MTCT-PLUS:
Spearheading HIV/AIDS Prevention & Care for Mothers & Children
### Glossary of Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tr>
<td>SSA</td>
<td>Sub-Saharan Africa</td>
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<tr>
<td>MTCT</td>
<td>mother-to-child transmission of HIV</td>
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<tr>
<td>MTCT+</td>
<td>MTCT-PLUS program</td>
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<td>MCH</td>
<td>maternal and child health</td>
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<tr>
<td>VCT</td>
<td>voluntary counseling and testing</td>
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<td>ARV</td>
<td>anti-retroviral</td>
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<td>NVP</td>
<td>Nevirapine</td>
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<td>HAART</td>
<td>highly active anti-retroviral therapy</td>
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<td>OI</td>
<td>opportunistic infections</td>
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<td>NGO</td>
<td>non-governmental organization</td>
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MTCT-PLUS:
Spearheading HIV/AIDS
Prevention & Care
for Mothers & Children
The magnitude of AIDS as a threat to global security cannot be overestimated. As we begin to grasp the levels of devastation ahead for families, societies, continents, and ultimately the world, if the pandemic is not checked, there is consensus that much more must be done, and done now. This call to action was sounded in the Declaration of Commitment on HIV/AIDS by the United Nations General Assembly Special Session on AIDS in June 2001.

Foundations have been a crucial component of the international response to AIDS, but as a community have acknowledged the need to do more — and do it quickly. In part, this reflects the drastic inroads AIDS is making in many countries among elementary and secondary teachers, university faculty and agricultural research centers — key areas of investment in many international foundation programs — and among the ranks of farmers, laborers, shopkeepers, office workers, health personnel — and mothers.

The urgent sense that we must do more has inspired the emergence of a multi-foundation program, not just for foundations that traditionally operate in the area of international public health, but for the larger community of global philanthropies. This program will build on existing efforts to prevent HIV infection in newborn infants by introducing HIV care for their mothers and working steadily towards the goal of treating their fathers and other infected family members. In turn, these efforts can help spearhead new treatment initiatives for resource-poor countries.

Mothers and children need help in the battle against HIV/AIDS. Women of child-bearing age...
are the segment of the world population in which the epidemic is exacting its heaviest toll and spreading most rapidly. Each year, nearly 1.5 million of these young women die, and 2.5 million others are newly infected. In sub-Saharan Africa, among the 26 million women who were pregnant in 2001, more than 2.5 million carried HIV. Assuming a rate of 20 percent for mother-to-child transmission of HIV, we can foresee that more than 500,000 babies born to these mothers will be infected. Many of these infants, as well as the luckier 80 percent who are not themselves infected at birth, are likely to be motherless by the time they can walk.

A PROGRAM TO BUILD ON

Over the last several years, efforts in Africa and elsewhere to prevent mother-to-child transmission (MTCT) of HIV have been rapidly expanding, using a well-established package of low-cost and effective practices, including the anti-retroviral medication Nevirapine. Although groundbreaking progress is being made in preventing infection of children, the absence of care for mothers has been identified both as a moral dilemma and as a disincentive to participation.

We have an important opportunity before us, therefore, to enhance the effectiveness of these prevention efforts by extending them to mothers, so they will have the possibility of surviving their own HIV infections for a substantially extended period. The concept is sound, and it is timely. The Declaration of Commitment of the June UNGASS on AIDS called, in Paragraph 54,

Each year, nearly 1.5 million women of child-bearing age die from HIV/AIDS, and 2.5 million others become newly infected.
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for a 50 percent reduction in the number of infected infants by 2010 by ensuring that 80 percent of pregnant women in antenatal care have information, counseling and other HIV services available to them. This September in Uganda, the International Conference on Global Strategies for the Prevention of HIV Transmission from Mothers to Infants issued the “Kampala Call to Action,” emphasizing the “extreme vulnerability of women and children to HIV” and calling on foundations and international organizations “to respond rapidly with funding and development of innovative programs to immediately address countrywide implementation of prevention of mother-to-child transmission and treatment of HIV-infected children and women.” The Special Session on Children confirms the urgency of a global commitment to fight HIV/AIDS by securing the health and well-being of children and their mothers around the world.

Responding to these calls, a multi-foundation group acting as a community is seeking $100 million in new commitments over the next five years towards a program in which MTCT prevention is linked to treatment initiatives aimed at increasing the chances of survival for both infected mothers and their infants — MTCT-PLUS. The “PLUS” strategy recognizes the rapidly increasing possibilities in HIV care, even in very difficult circumstances, as drug prices have plummeted and programs have begun to ready themselves for service delivery. It responds to the Kampala declaration by combining prevention and treatment, and it holds the real promise of health and other benefits for mothers, children and households in the near term.
To explore the major technical and operational challenges for MTCT-PLUS, a partnership coalition has been forged, led in its initial stages by Allan Rosenfield, Dean of the Mailman School of Public Health at Columbia University. The partners represent a broad spectrum of interested parties and constituencies, from technical and service delivery organizations on the front lines of MTCT prevention in developing countries (the Elizabeth Glaser Pediatric AIDS Foundation), to international institutions including multilaterals (UNAIDS, UNFPA, UNICEF, WHO), the global research community, NGOs and foundations. A core coordination group was set up to serve as liaison with other AIDS-related efforts, such as the Global AIDS and Health Fund, and to oversee five working groups. Each group met during July and August to focus on one of five topics:

1) Identification of demonstration sites;
2) Definition of the essential care package;
3) Implementation logistics;
4) Social mobilization and communications; and
5) Procurement mechanisms.

To become operational as quickly as possible, MTCT-PLUS will be piloted as an extension of programs that are currently providing MTCT prevention services. MTCT-PLUS will respect and build upon existing service delivery capacity at these sites and will mobilize community engagement. This will involve planning for further training of existing personnel and recruitment of additional workers, as well as investing in effective communications strategies to overcome barriers...
related to HIV stigma and gender inequality. Participating sites will offer voluntary counseling and testing for HIV, providing HIV-negative mothers with information about how to protect themselves and prevent infection. Mothers who are found to be HIV-infected will be enrolled in MTCT prevention protocols and followed over time. An essential care package will be provided, and appropriate therapies initiated as indicated. Depending on local capacity, these will include basic care for sexually transmitted infections and pneumonias, prevention and/or treatment of related opportunistic infections — of which tuberculosis is the most common — and treatment with highly active anti-retrovirals (HAART). MTCT-PLUS is thus a direct linkage of prevention (of HIV in the newborn child) and care (of the HIV-infected mother and child and, when possible, the full family). Attendant issues include monitoring of drug quality, finding qualified agents and intermediaries from country to country to handle supply, and working with governments on regulatory approvals, tax-exemptions and distribution mechanisms. Because experience has shown that drug-sharing and poor adherence create serious difficulties with mother-only treatment, it will be important to keep moving as rapidly as possible towards the ultimate goal of treating not just infants and their mothers, but the whole family.

The MTCT-PLUS program will be implemented through partners currently involved in MTCT prevention activities, chiefly UNICEF and the Elizabeth Glaser Pediatric AIDS Foundation. This will allow a natural evolution and expansion of these activities and avoid the creation of new

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**Assumptions:**
MTCT sites reach 30% of approximately 30 million pregnant women in SSA, 10% of whom will be HIV+. Use of NVP in those sites will prevent MTCT in 50% of the 182,000 babies who otherwise would be born infected.

**Assumptions:**
MTCT+ covers 20% of pregnant women (5,600,000) in SSA. Without intervention, 122,000 babies would be born infected.

If HAART is started before delivery, MTCT risk may drop as low as 2%.

Treating eligible HIV+ women (1 in 10) with HAART and the other 90% of HIV+ pregnant women with NVP would prevent MTCT to 66,000 babies.

**Assumption:**
Giving HAART around time of delivery to the 90% of HIV+ pregnant women not receiving a full HAART course could prevent 110,000 infant infections.
The map indicates actual working sites around the world where MTCT services are already being provided.
Sources: UNICEF, PMTCT News, No. 2, August 2001
Elizabeth Glaser Pediatric AIDS Foundation
Less than 5% of the approximately 28 million pregnant women in SSA now have access to MTCT prevention, but the number of MTCT sites is growing rapidly.

At selected sites over the next 5 years, MTCT-PLUS will expand MTCT care to include treatment for HIV+ pregnant women.

MTCT-PLUS will cover 20% of all pregnant women, but because some will refuse testing and/or ARV treatment, the model assumes that only 10% of the HIV+ women will receive HAART.
All women to have access to VCT and, if HIV+, a CD4 cell count to decide on HAART.

MTCT+ expects to cover 20% of pregnant women by 2006, enrolling 300,000 of these mothers and their children for treatment including OI and HAART.

Costs of each component of MTCT+ will decline, but aggregated costs will increase with growing numbers of mothers covered.

Covering fathers would increase the budget estimates by 27%. Receiving donated drugs would decrease them by 33%.
administrative and funding structures. Given the disproportionate burden of the epidemic, MTCT-PLUS sites will be concentrated primarily, but not exclusively, in sub-Saharan Africa. The demonstration projects aim to prove the effectiveness of the MTCT-PLUS concept across a diversity of settings and providers — urban and rural, government, NGO, and mission health services. Working with diverse locations will make community participation essential in shaping the MTCT-PLUS sites, discouraging unrealistic planning for a uniform “cookie-cutter” model of service delivery.

**GOVERNANCE AND SUSTAINABILITY**

It is envisaged that a governing committee made up of representatives of foundations as well as members with expertise relevant to MTCT-PLUS will oversee the implementation of the program. The coordinating committee led by Dr. Rosenfield will draw on the recommendations and findings of the five working groups and submit an operations plan to the governing committee for approval within the next two months. Most important, it is anticipated that the operations plan will identify the first ten MTCT-PLUS pilot sites for initial support beginning in January 2002. The plan will provide details on mechanisms to facilitate the flows of funds and on the structure and function of a coordinating secretariat.

The foundation commitment is expected to last five years, by which time MTCT-PLUS should be well established. As the program develops, explicit efforts will be made to prepare for ongoing sustainability for these programs. This relates to
integrating MTCT-PLUS into a more comprehensive package of AIDS prevention and care supported by communities, governments, NGOs and the international community.

**A Role for Research**

Although MTCT-PLUS is about “doing,” efficiencies and economies are likely to be achieved by “learning” through operations research. Care for mothers will benefit from the development of guidelines for practitioners that facilitate rapid and reliable decisions at the lowest cost. For example, there is little available data on whether, in deciding when to start anti-retroviral therapy in mothers, clinical observation of symptoms can reliably replace expensive laboratory testing. Research is needed. Similarly, timely and accurate monitoring of the effectiveness of MTCT-PLUS operations in various locations can help to identify best practices.

More fundamental research frameworks will be required to understand other important operational issues, like the synergies between the provision of care for mothers and increased receptivity to HIV testing and treatment. To address these and other important questions, a research working group will be responsible for defining the key areas for monitoring, evaluation and research, and will ensure that ties are fostered with other research related to AIDS care in Africa and elsewhere. Although resource mobilization efforts for MTCT-PLUS have encouraged support for program operations, a number of foundations that are unable to support service delivery have

It is expected that by 2006, 20 million women of child-bearing age in sub-Saharan Africa will have access to MTCT-PLUS services.
nonetheless committed to supporting fundamental and applied research.

**EXPECTED BENEFITS**

The $100 million foundation commitment to MTCT-PLUS over the next five years, if successful in proving the concept, may be expected to yield a wide range of benefits related to health, health care provision and household development including:

- Improved child survival and well-being — directly, because of reduction of HIV infection, and indirectly, because of better mothering provided by mothers who are not sick.
- Improved survival and well-being of HIV-infected mothers.
- Improved pre-natal care for all women.
- Improved prevention efforts directed at protecting vulnerable young women from HIV.
- Abatement of the stigma of HIV infection as a barrier to testing and care.
- Strengthened infrastructure for essential primary care beyond AIDS.
- Increased numbers, quality and morale of health personnel.
- A dramatic reduction in opportunistic infections (including TB) for mothers receiving highly active anti-retroviral therapy.
- Very significant decreases in the rate of AIDS-related complications requiring expensive hospitalization.
- Maintenance of family structures and livelihoods.
- Reversal of the disastrously rising trend of AIDS orphanhood.
More concretely, initial projections based on the sub-Saharan Africa “eligible” population, assuming steady expansion of MTCT-PLUS, suggest that in Africa by the year 2006, approximately:

- 20 million women of child-bearing age will have access to MTCT-PLUS services.
- Half a million pregnant women, in addition to MTCT prevention, will receive treatment for common infections like pneumonia and diarrhea as well as therapy for tuberculosis.
- A quarter of a million mothers will be extending their lives with highly active anti-retroviral therapy.
- 450,000 more infants will be HIV free.

**OUTSTANDING CHALLENGES AND RISKS**

There are, of course, very significant challenges and risks, and it is important to anticipate as many as possible. Until family coverage is a reality, MTCT-PLUS will encounter challenges associated with unequal access to care. Other family members in need of HIV care living in the same household with a mother or a child receiving treatment may react negatively to exclusion. Engaging communities in MTCT-PLUS planning and retaining the flexibility to accommodate different care plans will be critical ingredients in dealing with the conundrum of differential access.

There are also real concerns about maintaining the integrity of operations and quality of care. Pirating of drugs and mismanagement of complex drug regimens — which can result in drug resistance — are challenges in this regard. Working with
established partners currently engaged in MTCT prevention delivery and ensuring quality training will help to stem these risks.

**PART OF THE GLOBAL CALL TO ACTION FOR AIDS**

The MTCT-PLUS program leadership will keep in contact with other AIDS-related efforts, especially the Global AIDS and Health Fund, to assure good communications and to identify opportunities for specific collaborations. Communication with the Fund is particularly important because the demonstration of feasibility by MTCT-PLUS may trigger significant support from them. Likewise, specific procurement mechanisms that arise within the context of the Fund’s work may lend themselves to the needs of the MTCT-PLUS effort, avoiding duplication. Similar synergies are being explored with the Global Business Council on AIDS.

More strategically, the mobilization of the foundation community will represent a first follow-up to the recent round of bilateral deliberations on the levels of commitment to the Global AIDS and Health Fund. The focus and the commitment to immediate action implicit in MTCT-PLUS will send a signal to the wider community that there is much more to be done now. The magnitude of the threat deserves no less.