CREATE
Consortium to Respond Effectively to the AIDS TB Epidemic

The Consortium to Respond Effectively to the AIDS/TB Epidemic (CREATE) is a multinational research partnership that designs and implements studies of novel public health interventions to reduce the burden of HIV-related TB at the population level. Funded by the Bill and Melinda Gates Foundation, it was formally launched by Nelson Mandela at the International AIDS Conference in Bangkok in July, 2004. Mr. Mandela described his own experience as a TB patient, and advocated a vigorous assault on TB and HIV, stating "We cannot fight AIDS unless we do much more to fight TB as well."
While most medical research studies are designed to demonstrate benefits for individual patients, CREATE's research portfolio addresses whether the inventions are effective at a community level. CREATE works closely with the World Health Organization (WHO) Stop-TB Partnership to apply successful interventions and inform global public health policy through evidence-based advocacy. Below is a short description of the three studies CREATE conducts in Zambia, South Africa and Brazil.

ZAMSTAR

ZAMSTAR - Zambia and the Western Cape Province, South Africa
A total of 24 communities in Zambia and Cape Town, South Africa, each with 25,000 to 50,000 people, now take part in the ZAMSTAR study. This community-randomized trial is testing two interventions to reduce TB prevalence: improved TB case finding through increased access to TB diagnostics for those with symptoms, and household interventions centered on families with a TB case, offering TB screening , TB preventive therapy, and linking to HIV testing and care.

Pilot studies using TB skin testing for thousands of elementary school-age children in Zambia and South Africa with have been completed. Baseline TB prevalence surveys are underway in both countries. Intensive ethnographic evaluations of communities have been completed by a team of social scientists to aid the researchers in determining social behaviors and TB 'hot spots' in study communities.

THIBELA
Team up against TB

Gauteng, North West and Free State Provinces, South Africa
Thibela TB ("prevent TB" in Sotho, a predominant language of South African gold miners) is a cluster-randomized trial to measure the impact of community-wide isoniazid preventive therapy (IPT) on TB incidence at the community level, in a population with a high prevalence of HIV. Mine shafts, rather than individuals, have been randomized to the intervention. The total study population includes around 70,000, of whom around 38,000 are in clusters randomized to the intervention arm.

The study is powered to detect a reduction in TB incidence in the mines receiving community-wide IPT of 60%, or from 4,000 per 100,000 cases annually in the control mines to less than 800 per 100,000 annually in the mines implementing the intervention. The study includes over 19,000 miners, of who over 17,000 are on IPT.

THRio
TB/HIV NO RIO

THRio - Rio de Janeiro, Brazil
This study is designed to determine whether routine detection and treatment of latent TB infection in patients served by HIV clinics in Rio de Janeiro, Brazil, reduces TB incidence in the population receiving HIV care. Involving an estimated 17,000 clinic patients, the intervention consists of implementing a

comprehensive policy of screening for and treating latent TB infection in all HIV-infected patients.

Although TB preventive therapy with Isoniazid (IPT) has been shown to reduce the risk of TB at both the individual and community level; this is the first study to examine the impact of widespread use of IPT in an HIV infected population.

CREATE is led by The Johns Hopkins University Center for Tuberculosis Research in Baltimore, MD, U.S.A., and includes the following Partners:

- Aurum Institute for Health Research - Johannesburg, South Africa
- Desmond Tutu Centre at Stellenbosch University - Tygerberg, South Africa
- The Zambart Project - Lusaka, Zambia
- Municipal Health Secretariat of Rio de Janeiro - Rio de Janeiro, Brazil
- London School of Hygiene and Tropical Medicine - London, England
- Stop TB Partnership, World Health Organization (WHO)