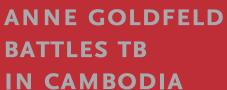
## survives a world away



For 15 years, CBR Investigator Anne Goldfeld has worked to help those suffering from tuberculosis in Cambodia. She and colleague Sok Thim founded the Cambodian Health Committee in 1994 and have pioneered community-based treatment programs in southeastern Cambodia that have increased TB patients' compliance with drug regimens from 30 to 99 percent. Their community-centered approach is detailed in *Curing Tuberculosis: A Manual for Developing Communities*. For a copy, send an email to goldfeld@cbr.med.harvard.edu.

Tuberculosis is a worldwide plague, at its worst in Southeast Asia, China, Russia, and in war-torn countries such as Afghanistan. Two million people died of TB last year and about one-third of the world is infected. The AIDS crisis fuels the spread of TB, because compromised immune systems are prone to developing the disease.

At the CBR Institute, Goldfeld conducts extensive research on TB, often using blood samples generously contributed by patients in Cambodia. Her paper "Genetic Susceptibility to Pulmonary Tuberculosis in Cambodia" appeared this winter in the journal *Tuberculosis*. Another 2004 paper by

CBR Investigator Anne Goldfeld, M.D., and co-founder of the Cambodian Health Committee, comforts Ngeng Thi Ung, a woman in a government hospital in Phnom Penh with advanced cases of tuberculosis and AIDS. *Photo by James Nachtwey.*VIIphoto Agency.

Goldfeld and colleagues, in *The Journal of Immunology*, suggests new therapeutic directions for patients co-infected with TB and AIDS.

In an excerpt from a longer article, Goldfeld writes here about the suffering and death of a Cambodian patient:

The desolate and filthy TB ward of the old Russian Hospital is a last resort for AIDS and TB patients with no resources in Phnom Penh. With few doctors and nurses and even fewer medical supplies, impoverished patients must purchase their own medicines and even blood for transfusion.

In one of the rooms of the Russian Hospital's TB ward, we found Chia Samoun. From Battambang in the west of the country, Samoun had cleared mines for a living. At 32, he had survived the minefields but not the visits to prostitutes he made two or three times a month. Prostitution is widely practiced in Cambodia. Men who leave their village for work in the cities often frequent prostitutes and become infected with HIV and infect their wives. The husband typically dies first, leaving the wife and a new baby HIV positive. In fact, 30 percent of all new HIV infections in Cambodia in 2003 are in newborn babies. The older children of the family soon become orphans. It is estimated that there will be 140,000 AIDS orphans in Cambodia by 2005.

In addition to HIV infection, Samoun's lungs were riddled with tuberculosis, the disease that kills half of all AIDS patients in Asia and Africa. He was writhing in pain and holding his belly due to a bleeding ulcer. He was unable to drink or eat. His family had spent all their money to bring him to the hospital, and there was no money left to buy morphine or intravenous fluids.

Samoun's wife rubbed his arms and offered him rice. Through tears, she said that she was angry when she first discovered his illness, but she remembered his goodness to her in the beginning of their marriage. With a seven-year-old daughter playing quietly in the corner of the room, Samoun's wife said she had decided not to abandon him. She would care for him until the end.

Samoun was transferred to a ward run by Medecins Sans Fronteires, the first place in Cambodia to offer AIDS drugs to poor people. Despite the outstanding care offered to him in the new ward, it was too late. He died three days later of massive internal bleeding.