



## **Health Volunteers Overseas**

*Improving Global Health Through Education*

### **“The Toll of Trauma and Injuries in Developing Countries”**

**Richard Gosselin, MD, MPH, MSc, FRCS(C)**

*Richard Gosselin has been doing full-time work in more than 40 developing countries for over a decade. His interest in global health only expanded after his residency, as he went on to complete several Orthopaedic Surgery fellowships in Senegal, Paris and San Francisco, followed by several experiences in international relief through the Red Cross. After retiring from his private practice in Florida, Dr. Gosselin continued his training in public health at UC-Berkeley School of Public Health and the London School of Hygiene and Tropical Medicine. He is also co-director of the UCSF-affiliated Institute for Global Orthopedics and Traumatology (IGOT).*

Although injuries kill each year as many people around the world as tuberculosis, malaria and HIV/AIDS combined, their recognition as a neglected pandemic is barely starting. Roughly a quarter of those five million deaths are from road traffic crashes, and for each death it is estimated that there are up to 50 survivors with some form of significant permanent disability.

At present around 25 percent of all hospital beds in developing countries are occupied by patients with road traffic injuries. The rapid economic growth of many low- and middle-income countries ensures that this trend will continue, probably even increase, for the foreseeable future. Health care systems of poor countries cannot cope with this surge of injured patients. Resources, both human and material, and infrastructures lag sadly behind the explosion of new motorized vehicles and paved roads. Problems such as brain drain, lack of political will, weak advocacy and corruption are compounding the situation.

Ninety percent of all injuries occur in the developing world where only ten percent of all formally trained orthopaedic surgeons work. Long bone fractures, usually treated surgically in rich countries, are most often treated with traction or plaster casts, often with poor functional outcomes and long-term sequelae. There are many reasons for this: lack of qualified medical personnel, inadequate facilities/equipment or the inability of poor patients to pay for their costly surgical treatment particularly if implants are involved. Their only option is prolonged traction or casting which keeps them away from gainful employment or sustenance farming, with the predictable domino effect on dependents.

The benefits of teaching/training local surgeons and care providers in the sound basic management of fractures and soft tissue injuries cannot be overstated. The long-term approach of HVO aims at the sustainable development and training of local caregivers, the workforce that is called upon to manage the huge challenge of the injuries pandemics.

*June 2010*