UNICEF COTE D’IVOIRE
VACCINATION AGAINST TETANUS IN COTE D’IVOIRE

Issue
Côte d’Ivoire is one of the 57 countries in the world where tetanus is not eliminated yet and where tetanus kills more than one out of thousand newborns, mainly due to the collapse of the health system as a result of the politico-military crisis.

In Cote d’Ivoire, one out of two newborns (49%) and two out of five mothers (40%) are not protected against tetanus, although technology exists to eliminate this mortal disease. 55% of mothers deliver their babies in their homes, mostly without qualified assistance and in poor hygienic conditions. These circumstances cause infections, e.g. tetanus.

Systematic vaccination of pregnant women, targeted vaccination of women in childbearing age in high risk districts, clean delivery, and a well-performing surveillance system of maternal and neonatal tetanus can eliminate tetanus and avoid 1.2% of deaths among children under five in Cote d’Ivoire due to tetanus; i.e. 23,000 child deaths could be prevented each year.\(^1\)

Action
Three main strategies are identified to eliminate tetanus:
1. Vaccination of all pregnant women with at least two doses of TT vaccine and all women in childbearing age with at least three doses in high risk districts;
2. Improvement of hygienic conditions around delivery;
3. Improvement of the surveillance system of maternal and neonatal tetanus.

UNICEF supports the vaccination of pregnant women against tetanus in routine vaccination programme and plans to support the vaccination of all women in childbearing age with at least three doses.

For 2007, twenty high risk districts were identified, where vaccination coverage of the routine immunization programme is weak: a total of 1,032,000 women in childbearing age with at least three doses.

Other partners and other projects will focus on the second and third strategy for tetanus elimination.

Impact
Objective:
Eliminate maternal and neonatal tetanus by the year 2010.

Specific Objective:
90% of women in childbearing age in 20 health districts received at least three doses of tetanus vaccine.

Expected results:
1,032,000 women in childbearing age in the health districts of Abidjan Centre, Beoumi, Daloa, Daloa-Zoukougbeu, Ferkessedougou, Guiglo, Tabou, Tanda, Tanda-Kounfao, Tiassale, Tiebissou, Touba, Yamoussoukro, Yamoussoukro-Didievi, Zuenoula, Bouna, Boundiali, Korhogo, Korhogo-Sirasso, and Tengrela are vaccinated against tetanus (90%).

Key activities:
- Procurement and distribution of doses of vaccines and injection materials for three vaccinations of 1,032,000 women in childbearing age;
- Production and distribution of 1,150,000 vaccination booklets and reporting tools;
- Micro-planning of the tetanus campaign;
- Training of 550 vaccinators and 100 supervisors in tetanus vaccination, stock management, injection safety, waste disposal and surveillance;
- Social mobilization and inter-personal communication to convince the population of the benefits of tetanus vaccination;
- Immunization of 1,032,000 women of childbearing age;
- Supervision, monitoring and evaluation.

Budget:

<table>
<thead>
<tr>
<th>Description</th>
<th>Total cost (in US$)</th>
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<tbody>
<tr>
<td>Vaccines and injection materials</td>
<td>735,000</td>
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<tr>
<td>Vaccination booklets and reporting tools</td>
<td>460,000</td>
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<tr>
<td>Micro-planning</td>
<td>90,000</td>
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<tr>
<td>Training</td>
<td>100,000</td>
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<tr>
<td>Immunization of 1,032,000 women in childbearing age (coordination, implementation and supervision)</td>
<td>500,000</td>
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<tr>
<td>Social mobilization</td>
<td>150,000</td>
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<tr>
<td>Monitoring and evaluation</td>
<td>115,000</td>
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<tr>
<td>Technical assistance</td>
<td>150,000</td>
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<td>Operational costs</td>
<td>230,000</td>
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<tr>
<td>Sub total</td>
<td>2,530,000</td>
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<tr>
<td>Recovery costs at head quarters (7%)</td>
<td>177,100</td>
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<tr>
<td>TOTAL</td>
<td>2,707,100</td>
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</tbody>
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Cost-effectiveness:

Cost per woman that benefits from tetanus vaccination: USD 2.62
23,000 deaths among children under five will be averted each year.\(^1\)
The project invests USD 117 per death averted.\(^1\)

\(^1\) Assumptions:
% that Neonatal and Maternal Tetanus attributes to child mortality: 3%
Clinical effectiveness: 95%
Actual coverage of TT+: 49%
Target coverage of TT2+: 90%
Rise in coverage of TT2+: 41%
Impact on child mortality rate: decrease of 1.2%

February 2007