The 2009 Liberia Malaria Indicator Survey (LMIS) assessed malaria knowledge, prevention, and treatment practices and malaria and anemia prevalence. Over 4,000 households were interviewed, and about 4,000 children were tested for both anemia and malaria.

**Key Findings**

- **Anemia Prevalence in Children**
  
  Anemia is a common symptom of malaria infection. More than 60% of children under age 5 have some degree of anemia, while 34% have moderate or severe anemia (shown above). Anemia is most common in younger children.

- **Use of ITNs**
  
  Most women know that malaria can be avoided and among them, 76% know that using mosquito nets can prevent malaria.

- **Ownership of ITNs by Region**
  
  Over three-quarters (78%) of household nets were obtained for free.

- **Children’s Use of ITNs by Region**
  
  Children and pregnant women are the most vulnerable to malaria. Only about one-quarter of children and one-third of pregnant women slept under an ITN the night before the survey.

- **Malaria Prevalence in Children**
  
  Malaria prevalence is highest in North Central and South Eastern B regions. It is least common in Monrovia.

- **Prevalence of Malaria in Children by Region**
  
  Malaria prevalence is highest in North Central and South Eastern B regions. It is least common in Monrovia.

- **Anemia Prevalence in Children**
  
  Percent of children 6-59 months with moderate or severe anemia

- **Ownership of ITNs by Region**
  
  Overall, 47% of Liberian households own at least one insecticide-treated net (ITN). ITN ownership is lowest in Monrovia and South Central region.

- **Children’s Use of ITNs by Region**
  
  Less than 1 in five children under age 5 in Monrovia and South Central region slept under an ITN the night before the survey.
2009 Liberia Malaria Indicator Survey (LMIS)

For more information on the results of the 2009 Liberia Malaria Indicator Survey, please contact:

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**Key Findings**

**Response rates and methodology:**
Malaria and anemia testing were carried out on all children age 6-59 months living in selected households. Malaria testing was done through both Paracheck rapid diagnostic blood testing, as well as blood smear microscopy. Anemia testing was carried out on a blood drop using the HemoCue system. Of the 4,110 eligible children, 98% provided blood spots for anemia and malaria testing.

**Intermittent Preventive Treatment of Pregnant Women**

<table>
<thead>
<tr>
<th>Took any antimalarial</th>
<th>Took any SP/Fansidar</th>
<th>Took 2+ doses SP/Fansidar</th>
<th>Received SP/Fansidar during ANC visit</th>
<th>Received 2+ doses of SP/Fansidar during ANC visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>65</td>
<td>58</td>
<td>47</td>
<td>55</td>
<td>45</td>
</tr>
</tbody>
</table>

Pregnant women should receive at least two doses of the antimalarial SP/Fansidar during an antenatal visit to prevent malaria. Almost half (45%) of pregnant women received this recommended treatment.

**Treatment of Fever in Children**

| 33% no antimalarial received | 29% received antimalarial, 2+ days after fever | 38% received antimalarial the same or next day |

More than one-third of children with fever received an antimalarial the day of or day after the fever. ACT and Chloroquine were the most commonly used antimalarials.

The 2009 Liberia Malaria Indicator Survey (LMIS) was implemented by the National Malaria Control Program of the Ministry of Health and Social Welfare (MOHSW). The Liberia Institute of Statistics and Geo-Information Services (LISGIS) assisted in the design of the survey, as well as the training and monitoring of data collection staff. The Laboratory at the China-Liberia Malaria Center implemented the microscopic reading of malaria slides. Technical assistance was provided by ICF Macro, an ICF International company, through the worldwide MEASURE DHS program. Funding was provided by the United States Agency for International Development (USAID) through the MEASURE DHS program, and the President’s Malaria Initiative.