Malaria in Swaziland

- Main Parasite: *P. falciparum*
- Main Vector: *A. arabiensis*
- Transmission season: November-May
- Geographic area of transmission: Lowveld
- Population at risk: 285,972 persons (~30%)
- June 2012-July 2013 malaria burden:
  - 379 confirmed cases
  - 26% of cases due to local transmission
- Target malaria elimination by 2015
Swaziland’s Malaria Elimination Strategy

**Case Management**
- Confirmed diagnosis for all cases
- Prompt, efficacious treatment for all confirmed cases

**Integrated Vector Management**
- Joint IRS and LLIN distribution to population at risk
- Ongoing entomological monitoring

**Surveillance and Epidemic Preparedness & Response**
- Strong surveillance systems
- Active surveillance programme
- EPR

**Information, Education, and Communication**
- Mass media campaign for total population and travelers
- Community outreach to endemic areas
Indoor Residual Spraying

- Currently, DDT is used for spraying of traditional structures,
- ICON is used for spraying modern structures.
- Vector control insecticides are procured through the Swaziland government tendering process.
- The NMCP uses Hudson X-pert pumps for conducting IRS.
- The target is 85% coverage of the population of households that require spraying each year.
- Coverage has remained above 85% with challenges here and there.
- With the introduction of the Malaria Elimination Campaign, full coverage spraying was embarked on for everyone living in the malaria at-risk areas, with the exercise combined with provision of LLINs.
Indoor Residual Spraying

- There are three spray teams responsible for vector control.
- Each team has 18 members, comprising 12 seasonal spray operators, 5 foremen and a team leader.
- Malaria Vector Control is centralised and there are no community teams responsible for malaria control.
- There is a vector control sub-committee at national level under the Swaziland Malaria Elimination Advisory Group (SMEAG) that provides input on policies, technical guidance on implementation, and monitors progress towards implementation.
Indoor Residual Spraying Operations

- The NMCP has designated technicians for repair and servicing of IRS equipment.
- To date, there has been a challenge of finding a reliable supply for spare parts locally.
- The program employs an average of 36 spray operators and trains them on IRS and GPS use every year on a seasonal and temporary basis.
- Past practice has been the re-engagement of the previous year’s operators in order to maintain and ensure efficiency, quality application, and results.
- There is however concern on the possibility of insecticide accumulation on the continuously retained personnel and the affected communities.
Joint IRS and LLIN Distribution
IRS Coverage

- 93% and 90% coverage in 2011 and 2012 respectively in targeted areas
- 101,030 structures sprayed in 2011/2012 season
- 73,217 structures sprayed 2012/2013 season
- Variance due to delays in the delivery of insecticides
Reasons for not spraying

Perception about IRS

<table>
<thead>
<tr>
<th>Responses</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>No one came</td>
<td>60</td>
<td>8</td>
</tr>
<tr>
<td>No one at home</td>
<td>24</td>
<td>4</td>
</tr>
<tr>
<td>Inconvenience</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Refused</td>
<td>3</td>
<td>0</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Responses</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happy with IRS</td>
<td>77</td>
<td>83</td>
</tr>
<tr>
<td>Replastered/repaired after IRS</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Believe IRS is effective</td>
<td>16</td>
<td>0</td>
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</tbody>
</table>
Community Involvement

- Work with Rural Health Motivators (RHMs)
- Work with Community Leaders
- Work with School Teachers
Conclusion

- In Swaziland, IRS coverage is high
- Little resistance from communities
- Conducted jointly with LLINs
- In elimination, Programme is conducting IRS in areas were there is transmission
Thank You