RUNNING OUT OF BREATH
The Tuberculosis Crisis
Cecilia, a 30-year-old Malawian woman, was too weak to travel. A bicycle-drawn ambulance had to transport her to Thyolo district hospital in rural Malawi. Cecilia has active tuberculosis (TB)—for the second time in two years. The first time she was diagnosed and treated as an outpatient. This time Cecilia has a form of TB that is outside her lungs and has caused lesions on her other vital organs. Recently, she completely lost her appetite and became so emaciated that she was unable to walk on her own.

Cecilia is one of more than eight million people who will develop active TB this year. Two million will die. A disease once thought vanquished in the West is roaring back. There has been a 20 percent increase in TB cases worldwide in the last decade.

Yet the most widely used diagnostic test was developed in 1882 and barely identifies half of the people with active TB. The only medicines available to treat the disease were developed decades ago, and must be taken for six to eight months to be effective. Meanwhile, TB has become the leading killer of people living with HIV/AIDS, and multi-drug resistant TB (MDR-TB) is on the rise.

Doctors Without Borders/Médecins Sans Frontières (MSF) is calling for research and development into new medicines and diagnostic tests that detect all forms of TB in all patients, especially children and people living with HIV/AIDS, and into new approaches to treating people with TB.

In the past few years, MSF has expanded its TB programs to include more patients. At the same time, the focus has shifted from controlling the disease to providing patients with the best treatment available. During 2003, MSF treated more than 20,000 people living with TB in 21 countries, and that number continued to increase in 2004.

“It’s time to openly admit we’ll never be able to ‘control TB’ by prescribing more of the same,” said Francine Matthys, MD, MSF’s TB advisor. “Massive investment is needed now, so that we can effectively diagnose and treat all those with TB in the shortest possible time.”

DETECTING TB

Ninety-five percent of people with TB live in developing countries, particularly in Africa and Southeast Asia. Medical professionals in these resource-poor countries are forced to rely on the diagnostic test, called sputum smear microscopy. Other more effective tests are too expensive and require...
extensive training for technicians and sophisticated labs.

There are several problems with sputum smear microscopy. The test requires patients to produce a sputum, or lung fluid, sample, and it is only effective in diagnosing people with active pulmonary TB (TB in the lungs). Children are usually physically incapable of producing the sputum sample and people living with HIV/AIDS generally have immune systems that are so weakened that they either cannot form sputum or have a form of TB, involving other organs, that require, much more sophisticated testing.

The smear microscopy test also requires trained technicians to examine the microscope slides to detect the TB bacillus. The test comes up positive only when a patient has a high concentration of the TB bacilli in their sputum sample, specifically 5,000 to 10,000 bacilli per milliliter. Cecilia was diagnosed with TB through observation of clinical symptoms and a chest X-ray. In many areas with high TB prevalence there is no access to other diagnostic tools, not even chest X-rays.

**BEYOND DOTS**

The main problem with TB treatment is that no new TB drug has been developed since the 1960s. Because the TB bacillus is an incredibly resilient bacterium, the best medicines take six to eight months to kill the last bacilli in an infected person.

Another constraint of TB treatment is the treatment strategy endorsed by the World Health Organization (WHO), known as Directly Observed Therapy Short course strategy (DOTS). DOTS requires each patient to swallow the drugs in the presence of a health worker every day for at least the first two months, which puts a tremendous strain on the already overstretched medical staffs of TB treatment programs in the hardest-hit countries, and also assumes a regular supply of quality drugs.

The reason behind DOTS is that doctors have few effective medicines to treat TB. Without the most powerful TB drug, rifampicin, TB treatment would take more than a year. There is a fear among public health officials that, if TB patients do not follow their treatment, strains resistant to rifampicin could spread.

Yet, it’s individual patients that suffer from this strategy, which is the result of no new TB drugs being developed. In reality, many countries with high rates of TB do not have the health workers needed to meet the DOTS standard for use of rifampicin, and patients are instead treated with inferior combinations of other TB medicines.

**DEADLY COMBINATION: HIV & TB**

In Thyolo, Malawi, Cecilia is complaining about pain and swelling in her legs. Andrew Mtilatila, her medical assistant, thinks the symptoms might be related to HIV. Cecilia is HIV positive, like 80 percent of the TB patients in Thyolo Hospital.

Worldwide an estimated 12 million people are now infected with both HIV and TB, more than two-thirds of them in sub-Saharan Africa. Between 1995 and 2000, global HIV-related TB prevalence tripled from 4 percent to 12 percent. AIDS weakens the immune system and leaves infected people vulnerable to TB.

Based on her CD4 count, Cecilia qualifies for antiretroviral (ARV) treatment, but “she is still too weak to tolerate the potentially life-threatening side effects of the drugs,” says Mtilatila. “ARVs may worsen her TB—this is a seemingly paradoxical consequence of ARVs making a person’s immune system stronger.”

MSF encourages anyone treated for TB to be voluntarily counseled and tested for HIV. Most accept, and most turn out to be HIV-positive. Those patients for whom ARVs are medically indicated...
are offered treatment. However, because TB treatment makes
their most acute symptoms disappear, and because of the cost,
time, and effort involved, only about 20 percent of patients
return to the clinic for their ARV treatment.

“To increase the uptake of ARVs, we’ve decided to start people
on ARVs while they’re still hospitalized for TB—when their
condition allows,” says Roger Teck, MD, MSF head of mission in
Thyolo. “This is not simple, as there are problems giving the
two treatments simultaneously.”

Patients who have both TB and HIV must follow two regimens
and two quite different approaches to treatment: they are
required to attend the clinics at different frequencies and for
varying lengths of time, with direct staff observation for TB
treatment and the identification of a support person to help
encourage adherence to their ARV treatment.

“Patients’ lives would be made easier if they could return for
TB and ARV treatment visits on the same day in nearby health
facilities, and if they could take their ARVs and TB drugs at the
same time at home,” says Dr. Teck.

The rise of TB and HIV co-infection makes the need to improve
TB treatment even more urgent. MSF’s experience delivering
ARV treatment in developing countries—which is arguably more
complex than TB treatment, particularly because treatment is
life-long—demonstrates clearly that, when patients are given
the necessary information and support, they take their medi-
cines properly over a long period of time.

In many of MSF’s ARV programs, adherence rates exceed 90 percent.
Key to this success has been the organization’s close partnerships
with associations of people living with HIV/AIDS and other
community activists to educate people about treatment and to
provide individual and group support. This “patient-centered”
approach, coupled with the development of simplified drug
regimens—especially fixed-dose combinations that reduce pill
burden—has significantly promoted adherence to treatment.
In the coming months and years, it will be important to
explore the lessons learned in delivering ARV treatment in
resource-limited settings and apply those to TB treatment.

Cecilia will not be leaving the Thyolo Hospital any time soon. “The
standard TB re-treatment regimen requires her to stay in the
hospital for three months of intensive treatment,” says Olga Ascurra,
MD, a member of the MSF team in Thyolo. “After that, she must
continue to take TB drugs at home for another five months.”

The hospitalization will put a significant strain on Cecilia’s family.
Her daughter has been staying with a sister while her husband
works. “I am happy with the care offered at the hospital, but

Thyolo is over half an hour’s drive away from Blantyre so it is
expensive for my family to come and see me,” she says.

Dr. Teck is concerned about the high rates of people returning with
TB-like symptoms once they have been treated. “Fifteen percent
of our TB patients are re-treatment cases like Cecilia,” he says.
“These people might be becoming multi-drug resistant, but in
Malawi we have no reliable means of confirming that.”

Micky van Gerven, MSF’s head of mission in Uzbekistan, shares
Dr. Teck’s worries over the spread of drug-resistant TB. In parts
of Eastern Europe, nearly half of all TB cases are resistant to at
least one first-line drug.

MSF is tackling MDR-TB in Karakalpakstan, Uzbekistan, which
is one of the world’s TB hot spots. Around 14 percent of all new
cases in the Nukus and Chimbay districts, where MSF works, are
resistant to first-line drugs. “This means 250 new people get infect-
ed every year with a resistant strain of TB,” says van Gerven.

Worldwide MDR-TB, defined as resistance to at least rifampicin
and isoniazid, the two post powerful TB drugs, could be spreading
by 250,000 to 400,000 new cases each year. Treatment for
MDR-TB can last upwards of two years, much of it requiring
inpatient care, and costing between $10,000 and $14,000 per
treatment course—250 to 1,400 times the cost of first-line

In April 2004, MSF expanded a program, in which it had been treating
100 people with MDR-TB from Nukus and Chimbay, to offering
treatment to all patients with TB resistance in the two areas.

“We want to put patients on treatment as early as possible and
not wait until they have failed DOTS,” says van Gerven. “This makes
treatment more successful and lowers the risk of spreading TB.”

Both the disease and the treatment take a heavy toll on MDR-TB
patients. “Since second-line drugs are not the most effective, it
is often necessary to use a combination of five to seven drugs,”
says van Gerven. “Many of these drugs have severe side effects,
like acute psychosis, that have to be treated as well.

“Most of the patients are among the poorest people of the
population and their circumstances force them to live day to
day,” says van Gerven. “A two-year period in which they have
to be either in the hospital or to come to the clinic six days
per week to take their drugs is not an easy one to adhere to.”
TUBERCULOSIS (TB)

Cause: Koch's bacilli. Transmitted when a person breathes in the germs through the infected person's coughs or sneezes.

Symptoms: Shortness of breath, fever, fatigue, weight loss, coughing up of phlegm and, in later stages, blood. Other forms lead to pain, loss of concentration, high fevers, and weight loss. People infected with TB do not necessarily become ill (only one in 10 of those with a normal immune system become sick). The immune system creates a barrier around the bacilli, which can lie dormant for years until the metabolism is weakened, creating the right conditions for the bacteria to become activated and attack the lungs, bone marrow, and meninges (membranes around brain and spinal cord.)

Prevalence: One-third of the world’s population is infected with TB, and 16 million suffer from active TB. It is estimated that two million people die of the disease every year. Cases of TB have risen by 20 percent over the last decade.

Treatment: Isoniazid, rifampicin, pyrazinamide, ethambutol, or streptomycin. The recommended global strategy for combating TB is called DOTS, which combines a regular and uninterrupted supply of high quality anti-TB medicine with six to eight months of directly supervised treatment. Multi-drug resistant TB (MDR-TB) is resistant to isoniazid and rifampicin, the two most powerful anti-TB drugs. Treatment of MDR-TB is not only more toxic, but also up to 1,400 times more expensive than treating other forms of TB.

MSF’S TB TREATMENT PROGRAMS

Doctors Without Borders/Médecins Sans Frontières (MSF) cares for TB patients through 39 projects in 19 countries: Angola, Abkhazia/Georgia, Myanmar (Burma), Burundi, Caucasus/Chechnya, Chad, China, Republic of Congo (Brazzaville), Democratic Republic of Congo, Ethiopia, Guinea, Ivory Coast, Kenya, Malawi, Sudan, Somalia, Thailand, Uganda, and Uzbekistan. In 2003, 20,189 new TB patients were admitted to programs supported by MSF.

The settings in which MSF provides TB care vary widely:

Chronic conflicts: Fifteen MSF projects treat TB patients in chronic conflicts, including work in breakaway Abkhazia region of Georgia and in southern Sudan.

Primary health care: An increasing number of patients receive TB care from MSF in health centers, such as those in southern Sudan and Angola.

Prisons: Two MSF projects offer treatment in prison settings, in Abkhazia/Georgia and Ivory Coast.

Multi-drug resistant TB: MSF is treating multi-drug resistant tuberculosis in three countries: Ivory Coast, Abkhazia/Georgia, and Uzbekistan, where a cohort of some 100 MDR-TB patients was enrolled in September 2003.

HIV/AIDS co-infection: Because TB is a major threat to people living with HIV/AIDS, MSF provides TB treatment in its AIDS programs in several countries, including China, Cambodia, Kenya, Malawi, South Africa, and Zambia.

Alternative models: MSF is trying to find ways to treat patients who cannot come to a clinic to receive their medicines, such as migrants or nomadic people. For example, MSF is offering home-based care in Cambodia and factory-based treatment in Thailand.

A two-year-old girl who had successfully completed TB treatment a month ago at MSF’s TB program in Kuito, Angola, was brought back to the hospital only a few weeks later. She had lost nearly six pounds and was suffering from malnutrition, diarrhea, and dehydration. An MSF aid worker is trying to find a vein to place an IV. 2004 © Sebastien Rich
TB CASES AROUND THE WORLD

THE AMERICAS

Estimated number of TB cases by region (in thousands).

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<thead>
<tr>
<th>Region</th>
<th>Cases (in thousands)</th>
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<tr>
<td></td>
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<td></td>
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TB incidence rate measured as TB cases per 100,000 people per year.

<table>
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<tr>
<th>Region</th>
<th>Incidence (per 100,000)</th>
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<tbody>
<tr>
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<td>182</td>
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SOURCE: WORLD HEALTH ORGANIZATION
Within 72 hours of the Indian Ocean tsunami that devastated countries throughout South Asia, the first Doctors Without Border/Médecins Sans Frontières (MSF) teams arrived in the affected areas. In all, more than 200 international MSF volunteers and 2,000 metric tons of supplies have been sent to the region.

After assessing the needs, MSF decided to focus its relief efforts mainly on Aceh province in the northern part of the Indonesian island of Sumatra, and on the southern, eastern, and northern coastal areas of Sri Lanka.

In Thailand, MSF donated medical material to several hospitals in the province of Phang Nga. In southern India, where psychological trauma was found to be a serious problem within affected communities, MSF launched psychosocial support programs.

From left to right:
- In Kalmunai, Sri Lanka, an MSF team distributes supplies to tsunami survivors. © Henk Braam
- An MSF aid worker cleans the wound of an injured woman in Aceh, Indonesia. © Francesco Zizola

INDONESIA

An MSF team of eight people, including three nurses and two doctors, arrived in Banda Aceh, Sumatra, on December 28, 2004, two days after the tsunami struck, on a chartered aircraft also carrying 3.5 metric tons of medical and relief materials. They immediately set up a medical clinic in the city and began conducting assessments and relief operations both in the city and, by helicopter, in locations along the western and northeastern coasts of Aceh province. The first assessments revealed that large numbers of people living in these coastal areas were killed in the first minutes of the tsunami.

During the first 10 days of operations, MSF provided medical and sanitation support in one of the main hospitals in Banda Aceh and brought three mobile medical clinics to camps for displaced people in the city. Traveling by helicopter, MSF teams worked in 12 locations along the hard-hit western and eastern coasts. They provided emergency medical care, evacuated severely wounded people to hospitals, assisted local health facilities with medical supplies, carried out mental trauma counseling, and provided relief items such as food, jerry cans, and tents.

In the second week of operations, MSF began supporting the main hospitals in Meulaboh and Sigli, and began running mobile medical clinics in those towns as well as in Lamno, in addition to those continuing in Banda Aceh. MSF undertook additional assessments between Bireuen and Lokseumawe on the eastern coast, where an estimated 38,000 displaced people had gathered, and in 25 locations along the western coast. MSF donated medical supplies to health facilities and distributed relief supplies to the people in need in these areas.

By the end of January the mobile medical teams working in Banda Aceh, Lamno, Meulaboh, and Sigli had seen more than 15,000 patients. In the main hospital in Meulaboh, MSF is continuing to provide support to patients in the post-operative, medical, and pediatric wards. Given the increase in cases of tetanus seen among
UNPRECEDENTED DONOR SUPPORT

In an extraordinary demonstration of public support, MSF donors contributed more than 90 million euro (USD 117 million) to MSF offices worldwide to support the victims of the tsunami. MSF is extremely grateful for this generosity: These funds allowed our teams to quickly bring significant assistance to the affected people.

Donations to MSF for the tsunami emergency—equivalent to the entire 2003 budget for MSF operations in Angola, Afghanistan, Democratic Republic of Congo, Liberia, and Sudan put together—surpass our financial requirements for tsunami-related emergency needs. That is why, within a week of the disaster, MSF decided to stop accepting earmarked donations for tsunami-related relief operations to ensure its accountability to our donors and beneficiaries.

Following its sizeable emergency response, MSF is committed to continue working in Aceh and other regions affected by the tsunami as long as we are needed. As a result of the over-abundance of funds for the tsunami emergency, MSF offices in the United States and around the world are contacting supporters to ask their consent for using their ‘tsunami gifts’ in other emergencies and crises. No donations earmarked for tsunami relief will be used for any other purpose without the consent of the donor. MSF operations are needs driven. We are asking supporters to meet the urgent and unmet needs that our fields teams are addressing in other emergencies. Moreover, MSF’s strength lies in our ability to respond quickly to the immediate medical needs of people affected by natural disasters, conflicts, and epidemics, while other organizations may undertake long-term reconstruction and development projects.

RESPONDING TO THE TSUNAMI DISASTER

The population affected by the tsunami, MSF is ensuring that tetanus vaccinations are given and providing treatment with human tetanus immune globulin (HTIG) for all wounded patients in two hospitals in Meulaboh and Sigli.

Because vaccination coverage among children in Aceh is relatively low, MSF carried out a measles-vaccination campaign for 6,500 children living in camps in Sigli.

The tsunami created untold grief and left many victims in need of mental health care. MSF is running mental health programs (linked to medical consultations) in Banda Aceh, Lhokseumawe, and Meulaboh, and is rehabilitating the main psychiatric hospital in Banda Aceh and supporting the staff there.

So far, there have been no major disease outbreaks, but MSF is continuing to conduct epidemiological surveillance in the main locations where teams are working. The medical teams are mainly busy treating respiratory tract infections, diarrhea, and suspected psychosomatic illnesses.

With clean drinking water supplies and sanitation still lacking, MSF is setting up water bladders and distribution systems; trucking water; cleaning and rehabilitating wells; and improving sanitation and waste collection in many locations.

SRI LANKA

The first of several MSF teams arrived in Colombo, the capital of Sri Lanka, on December 27 and reached Batticaloa and Trincomalee in the east three days later. For 10 to 12 days following their arrival, MSF teams carried out assessments along 200 kilometers of the eastern coast from Pulmoddai to Koddaikalar, and covered approximately the same distance between Galle and Poituvil, on the southern coast. They visited the most affected areas from Point Pedro to Colombo in the west.

The assessments revealed uneven destruction of coastal villages, with those closest to the sea having been partially or totally destroyed. The survivors had settled in public buildings or were living with neighbors and family. Livelihoods—boats, fishing nets, fisheries, hotels, restaurants, and so on—had been destroyed. Access to village was often difficult during the first week due to destroyed roads and bridges. The teams encountered local people who were very active in rebuilding and cleaning up and discovered no large-scale medical emergency. Indeed, most Sri Lankans have received vaccinations, and the well-organized medical system remained efficient after the tsunami hit the coast.

However, MSF helped to meet basic medical needs, such as treatment for the large numbers of respiratory tract infections and diarrhea, which are common among displaced people without adequate shelter. By mid-January some 160 relief groups had arrived to support the aid effort.

After having provided basic medical aid through mobile clinics and existing medical facilities as well as by distributing relief goods during the first weeks after the tsunami, MSF is now focusing on helping the most vulnerable people as they rebuild their lives. The organization will be providing psychosocial support in collaboration with the local NGO Shade and will help families re-establish their livelihoods and communities.

For the latest information on MSF’s aid operations in tsunami-affected areas visit: www.doctorswithoutborders.org
In Aceh, a part of Indonesia that has been sealed off to foreigners, aid workers, and journalists for the past two years, Doctors Without Borders/Médecins Sans Frontières (MSF) received authorization to enter on the night of December 27, the day after the disaster. Ibrahim Younis, a logistician with MSF's emergency team, led the first MSF team in Aceh. He had worked there for two years previously, in 1999 and 2000. Ibrahim looks back on the first 10 days of devastation and aid operations in the province.

Sunday, December 26, 2004
Ibrahim is in Jakarta after having conducted aid-assessment missions that took him to Thailand, Malaysia, and Indonesia. He had been scheduled to fly back to one of the MSF operations centers in Brussels, Belgium, the next day. “At nine in the morning, I received a text message from a former colleague in Bireuen on Aceh’s east coast. Flooding everywhere, it said. Then I saw the first reports from other countries hit by the disaster and realized this was something very big. We put a team on standby, looked at the emergency stock in our warehouse, started negotiating clearance with the authorities, and of course had regular contact with the MSF emergency desk in Brussels.”

Monday, December 27
Bit by bit, more information comes in from Aceh. Another former MSF employee passes on a message about Banda Aceh: “There are bodies and the city is flooding.” Ibrahim finds a plane that can take the first team and 3.5 tons of supplies from Jakarta into the province. In the evening, the Indonesian authorities give MSF written approval to go in.

Tuesday, December 28
Most of the day is spent sending orders for supplies to Brussels, buying extra materials in Jakarta, and loading the plane. At eight o’clock in the evening the plane leaves, carrying eight MSF workers. Late that night, they offload the materials on the tarmac of Banda Aceh airport. “I took a car together with a medical doctor into town, primarily to make contact with local people. At the roundabout on the way from the airport, there were between 500 and 1,000 bodies. The stench was unbearable. In the city people were wandering the streets. A group of people had gathered around the mosque.” That night, the team makes a donation of medical materials to the one functioning hospital, the first of many such donations.

Wednesday, December 29
In the morning, Ibrahim rents two cars with local drivers. The airport is chaotic, with many Acehnese arriving to search for their loved ones and people from other parts of Indonesia coming to help out. Based on information gathered locally, two MSF teams set out into the city to bring mobile clinics to displaced camps.

Thursday, December 30
More MSF staff arrive. The cargo flight with supplies has arrived in Medan, the other major airport in Aceh province, and will arrive in Banda Aceh soon. Ibrahim finds trucks to deliver the goods. While the medical staff is doing back-to-back consultations with the mobile clinics, others erect tents at the side of Fakine Hospital and set up MSF’s temporary base there.

Friday, December 31
The arrival of seven cars and an available helicopter helps get the MSF operation in full swing. Ibrahim and three colleagues fly along the western coast to find people left homeless by the tsunami. “The coastline looked like Hiroshima. Basically everything up to two miles inland from the coast was completely wiped out and the villages I used to recognize from my time here before were not there anymore. The road from Banda Aceh to Calang and on to Meulaboh was completely
destroyed. All that remained of Calang itself was the telecommunication tower on the hill. We landed briefly in Lokh Timun, in Lampe Ngo, and in Calang. We were the first aid workers to get there, so we asked four simple questions. Is there food, is there water, are there wounded, and is there a doctor or nurse? Thus, we could prepare for coming back with the appropriate assistance. In Lokh Timun, there was a nurse, so we left material behind for wound dressing.”

Saturday, January 1
The helicopter drops off a medical team with materials and rice in Lokh Timun, to do a one-day clinic. “We were about to reach the city of Meulaboh when it started to rain. We couldn’t land because the pilots couldn’t see clearly enough. But still we could see that about half of the city was destroyed. Nothing was left standing near the harbor but a mosque. Then we went back and picked up the medical team in the first location. They also had a child who had a serious infected wound on his leg that needed surgery. The boy was only seven or eight. His sister, who wasn’t much older, came with him. The rest of the family was dead.”

Sunday, January 2
During a second day of consultations in Lokh Timun, the team learns that of the original population of 3,200 only 1,270 people are left. Most of them have survived without shelter and on a diet of coconuts. From nearby Calang, where the Red Crescent has now started providing medical care, the helicopter evacuates two patients to Banda Aceh. A small MSF team has a first look in communities east of Banda Aceh and finds large numbers of displaced there too.

Monday, January 3
A team stays overnight in the village of Lamno on the west coast. Around 11,000 people are living there in improvised camps, many of them from nearby villages that had lost nearly all of their inhabitants. In Banda Aceh the mobile clinics provide 228 consultations in one day, most of them for wounds (many of them infected), respiratory tract infections, and skin diseases. They also provide trauma counseling. Ibrahim sets off for a two-day assessment along the east coast.

“...“The hospital in Sigli, two hours east of Banda Aceh, was overwhelmed. Much farther east, in Bireuen, 500 wounded people arrived in one day. We decided to put a surgical team in Sigli hospital, start mobile clinics for the displaced, and donate supplies to the staff working in the hospital of Bireuen.”

Tuesday, January 4
The surgical team in Sigli hospital does 60 consultations, finds 20 infected wounds, and performs surgery on six patients. Nearby, in Kembang Tanjung MSF sets up a mobile clinic in an area that houses 47,000 displaced persons in 60 camps. In Banda Aceh, the logistical challenge is exacerbated by the temporary closure of the airport following an accident on the runway. This does not interrupt the busy schedule of the MSF helicopter. In addition to transporting MSF staff along the coast, the helicopter also delivers 270 kilos of rice, and 100 tarpaulins, and evacuates seven severely wounded people to Banda Aceh.
AFTER THE WATERS RECEDE

From cleaning infected wounds to distributing shelter materials, here, in photographs, are snapshots of Doctors Without Borders/Médecins Sans Frontières’ (MSF) efforts to assist tsunami survivors.

1. An MSF aid worker setting up a tetanus prevention clinic in Banda Aceh, Indonesia. © Francesco Zizola
2. In Kalmunai, Sri Lanka, MSF distributes relief supplies to tsunami victims. © Henk Braam
3. The MSF tetanus clinic in Banda Aceh. © Francesco Zizola
4. In Meulaboh, Indonesia, an MSF aid worker surveys the damage from the tsunami. © Francesco Zizola
5. Children draw to express themselves in an MSF mental health clinic in Indonesia. © Kris Torgeson/MSF
6. The MSF tetanus prevention clinic in Banda Aceh. © Francesco Zizola
7. In Tangalle, Sri Lanka, a woman walks past the ruins of a house. © Henk Braam
8 In Kalmunai, Sri Lanka, an MSF team distributes supplies to tsunami survivors. ©Henk Braam
9 An MSF physician examines a child in Aceh province of Indonesia’s island of Sumatra. ©Francesco Zizola
10 A camp for displaced Sri Lankans from Tirrukovil, where MSF provided assistance. ©Henk Braam
11 The ruins of Meulaboh city in Aceh province. ©Francesco Zizola
12 In Tirrukovil, Sri Lanka, women wait to receive medical assistance from MSF. ©Henk Braam
13 View of the destroyed city of Banda Aceh. ©Francesco Zizola
FIELD UPDATES

MENINGITIS OUTBREAK IN EASTERN CHAD AMONG REFUGEES FROM DARFUR
MSF has launched a vaccination campaign following a recent outbreak of the “W135” meningitis strain among Sudanese refugees who fled the ongoing violence in the Darfur region for eastern Chad. Working with local health authorities, MSF’s goal is to vaccinate 70,000 Sudanese refugees and local residents who are living in and around the Bredjing and Farchana refugee camps, and in the border town of Adré. MSF has been working in eastern Chad since September 2003, providing medical and surgical assistance, nutritional support, and water and sanitation to 85,000 Sudanese refugees.

COLOMBIA’S “INVISIBLE” PEOPLE
MSF has focused its activities in Colombia on aiding the large population of internally displaced persons, whose numbers, by some estimates exceed three million, and who, in many cases, lack access to the national health system. More than 7,500 of the Colombians who have fled violence, death threats, and extortion have settled in the impoverished Altos de Cazucá section of Soacha, a township on the outskirts of Bogota, where MSF has been providing primary health care since 1999. During consultations in Soacha in 2004, MSF medical staff found a chronic malnutrition rate of 29 percent among children under the age of five compared with a nationwide rate of 9 percent. Despite Colombia’s progressive health care laws, few of the internally displaced people know of the benefits available to them, and of those who do, many fear providing information on their whereabouts. More than 60 percent of the patients surveyed in MSF clinics did not know about the health agency for displaced people, and 88 percent did not know how to access the agency or find information about it. “Look, yesterday my child had a stomach ache,” one displaced person told MSF. “We had to take him to the doctor, but no, when you are displaced and have no card, you are not given assistance.”
© Gervasio Sanchez
SUPPORTING EARTHQUAKE VICTIMS IN IRAN

MSF has sent medical support and materials to those hardest hit by the earthquake in February that affected more than 30,000 people in the mountainous region of Zarand, Iran. MSF is working in the health center of Hotkan, a mountainous village, located 45 minutes from the city of Zarand, near the earthquake epicenter. Up to 95 percent of the town was destroyed. Two teams, each composed of an MSF doctor and nurse, are providing consultations from mobile clinics in this and other areas, such as Babgohar and Sarbagh some 30 minutes away. The planned MSF assistance focuses on the 3,000 of the most vulnerable people who live in isolated or affected villages. The most vulnerable people are those who have lost everything in the earthquake. The snow and cold in the mountainous regions could exacerbate the seriousness of their current conditions.

THOUSANDS FLEE FIGHTING IN EASTERN CONGO

Since the end of January 2005, thousands of people have been left homeless due to the fighting between rebel groups in the Ituri region of the Democratic Republic of Congo (DRC). In the village of Tche, in the highlands, nearly 7,000 displaced people are living without adequate shelter in an area with especially low temperatures at night. An MSF medical team has set up a temporary health clinic and is supplying potable water, but people still need food. Between 5,000 and 7,000 people have fled to Kawa, on the banks of Lake Albert, which is only accessible by boat. Many cases of dysentery have broken out among the displaced people, and measles vaccination coverage among the children is very low. MSF has airlifted enough medical and water-and-sanitation equipment to meet the needs of all the people for the next three months and is prepared to bring in more supplies as necessary. Medical assistance will include a measles vaccination campaign. The intensity of the violence and insecurity forced MSF teams to suspend operations for a few days in late February, but they were resumed in early March. © Cecilia Innes
Maria Ilva Tente, MD, speaks with a patient at the Doctors Without Borders/Médecins Sans Frontières (MSF) clinic in Walgak, in southern Sudan. After having been successfully treated for more than a month, the patient is happy to be discharged. The Walgak clinic where he was seen has the capacity for 20 inpatients and mostly treats people suffering from the disease kala azar.

Kala azar is the most severe form of leishmaniasis and is transmitted by the bite of a tiny parasitic sand fly. It affects about half a million people per year, mostly in Bangladesh, Brazil, India, Nepal, and Sudan. The treatment is painful and lengthy: 30 daily injections of the drug SSG. To date, MSF has treated more than 20,000 kala azar cases in the West Upper Nile region.