September 2016 Updates

The last several years have produced outstanding achievements in HDI's ongoing efforts to prevent maternal (and infant) injury and death at childbirth in a large part of Niger thanks to the untiring efforts of the HDI team, local health workers, and people who live in project areas. HDI believes any progress in the poorest country in Africa must include strong support of maternal health as part of empowering women to help themselves and their families to better lives. This also prevents horrendous personal suffering. All empowerment must start with healthy child birth for both the woman and the baby. In Niger, as in most very poor countries, the two main causes of injury and death at child birth are obstetric fistulas and excessive post-partum bleeding. HDI is focused on both of these issues.

Our community based rural programs are working. HDI is pleased to report that as of June 30, 2016, maternal mortality at birth in our program area is down **89.4%** overall from the base year in 2008. This is a huge success.

HDI Preventing Obstetric Fistula:

Of the 111,537 women, who have given birth in the rural program area, none have died of obstructed labor since May 2008, though it was previously a primary cause of death. Getting rid of obstetric fistula took a bit longer. Even so, since July 2009 only one woman has gotten a community-related obstetric fistula. That happened in April 2012.

The success of the program has ensured the full support of the Ministry of Health of Niger; however, the program is not yet capable of supporting itself without the supervision and support of HDI because of general health infrastructure challenges.

Obstetric fistula results from a variety of blocked labor situations. In the first world, a doctor performs a cesarean section long before the mother or baby is in danger of injury or death. Without this medical intervention, during prolonged labor, the woman's vaginal tissue is deprived of blood flow from the intense pressure of the infant being stuck in the birth canal. Sections of that vaginal tissue die. Depending on the location of the damage, urine or feces leak into the vagina. The woman loses control of urination/defecation, is subject to continual infections, smells disgusting, is usually divorced by her husband and ostracized by her community. HDI's initiative puts in place a system that prepares for the emergency by getting permission for medical help from the husband, elders and grandmothers of the pregnant women in advance and setting up emergency procedures and evacuations routes. If needed, that is even by donkey cart or motorcycle part of the way to the nearest place for the C-section. The approach is village based and requires community involvement. Since fistula injuries have struck most villages, the villagers have been tremendously receptive to the changes.

HDI Initiative to Prevent Postpartum Hemorrhage Mortality: Our preliminary figures indicated that only **2.0%** of women giving birth in a health center or hospital have experienced severe bleeding since we began our program vs the 10.5% expected to bleed over 1,000 ml or ≈ 1 quart. Half as many died of bleeding as expected, so far 12% instead of the expected 25%-35%.

HDI's initiative is based on purchasing and administering tablets of misoprostol to all women within a minute of giving birth. This is best done by having a knowledgeable attendant with the tablets in hand ready to administer them at the critical moment but can even be done by the woman herself. That's why a dose of misoprostol is provided for women to take home from her last, late-pregnancy prenatal consultation in case she doesn't make it back in time to give birth at a health center. It costs 22 cents a tablet if bought in bulk directly from the manufacturer. Misoprostol does not require refrigeration and has few side effects if used in an appropriate dose. It is very effective at reducing post-partum bleeding. About 10% of all women bleed severely, worldwide if nothing is done to prevent it. In the West a similar drug is routinely injected after birth. Our 3-Step Treatment in the hands of health workers starts with a higher dose of misoprostol for women who bleed too much after all. If she is still bleeding after 25 minutes, a water-filled tamponade is inserted in the birth canal to put pressure inside the bleeding uterus. If bleeding continues for 12 more minutes in spite of this second step, emergency surgery and often blood transfusions are necessary. To significantly increase her chances of surviving to surgery the health worker then quickly and easily applies an anti-shock garment. If surgery is then not made available on an emergency basis, the woman would frequently die or suffer months or years of debilitating anemia. Niger needs to distribute through their health care system about 2 million tablets of misoprostol a year. HDI helped to set up and is monitoring this national system that aims to halve the number of women bleeding to death at childbirth, within two years.

The HDI fistula and post-partum bleeding initiatives go together. Both have the same goals of protecting women's lives and dignity. Both require educating health care workers to have the emergency procedure in each local village in place and the equipment and misoprostol tablets necessary at the critical moments. Health workers must be able to identify the emergency and take the appropriate steps. HDI-supported on-the-ground supervision remains critical to the success of these programs.

As a result, HDI continues its fund raising efforts with international agencies, governments and private foundations as well as generous individuals. Despite our excellent results, the large foundations move slowly and their funds are frequently already committed in certain regions or for certain projects. Part of our effort is to have Niger included under the World Bank *Global Financing Facility for Every Woman Every Child.* We are working from both ends, encouraging both the World Bank and the government of Niger to meet on these issues. In May of this year, we organized in Washington a World Bank meeting with HDI's own Dr. Zeidou and Dr. Asma, Niger's Ambassador for Women's Health to the African Union. That was an important step. The World Bank and Niger's Ministry have since agreed to procure misoprostol with funds under an existing World Bank grant where another activity is not happening as quickly as planned. We continue to encourage both the World Bank and the Ministry for immediate action to buy the tablets. Without misoprostol tablets at the critical moment, women will continue to needlessly bleed and die in childbirth.

In August, HDI-Norway submitted a 1 million Norwegian kroner (≈ $120,000) proposal to the Kavli Trust in Bergen at their invitation. These funds are to support critically important supervision of the post-partum bleeding initiative across all of Niger for another year.

In another exciting development, one state in Nigeria has resolved to replicate Niger's *Initiative* and prevent obstetric fistula using its own resources, without asking for external funds. This occurred during a trip that Dr. Anders Seim, HDI's executive director, made to Nigeria in February. We're helping with the planning, including a baseline survey where the statistical sampling method and protocol are being designed by HDI's medical epidemiologist Dr. Rachel Bronzan and biostatisticians in Seattle together with the state Ministry of Health. Nigeria is a very competitive place. Therefore, if a state there succeeds in halving the main cause of maternal mortality as Niger appears to be doing, then we believe Nigeria will "take care of itself" because no state will wish to do worse than those folks in the northwest.

Finally the local health worker network that HDI has set up for pregnant women is going to lend a hand in another extremely important area—polio eradication. At HDI's suggestion, Niger's polio eradication and maternal health programs will now cooperate to help detect any reappearance of polio in Niger. To eradicate the last polio viruses, all new cases must be immediately identified, no matter where they are. Pregnant village women from remote villages come into direct contact with health care workers for prenatal and birthing care. These women will now be asked "Have you seen any child younger than 15 years of age who became paralyzed in the past month?" There is a new outbreak of polio in Nigeria, across the border from Niger, which is disturbing. The answer to this question will appear on monthly reports that HDI monitors. This information will then be passed on to the large national and international team that is working on polio eradication. We and Niger's Ministry of Health believe our Initiatives in obstetric fistula and post-partum bleeding will also benefit from cooperative work with the big players in the polio eradication area as we help them achieve their remarkable goal, a world with no polio.

Neglected Tropical Diseases program

River Blindness:

In Togo, the USAID-supported Neglected Tropical Diseases program continues to do well. Togo's Ministry of Health has decided to change the aim of its River Blindness (onchocerchiasis) Program from "control" which requires the program to go on forever, to "elimination", the complete interruption of transmission. In late July, international and national River Blindness experts including Dr. Frank Richards from The Carter Center gathered in Togo with HDI support and USAID funding, to study the situation and provide guidance to the national program. We believe that HDI is making an important contribution in this area.

Effective September 1st, HDI's support to River Blindness Elimination in Togo is being further strengthened by having a new Resident Representative in Lome, Professor Yao Kassankogno. We very greatly appreciate his willingness to help in these efforts.

Guinea Worm Eradication:

In Guinea Worm Eradication, the world has seen seven (7) cases in three countries through July 2016, six (6) of them reportedly contained thanks to Dr. Don Hopkins, an HDI Board member, and his colleagues at The Carter Center along with partnering organizations including HDI. At the outset of the program in the mid-1980s, an estimated 3.6 million people had Guinea worm each year. The program has been stunningly successful.

As with polio, all remaining cases of Guinea worm disease must be identified to obtain the goal of eradication. In locating the last cases, HDI supports the cash reward system; cash rewards are given

to anyone coming forward who has the disease. It has proven very effective in locating the last pockets of the disease. In Mali, HDI also supports local and national radio broadcasts to make the rewards widely known. The numbers reveal clearly the importance of this program. In 2014, 126 people with guinea worm were reported anywhere in the world; in 2015 only 22, and in 2016 through July only 7. HDI supports the reward system for South Sudan, Chad, and Ethiopia through the Carter Center, and in Mali where funds are transferred with the kind help of Norwegian Church Aid.

Thank you to all of the HDI team and our supporters for such outstanding results,

Dr. Anders Seim
Executive Director
September 1, 2016