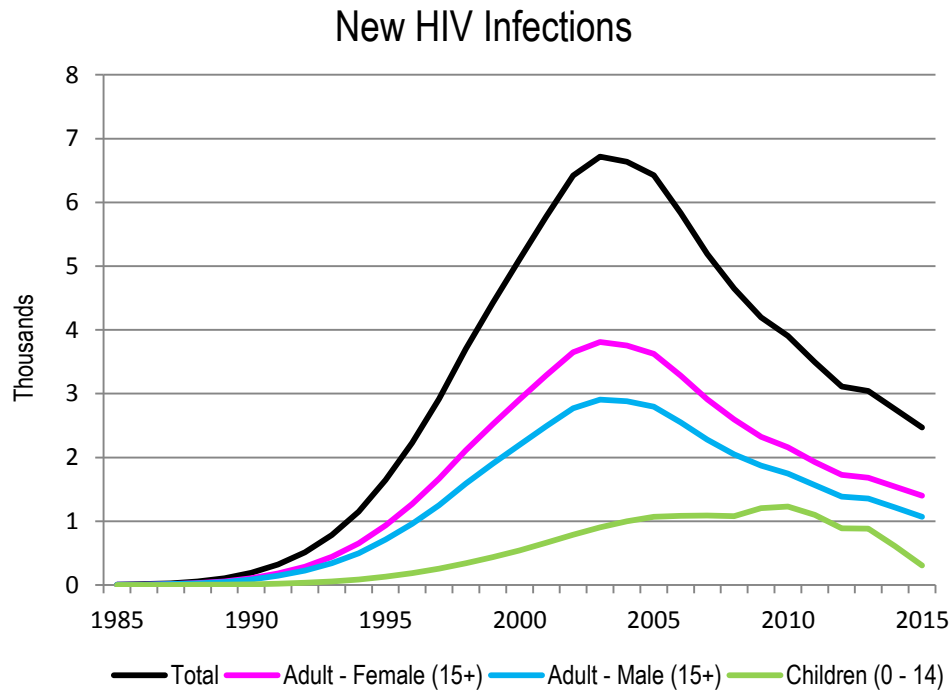


Figure 2: Estimated number of new HIV infections in Sierra Leone

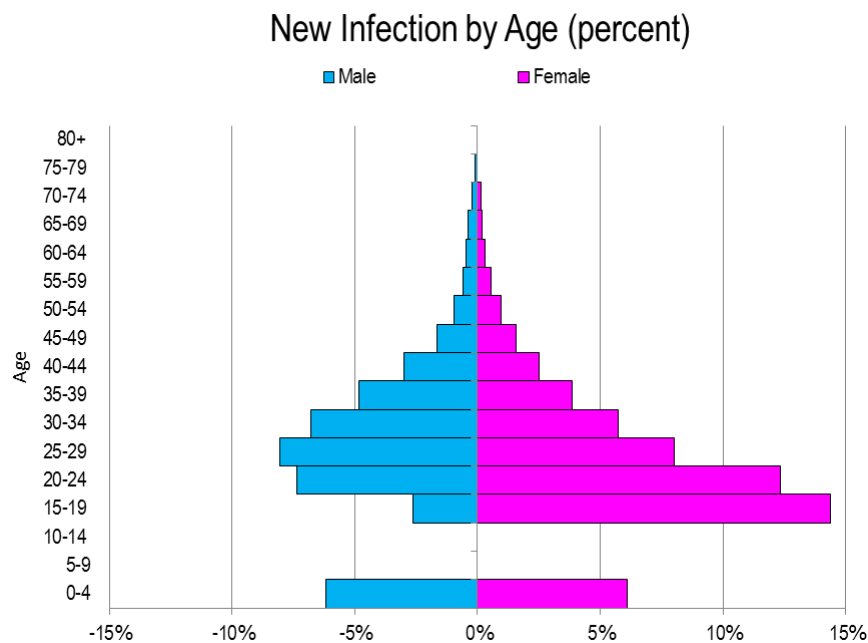


Figure 3: Estimated new HIV infections by age (Percent)

Although it is estimated that roughly 1,473 deaths were averted due to ART, ART coverage rate remains very low (30%) (Figure 4).

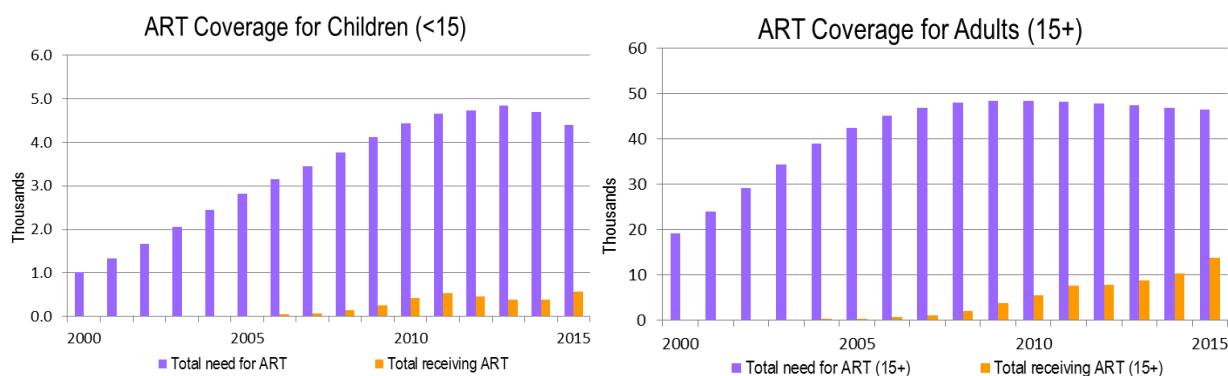


Figure 4: ART Coverage in Sierra Leone

Unlike ART coverage, PMTCT coverage rates are very high (83%) (Figure 5). This accomplishment is also reflected in the low mother-to-child transmission rate (4% for MTCT rate at 6 weeks, and 8% for final transmission including breastfeeding period).

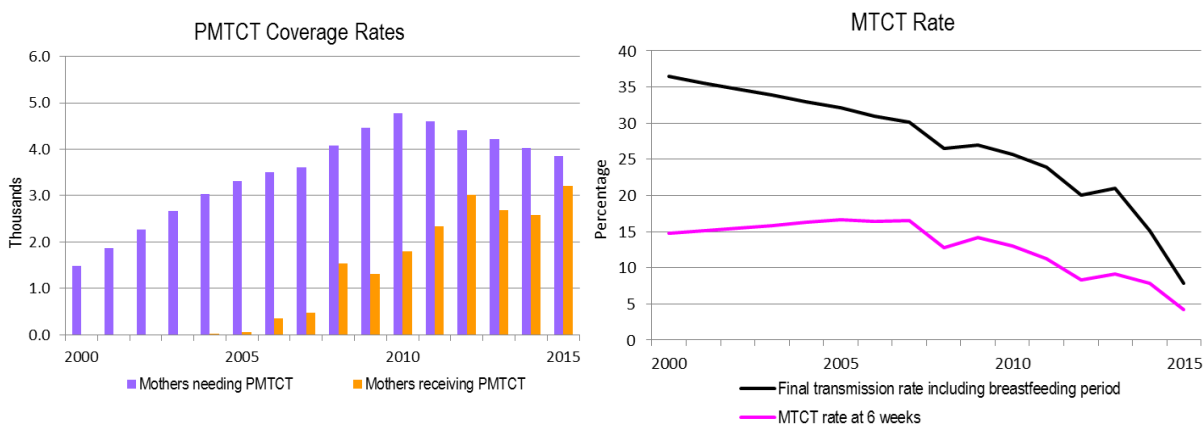


Figure 5: PMTCT Coverage in Sierra Leone

It is encouraging to note that despite the increase in the number of people living with HIV and the poor ART coverage rates, there is a steady decline in AIDS deaths (Figure 6). This is further supported by the Survival Rate Study performed in 2013 that found 93% survival rate amongst its cohort at 12 months follow up despite a 70% retention rate to treatment. However, it is worth noting that it is estimated that AIDS deaths in males are increasing. Due to PMTCT and ART programming, roughly 650 infections and 1,473 deaths were averted in 2012 (see Figure 7).

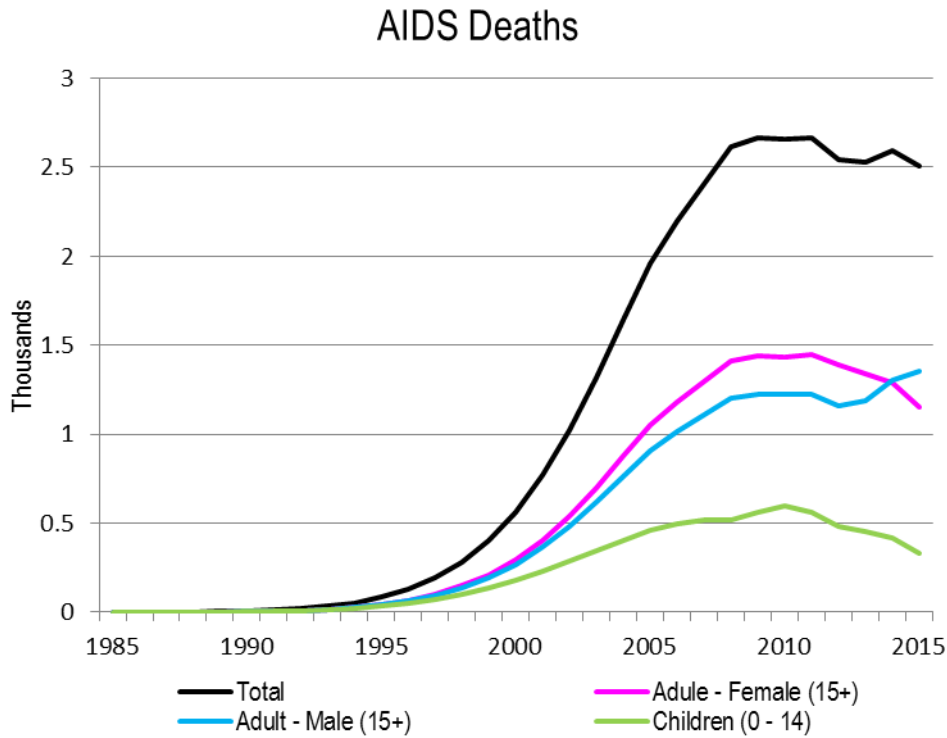


Figure 6: Estimated number of AIDS related deaths in Sierra Leone

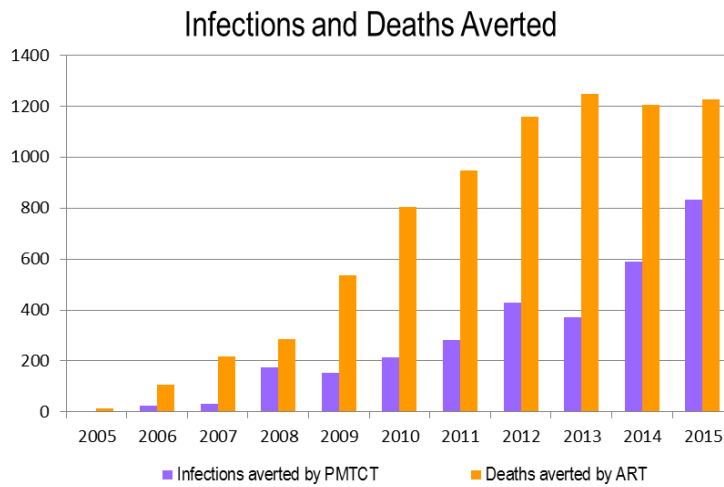


Figure 7: Infections and Deaths Averted in Sierra Leone

### **Gaps in knowledge**

The information provided above is very helpful for improving programming for the general public, however very little epidemiological information is known and provided for key populations that are most vulnerable to HIV. According to the Modes of Transmission Study in 2010, the Sierra Leonean key populations include sex workers, the clients of sex workers, their partners, men who have sex with men, and miners.