DEATHS TOWARDS ZERO

QUICK FACTS
• At least half a million children become ill with tuberculosis (TB) each year.
• Up to 74,000 HIV-uninfected children die of TB every year*.
• 70–80% of children with TB, have the disease in their lungs (pulmonary TB). The rest are affected by TB disease in other parts of the body (extrapulmonary TB).
• There were over ten million orphans due to parental TB deaths in 2010.

FACTORS THAT PUT CHILDREN AT RISK
• Any child living in a setting where there are people with infectious TB can become ill with TB, even if they are vaccinated.
• TB illness in children is often missed or overlooked due to non-specific symptoms and difficulties in diagnosis, such as obtaining sputum from young children.
• Children with vulnerable immune systems, such as the very young, HIV-infected or severely malnourished, are most at risk for falling ill or dying from TB.
• Infants and young children are at increased risk of developing severe disseminated disease associated with high mortality, such as TB meningitis or miliary TB.
• Adolescents are at particular risk of developing adult-type disease, i.e. often sputum smear-positive and highly infectious.
• Children with TB are often poor and live in vulnerable communities where there may be a lack of access to health care.
• Newborn children of women with TB are at increased risk of contracting TB. Risks are very high for HIV-infected mothers and children.

ENHANCED INVESTMENT IS CRITICAL TO END TB DEATHS AMONG CHILDREN
Globally at least US$ 80 million per year will be required to address childhood TB. An additional US$ 40 million per year will be needed for antiretroviral therapy and co-trimoxazole preventive therapy for children co-infected with TB and HIV.
For childhood TB research, at least US$ 40 million per year will be required to complete projects directly aimed at providing new tools for preventing, diagnosing and treating children who have TB**.

KEY CHALLENGES
• TB in children is often missed or overlooked due to non-specific symptoms and difficulties in diagnosis. This has made it difficult to assess the actual magnitude of the childhood TB epidemic.
• Attention to child TB activities rarely included in strategic plans and budgets of ministries of health.
• Systematic screening for TB not undertaken among children living in households affected by TB.
• Recommendations for provision of isoniazid preventive therapy (IPT) for children under 5 years of age rarely implemented.
• Lack of effective diagnostics that can detect TB in children and appropriate child-friendly fixed-dose combination drugs for treatment.
• Current TB vaccine protects young children against the most severe forms of TB, such as meningitis and disseminated TB disease, but does not prevent transmission from an infectious contact.
• Insufficient knowledge of health workers on child TB diagnosis and management issues.
• Need for increased collaboration between actors in TB and maternal and child health.
• Lack of community knowledge and advocacy.

* WHO Global TB Report 2013 (in press)
The goal of reaching zero tuberculosis (TB) deaths among children worldwide is within our grasp. Achieving this requires sustained advocacy, greater commitment, mobilization of increased resources and a joint effort by all stakeholders involved in providing health care for children and in TB control. This roadmap indicates key actions and the enhanced investment urgently needed to tackle childhood TB.

**ROADMAP FOR CHILDHOOD TUBERCULOSIS**

- Include the needs of children and adolescents in research, policy development and clinical practices
- Collect and report better data, including data on prevention
- Develop training and reference materials for health care workers
- Foster local expertise and leadership
- Do not miss critical opportunities for intervention
- Engage key stakeholders
- Develop integrated family-centred and community-centred strategies
- Address research gaps
- Meet funding needs for childhood TB
- Form coalitions and partnerships to improve tools for diagnosis and treatment

**TIMELINE: KEY ACTIONS TO ADDRESS CHILDHOOD TB**

**Short term by 2015**
- Increased action in countries to prioritize childhood TB and implement activities such as contact investigation and IPT to detect and manage TB in children, in line with international standards
- High profile of childhood TB at the global and national levels
- Capacity building of health workers scaled up at all levels to detect and manage children with TB
- Antenatal screening for TB, in tandem with HIV – detect, treat or prevent TB in mothers
- Advocacy for research on new diagnostics, drugs and vaccines for childhood TB
- Improved recording and reporting of data on childhood TB

**Medium term by 2020**
- Improved prevention, detection, diagnosis and management of TB in children
- Integrated approaches implemented across the health system to address TB in children and pregnant women
- Inclusion of children in trials of new diagnostics and drugs
- Development of new diagnostics suitable for children

**Long term by 2025**
- Test for latent TB with ability to predict disease progression in children
- Point of care test with good accuracy for childhood TB
- Shorter, child-friendly regimens for both infection and disease
- Vaccines to prevent infection and disease in children and adults

**REACHING THE MDGS**

Millennium Development Goals 4 and 5 aim to reduce deaths among children and pregnant women, while MDG 6 focuses on turning around the TB, HIV and malaria epidemics. These goals cannot be achieved without additional efforts on TB diagnosis and treatment in children as well as pregnant women.