The 2013 Liberia Demographic and Health Survey (LDHS) was implemented by the Liberia Institute of Statistics and Geo-Information Services (LISGIS) from 10 March to 19 July, 2013. The Ministry of Health and Social Welfare (MOHSW) authorized the survey. Funding for the survey was provided by the United States Agency for International Development (USAID), the Global Fund, the United Nations Children’s Fund (UNICEF), the United Nations Population Fund (UNFPA), and the Government of Liberia. ICF International supported the project through the MEASURE DHS project, a USAID-funded program providing support, technical assistance, and funding for population and health surveys in countries worldwide.
Objectives

The primary objective of the 2013 Liberia Demographic and Health Survey (2013 LDHS) is to provide up-to-date estimates of basic demographic and health indicators. Specifically, the 2013 LDHS collected information on:

• fertility levels
• marriage, sexual activity
• fertility preferences
• awareness and use of family planning methods
• breastfeeding practices
• nutrition
• childhood and maternal mortality
• maternal and child health

In addition, the 2013 LDHS provides information on:

• awareness and behavior regarding HIV/AIDS and other sexually transmitted infections (STIs).
• estimates on HIV prevalence among adult Liberians.
Sampling Design

Sampling frame: 2008 National Population and Housing Census

First stage: 322 clusters selected (119 urban and 203 rural)

Second stage: systematic sampling of 9,677 households

Selected households were visited and interviewed; all women age 15-49 were eligible to be interviewed.

In half of selected households, men age 15-49 were eligible to be interviewed. In the same subsample, blood was collected from eligible men and women for HIV testing.
2013 Liberia Demographic and Health Survey (LDHS)

- The 2013 LDHS is a nationally representative sample.
- The 2013 LDHS provides estimates for the whole country, for urban and rural areas, and for each of the five regions.
- The 2013 LDHS provides estimates for each of the 15 counties for some, but not all indicators.
Questionnaires

Household questionnaire:
- List all usual members and visitors
- Household characteristics
- Identify women and men eligible for individual interview and HIV testing

Individual (Woman’s and Man’s) questionnaires:
- Background characteristics (age, education, religion, etc.)
- Knowledge, awareness and behavior regarding AIDS and other sexually transmitted infections (STIs)
- Many other topics
Biomarkers – HIV testing

• All adults age 15-49 who were interviewed were asked to voluntarily provide a blood sample for testing for HIV. Blood samples from consenting respondents were collected by LDHS interviewers.

• The protocol for the blood specimen collection and analysis was based on the anonymous linked protocol developed by MEASURE DHS. This protocol allows for the merging of the HIV test results with the socio-demographic data collected in the individual questionnaires after all information that could potentially identify an individual is destroyed.

• Protocol for testing was approved by by the Liberia Institute for Biomedical Research, the Institutional Review Board of ICF International, and the Centers for Disease Control in Atlanta.

• HIV testing took place at the National Reference Laboratory at the Liberia Institute for Biomedical Research.
Results of the household and individual interviews

<table>
<thead>
<tr>
<th>Household Interviews</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Households selected</td>
<td>9,677</td>
</tr>
<tr>
<td>Households occupied</td>
<td>9,386</td>
</tr>
<tr>
<td>Households interviewed</td>
<td>9,333</td>
</tr>
<tr>
<td>Response Rate</td>
<td>99%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interviews with Women age 15-49</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible women</td>
<td>9,462</td>
</tr>
<tr>
<td>Women interviewed</td>
<td>9,239</td>
</tr>
<tr>
<td>Response Rate</td>
<td>98%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interviews with Men age 15-49</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible men</td>
<td>4,318</td>
</tr>
<tr>
<td>Men interviewed</td>
<td>4,118</td>
</tr>
<tr>
<td>Response Rate</td>
<td>95%</td>
</tr>
</tbody>
</table>
97% of women and 96% of men age 15-49 have heard of AIDS.
Knowledge of HIV Prevention Methods

Percent who know HIV can be prevented by:

- Using condoms: Women 15-49 75, Men 15-49 75
- Limiting sex to one uninfected partner: Women 15-49 79, Men 15-49 78
- Using condoms AND limit sex to 1 partner: Women 15-49 68, Men 15-49 68
Trends in Knowledge of HIV Prevention Methods

Percent who know HIV can be prevented by using condoms and limiting sex to one uninfected partner:

- **Women 15-49**
  - 2007 LDHS: 44%
  - 2013 LDHS: 68%

- **Men 15-49**
  - 2007 LDHS: 66%
  - 2013 LDHS: 68%
Knowledge of Mother to Child Transmission (MTCT) of HIV

Percent of women and men age 15-49 who say that:

- HIV can be transmitted by breastfeeding: 71% of women and 52% of men.
- Risk of MTCT can be reduced by taking special drugs during pregnancy: 58% of women and 35% of men.
- HIV can be transmitted by breastfeeding AND reduced by taking special drugs during pregnancy: 51% of women and 27% of men.
Trends in Knowledge of Prevention of Mother-to-Child Transmission

Percent of women and men age 15-49 who know that HIV can be transmitted by breastfeeding and that the risk of MTCT can be reduced by the mother taking drugs during pregnancy

- **Women**
  - 2007 LDHS: 12%
  - 2013 LDHS: 51%

- **Men**
  - 2007 LDHS: 14%
  - 2013 LDHS: 27%
76% of women and 62% of men age 15-49 know where to get an HIV test.
HIV Testing

Percent of women and men age 15-49

Ever tested and received results

- Women: 45
- Men: 23

Tested in last 12 months and received results

- Women: 19
- Men: 12
Trends in HIV Testing

Percent of women and men age 15-49 who have ever been tested for HIV in the last 12 months and received the results

- 2007 LDHS
- 2013 LDHS

<table>
<thead>
<tr>
<th></th>
<th>2007 LDHS</th>
<th>2013 LDHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>Men</td>
<td>2</td>
<td>12</td>
</tr>
</tbody>
</table>
Among women who gave birth in the two years before the survey, 53% were counseled and tested for HIV during antenatal care and received the results.
Key Findings

• **68%** of women and men know that **using condoms and limiting sex to one uninfected partner** reduces the risk of contracting HIV.

• **51%** of women and **27%** of men know that **HIV can be transmitted by breastfeeding and the risk of MTCT can be reduced by the mother taking special drugs during pregnancy**.

• **19%** of women and **12%** of men age 15-49 were **tested for HIV and received their results in the last 12 months**.
HIV Prevalence

2013 Liberia Demographic and Health Survey
HIV Testing Response Rates

Percentage of women and men age 15-49 tested for HIV in the 2013 LDHS

- Women: 92%
- Men: 88%
- Total: 90%
HIV Prevalence by Residence

Percent HIV-positive, women and men age 15-49

- **Liberia**
  - Women 15-49: 2.0%
  - Men 15-49: 1.7%
  - Total 15-49: 1.9%

- **Urban**
  - Women 15-49: 2.7%
  - Men 15-49: 2.5%
  - Total 15-49: 2.6%

- **Rural**
  - Women 15-49: 1.0%
  - Men 15-49: 0.7%
  - Total 15-49: 0.8%
Trends in HIV Prevalence in Liberia

Percent HIV-positive

Difference in HIV Prevalence among Adults age 15-49 between Surveys is **NOT** Statistically Significant

Percent HIV-positive women and men age 15-49

- Total 2007 LDHS: 1.5
- Total 2013 LDHS: 1.9
- Women 2007 LDHS: 1.8
- Women 2013 LDHS: 2.0
- Men 2007 LDHS: 1.2
- Men 2013 LDHS: 1.7
HIV Prevalence by Region

- Liberia: 1.9%
- North Western: 0.9%
- North Central: 0.7%
- South Central: 2.7%
- South Eastern A: 1.3%
- South Eastern B: 1.8%
Key Findings

• **1.9%** of Liberian adults age 15-49 are HIV-positive.
  • **2.0%** of women and **1.7%** of men are HIV-positive.
• The change in HIV prevalence since 2007 is **not statistically significant**, which means we cannot say with confidence that HIV has truly changed.
• HIV prevalence is highest in **South Central (2.7%)** and lowest in **North Central (0.7%)**.
• HIV prevalence is higher among women and men who are **divorced, separated or widowed**.