

HEALTH BRIDGES INTERNATIONAL

The Misión of Alto Cayma

Policlinico Maria Madre de la Misiones

Volunteer Healthcare Provider Program

FREQUENTLY ASKED QUESTIONS FOR MEDICAL AND HEALTH CARE VOLUNTEERS

WHO WE ARE? The Alto Cayma mission is run by Father Alex Busuttil, a Catholic priest from the island of Malta who has been in Peru for over ten years. When he first arrived and asked the people what their greatest needs were, he was told that a church, day-care center would be of greatest benefit. In addition, he was told of the great need for help with employment. Since then, a model community healthcare program has been established. From a child care facility that offers food, education and healthcare to over 65 children per day to a multidisciplinary clinic that serves over 9,000 patients per year – the mission has grown to meet the needs of the people in the community of Alto Cayma.

WHAT WE DO? The mission is quite far-reaching in scope. While providing much needed help in the way of food, medical care and spiritual support, they are also training and employing people. They are teaching people to farm and cook. Those who work at the mission but have problems with alcoholism in the family are paid in clothing and food to help avoid perpetuating the problem. They provide the yarn for women who make sweaters and then sell them. A significant portion of the mission outreach is dedicated to a daily food distribution program that feeds well over 650 people everyday. The food, prepared in a large industrial kitchen on site at the mission's main campus, is distributed to the poorest families and individuals of Alto Cayma in a "Meals on Wheels" format. Each day food is brought directly to the houses of the most needed citizens in one of Arequipa's poorest communities.

While less than 1% of the population was employed when the priest first arrived, he has a goal of a 60% employment rate. One of the largest struggles is in working to keep children in schools. Currently, to attend a public school, children must have a basic uniform and book supply. The parents must already be employed to have the money to keep their children in school. While this cost is a hardship for many of the families, the government is considering abandoning public schooling in favor of private schooling which would result in no education for the large poor population. Programs have been erected in the Alto Cayma community to build financial safety nets for the poorest citizens. Vocational and didactic training programs are designed at elevating the socioeconomic status of families so that children can remain in school and build toward their futures.

The focus of the mission of Alto Cayma is to be ever present to the needs of the community and to create programmatic responses that are culturally responsible and sustainable. One such project of the mission is the Policlinico Maria Madre de la Misiones.

WHO SHOULD VOLUNTEER? Licensed healthcare providers are welcome to apply. We receive a variety of dental and medical individuals and teams from around the world that assist our community health center. Placements for up to 1 year can be arranged through direct contact with the mission or through coordination through a medical mission board (e.g. The Catholic Medical Mission Board; see - <http://www.cmmb.org/> or Health Bridges International, Inc.; see – www.HBInt.org).

The bulk of volunteer providers in our clinic and healthcare center are trained in the primary care disciplines. We have, however, had volunteers join us for Physical Therapy placements, speciality medical care placements and general nursing.

- Medical brigades work in clinics, mountain villages and places where routine care and assessment are needed
- Optometry teams provide eye examinations and glasses for needy people
- Other teams include: Primary care, OB/GYN, pediatric and specialty care

GENERAL MEDICAL/DENTAL VOLUNTEER REQUIREMENTS:

- Ability to work on behalf of a faith-based organization
- Cultural sensitivity to the needs of impoverished peoples of a developing nation
- Willingness to work in difficult conditions and challenging environments
- **Copy of:** current medical/dental license, copy of medical/dental/health professional training program degree/diploma, copy of residency training program certificate/diploma, and copy of current Curriculum Vitae (CV)
- **Medical Providers** - Completion of a three-year residency program in one of the following primary care disciplines: Pediatrics, family medicine, internal medicine, and gynecology; special consideration and accommodation can be made for physicians trained in dermatology, ophthalmology and gastroenterology – but a majority of the care provided from the Policlínico María Madre de la Misiones is primary care related health care services
- **Dental Providers** – a good general understanding of extraction and restorative based dental services is needed
- Good general health
- Valid passport
- Up-to-date doctor-recommended immunizations
- Ability to pay and/or fundraise travel and in-country expenses
- Ability to assist in acquiring needed supplies

DO YOU HAVE TO BE RELIGIOUS TO PARTICIPATE? The Alto Cayma Mission is a Catholic organization; but faith, spirituality or religious preference is not a criterion for volunteering. We have had Buddhists, Christians, agnostics and atheists join us. All we ask is that you are respectful to the beliefs of those around you and that you participate in group activities. We are not an evangelical outreach program; and do not expect trip participants to abide by any single doctrine. We only ask that everyone who participates in the Mission of Alto Cayma Volunteer Healthcare Provider Program be respectful, open, and flexible.

IS THERE A LANGUAGE REQUIREMENT? The Volunteer Healthcare Provider Program with the Mission of Alto Cayma has no Spanish language requirement for participation. We have had volunteers with various levels of Spanish proficiency. It is, however, rather difficult for volunteer clinicians to work in the healthcare center without some understanding of medical and conversational Spanish. As a majority of the clinical care encounters are dedicated to patients who are being managed by the center for on-going healthcare needs – a strong command of Spanish will allow a provider to truly immerse themselves in the day to day program of the clinic. There are a few trained interpreters, but this service is not always readily available.

WHAT ABOUT THE CLINIC? From humble beginnings almost 8 years ago, the clinic has grown from a small general medical post to a multidisciplinary health center providing over 17,000 visits in 2006. The major programs and services provided by the Policlinico Maria Madre de la Misiones include:

- General medical services provided at a longitudinal care clinic
- Pediatric care – including age appropriate wellness examinations and growth/development screenings
- Obstetrics care
- Ophthalmological care and screenings
- Optometric services including a dispensary to be opened in the late summer of 2007)
- Dental care – including advanced restorative and preventative care
- Psychological counselling
- Community outreach and social assistance advocacy – as provided by a trained social worker
- Nursing care – including health education and disease prevention services
- Comprehensive laboratory services (please see the attached list of lab services that are currently available on-site)
- Full service pharmacy that is stocked with essential medications and supplies to fulfil the healthcare needs of a community based health center (medications are selected based on their cost and compatibility with the Peruvian Ministry of Health's "essential" medications list)
- Referrals services to specialty consultations and advanced diagnostic and laboratory evaluations.
- A "scholarship" program to help defer the cost of hospitalizations and diagnostic work-ups for the most impoverished members of the community.

WHERE ARE WE LOCATED? Peru is South America's third largest country, covering 1,285,215 sq. km., and can be divided into three distinct geographic regions. The best known of these is the central high sierra of the Andes, with its massive peaks, steep canyons, and extraordinary pre Columbian archaeological sites. The Andes are still one of the world's most unstable mountain ranges, with frequent earthquakes, landslides, and flash floods. Despite such instability, the Andes are also the site of the most fascinating pre-Columbian cities of South America-like the great city of the clouds, Machu Picchu.

The Andes are by no means the only region to visit in Peru. Also of great interest is Peru's narrow, lowland coastal region, a northern extension of the Atacama Desert. Although the Atacama is generally known as the most arid region on the planet, the climate along Peru's shores is made cooler and less dry by La Garuà, a dense fog created by the collision of the frigid waters of the Humboldt Current with the heated sands of the Atacama. Lima, Trujillo, and Chiclayo, three of Peru's major population centres, are located along this coastal desert.

Peru's third great region is the dense forest that surrounds the headwaters of the Amazon beneath the eastern slopes of the Andes. This part of the country is so inaccessible that only the most adventurous and intrepid travelers should attempt to penetrate its mysterious emerald depths. In fact, the region's capital of Iquitos, a city of 400,000, is accessible only by air or by boat up the Amazon.

Peru's climate varies considerably by region, although January through March tends everywhere to be the wet season. The coastal areas, which are quite hot and humid during those months, are cooled during the rest of the year by La Garuà. The fog doesn't penetrate very far inland, however, and the western side of the Andes is very clear, warm, and dry for the greater part of the year. As one moves up into the mountains, night-time temperatures become considerably colder. The eastern slope of the Andes, like the Amazon basin, experiences very heavy rainfall during the wet season, which extends from January all the way through April.

Arequipa is located in the point where the central Andean area and the Andean south center are divided. The valleys to the south of the Sihuas Rivers are incorporated into this area. This division was more notorious in the Wari Age, which embraces the valleys in the north up to Sihuas.

Arequipa has become the economic center for the south of Peru. It is one of the most important milk producers in the country. Arequipa, the "White City," is a modern city that offers everything necessary for an unforgettable trip. Its districts and towns show great contrast between Spanish heritage and Indian influence. The city boasts mysterious and majestic monuments, unique in the world, and an exceptional geography, with wonderful green landscapes, luminous valleys and impressive geological areas. The artistic and cultural traditions of the settlers of the different districts in Arequipa enable one to enjoy beautiful architecture, exciting excursions and delicious gastronomy.

Alto Cayma is made up of 35 settlements on the outskirts of the city of Arequipa. It is located at an altitude of over 3,000 meters above sea level and is 15 kilometers from the city centre. The community consists of the immediate population of Alto Cayma and a network of 7 villages on the mountains at 4,000 meters above sea level and around 75 miles from the Parish. The total population of the community served by the Policlinico Maria Madre de la Misiones is around 31,000 and the people are mainly migrants from mountain villages.

The migrants leave the mountains to find better living conditions in the city. On the mountains they lack food, health care, education, electricity and live isolated in difficult weather conditions. When they reach Alto Cayma they occupy a piece of land on

which they build a small room to be their future house. In the beginning life is very difficult. They lack all basic needs and in most cases they find themselves in worse conditions than on the mountains.

WHAT CAN YOU EXPECT? You can expect a life changing experience! The volunteer experience with the Mission of Alto Cayma and the Policlinico Maria Madre de la Misiones is designed to provide participants with a chance to interact with people of a developing nation. It is our hope that healthcare professional will volunteer their time to come and learn about the culture and people of Peru. Because volunteer providers work directly alongside Peruvian medical professionals, the major focus is not on the provision of healthcare services. Rather, our hope is that US, Canadian and European doctors and medical providers will create collegial relationships with their Peruvian counterparts and share their talents, passions and commitments to serving the underserved.

The goal of the Volunteer Healthcare Provider Program with the Mission of Alto Cayma is not to miraculously cure disease or eradicate disease and suffering; rather we hope to change our own lives through service to others. In observing and responding to the suffering of others, we can change the way that we look at the world. And hopefully, we will come back to our “lives” in the United States, Canada, and Western Europe committed to making a difference in our communities and the environment around us.

WHERE WILL YOU BE STAYING? A volunteer house has been developing in the community of Alto Cayma to accommodate visitors of all lengths of stay. The volunteer house is located a short 15 minute walk from the healthcare center and has all of the modern conveniences of a home in the United States, Canada or Europe. Individual rooms are apportioned with a desk for working, private bathroom with warm water shower, and comfortable privacy for resting and relaxing. The house is equipped with high speed internet service and has a wireless modem that allows visitors to connect with their laptop computers. Meals are provided in a group dining room and are prepared by our excellent cook. The house offers a safe, welcoming environment to relax after a hard days work in the clinic, day care center or community outreach programs.

WHAT ABOUT LAUNDRY? Invariably one of the first questions that volunteers ask is “will I be able to get my laundry done?” We have laundry facilities available at the volunteer house and consider this service to be a portion of your room and board fee. However, if you would prefer to do your own laundry – self service facilities are located in the city of Arequipa, a short 15 minute car ride away. Additionally, there are small tiendas and boticas in the area surrounding the clinic and the volunteer house where you can purchase hygiene supplies and small groceries. Large shopping excursions require a trip to the neighbourhood of Yanahuara – 10 minutes drive down the hill from the clinic.

WHAT WILL YOU BE DOING IN THE CLINIC? As the clinic is staffed with fulltime Peruvian nurses and physicians, the role of volunteer providers is often times much different than what a person may have experienced in other “mission” outreaches. Volunteers that come to the Policlinico Maria Madre de la Misiones are asked to work along side Peruvian providers to learn the subtle cultural and clinical techniques of working with the community of Alto Cayma. The work day starts at 9 am and ends for lunch at 12

noon. The afternoon clinic reopens at 2 pm and runs until 6 pm. A physician or provider can expect to see 20-25 patients per day. A provider will see a full gamete of medical morbidity – from simple upper respiratory tract infections to complex diabetes (For more information on the pathological spectrum of disease seen at the Policlinico Maria Madre de la Misiones, please see the attached document). As the clinic has grown in accordance to the needs of the community, more and more patients are presenting for longitudinal care needs. This means that providers will often times find themselves managing patients with chronic diseases similar to their practices in the United States, Canada or Western Europe.

IS THERE A “DRESS CODE” FOR THE CLINIC? The Policlinico Maria Madre de la Misiones is a very informal work environment. However, with that said – your patients will expect you to be dressed neat and clean. We do not wear white coats in the clinic, but volunteer healthcare providers are welcome to bring there own. Typical clinic attire includes – medical scrubs, khaki pants, polo shirts, dark slacks (the dust will relegate any pant to a soft gray in a matter of hours) and dress casual blouses and shirts. Please keep in mind that the temperature in the clinic can be quite cool in the morning hours (and heat up as the day goes along) – so layering is important. Plan to bring a fleece top or sweater that you can easily remove to regulate your comfort level.

HOW IS THE WEATHER? The weather in Arequipa is, well, beautiful! The sun never seems to stop shinning in Arequipa regardless of the season. Expect cool to cold mornings and evenings and warm, sunny afternoons. Once again – layers are the key.

Arequipa	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Av. High (°F)	66	66	67	68	68	67	67	68	68	70	69	68
Av. Low (°F)	44	44	44	41	37	34	34	34	39	42	43	43
Wet days	16	12	10	7	4	3	2	2	6	8	10	14

WHAT ABOUT TIME OFF? Your schedule will allow for weekend excursion trips to some of Peru’s most enchanting locations. We will be happy to help set-up excursion and sight seeing trips for volunteers – the only request we make is that volunteers avoid travelling during the work week (as we will be scheduling patients in accordance to your presence). Costs and availability for excursion trips are constantly changing – please speak with your volunteer coordinator when you arrive at the mission and we can help to arrange a special experience for you.

IS THERE ANY SIGHTSEEING IN AREQUIPA? The City of Arequipa is called "The White City," built from the white sillar rock tossed out by one of the three volcanoes that overlook it. The name is also inspired by the fact that the sun shines there every single day, a sunlit city almost lost in the middle of a severe mountain range.

It is, however, the 2nd largest urban area in Peru and now prosperous enough that smog from the cars mixing with mountain street sand adds an unfortunate brownish cast to what must have been beautiful early light not too long ago. The City of Arequipa is considered the intellectual capital of modern Peru, and boasts rich museums and well established universities.

Arequipa's much-visited convent is the Santa Catalina 'Monastery' began, in the 16th century, as a convent for the daughters of rich families. At one time, there were over 450 nuns living in it, and in the early days the nuns all had their own servants and held regular parties, enjoying English carpets, silk curtains, porcelain plates, damask tablecloths, silver cutlery, and lace sheets, until a crackdown brought a more severe lifestyle. The convent is a city in itself, with streets, gardens, and pools inside. The nuns were hidden from view by curtains or other barriers during visits by family or friends, but life there was not likely too grim, as the courtyards and private areas look relatively comfy and spacious.

As you progress north towards the Plaza de Armas you will see the astounding Museo Santuarios Andinos where you will find the famous "Juanita, La Niña de los Hielos;" the 550 year old Inca girl sacrifice found in 1995 by mountaineers in the ice on the summit of nearby Volcano Ampato at 6318 meters altitude. An adjacent volcano had erupted and blown ash to melt the summit snow to reveal this sacrificial site. There she is, kept in a glass case at low temperature, in all her Inca finery, and the museum displays the historical and scientific data associated with the discovery.

Immediately you set foot into the Plaza you are besieged by friendly entrepreneurs enticing you to snack and drink at their balcony restaurants. This is a very pleasant spot to watch the comings and goings of Arequipa.

Along Calle Santa Catalina craft shops and tour agencies abound. You can buy Alpaca winter woollies and textiles. Regular sweaters cost about \$10 (USD) and the finest baby Alpaca garments are nearer to \$50 – keep in mind that much of the textile merchandise sold in the markets is NOT real Alpaca, but a blend of wool and lower quality Alpaca yarn. One of the main problems is finding large sizes for the Western travelers with long arms.

WHAT ARE THE COSTS? The Mission of Alto Cayma relies on a continuous infusion of donations and funds to keep all of the programs of our mission operating. As such, volunteers will be assessed a small participation fee to off-set the cost of having another physician or healthcare provider working in the clinic. A complete cost break down is listed below (please note, all expenses are listed in US dollars):

- Room and board (including three meals per day) - \$25 (long term stays – those lasting more than 30 days – are discounted to a rate of \$20 per day)
- Transportation (including transport to and from the clinic as well as city/commuting expenses) - \$5
- Clinic fee (this includes monies to allow for an increase in prescription volumes and ancillary staffing) - \$5
- Total cost of volunteering at the Mission of Alto Cayma is \$35.00 per day

PERU – AN EPIDEMIOLOGICAL “SNAP SHOT”:

- 1) **Life Expectancy** – 57-63 year old (almost 35% of country <15 yrs old, less than 5% >64 yrs old)

- 2) The Ministry of Health provides drugs free of charge for national programs aimed at priority problems such as:
 - a) Acute respiratory infections (ARI)
 - b) Acute diarrheal disease (ADD)
 - c) Tuberculosis (TB)
 - d) EPI (Expanded Program on Immunization)
 - e) Malaria

- 3) **Top Rx in Peru (1999):**
 - Voltaren
 - Mix of Paracetamol and Diclofenac (Voltaren)
 - Naproxen sodium
 - Amoxicillin
 - Mix of Vitamin B and Orotic acid (Vitamin B13)
 - “Portil” Dermal cream (combination of Clotrimazole/Dexamethasone/Gentamicin)

- 4) **Most common Dx in Peru:**
 - ARI & URTI – Asthma, TB (work of Farmer, et al) (>40% of clinic visits for
 - ARI, >30% of pediatric hospitalizations dt ARI)
 - Gastroenteritis – GERD (H. pylori)
 - Dermatological – fungal infections and gram(+) skin and soft tissue/structure infections
 - Musculoskeletal – Low back pain, OA/DJD
 - Depression/Anxiety (secondary to SES)
 - Curiosity – “Gringo” physician

- 5) **Common symptomology:**
 - Fatigue
 - Headache
 - Myalgia (diffuse) – “bone pain”
 - Polyarticular pain

- 6) **Language differences:**
 - Spanish (2000 National Standard of living Survey reported that 16.5% of the population does not speak Spanish)
 - Andean languages (14%) (Quechua and Aymara)
 - Amazon languages (2.5%)

Literacy -1996 stats showed that 10% of the populations were illiterate (female illiteracy declined from 1993 to 1996 from 18.3% to 15.2%). This may be a rather misleading

statistic, as many Peruvians perform at a “functional” level of literacy that does not go beyond the 6th grade level of reading comprehension.

Healthcare Staffing - Physicians per 10,000 population is 10.3 (compared with 27.9 per 10,000 in the U.S.) and DMD per 10,000 is 0.6

Poverty: Extreme poverty is defined as the inability to cover the cost of a market basket consisting only of food that meets minimum nutritional requirements. The Lima metropolitan area has the lowest percentages of poor and extremely poor population: 38% and 5%, compared to other urban areas in Peru. Do not, however, let this number belie the tremendous need in Lima (a city of over 10 million people). According to the 1993 census, 53.9% of Peruvian households had at least one unmet basic need. In rural areas, the proportion was 88.2%, while in urban areas, it was 39.2%. In 16 of the 25 departments, more than 60% of households had at least one unmet basic need.

Mortality: With regard to the structure of mortality by age groups, of all the deaths in stratum I, 13.1% and 2.9%, respectively, occurred among children under 1 and children aged 1–4 years; in stratum V these percentages were 29.3% and 11.1%, respectively. The risk of dying was five times higher for children under 1 in stratum V than in stratum I (151.1 and 31.0 per 1,000 children under 1) and seven times higher for children aged 1–4 (13.9 per 1,000 children aged 1–4 in stratum V compared with 1.8 in stratum I). Stratum I are defined as a level of society composed of people with similar social, cultural, or economic status.

The 10 leading causes of death are (2000 WHO data):

- Acute respiratory infections (16.3%)
- Intestinal infectious diseases (7.7%)
- Diseases of pulmonary circulation and other forms of heart disease (5.4%)
- Tuberculosis (5.0%)
- Cerebrovascular disease (4.0%)
- Diseases of the urinary system (3.5%)
- Diseases of other parts of the digestive system (3.2%)
- Nutritional deficiencies and anemias (3.2%)
- Ischemic heart disease (3.2%)
- Hypoxia, birth asphyxia, and other respiratory conditions of the fetus or newborn (3.1%)

Nutrition: According to the first national height census of schoolchildren in the first grade of primary school (1993), 48.0% of children aged 6–9 suffered from chronic malnutrition. The situation was more serious in males (54%) and in rural areas (67%).

In 1992 the leading causes of death in the population aged 15–59 years were infectious diseases (21.9%), external causes (20.8%), and malignant neoplasms (17.6%). Among men, the leading causes were tuberculosis (10.0%); homicide and intentional injury, injuries due to legal interventions and operations of war (8.4%); other accidents, including after-effects (6.6%); acute respiratory infections (6.4%); and motor vehicle traffic accidents (5.4%).

Among women, the leading causes were tuberculosis (9.6%), malignant neoplasms of the

uterine cervix (7.0%), acute respiratory infections (6.1%), cerebrovascular disease (4.5%), and malignant neoplasm of the breast (4.0%).

Among the population aged 60 and over, diseases of the circulatory system are the primary cause of death (30.2%), followed by infectious diseases (20.9%) and malignant neoplasms (19.1%). The Peruvian Social Security Institute (IPSS) has an Occupational Health Program, but it covers only 28.0% of the population who are economically active. (7,814,809 people). Since 1997, the Ministry of Health also has had an Occupational Health Program. According to IPSS, between 1995 and 1996 the occupational accident rate rose from 12.0 to 20.0 per 1,000 workers and fatal accidents increased from 0.7 to 1.9 per 10,000 workers. These figures have been verified on the basis of information provided by unions and by other ministries. In the mining sector alone, 102 fatal accidents were registered in 1995 (68 in 1992). Data on occupational illnesses are limited. Another major problem is lack of access to occupational health services for workers in the informal sector (53.9%).

Based on the 1991 national census, in 1993 the INEI estimated the total number of children aged 6–14 who work at 175,022; the estimate of the Ministry of the Presidency for 1995 was 1,100,000 working children under the age of 18. These children work mainly in mining, agriculture, and in gold ore processing.