Impact in Senegal

- 63% of households own insecticide-treated nets to prevent malaria.
- The number of children under 5 years old infected with malaria dropped 50% from 2008 to 2010.
- CDC support to Senegal’s national reference lab resulted in an expansion of existing HIV surveillance activities, enhanced data management, and analytic support.
- Global polio eradication activities contributed to the absence of polio cases in Senegal since 2010.

Top 10 Causes of Death in Senegal

<table>
<thead>
<tr>
<th></th>
<th>Cause</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Malaria</td>
<td>13%</td>
</tr>
<tr>
<td>2.</td>
<td>Lower Respiratory Infections</td>
<td>11%</td>
</tr>
<tr>
<td>3.</td>
<td>Diarrheal Diseases</td>
<td>10%</td>
</tr>
<tr>
<td>4.</td>
<td>Cancer</td>
<td>6%</td>
</tr>
<tr>
<td>5.</td>
<td>Sepsis</td>
<td>4%</td>
</tr>
<tr>
<td>6.</td>
<td>Other Neonatal Disorders</td>
<td>4%</td>
</tr>
<tr>
<td>7.</td>
<td>Tuberculosis</td>
<td>3%</td>
</tr>
<tr>
<td>8.</td>
<td>Meningitis</td>
<td>3%</td>
</tr>
<tr>
<td>9.</td>
<td>Preterm Birth Complications</td>
<td>3%</td>
</tr>
<tr>
<td>10.</td>
<td>HIV</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: GBD Compare (http://viz.healthmetricsandevaluation.org/gbd-compare/), 2010

Malaria

CDC-Senegal jointly manages the U.S. President’s Malaria Initiative (PMI) activities with USAID and works with the Ministry of Health and other partners to develop proven policies and programs that reduce the burden of malaria in Senegal and build in-country capacity. CDC and USAID staff in country work together to oversee all technical and administrative aspects of PMI in Senegal. CDC provides technical assistance for operations research, diagnostics, case management, malaria in pregnancy, malaria surveillance, program evaluation, and vector control. The CDC resident advisor provides valuable support for the design and implementation of continuous demographic and health surveys to monitor the burden of disease and impact of interventions. CDC also assists with research related to insecticide-treated net longevity and malaria case management at health facilities.

Immunization

The focus of CDC-supported polio eradication activities is to increase the immunity of the population through immunization campaigns, to strengthen surveillance, to prevent re-importation of wild poliovirus and to minimize the consequences of any further international spread of virus into West Africa. CDC has deployed 9 public health professionals to work in Senegal on immunization activities through the Stop the Transmission of Polio program since the program began in 1999. In 2009, CDC facilitated collaboration between WHO and U.S. Peace Corps-Senegal to encourage volunteers to participate in vaccine-preventable disease surveillance and other national immunization activities. CDC also co-founded the Measles & Rubella Initiative partnership that is working to eliminate measles and rubella in Senegal as well as in the other parts of the world. Senegal had 18 cases of wild polio virus in 2010 but has had no cases since then.
Senegal at a Glance

<table>
<thead>
<tr>
<th>Category</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population:</td>
<td>13,108,000</td>
</tr>
<tr>
<td>Per capita income:</td>
<td>$1,810</td>
</tr>
<tr>
<td>Life expectancy at</td>
<td>61/59 yrs.</td>
</tr>
<tr>
<td>birth women/men:</td>
<td></td>
</tr>
<tr>
<td>Infant mortality rate:</td>
<td>51/1000 live</td>
</tr>
<tr>
<td></td>
<td>births</td>
</tr>
</tbody>
</table>

Population Reference Bureau World Population Data Sheet, 2011

Neglected Tropical Diseases

In addition to providing technical assistance to neglected tropical disease (NTD) programs in Senegal, CDC conducted operational research, supported by the Bill and Melinda Gates Foundation, to develop more cost-effective ways of implementing integrated NTD programs. The broader NTD community, including CDC, is focusing on developing strategies that capitalize on synergies among these programs, in order to rapidly expand. In three countries, including Senegal, CDC tested a method of mapping that incorporates several NTDs instead of just one. The effort proved highly successful – so much so that Sightsavers, a nongovernmental organization devoted to preventing and treating diseases of the eye, has requested that CDC implement this approach in three districts in Senegal.

HIV/AIDS

Senegal has a concentrated HIV epidemic occurring predominantly in the most-at-risk groups (i.e., commercial sex workers), with minimal occurrence in the general population. Since 2009, through the President's Emergency Plan for AIDS Relief (PEPFAR), CDC has provided support for the National Reference Laboratory (NRL) and the government surveillance program to strengthen laboratory systems and to develop reliable data on HIV transmission within Senegal. CDC HIV/AIDS activities include the following:

1. Technical and financial support for Senegal's HIV/AIDS strategic information activities through assistance with conducting, analyzing, and sharing the results of Senegal's National HIV Sentinel Surveillance Survey which informs national policymaking and programming in HIV/AIDS.
2. Guidance and technical assistance to the HIV surveillance coordinating program at the NRL to strengthen the use of HIV strategic information through the design and implementation of a national HIV case reporting system and other surveillance activities in support of the National Strategic Information Program.
3. In partnership with Senegal's Cheik Anta Diop University, strengthening indigenous capacity for laboratories to implement basic quality management systems by developing HIV testing and diagnosis procedures that are available to all African countries.

Influenza

CDC is working in collaboration with PATH, an international nonprofit organization; Institut Pasteur de Dakar; and the Institut de Recherche pour le Développement to conduct a vaccine trial in 20 villages in a rural area of Senegal. This study will determine the direct effects of influenza vaccine in children 6 months to 9 years of age, as well as the indirect effects of vaccinating this age group on reducing influenza among unvaccinated infants, older children, and adults. To date, over 20,000 potential cases have been identified and tested for influenza through community surveillance.

For more information please contact Centers for Disease Control and Prevention:

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