

The SAFE Initiative: Preventing mother-to-child HIV transmission in Haiti

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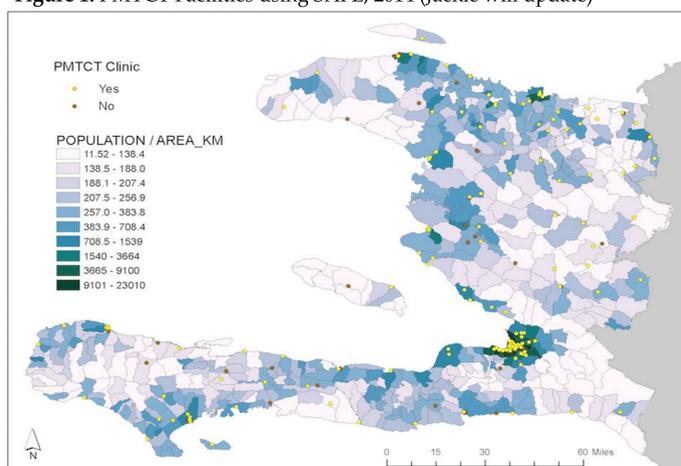
Background

HIV was first reported in Haiti in 1982. The prevalence in the general adult population was estimated to have been as high as 5% in the mid 1990s¹, but has declined to approximately 2% over the past 5 years. It is estimated that almost 3% of pregnant women and approximately 12,000 children under age 14 are HIV-infected.²

The Haitian Ministry of Health (MoH) has prioritized the virtual elimination of mother-to-child HIV transmission and has invested heavily to promote HIV screening among pregnant women and to ensure availability of treatment and support services. There are currently 145 prevention of mother-to-child transmission (PMTCT) health care facilities throughout Haiti. During 2014, more than 75% of the estimated 300,000 pregnant women were tested for HIV.³

As part of this scale-up in services, in 2012 the National Alliance of State and Territorial AIDS Directors (NASTAD) began working with the MoH and the U.S. CDC to develop, pilot and implement a system of enhanced perinatal HIV surveillance. This effort aims to improve public health disease surveillance of HIV infections among mothers and infants, and to promote linkage and adherence to HIV care, treatment and prophylaxis. The system, named "SAFE" (Surveillance Active de la Femme Enceinte Seropositive), builds upon Haiti's existing case-based surveillance system and case management resources and was implemented nationally in 2014. SAFE is currently in use at 143 of 145 PMTCT facilities.

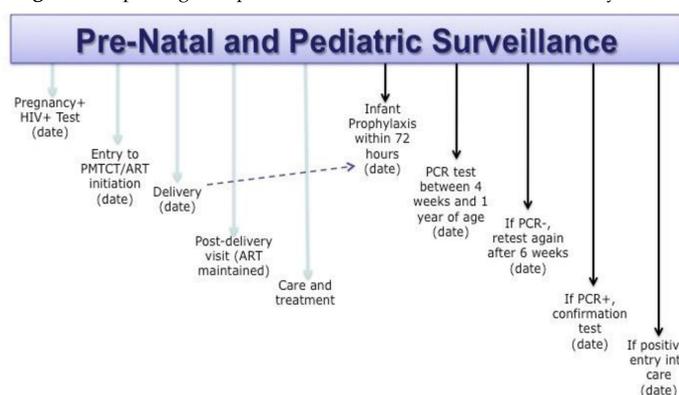
Figure 1. PMTCT Facilities using SAFE, 2014 (Jackie will update)



Methods

SAFE was designed to standardize collection of detailed, patient-level data about HIV-infected pregnant women and their infants, and to facilitate linkage to care for this vulnerable population. The Haitian MoH requires that 10 "sentinel events" be reported related to HIV infection among pregnant women for epidemic tracking and to assure patient care and follow-up (see Figure 2). These include initial diagnosis in pregnant women, entry into PMTCT-related care, receipt of treatment and prophylaxis, and testing and treatment of HIV-exposed infants.

Figure 2. Reporting the spectrum of HIV PMTCT-related morbidity

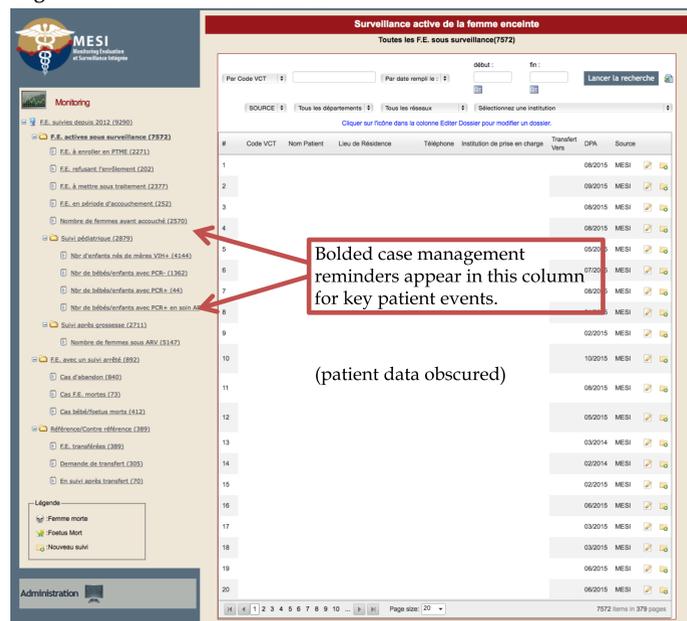


SAFE provides a simple, easy-to-use process to record and report the above sentinel events among pregnant women, and alerts health care workers to critical follow-up needs. Once a pregnant woman is diagnosed with HIV, the following steps occur:

The SAFE Process

- ✓ HIV screening is routine for all pregnant women in Haiti. If a pregnant woman is diagnosed, entry into PMTCT care is encouraged and a referral is provided.
- ✓ A PMTCT case manager interviews the patient to obtain demographic and clinical information.
- ✓ Patient data such as name, address, national ID code, demographics and clinical data are recorded in both a clinic registry and a paper-based HIV case notification form.
- ✓ The case manager logs onto the SAFE system, a web-based interface, using a unique ID and a confidential password.
- ✓ Data from the case notification form are entered into the SAFE interface and populate an additional form, the Enhanced Perinatal HIV Surveillance form. Once data are entered into SAFE, the case becomes "active." If there is no internet service, the system stores patient data and confidentially submits them once connectivity is restored.
- ✓ During antenatal and postnatal care, key benchmarks are tracked and recorded in the SAFE patient record by the case manager, ensuring that mothers and their infants receive appropriate care, testing, prophylaxis and treatment.
- ✓ Upon each login, the case manager is provided with bolded reminders on a summary data screen (Figure 4) for patients needing follow-up. Bolded reminders remain in place until appropriate follow up information is entered. Case managers initiate outreach efforts as needed to contact patients who are lost to follow-up.
- ✓ Encrypted SAFE data are transferred electronically to a secure data system that is monitored by MoH and NASTAD staff.

Figure 3. SAFE Electronic Interface



Results

During the first year of SAFE implementation, activities focused on 1) training of all PMTCT clinic staff; 2) trouble shooting the electronic interface and 3) monitoring and evaluating the system to ensure that key data elements were reported from all sites. This has resulted in implementation of SAFE in 143 of 145 sites (99%), with data reported from all active sites.

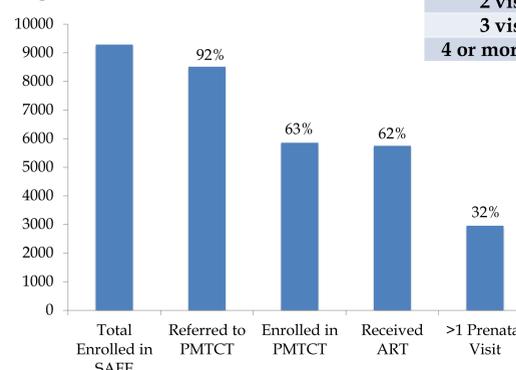
Though the SAFE system has been fully implemented for less than one year, it has already begun to yield important data about this population and potential barriers to eliminating vertical transmission of HIV. Since the start of the project, 9,290 women have been followed through the system. Approximately one-third of these were reported by PMTCT facilities during pilot phases of the project (2012 to 2013), and the remainder were reported after national implementation in 2014.

Of total enrollees, 92% were referred to PMTCT services 63% were enrolled, and 62% were placed on HIV antiretroviral therapy. Approximately three-quarters of pregnant women reported through SAFE returned for follow up prenatal visits, with 32% having two or more visits recorded.

Table 1. Number of Prenatal Visits per Patient

Number of Visits	No.	%
0 visits	2,444	26
1 visit	3,889	42
2 visits	1,182	13
3 visits	1,274	14
4 or more visits	501	5

Figure 4. PMTCT Outcomes



Concerning age at first clinic visit, 8% of women were under the age of 20, 21% percent were aged between 20 and 24 years, 29% were ages 25-29, 38% were 30-39, and 4% were 40 years of age or older. Approximately 40% of women were reported from clinics in the Port-au-Prince metropolitan area, where roughly half the population resides.

Only preliminary data are available concerning birth outcomes. So far, 6,976 births have been recorded in the system. Of these, 44 (1%) showed evidence of HIV infection through HIV PCR testing, although this number could increase as additional infants receive testing. Forty-three of the 44 mothers who gave birth to HIV-infected infants had been referred for PMTCT services, and 40 of 44 (91%) received antiretroviral therapy during pregnancy.

Conclusions and Next Steps

Preliminary SAFE data suggest that the system is functioning throughout Haiti to report data about the care, treatment and birth outcomes of pregnant women diagnosed with HIV. As the system matures, the detailed case surveillance data offered through SAFE will be invaluable for planning and evaluation of prevention, treatment, and patient outreach and support programming, in line with the MoH's goal to eliminate mother-to-child HIV transmission.

During the coming year, training and support will continue for PMTCT clinic staff to ensure ongoing SAFE implementation. Per initial findings, clinic staff will be encouraged increase outreach to patients who do not return for follow-up visits. In addition, SAFE data will be validated for completeness, representativeness and accuracy.

Literature cited

1. UNAIDS/WHO. AIDS Epidemic Update December 2004. Geneva: UNAIDS/WHO, 2004.
2. UNAIDS Country-Specific Reports: www.unaids.org/en/regionscountries/countries/haiti
3. Haiti's National Monitoring, Evaluation and Surveillance Interface (MESI) data: www.mesi.ht

Acknowledgments

This work was possible due to strong partnerships between the Haitian MSPP, Solutions, and the committed NASTAD/Haiti and MSPP teams on the ground in Haiti. This work is supported by CoAg #5U2G5001842 from the U.S. Centers for Disease Control and Prevention (CDC). The contents of this poster are solely the responsibility of the authors and do not represent the official views of the CDC.