

THE GLOBAL ELIMINATION OF CONGENITAL SYPHILIS: RATIONALE AND STRATEGY FOR ACTION



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Abbreviations and acronyms

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| | |
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| AIDS | Acquired immunodeficiency syndrome |
| DALY | Disability-adjusted life year |
| HIV | Human immunodeficiency virus |
| IEC | Information, education, communication |
| IgG | Immunoglobulin G |
| MCH | Maternal and child health |
| MDG | Millenium Development Goal |
| NGO | Nongovernmental organization |
| PAHO | Pan American Health Organization |
| PMTCT | Prevention of mother-to-child transmission (of HIV) |
| RHR | WHO Department of Reproductive Health and Research |
| RPR | Rapid plasma reagin |
| STI | Sexually transmitted infection |
| TPHA | Treponema pallidum haemagglutination assay |
| TPPA | Treponema pallidum agglutination assay |
| UNICEF | United Nations Children's Fund |
| VDRL | Venereal Disease Research Laboratory |
| WHO | World Health Organization |

Executive summary

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Syphilis remains a global problem with an estimated 12 million people infected each year, despite the existence of effective prevention measures, such as condoms, and effective and relatively inexpensive treatment options. Pregnant women who are infected with syphilis can transmit the infection to their fetus, causing congenital syphilis, with serious adverse outcomes for the pregnancy in up to 80% of cases. An estimated two million pregnancies are affected annually; approximately 25% of these pregnancies end in stillbirth or spontaneous abortion, and in a further 25% the newborn has a low birth weight or serious infection, both of which are associated with an increased risk of perinatal death. Yet, there is still a general under appreciation of the burden of congenital syphilis.

Unlike many neonatal infections, congenital syphilis is a preventable disease, which could be eliminated through effective antenatal screening, and treatment of infected pregnant women. Elimination of congenital syphilis would reduce the numbers of miscarriages, stillbirths, preterm and low-birth-weight infants, and perinatal deaths, thus contributing to the achievement of the Millennium Development Goals on maternal and child health.

A large reduction in congenital syphilis is feasible with relatively simple interventions focused on maternal and newborn care. The building blocks for congenital syphilis prevention are already in place in many parts of the world: most countries have policy guidelines for universal antenatal syphilis screening; levels of antenatal attendance are generally high; screening tests are of low cost and can be carried out at the primary healthcare level; treatment with penicillin is inexpensive; and the drug is on the essential medicines list of all countries. However, despite all these factors, congenital syphilis still causes a high burden of disease.

The overarching global goal of the present initiative is the elimination of congenital syphilis as a public health problem. This would be achieved through reduction of prevalence of syphilis in pregnant women and by the prevention of mother-to-child transmission of syphilis. The strategy of the World Health Organization for elimination of congenital syphilis rests on four pillars (see Box 1).

Box 1. Four pillars for elimination of congenital syphilis

Pillar 1:

- ensure sustained political commitment and advocacy.

Pillar 2:

- increase access to, and quality of, maternal and newborn health services. Ensure that all pregnant women are screened and adequately treated, and decrease the frequency of missed opportunities for screening women outside maternal and newborn care.

Pillar 3:

- screen and treat pregnant women and their partners. Currently available diagnostic tests for syphilis are effective, affordable and require minimal logistic support. All infected women, and their partners, should be treated, as should infants born to infected mothers not treated during pregnancy.

Pillar 4:

- establish surveillance, monitoring and evaluation systems. Improve surveillance systems, develop indicators, and strengthen monitoring and evaluation systems.



The four guiding principles for country-level action to control congenital syphilis are:

- the process should be **country-driven**, taking into account the specific cultural, epidemiological and antenatal care conditions;
- an **integrated approach** should be adopted, linking with other maternal and newborn health services (prevention of mother-to-child transmission of human immunodeficiency virus (HIV), malaria screening, etc.), sexual and reproductive health initiatives (programmes to control genital ulcer disease and other sexually transmitted infections), and primary health-care services;
- a **rights-based approach** should be applied, giving women the right to information, counselling and confidentiality;

- **partnership and collaboration** are essential for making the best use of available resources.

If congenital syphilis is to be reduced and eventually eliminated as a public health problem, increased advocacy and awareness are needed at both international and national levels, together with a sustained commitment to implement the simple and effective actions needed. Coordinated actions to provide a total package of maternal and newborn health care (for example, combining screening and treatment for HIV, malaria, and syphilis with other efforts to improve the health of pregnant women) are highly desirable. Efforts to eliminate congenital syphilis would benefit from simultaneous control of infectious syphilis in the general population.

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