



Medical and Evacuation Procedures Honduras 2022

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1. Introduction

Medical screening

As with all expeditions careful planning is essential to ensure that all individuals enjoy a safe and successful trip. Some members of the expedition team (including volunteers and staff) may have significant pre-existing health problems or disabilities, which in the field, could potentially lead to problems. All participants are required to complete a medical questionnaire prior to departure (via the online portal). All those participants who are diving during the expedition are also required to complete a PADI medical questionnaire. On these forms all those who have answered yes to any of the questions are required to get a GP or specialist dive medic to sign the declaration on the reverse of the form.

These medical forms are then checked by the Operation Wallacea appointed Expedition Medic to check for any conditions that may cause problems on the expedition and to suggest additions to the medical kits in light of any pre-existing health problems highlighted.

All participants are required to have medical and travel insurance and to provide these details in advance of their expedition. Operation Wallacea have comprehensive combined liability insurance with up to £10,000,000 for public/product liability.

Roles in the event of an Emergency

Carefully planned evacuation protocols are in place in all of the sites in Honduras. All staff will have training on the evacuation procedures and protocols.

Once a major incident leading to an evacuation is identified the appropriate Manager (Dr Dan Exton, Dr Tom Martin or Shannon Cameron) will take overall control and will decide the level of emergency evacuation required for the patient. These are classified as either **Medium Priority**, **High Priority** or **Emergency**.

Medium Priority

Cases in which the patient is in no immediate danger but the onsite facilities are unable to cope were their condition to deteriorate. An example of this would be dehydration due to sickness. This requires the patient to be moved as quickly as possible without the need to hire special vehicles or boats to the nearest appropriate suitable facilities in San Pedro Sula or La Ceiba.

High Priority

Cases where the patient's health is at risk if immediate action is not taken. An example of this is a broken bone. This requires transportation, via specially arranged vehicles and boats to medical facilities available in San Pedro Sula or Utila.

Emergency Priority

Cases requiring the fastest possible transfer usually by air from the various forest sites to the CEMESA hospital in San Pedro Sula for forest sites, or to the D'Antoni hospital in La Ceiba for the marine sites. In the case of an Evacuation, the Country Manager will be responsible for contacting the Opwall Office UK.

In the case of an Evacuation, the Country Manager will be responsible for contacting the insurance company.

2. Medical Facilities in Country

Camps

There are medical officers (doctors, nurses, paramedics) at Base Camp, accompanying jungle training and at each of the field camps being operated. In addition, there is a medical officer at the Utila site. Each of these medical officers has a medical kit designed to treat the commoner conditions and to stabilise the patient in the event of a more serious case where evacuation is needed. There are no designated medical officers in either Tela or Roatan. Both sites are within 30 minutes of professional medical care, and all on-site staff have completed appropriate First Aid training.

Antivenin

There is a store of 20 vials of antivenin specific to the vipers. 10 vials are held in the fridge at Base Camp. A further 10 vials are held in the Danto field camp (dry version not needing refrigeration) whenever the western camps are operating. These vials are to accompany any patient being evacuated because of snake bite and are also available to be administered in the field in the event of prolonged evacuation times. Epi-pens are also held at these sites in case of anaphylactic shock in the highly unlikely event that the antivenin has to be delivered in the field. Cemesa Hospital in San Pedro Sula also has a store of antivenin in the event of a venomous snakebite.

Rabies

All those volunteers and staff involved in bat or small mammal handling must have the rabies pre-exposure vaccinations prior to departure. Rabies post exposure boosters are available via ESAC, and at the CEMESA hospital in San Pedro Sula. If a volunteer or staff member is suspected to be at risk of infection due to exposure to an animal (bite/scratch/other), the level of risk will be assessed by the on site medic and the appropriate path of action will be taken as outlined in the 'Bite Assessment and Treatment Proforma' document. The path of action will depend on whether the patient has had the three pre-exposure vaccines or not, as well as the type of animal that the patient was in contact with. In most cases, the patient can be treated with an appropriate course of anti-rabies vaccines in country. However, in the unlikely event of a volunteer or staff member, that has not had the three pre-exposure vaccines, being bitten or scratched by a bat, Human anti-Rabies Immunoglobulin (HRIG) may be necessary. HRIG is not available within Honduras and, therefore, the patient would be evacuated immediately to Miami, USA, for appropriate treatment. Because staff and volunteers who have not had the pre-exposure vaccines are not allowed to handle bats or small mammals, the risk of this scenario is very low. Also, school students and university research assistants who are only joining the expedition for a short time will not be able to be trained to handle mammals and bats safely and so will not participate directly in these activities even if they have had the pre-exposure vaccines.

Facilities in San Pedro Sula

Suitable for evacuations from East Cusuco and Cofradia.

CEMESA Hospital

Address: Colonia Altamira, Boulevard del Sur, San Pedro Sula

Tel: (504) 2516-0174 / (504) 2556-7401 for the Accident and Emergency department

E-mail: cemesa@sigmanet.hn

This is one of the best private hospitals in Honduras with a large group of leading specialists capable of carrying out a wide range of major surgery and procedures. Facilities include operating theatres, X-ray, body scanner and magnetic resonance equipment, laboratories, a diagnostic centre etc. This hospital is likely to provide suitable facilities for most emergencies. CEMESA has both the treatment for rabies (with the exception of Human anti-Rabies Immunoglobulin) and has its own supply of anti-venin.

Facilities in Puerto Cortes

Suitable for evacuations from West Cusuco

Hospital Policlinica Portena

Address: San Ramon, 2 Calle entre 2 y 3 ave., N.O Edif, Puerto Cortes

Tel: (504) 665 -0342 Fax: (504) 665-6353 or 665-6354

This is a private clinic, with an emergency room, operating theatre, delivery suite, x-ray facilities and a stock of common medicines required in an emergency. The facilities are clean. There are a number of specialist doctors available including surgeons, orthopaedics, radiologist, and paediatrician.

The clinic is open 24 hours a day, 7 days a week. Antibiotics, strong painkillers and intravenous fluids are available, as well as a supply of sterile surgical equipment (including needles). A supply of antivenin is also available.

Facilities in La Ceiba

Suitable for evacuations from Utila and Roatan

Hospital Vicente D'Antoni

Address: Ave Morazan, Barrios Solares Nueves, La Ceiba

Tel: (504) 2443-2264/ (504) 2443-1335; Emergency: (504) 2443-3335

E-mail: atinfo@hvdantoni.com

The hospital is the best in La Ceiba with 56 beds and a landing spot for helicopters. There are 30 resident doctors and another 20 visiting doctors. There is a laboratory, X-ray, ultrasound, endoscopes and surgery facilities. The hospital is open 24 hours a day, 7 days a week.

Facilities in Tela

Suitable for evacuations from Tela

Centro Medical Lancetilla

Address: Centro Medical Lancetilla, Tela, Atlantida, Honduras

Tel: (504) 2448-3222/ (504) 2448 1634

The hospital is the best in Tela, offering high quality private facilities including x-ray, operating theatre, laboratory, private rooms and emergency room open 24 hours per day 7 days per week.

Facilities in Roatan

There are numerous medical clinics on Roatan within a 30-minute drive of Eco Divers.

Cornerstone Hyperbaric Chamber and Clinic

Anthony's Key Resort, Sandy Bay, Roatan

Tel: (504) 2445-3049/(504) 2445-1049

Out-of-hours telephone: (504) 2445-1003/(504)2445-1026/(504) 2445-1274

Radio: Channel 88, Call sign: Anthony's Key

Clinica Esperanza, Sandy Bay, Roatan

Tel: (504) 2445-3234

Email: info@clinicaesperanza.org

Wood Medical Centre, Main Street, Coxen Hole, Roatan

Tel: (504) 2445-1031

Recompression Chambers

Utila Hyperbaric Chamber

Utila Lodge

Tel: (504) 2425-3378

One of the main operators of this chamber is Rich Astley who is the Dive Operations Manager for the Opwall teams on Utila. The chamber is a 5-minute transfer from Coral View.

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Radio: Channel 88, Call sign: Anthony's Key

Centro Medico Hiperbarico la Bendicion, La Ceiba

Colonia Irias Navas, Calle Principal, 1 Cuadra al Norte de la Iglesia Mormona, La Ceiba, Atlantida

Tel: (504) 2442-1149

Out-of-hours telephone: (504) 9894-2746

Helicopter Support for Evacuations

228th AR American Military Air Base in Soto Cano

Address: Soto Cano, near Comayagua

Tel: Joint Operations Center - 234-4635, ext. 4149 (emergency only) 24 Hours a day

Commanding Officer: Coronel Gary Rhett Wallace

Email: gary.r.wallace2.mil@mail.mil

Principal Contact: Dr Guillermo Saenz Tel: (+504) 9830 5304 or (+504) 2234 4634

Email: guillermo.a.saenz2.fn@mail.mil

A helicopter can be at any of the seven Cusuco sites in 90 minutes of the call.

Honduran Military Air Base

Base Aerea de San Pedro Sula. Phone 668 30 09 / 668 30 12 Cell. 9908 78 50

Military contact: Colonel Hermida Alvarez Commander of Air Force Base in San Pedro Sula Mobile 9979 68 23

Helicopteros del Norte, Puerto Cortes

Address: Frente Colonia Los Pinos, La Lima, Cortes

Tel: 668 1291 or 668 1293

Monday - Thursday 8 - 12 and 1 - 5: Friday 8 -12 and 1 - 4.

Out of hours: Pilot Capt Sergio Salgada 995 1933

Owner Juan Aramendia 991 5122

A helicopter can be activated within 60-120 minutes of the call.

Coordinates of each of the camps is provided in advance with the UTM, Lat/Long and Degree Minutes Seconds coordinates. Evacuation can be by landing (> 30 X 30 m²) or via a winch hole (>15 X 15m²). On-board medical facilities include life support to stabilize the patient en-route to hospital. Short description of patient injury is necessary prior to departure. Note this option can only be used for incidents which are life threatening or may result in loss of limbs or eyesight. Note also that helicopter evacuation is generally only possible during daylight. The helicopter will take the patient directly to the CEMESA Hospital in San Pedro or the Hospital Vicente D'Antoni in La Ceiba.

3. Communications

Forest communications

Base Camp is the main operations and comms centre for all the forest projects. There is internet connection at the camp and parts of the camp where cell phone calls can be made. In addition, there is a base station radio that can speak to each of the field camps operating. Each of the teams working on the transects around Base Camp have to take a hand-held radio which communicates back to Base Camp.

Each of the field camps (Danto, Cortecito, Cantiles and Guanales) have base station radios set up so they can communicate either with Base Camp (eastern camps and Danto) or Santo Tomas (western camps) and there are pre-arranged daily comms times. Danto is also able to communicate directly with Base Camp. All groups at each of these camps have to take a hand-held radio when walking the transects to communicate back to the camp.

On the western side the main entry and exit camp is Santo Tomas with Danto and Cortecito satellite camps also on this side. Danto is able to communicate directly with Base Camp by radio. Danto and Cortecito can also communicate with Tierra Santa (a village at the base of the mountain) where there is a radio which is always manned. Due to their remote locations, each camp on the western side is also provided with a cell phone in case radio communication breaks down for any reason and there are areas with cell coverage. The details of these areas should be obtained from the guides in the camp before participants arrive in camp. The guides will also maintain contact with the ESAC representatives in Tierra Santa and Santo Tomas to arrange supplies for Cortecito and Danto camps when they are operating. There are no direct comms between Santo Tomas or Tierra Santa and Base Camp by radio, so daily contacts are made via Danto and if necessary a cell phone can be used to contact Buenos Aries. In emergency situations, the operator in Tierra Santa has a radio that can communicate directly with Santo Tomas and the western side satellite camps. Danto can also communicate any emergencies directly to Base Camp.

In Buenos Aires there is hand phone signal at most locations and a base station radio that can communicate with Base Camp.

Marine communications

Utila and Roatan have land lines, cell phone coverage and email and internet connections. Each of the dive boats carries a fully charged cell phone that communicates back to the Utila/Roatan operations centre.

Tela has a land line, cell phone coverage and email and internet connections. On every dive the boat captain carries a fully charged cell phone with all of the programmed emergency numbers programmed in. This is checked before departure.

Transfers

All bus and vehicle transfers have cell phones with the drivers and Operation Wallacea members of staff.

4. Evacuations from field sites

Cusuco Base Camp and Buenos Aires

All levels of emergency are evacuated using the standby vehicle at Base Camp down the mountain to the CEMESA hospital (2 hours)

Eastern Camps

At Guanales it is generally faster to carry the patient out to Base Camp and evacuate down the mountain to the CEMESA hospital than it is to organise a helicopter evacuation. At Cantiles non-emergency evacuations will be done by carrying the patient back to Base Camp and then evacuating by vehicle. Emergency evacuations at this site are most likely carried out via helicopter extraction with a winch. However, if evacuation is necessary at night a judgement call will need to be made whether to wait for daylight for helicopter extraction or to carry the patient to Base Camp and evacuate by road.

Santo Tomas

All levels of emergency are evacuated using the standby vehicle at Santo Tomas down the mountain to the Puerto Cortes hospital (2 hours) or the CEMESA hospital (3 hours).

Western Camps

At Danto and Cortecito non-emergency evacuations will normally be done by carrying the patient back to Santo Tomas and then evacuating by vehicle. Emergency evacuations from Danto or Cortecito require helicopter evacuation with a winch. However, if evacuation is necessary at night a judgement call will need to be made whether to wait for daylight for helicopter extraction or to carry the patient to Santo Tomas and evacuate by road.

Cofradia

Evacuation from Cofradia is by vehicle to CEMESA hospital (30 mins).

Utila

Evacuations are done by the twice daily ferry to La Ceiba (1 hour). There is also a small airport on Utila (30 mins from Coral View) that can be used for evacuations in the event of an emergency. The recompression chamber on Utila is 5 mins from Coral View.

Tela

As Tela is a mainland site, evacuations to the hospital or recompression chamber can be made at any time by road. Hospital facilities can be reached in less than 30 mins, whilst the recompression chamber can be reached in 90 mins. In emergency situations there is a small airport within 30 min drive that can be used for evacuations.

Roatan

Evacuations to hospital facilities in La Ceiba are done by the twice daily ferry (1.5 hours). In emergency situations there is an airport on Roatan (30 mins from Ecodivers). The recompression chamber on Roatan is within 30 mins of Ecodivers.

5. Reporting and Logging

During evacuations it is crucial that a log is kept by the Manager coordinating the evacuation detailing times, personnel involved and all relevant details of each step of the evacuation process.

A full safety assessment must be carried-out after all evacuations and if a similar incident is likely all activities must be stopped until the situation has been rectified.

The Honduras Country Manager will collate the reports of all medical treatment and evacuations and will submit the final report to the UK office. The Honduras Country Manager will also submit the costs and report to the Operation Wallacea Office UK for re-imbursement of costs.

6. Mass Evacuations and Disaster Management

The most likely scenario is warning of an impending hurricane. Hurricanes can occur in Honduras at any time from June to November but are most likely in October followed by September which are both months outside the Operation Wallacea survey season. However, it is possible that a hurricane will occur. Honduras has an excellent warning system with about a week's advance notice of any hurricanes heading for Honduras. This information phase is succeeded by a Warning Phase if the hurricane is headed for Honduras. If it looks as though a hurricane is headed for Honduras, the forest teams will be evacuated down the mountain to San Pedro Sula or Cofradia. The marine teams in Utila and Roatan will be evacuated back to La Ceiba. The marine team at Tela will be evacuated to San Pedro Sula.