

## **POSNA/COUR Committee Haiti Update January 22, 2010**

COUR Committee will be providing an end of the week summary of events in Haiti as they relate to the pediatric orthopaedic needs of Haitian children. Included in the following summary are member volunteer activities, children's' hospitals responses, update on NGO organizations that are assisting our member's volunteer efforts and other relevant information.

### **A. POSNA Member Volunteer Activities in Haiti**

This list is from members that we have heard from. If you will be going or know of someone going to Haiti please inform Teri Stech at POSNA [stech@aaos.org](mailto:stech@aaos.org) so that we can list your name and communicate your experience and needs to the POSNA membership.

1. **John F Lovejoy** of Children's National Medical Center [jlovejoymac@mac.com](mailto:jlovejoymac@mac.com) or [JLovejoy@cnmc.org](mailto:JLovejoy@cnmc.org) organized a team that includes his father Steven Lovejoy, MD, **Ed Fink** and other staff from Children's National Medical Center. They are working at Sacre Couer Hospital in Milot, northern part of Haiti, about 20 miles south of port city of Cap- Haitian. You may contact John at [JLovejoy@cnmc.org](mailto:JLovejoy@cnmc.org) if you are interested in joining this group. **Edward P Fink**-Children's National Medical Center. [efink@cnmc.org](mailto:efink@cnmc.org). has been sending daily updates back to US about activities at their hospital. Some of his excerpts are in Appendix A.

2. **Scott Nelson** is serving at Hospital Comunaute Haitienne in Port a Prince. If interested in assisting contact Eileen Jeffrey at 717 730 6706 or cell 717 802 0392.

4. **Karl Rathjen**, Texas Scottish Rite Hospital [karl.rathjen@tsrh.org](mailto:karl.rathjen@tsrh.org) reportedly is recently in Haiti.

5. **Joshua Hyman**, Columbia University [jehyman@gmail.com](mailto:jehyman@gmail.com) is recently in Haiti with University of Miami team.

6. **Dave Feldman**, Hospital for Joint Diseases [david.feldman@nyumc.org](mailto:david.feldman@nyumc.org) . Left with Partners in Health team from Boston Jan 21 for L'Hospital Generale in Port-au-Prince. This is 2 week trip and will need volunteer replacements every 2 weeks. PIH is a well organized group from Boston associated with Paul Farmer.

7. **Jim Sanders**, University of [RochesterJames\\_sanders@urmc.rochester.edu](mailto:RochesterJames_sanders@urmc.rochester.edu) will be traveling to Haiti next week

8. **Francis Fassier**, Chief of Staff Shriners Montreal [ffassier@shrinet.org](mailto:ffassier@shrinet.org) provided the following summary of relief efforts by orthopaedic surgeons from Quebec:  
"Just to update your list with the volunteers from the province of Quebec helping in Haiti: Dr. François Cabana and a resident V, together with Dr. Vincent Echavé (general surgeon deeply involved in overseas help) work under the auspices of the University of

Sherbrooke. Dr. Jacques Desnoyers (President of the Quebec Orthopaedic Association) as well as Dr. Karl Fournier are going Saturday with the CECI (International Cooperation Center) and 2 other orthopaedic surgeons are waiting to go later on with the same organization. Dr. Richard Gosselin is participating in the mission of Operation Rainbow (arriving Sunday). I am working on the development of an outreach clinic (with Shriners) to organize the care of children after the acute phase of the earthquake.”

9. Kaye Wilkins [drkwilkins@aol.com](mailto:drkwilkins@aol.com) has been doing volunteer surgical work in Haiti for much of his career and is currently in Haiti.

### **B. NDMS, NACHRI, AAP Coordination of Response**

Over the past week, many US children’s’ hospitals leadership have been meeting by phone with the National Association of Children's Hospitals and Related Institutions (NACHRI) and the U.S. National Disaster Medical System (NDMS) to establish a coordinated response from the network of US children’s’ hospitals. NDMS hospitals may be asked to accept Haitian children in need of medical care as a result of the earthquake. In addition, NACHRI, in coordination with the American Academy of Pediatrics (AAP) and NDMS have asked children’s’ hospitals to assist in organizing volunteer teams to travel to Haiti to support the relief efforts. Many children’s’ hospitals have already developed these teams for deployment. The NACHRI list of priority pediatric medical personnel needed in Haiti includes:

- Critical care transport
- Surgical/critical care (specifically anesthesiologists, general and orthopedic surgeons intensive care physicians, neurosurgeons, emergency medicine physicians, OR/PICU nurses, respiratory therapists and paramedics)

For the first time, the NDMS will provide a rapid federal employment system for volunteer pediatric specific medical personnel. This temporary employment status is critical to provide federal protection and liability coverage through a special U.S./Haiti treaty; and U.S. military support and protection while working in the disaster area. Deployments may be as short as 2-5 days for transport teams, and 2 weeks for other volunteers. You should check with your hospital before you urgently go to Haiti as a volunteer. You may be better utilized by your hospital on one of these organized and hopefully more secure teams, or caring for children over the long term (see appendix B report of problems to avoid). For those volunteering in Haiti who want to transport a child to the US- in the initial stages, visas will only be issued to children who go through this US government controlled system, which is being developed to provide proper security, leadership, triage and resource utilization.

For those pediatric orthopaedic surgeons considering deployment with a hospital team

- You will need a current passport
- If called up by NDMS, you will be a federal volunteer and all logistics will be handled by the federal government

- The conditions in Haiti are extremely austere and constantly changing, and may best be handled by people with previous wartime, disaster, or international mission experience. Make sure that you are physically fit and prepared.
- In addition to current routine vaccinations, the CDC also recommends Hepatitis A, Typhoid and Hepatitis B

### **C. Partners and Other Organizations.**

The following is a list of organizations that we have communicated with or who our members have mentioned have been helpful. Please let Teri Stech know if you have information of other active groups that have been helpful.

1. **AAOS** [Haiti@aaos.org](mailto:Haiti@aaos.org) Lynne Dowling director of AAOS International Department. If you register with AAOS they will forward your information to many NGOs. Including Global Outreach International [www.globaloutreach.org](http://www.globaloutreach.org) and International Medical Corps [www.imcworldwide.org](http://www.imcworldwide.org).
2. **Partners in Health**. Volunteer coordinator [volunteer@pih.org](mailto:volunteer@pih.org). Partners in Health plane reportedly left Boston on 1/21/10 and will recycle every 2 weeks and will need volunteers. Point of contact is Amber Oberc [aoberc@pih.org](mailto:aoberc@pih.org).
3. **Operation Rainbow** [www.OperationRainbow.org](http://www.OperationRainbow.org) Nonprofit volunteer pediatric orthopaedic organization with many PONSAs who volunteer (**Todd Lincoln, Lawrence Rinsky, John Herzenberg, Chris Comstock, Jaques D'Astous**). Currently has a team operating in Jimani, Dominican Republic near the border, 50 miles from Port-au-Prince.
6. **Healing the Children**. <http://www.healingthechildren.org/> 501(c) (3) organization that can assist with bringing families to US. This group may be very useful for when a child/family needs community housing, transportation and assistance. There are 13 US chapters and they do an excellent job where they are located. Not all US cities are covered.
7. **SIGN** [www.sign-post.org](http://www.sign-post.org) contact person Lew Zirkle [lgzjr@sign-post.org](mailto:lgzjr@sign-post.org). Orthopaedic equivalent to Operation Smile.
8. **Ronald McDonald Charities**. They can take on some of the short term acute housing needs of families coming in if they have a house at your hospital.
10. **Operation Smile**. POC is Bill Magee. [bmagee@operationsmile.org](mailto:bmagee@operationsmile.org) May provide logistics to other volunteer groups such as Partners in Health.
11. **First Hand Foundation** [www.firsthandfoundation](http://www.firsthandfoundation) (Cerner Corp) mission is to provide financial assistance for direct medical care of children in need. In past, they have provided a generous amount of funding for surgical care.

### **D. Other items of interest and importance that we have received:**

1. Recent reports from physicians at Port-au-Prince describe being unprepared for the amount of human devastation, NO infrastructure, no security, lack of protection by the military, no leadership, huge issues with supply. We have heard of physicians showing up and being underutilized or in a location where they are not caring for children. This shows importance of advanced planning and being on a capable team and experienced organization so you are tasked to an appropriate location.

2. Malaria is found in certain areas of Haiti starting prophylaxis in advance is recommended for certain areas. Project Hope stated that chloroquine is not considered effective against malaria in Haiti. CDC [www.cdc.gov](http://www.cdc.gov) lists chloroquine as one of the prophylaxis options for travelers to Haiti. We suggest you talk with your infectious disease colleagues and CDC in advance.

## Appendix A

Updates by Ed Fink, Sacre Couer Hospital in Milot

**Thursday 1/21/10** Yesterday was as somber as those before. The influx of patients, arriving by helicopter, continued unabated. Each individual as different as the other, yet unfortunately connected by the tragic unfolding of events, their injuries bore a repeated pattern of open fractures, crush injuries, and infected wounds.

The school across the street has been emptied and serves as our triage center. The wounded are taken by ambulance from the choppers to the courtyard and, each lying on a simple cloth stretcher, are laid out on the ground. They are rapidly seen by us, their wounds assessed, and a plan formulated. Implementation of the plan is slow, unfortunately.

The situation has improved considerably yesterday afternoon, with the arrival not of more tragically wounded Haitians, yet with two groups of orthopaedic surgeons and emergency medicine doctors, with critically lacking supplies. Immediately I dropped out of the surgical rotation and worked with the latter group to assemble, in the school building, a supply center complete with IV drugs. We have created a streamlined triage system and provide more crucial medical management to these critically ill people. Yet still, even with the added doctors, their injuries are still life and limb threatening

I will continue with the triage and assessment management today, although we have implemented a 24hour surgical schedule to deal with the surfeit of patients requiring surgical care, hopefully for only one or two days. I volunteered for the midnight to 6am shift that just ended. In part, because I could not take the roosters any more...

“100 patients being airlifted here in two hours!!! Needs currently being filled by new team of ortho docs arrived this AM. Yet, assuredly for months, surgeons will be needed for continued care and operating on pts who have been triaged away, only to return in several weeks for surgery. 20% of surgeries on kids, with anticipation of future needs accordingly. Need anesthesiologists. Supplies in the future with more implants. Damage control ortho currently with ex fixes and reductions without radiographs in the OR.”

### **Wed 1/20/10.**

It has been eight days since the devastation struck this impoverished island nation. Eight days. And yet people are being delivered to our hospital in record numbers with untreated infected wounds, open fractures, and crippling crush injuries. As if the injuries had just occurred. I always ask, through the interpreters, how their injuries occurred, and where they spent the intervening days. Invariably walls collapsed upon them, sometimes trapping them for days, and once freed, would spend days in their homes or public dwellings, as there was neither transportation nor secondary care once life-saving measures were successful.

And yet, these are the 'lucky ones.' Their countenances reflect the quiet solemnity of survival amidst the horrors of destruction. They come to us, children from ages 2 to 11, elderly women, young men. Quiet, dignified. You can see in their eyes that they are thankful, regardless of their injuries. And many come with extremities having already been amputated.

Our work in the hospital is stratified chaos. We are continually trying to process and understand the nature of the injuries of the incoming individuals. X-rays sometimes take over 24 hours to procure. Triage determines the ability to take the most needy to surgery. Equipment scarcity and time determine, in part, what we are able to accomplish. Finally, supplies arrived yesterday, and the dire need to innovate is not as acute. External fixation of all fractures occurs quickly, debridement of wounds with large areas of skin and soft tissue loss, and infections require judgment to determine if the limbs can be saved.

We are absolutely inundated with patients, sent here as we are the largest hospital with functioning facilities in the country. The people of this city of Milot have rallied to accommodate their brethren. The schoolyard across the street has been vacated to house the injured. I went on rounds late last evening with a Haitian doctor from the hospital, to see our post operative patients and to assess those who had come in throughout the day. In a room with a blackboard painted on the wall, where once were student desks and chairs, eight thick straw mats provided bedding for the injured. IV's were hung where once the hands of inquisitive students assuredly were raised.

My last evaluation of the evening was that of a 42 year old man whose story was all too familiar. A wall had collapsed on his right leg where he remained trapped for two days. He had just come to us yesterday afternoon. His leg was twice the size of the other, with blisters, and weeping wounds. He had no sensation nor movement of his foot, and his leg was quite hard and tense. It was obvious that he had what we call a compartment syndrome, where intense swelling occurs in a part of the leg. The pressure increases and prevents blood from entering the leg. Slowly the muscles and nerves die if the pressure cannot be relieved with surgery. Unfortunately, this did not occur, and his entire lower leg is effectively dead. He will require an above knee amputation. With further questioning, I learned that this gentleman is an accountant. Do you know how difficult it is to achieve an advanced degree in this country, let alone any developing country? At least, with the tragedy of losing a limb, he will be one of the absolute few who have some hope of overriding the socio-cultural and fiscal devastation of an amputation and its subsequent disability. He prayed that G\_d would protect him.

While writing this at 6am, just felt a 15 second tremor and shaking of the building housing us. We are 90 miles from the epicenter! Just heard there was no damage in Port au Prince

All for now. Edward PS- Does anyone know whether rooster is more savory broiled or barbequed? They leave me with only four hours of sleep each night.

### **Tuesday 1/19/10**

Yesterday unfolded with a grim somber tone, with today promising to unfold with a heightened reality. Now over one week after the tragedy, we are seeing innumerable patients coming to us with grossly infected wounds, incipient gangrene, and increasingly sick. Many had initial surgeries in PAP. We are uncertain where they have spent the intervening week. Many arrive by Blackhawk heli's. We received at 1am this morning a busload from PAP.

We performed 16 procedures yesterday, operating until 11:30pm. Luckily joined here by a group from NJ, of general surgeons and an anesthesiologist, who were in the hospital for an elective program before the quake. Surgery limited by available anesthesia--need more! Almost all procedures are spinal, gen anesthesia for the children. Every case involves considerable innovation, as we lack significant equipment. That which we assembled had to be transported later due to weight constraints on the flight. Managed to convert two rooms in the hospital to ORs, giving us a capacity of 4. We are seeing bad crush injuries, which along with terrible infections leave us with little capacity than to perform amputations. So many pts will require many OR procedures for re-washouts. No wound vac system!!! Almost all fractures are treated with ext fixes. We have placed innumerable individuals in long arm casts for upper extremity fractures that need surgical mgt. Yet they are not acute, and asked to come back in two weeks. What will obtain then, I do not know.

Today there are plans to have 450 patients transferred to the nearby city of Cap- Haitien, to some sort of facility arranged there. And to transfer the most urgent to us. Therein the starkness of the reality to unfold.

IMPORTANT- Have been advised that malaria prophylaxis is recommended here! We have none. Please check with partners in health. If this is indeed true, apparently chloroquin sensitive, need to take necessary steps.

All for now. Edward PS- Haitian roosters have no respect for sleeping Americans, beginning to crow at about 5am, two hours before daybreak

## **Appendix B**

Trip report from Dean Lorich, Orthopaedic Trauma surgeon who just returned from Haiti. This is a must read to understand problems with urgent disaster medical and surgical response when no infrastructure is in place.

I believe we went in with a reasonably comprehensive service we wanted to provide acute trauma care in an orthopedic disaster. Our plan was to be at a hospital where we could utilize our abilities as trauma surgeons treat the acute injuries involved in an orthopaedic disaster. We expected many amputations however came with a philosophy that would reasonably start limb salvage in what we thought was a salvageable limb.

David Helfet put a team together which included:

- 2 orthopaedic trauma surgeons
- 3 orthopaedic trauma fellows
- 2 highly skilled anesthesiologists
- 1 general surgery trauma surgeon
- 2 synthes reps who were also scrub techs
- 1 trauma nurse practitioner to do triage
- 2 OR nurses

Our equipment including a huge amount of anesthetic medications and equipment, ability to construct 150 ex fix both small and large, OR equipment including scalpels etc, OR soft goods, splint material, OR prep material.

We also had a plan of physician and equipment replacement that was dynamic where w/i 24hrs we could bring in what was necessary on the Synthes private jet.

We thought the plan was a good one.

We were incredibly naïve.

Disaster management on the ground was nonexistent. The difficulties in getting in despite the intelligence we had from people on the ground and David Helfet's high political connections with Partners in Health as well as the Clintons only portended the difficulties we would have once we arrived.

We started out Friday morning, got a slot to get in Friday that was eventually cancelled when we were on the runway to be rescheduled the next day. We diverted to the DR and planned on arriving in P OP Saturday.

Once on the ground the hospital we had intelligence that was up and running with 2 OR's General Hospital was included severely in the earthquake and not capable of running functioning OR's as there was no running water and only a limited electrical supply on generator.

We quickly took our second option

Community Hospital of Haiti. We found approx 750 pt in the hospital upon our initial eval, the hospital had running water, electricity and 2 functional OR's

Our naivete did not expect that the 2 anesthetic machines would not work, there would be 1 cautery for the hospital, autoclave that fit instruments the size of a cigar box, no sterile saline, no functioning fluoro and no local staff only a ragtag group of voluntary health providers who like us had made it there on their own.

To summarize we had no clue the medical infrastructure of the country was so poor.

As we got up and running in the OR and organized the patients for surgery we communicated our new needs back to Synthes and more supplies were loaded for a second trip - these included battery operated pulse lavage, a huge supply of saline, soft goods in the OR. This plane landed as planned Sunday pm, equipment was loaded on a truck and subsequently hijacked between the airport and the hospital.

At the hospital we had zero security despite promises from NYPD and NYFD to provide that to us.

Our philosophy was to work like this was a marathon run the OR's around the clock with the idea that we would have a defined extraction time of 11pm tues. The plane that extracted us would come in with a new medical staff compliment to replace us. Equipment included urgent things to maximize issues that were nonexistent in the hospital that would enable us to provide better and more efficient care:

2 portable anesth machines

2electrocautery

2 portable monitors for the pacu

2autoclaves

Replacement exfix

Things that didn't arrive with the previous flight

That planes slot was cancelled by the military at 6am tues.

We also previously had seen daylight in the remaining patients monday night having completed approx 100 surgeries. However on tues morning we found a huge # of new patients. The hospital was forced to undergo lockdown closing its gates to the outside and outside crowd becoming angry.

We also noted tues morning that many of the patients we were operating on were becoming septic.

We finished operating at noon tues, the last surgery our group assisting an obstetrician on a caesarian and resuscitating a baby that was not breathing.

We decided as a group the situation for us at the hospital was untenable supplies were running out, team was exhausted, safety a huge concern, and no extraction plan with resupply. We decided to make our way to airport thru the help of a hospital benefactor. Jamaican soldiers with M-16 were necessary to escort us out with our luggage as the crowd outside saw us abandoning the hospital.

We made it to airport on back of a pickup truck, got onto the tarmac, hailed a commercial plane that carried cargo to montreal and had private jet pick us up there.

The issues we were unprepared for and witnessed were

1. The amount of human devastation
2. The complete lack of a medical infrastructure in the country
3. The lack of support of the haitian medical community
4. The complete lack of any organization on the ground. No one was in charge, we had the first functional up and running hospital in the P OP area yet no one and I me NO ONE came to the hospital to assess what we were doing, what we were capable of doing and what we would need, to be more efficient. The fact that the military could not or would not protect the re-supply equipment on sunday or let the tues flight come in says it all.
5. Lack of any security at all at the hospital

I would take away that disasters like this need organization on a much higher level than we had with the clear involvement and approval of the military from the beginning.

Currently there is no one obviously running the show and care is in chaotic at best. MD's are coming in country with no plan of what they are going to do. Surgeons that expect to just show up and operate are delusional as to what there role would be as without a complement of support staff and supplies they would be of limited or no value.

I hope this helps. We all felt as though we abandoned these patients and that country and feel terrible. Our role now being back in NY is to expose the inadequacies of the system to the media in the hopes of effecting a change in this system immediatly. We feel that the only way to really help now is an urgent programtic change and organization in the support of the medical staff on the ground and what is critically needed to expeditiously bring in.

Cherrios on the tarmac are not getting it done on these patients which clearly would be savable if good care could urgently be provided.

Please share this email with everyone and anyone you find might help.