Malaria represents a major public health concern in Vanuatu, especially among those who are particularly vulnerable, such as pregnant women and children under five years of age. It is a leading cause of morbidity in Vanuatu, and places a heavy burden on the country in both social and economic terms, ranging from school absenteeism to low productivity. Most parts of the country report transmission throughout the year, although it increases during and soon after the rainy season.

Mosquito nets
The use of long-lasting insecticide-treated mosquito nets (ITNs) is a key component of the Vanuatu Government’s primary health care program, which is committed to controlling and preventing malaria. An ITN kills and repels mosquitoes with greater effectiveness than a net that has never been treated; however, a net that was treated within the last 12 months or was treated with a long-lasting insecticide is the most effective.

Ownership of mosquito nets
Ownership of ITNs is slightly lower (83%), compared to ‘ever treated nets’ (85%) or ‘nets of any kind’ (87%); ownership is highest in Rural-2 (92%), with only two out of three urban households (66%) having access to at least one ITN (Fig. 1). Ownership of ITNs is higher amongst households in the lowest wealth quintiles (93%) and lowest in the highest quintile (61%), and rural households have a higher number of ITNs per household (three) than urban households (two).

Use of mosquito nets
On the night before the survey, 53% of all children under five years of age slept under a mosquito net (51% slept under an ITN net), with net-use of any kind more than twice as high in rural Vanuatu (62%) than in the more densely populated urban areas (29%). The corresponding coverage for ITN use was 61% for rural and 26% for urban Vanuatu. A similar contrast emerges across wealth quintiles, with net-use by children in the lowest wealth quintile more than three times higher (68%) than that by children in the highest wealth quintile (19%) (Fig. 2). Not much variability occurs between different age groups.

Treatment of children with fever
During the two weeks preceding the survey, 13% of children under five years old had a fever, with only a marginal difference emerging between urban (15%) and rural (12%) Vanuatu (Fig. 4). With access to anti-malarial drugs very low, provided to only 5% of children who had experienced a fever, there is no difference in the availability of, or access to such drugs between urban (6%) and rural (5%) Vanuatu; and the number of children having had access to these drugs the same...
day or the day after their fever started is equally low in in urban (1%) and rural (2%) Vanuatu. The small number of overall cases (N=10) prevents any meaningful further disaggregation.

**Figure 4: Prevalence and prompt treatment of fever**

<table>
<thead>
<tr>
<th></th>
<th>Fever in the two weeks preceding the survey</th>
<th>Took antimalarial drugs</th>
<th>Took antimalarial drugs same or next day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>15</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Rural</td>
<td>12</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>.Rural 1</td>
<td>13</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>.Rural 2</td>
<td>12</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

*For more detailed information on HIV/AIDS see chapter 12 in the 2013 Vanuatu DHS report.*

**Policy note**

Malaria remains a leading cause of morbidity in Vanuatu, with bed nets, particularly long-lasting insecticide-treated nets (ITNs) representing a proven and cost-effective way of preventing malaria. While continued distribution of ITNs and perhaps a re-treatment programme remain important components of Vanuatu's vector-borne diseases control programme, notable discrepancies in the use of bed nets between urban and rural areas and between different population groups, as well as a far from universal uptake by particular population groups at risk (young children and pregnant women), highlight the importance of complementing primary health care measures with stepped-up efforts in comprehensive community education and awareness programmes.

Survey findings highlight some key areas of possible policy attention:

- Improve bed-net use amongst vulnerable populations, such as infants and pregnant women. Universal coverage may be more aspirational than realistic, but current rates of people sleeping under an ITN – 54% of children under one year old and 41% of pregnant women – put one out of two infants and 60% of future mothers at unnecessary risk.

- Improve bed-net use among urban populations. While policy attention and service coverage often favours urban populations over their rural counterparts, survey results point to substantially lower numbers of urban infants (26%) and pregnant women (28%) who receive protection from ITN bed nets, compared to 61% of rural infants and 47% of pregnant women. This highlights the importance of stepped-up primary health care measures in urban Vanuatu, particularly in high-density neighbourhoods, including informal urban settlements.

- Consider improving treatment rates for children with fever, from a current low 5% access to drugs, and 2% access to drugs the same day or day after a fever started.