

CALL TO ACTION: CONTINUED  
INVESTMENT NEEDED



The world needs to add 1 million new frontline health workers, and better support existing workers, where the needs are greatest. The United States has a critical role to play. The Frontline Health Workers Coalition urges the U.S. government to commit to training, deploying and retaining an additional 250,000 new frontline health workers and to better train, equip, link and support existing health workers.

By September 2015, the U.S. government should ensure adequate and effective financing for this frontline health worker effort in the context of overall development assistance. This should include better use of existing bilateral and multilateral funding to achieve the greatest impact on health workforce development, increased bilateral support, and pressing multilateral agencies and other governments to invest more in frontline health workers. Identifying strategic partnership opportunities with the private sector can extend the reach and impact of these investments.

**Above:** 17-month-old Juthi gets an antibiotic for pneumonia from a community health worker in Bangladesh. —PHOTO BY ASMA SHARMIN

# Frontline Health Workers: The Best Way to Save Lives, Accelerate Progress on Global Health, and Help Advance U.S. Interests

Every day, more than 20,000 children in the developing world perish, mostly from preventable causes, and 1,000 women die due to pregnancy complications. Every year, millions of adults succumb to the ravages of AIDS, tuberculosis and other treatable chronic diseases. However, there is a tested, cost-effective solution that could save these lives: access to skilled and supported frontline health workers.

Frontline health workers are the first and often the only point of contact to the health care system for millions of people. They deliver a range of lifesaving interventions to prevent illness, death and disability. Many are community health workers and midwives, though they can also include local pharmacists, nurses and doctors who serve in community clinics near people in need.

**The problem: The World Health Organization estimates there is a shortage of at least 1 million frontline health workers in the developing world.<sup>1</sup>** And many existing health workers are not trained, equipped and supported to deliver basic lifesaving care close to the community. The daily death toll due to this gap is tragic. But the deaths are just the tip of the iceberg—many more children and adults suffer lifelong disabilities and impairments due to frequent untreated illness and malnutrition. While the long-term effects on families can be debilitating, the global consequences of this health crisis are also cause for alarm—condemning vast parts of the globe to continued poor health, unmet potential and economic underperformance.

In countries where public and private investments to strengthen frontline health workers have been made, deaths due to preventable causes have decreased and populations are healthier and more stable. More children are capable of performing well in school, and this benefits economic growth. Future economic growth, better educational outcomes and reductions in mortality can be enhanced by ensuring that a health worker is within reach of every vulnerable family.

The longer we wait, the more lives we will lose, and the more opportunities for improved health, higher education levels, economic growth and prosperity will be squandered.

# No Health Workers, No Health

The developing world has experienced remarkable declines in maternal, child and infant mortality in recent decades, thanks in large part to the contributions of frontline health workers. Millions of people in impoverished countries are alive today because a midwife was by their side when they gave birth, or they were vaccinated as infants by a nurse, or because their families learned from a community health worker to adopt healthy behaviors like breastfeeding, hand washing, birth spacing, and sleeping under a mosquito net.

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*Every 3 seconds, a child's death is prevented thanks to care provided by a frontline health worker. But millions of people are still dying needlessly because they do not have access to a health worker.*

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But tragically, there are still too few health workers to reach the millions of families who are in urgent need of care, and millions still die every year from preventable causes. While progress is being made thanks to the training and deployment of health workers in many countries, 7.6 million children still die each year, many from treatable illnesses like pneumonia and diarrhea, 3.1 million in the first month of life. Millions of adults lose their lives due to childbirth complications, AIDS, tuberculosis and other diseases that could be managed with a skilled, equipped and supported frontline health worker.

Many of the interventions that have proven most effective in saving lives require health workers to deliver them, but there just aren't enough

health workers to get the job done. Not only is there a global shortage of health workers, many lives are also lost because existing frontline health workers are underutilized or do not have the right training and equipment to provide simple and appropriate lifesaving care. Major killers of children such as diarrhea, pneumonia, malaria and newborn complications can often be prevented or treated close to home by a well-trained health worker who is armed with basic tools and skills, and is part of a functioning health system. Frontline health workers are also key to fighting diseases that kill adults.

Frontline health workers do not need to be highly educated to be successful. Experience in many developing countries has shown that health workers with basic schooling plus several weeks of well-designed training, followed by on-the-job supervision, can master the skills needed to diagnose and treat common illnesses, promote

lifesaving health practices and counsel families about family planning, nutrition and hygiene. Higher levels of training are needed to provide immunizations and deliver babies, but these services do not require highly trained medical staff or expensive hospital equipment.

U.S. leadership has been critical to developing many of the effective, low-cost health advances seen in recent decades. American researchers have pioneered vaccines to prevent deadly illnesses, oral rehydration therapy to treat diarrhea, and demonstrated the value of vitamin A supplements to fight malnutrition and disease. Generous funding from the U.S. government has helped improve the quality of care provided by the health workers who are fighting on the frontlines in the developing world to deliver these lifesaving solutions. But more resources and attention are needed to reach those who are still at risk.

## MANY LIVES HAVE BEEN SAVED, BUT TOO MANY STILL DIE

**37%**  
Fewer Deaths

### Child mortality

The number of children who die before reaching age 5 each year has decreased by 37%—from 12 million in 1990 to 7.6 million in 2010.

**34%**  
Fewer Deaths

### Maternal mortality

The number of women dying due to complications during pregnancy and childbirth has decreased by 34%—from 546,000 in 1990 to 358,000 in 2008.

Despite this progress, nearly 21,000 children still die every day, most from preventable causes and 1,000 girls and women die each day in pregnancy and childbirth.

Sources: UNICEF, *Levels and Trends in Child Mortality: 2011 Report*, 2011. WHO, *Trends in Maternal Mortality: 1990 to 2008*, 2010.

# How Do Frontline Health Workers Save Lives?

| Major causes of death in the developing world  | How many die each year?  | What does it take to fight this killer?   | Why frontline health workers are critical to saving lives  |
|--|--|---|--|
| <b>Childbirth complications and newborn causes</b><br><i>(prematurity, infections, birth asphyxia, and other causes)</i> | <b>3.1 million newborns:</b> <ul style="list-style-type: none"> <li>infections: 901,000</li> <li>prematurity: 887,000</li> <li>asphyxia: 699,000</li> <li>other: 585,000</li> </ul> <b>2.6 million stillbirths</b> | Prenatal care. Drugs to prevent and treat infections. Clean, safe childbirth. Proper care of newborn, including teaching mothers to keep baby warm and clean, and to breastfeed immediately and exclusively for the first 6 months.                                       | Frontline health workers counsel pregnant women about danger signs and the importance of prenatal care and clean deliveries. Midwives provide prenatal care, including screening and treatment for infections. They provide a clean, safe childbirth and newborn resuscitation if needed. They ensure the new mother and her baby are healthy in the vulnerable period just after birth. They support breastfeeding. |
| <b>Maternal mortality</b><br><i>(pregnancy related complications)</i>  | <b>358,000 women</b>   | Skilled birth attendants with the capacity to prevent, treat and refer complications, and—together with other frontline health workers—to provide access to family planning for women who want to avoid pregnancy but who lack access to effective contraceptive methods. | Frontline health workers help properly manage pregnancy, delivery and complications, which affect 15% of all pregnancies. They provide information and distribute modern contraception, which helps parents plan each pregnancy to protect the health of women and newborns.   |
| <b>HIV / AIDS</b>  | <b>1.8 million people</b><br><i>(9% are children under age 5)</i>  | Prevent infection by promoting safe sex, fidelity and abstinence. Provide antiretroviral drugs to HIV-positive pregnant women to prevent mother-to-child transmission of the disease. Treat infection by providing daily, supervised health care.                         | Frontline health workers provide counseling to prevent the spread of the disease among adults and from mother to child. They visit infected patients daily to make sure they are taking the correct doses of medication at the correct time. They provide antiretroviral drugs to HIV-positive pregnant women to prevent mother-to-child transmission of the disease.  |
| <b>Pneumonia</b>   | <b>1.4 million children</b>  | Early diagnosis (before the disease becomes life-threatening). Antibiotics to cure infection.   | Frontline health workers educate parents about danger signs to watch for. They diagnose and treat regular pneumonia. They identify life-threatening pneumonia and refer severe cases to a health facility for immediate treatment.   |
| <b>Tuberculosis</b>  | <b>1.3 million people</b>  | Early detection of cases in the community. Treat infection by providing daily, supervised medical care and counseling.  | Frontline health workers screen for symptoms, refer patients to clinics and do home visits to ensure correct and consistent treatment. They educate communities about the signs and symptoms to encourage early treatment of TB.   |
| <b>Diarrhea</b>  | <b>1.1 million children</b>  | Treat disease by providing oral rehydration solution (ORS) and zinc tablets. Educate families about the importance of clean water and sanitation.   | Frontline health workers provide ORS and zinc and teach parents how to use these remedies to treat sick children. They educate families about purifying water and accessing sanitation. They also can deliver supplies to households to purify water.  |
| <b>Malaria</b>   | <b>781,000 people</b><br><i>(90% are children under age 5)</i>   | Sleep under a mosquito net to prevent infection and provide antimalarial drugs to treat cases.  | Frontline health workers counsel families to sleep under mosquito nets, diagnose the disease when it occurs, and give drugs to treat it.   |
| <b>Measles</b>   | <b>164,000 people</b><br><i>(mostly children under age 5)</i>  | Immunization before a child's first birthday.   | Frontline health workers organize vaccination days in the community and make sure families participate. Often, they also give the injections.  |
| <b>Malnutrition</b>  | Contributes to 35% of child deaths   | Breastfeeding and appropriate weaning. Micronutrient supplements.   | Frontline health workers counsel new mothers about breastfeeding and young child feeding. They distribute micronutrient supplements. They also assess and treat moderate to severe malnutrition.   |

Sources: UNICEF, *Levels and Trends in Child Mortality: 2011 Report*, 2011. J.E.Lawn, K.Kerber, C.Enweronu-Laryea, et al, "3.6 Million Neonatal Deaths – What is Progressing and What is Not?" *Seminars in Perinatology* 2010; 34, (6). J.Lawn, H.Blencowe, R.Pattison, et al, "Stillbirths: Where? When? Why? How to Make the Data Count?" *Lancet* 2011, doi: 10.1016/S0140-6736(10)62187-3. WHO, *Trends in Maternal Mortality: 1990 to 2008*, 2010. WHO, *World Health Statistics: 2011*, 2011. R.E. Black, L.H. Allen, Z.A. Bhutta, et al, for the Maternal and Child Undernutrition Study Group, "Maternal and Child Undernutrition: Global and Regional Exposures and Health Consequences," *Lancet* 2008, doi: 10.1016/S0140-6736(07)61690-0.

# Why Frontline Health Workers Are a Good U.S. Investment

Even in this time of significant economic challenges and need here at home, polls show that the majority of Americans continue to support U.S. investment in programs that save and improve the lives of impoverished children and their families in the developing world.<sup>2</sup> In addition to the American generosity of spirit, there is strong evidence that frontline health workers are a “best buy” for global health, and taxpayer investment will reap big returns.



Villagers learn about the importance of hand washing from a community health worker in Malawi. —PHOTO BY AMOS GUMULIRA

**1 Frontline health workers are the backbone of effective health systems and are the only way to serve millions of families who live beyond the reach of hospitals and clinics.** Frontline health workers with proper support and linkages to the formal health system can offer “one stop shopping”—providing families with access to a range of proven, cost-effective, lifesaving care to help prevent and treat infections, increase coverage of vaccines, ensure healthy outcomes for mothers and newborns, prevent unintended pregnancies, and fight diseases like tuberculosis, malaria and HIV.

**2 The low-cost services they deliver have been proven to save lives and help build more stable, prosperous communities.** Bangladesh, Ethiopia, Indonesia, Malawi and Nepal have all seen dramatic reductions in mortality as a result of their investments in frontline health workers. Many of the emerging markets today including Thailand, Sri Lanka and Brazil invested during the 1960s and 70s in basic health care via community-based health workers. These workers brought about the improvements in health and reductions in fertility that have allowed economies to grow and prosper.

**3 Frontline health workers are a cost-effective solution to fill the gap in health workers.** It can cost as little as \$300 to train a frontline health worker in critical lifesaving skills to address common threats to health. The overall cost to deploy them varies, but is estimated at \$3,700 for one year.<sup>3</sup> Midwives who are critical to reducing the deaths of mothers and newborns require longer training but still cost on average less than \$5,000 to train.<sup>4</sup> In some countries, policies and programs are expanding the tasks and support for existing health workers so that they can do more with only marginal additional costs.

**4 Because frontline health workers are drawn from the communities they serve, they are less likely to migrate than higher-skilled categories of health workers.** Many developing countries are experiencing a serious “brain drain” of medical personnel moving from villages to cities or to richer countries in search of better paying jobs and higher standards of living. This migration has led to major health workforce shortages in the developing world and left already struggling health care systems in an even more desperate state. Investments that target frontline health workers are a good way to help strengthen and rebuild health systems with a cadre of workers that is less likely to migrate and

more culturally in synch with local needs and beliefs, thus ensuring care reaches those who need it most.

Investing in frontline health workers is not just a cost-effective way to save lives in the developing world—these investments are also a smart way to advance U.S. interests and build a favorable climate for American business.

Never has the U.S. economy depended so much on the success of developing nations. Developing countries now account for almost half the globe’s economic output and their economies are growing faster than the industrialized world. These growing markets benefit from a healthier workforce, better educated youth, and greater stability. With this growth comes the foundation for international business partnerships that benefit both donor and developing nations.

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*“We should recognize that the development goals of Africa do not simply benefit Africa, but are essential to our own national economic security. Private sector-led development throughout Africa will bring about a growing middle class, create greater stability throughout the continent, and provide for U.S. businesses stronger and more reliable business partners.”*

— Stephen Hayes, President, The Corporate Council on Africa

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# The Amazing Impact of Frontline Health Workers

Investments in frontline health workers yield real payoffs both in lives saved and in healthier, more productive populations. With help from international partners from the public and private sector, many countries have unleashed the power of frontline health workers to achieve progress on global health goals and to position themselves for a more prosperous future.

**Ethiopia** has a new program that has trained 40,000 frontline health workers since 2003. Results have included a doubling of the rates of young children who have been immunized, treated for pneumonia, and given vitamin A to prevent blindness and build their immune systems. Use of modern contraception has risen four-fold. Reports from the communities indicate that not only are children healthier, they are also doing better in school. Children's ability to concentrate in class has improved and they miss fewer days of school due to illness.

**Nepal** has a unique, well-established body of 50,000 female health volunteers who are frontline providers of a wide range of maternal and child health



At a baby clinic in Ethiopia, 3-month-old Hailu is weighed, vaccinated and given vitamin A by a frontline health worker. —PHOTO BY JENNY MATTHEWS

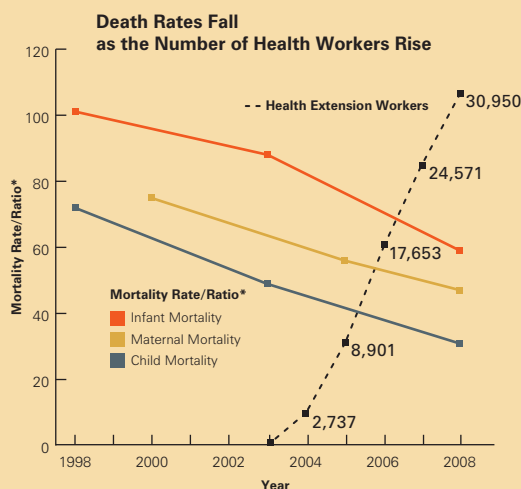
services throughout the country. These health workers have been a bridge between the formal health system and the communities since the 1990s. They have achieved near universal coverage of vitamin A supplementation, can diagnose and treat pneumonia cases in the community, and have mobilized communities to increase vaccine coverage. They carry out home visits before and after birth and have been trained in essential newborn care. They counsel women about contraception and link them to needed supplies. In the last two decades, maternal and child death rates have dropped dramatically, thanks in large part to the work of these volunteers. Between 1990 and 2008, Nepal

cut its maternal mortality rate nearly in half. Its under-5 mortality rate also declined rapidly, falling 65 percent in that same time period. All this has taken place in a country that is among the world's poorest—with GDP per capita income of just \$438.

In **Malawi**, many improvements in the survival chances of children can be attributed in part to the health promotion work of more than 10,000 health surveillance assistants who are deployed in rural areas of the country. These trained, salaried outreach workers deliver preventative health care such as oral immunizations, treat common killers like diarrhea, pneumonia and malaria, and care for mothers and babies before and after birth. They are key to promotion and provision of contraception, which is helping to reduce maternal and child death rates, and also reduce the numbers of children born HIV positive. They are also key to promoting voluntary counseling and testing for HIV and to providing treatment for children and parents who are affected. This very poor country has reaped enormous rewards for its smart investments in frontline health care. Malawi is now a proud African success story, having cut its under-5 death rate by 59 percent since 1990.

These are just a few examples demonstrating that the lives of children and their families can be saved when strategic investments and appropriate policies come together to unleash the power of frontline health workers. But tragically, there are not enough frontline health workers to reach all the families who need care. Worldwide, there are 57 countries with critical health workforce shortages, according to the World Health Organization. Most of these countries are in sub-Saharan Africa and South Asia—regions that also have the greatest share of the "global disease burden" and the highest numbers of preventable deaths.<sup>5</sup>

## IMPACT OF HEALTH EXTENSION WORKERS IN ETHIOPIA



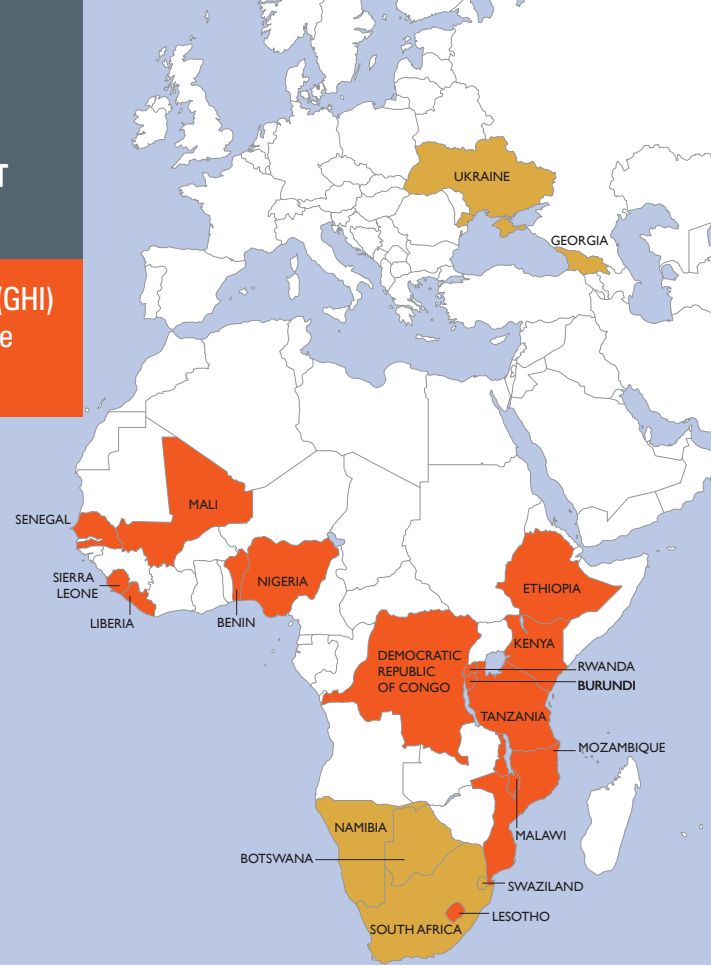
Since 2003—when Ethiopia made a commitment to invest in frontline health workers—death rates among Ethiopian infants, children and women have steadily declined. By the end of 2008, more than 30,000 of these new health extension workers had been trained and deployed to rural areas, doubling the size of Ethiopia's health workforce in just five years.

\*Infant and child mortality rates are given per 1,000 live births; maternal mortality ratio (MMR) is per 10,000 live births. Data sources: Infant and child mortality rates: Central Statistical Agency [Ethiopia] and ORC Macro. *Ethiopia Demographic and Health Survey 2011 Preliminary Report* (Addis Ababa, Ethiopia and Calverton, Maryland, USA: 2011); MMR: WHO. *Trends in Maternal Mortality: 1990 to 2008*. (Geneva: 2010); Health Extension Workers: AHWO. *Human Resources for Health Country Profile Ethiopia* (Brazzaville: 2010).



## WHERE U.S. INVESTMENT IS NEEDED MOST

U.S. Global Health Initiative (GHI)  
Focus Countries With Severe  
Workforce Shortages



*“If more leaders work together to deploy more frontline health workers, more women and children will survive. But they also should ensure better support for those **already on the front lines**—health workers who sometimes lack the information, skills, equipment and supplies they need to save more lives.”*

—Melinda Gates, Co-chair of the Bill & Melinda Gates Foundation

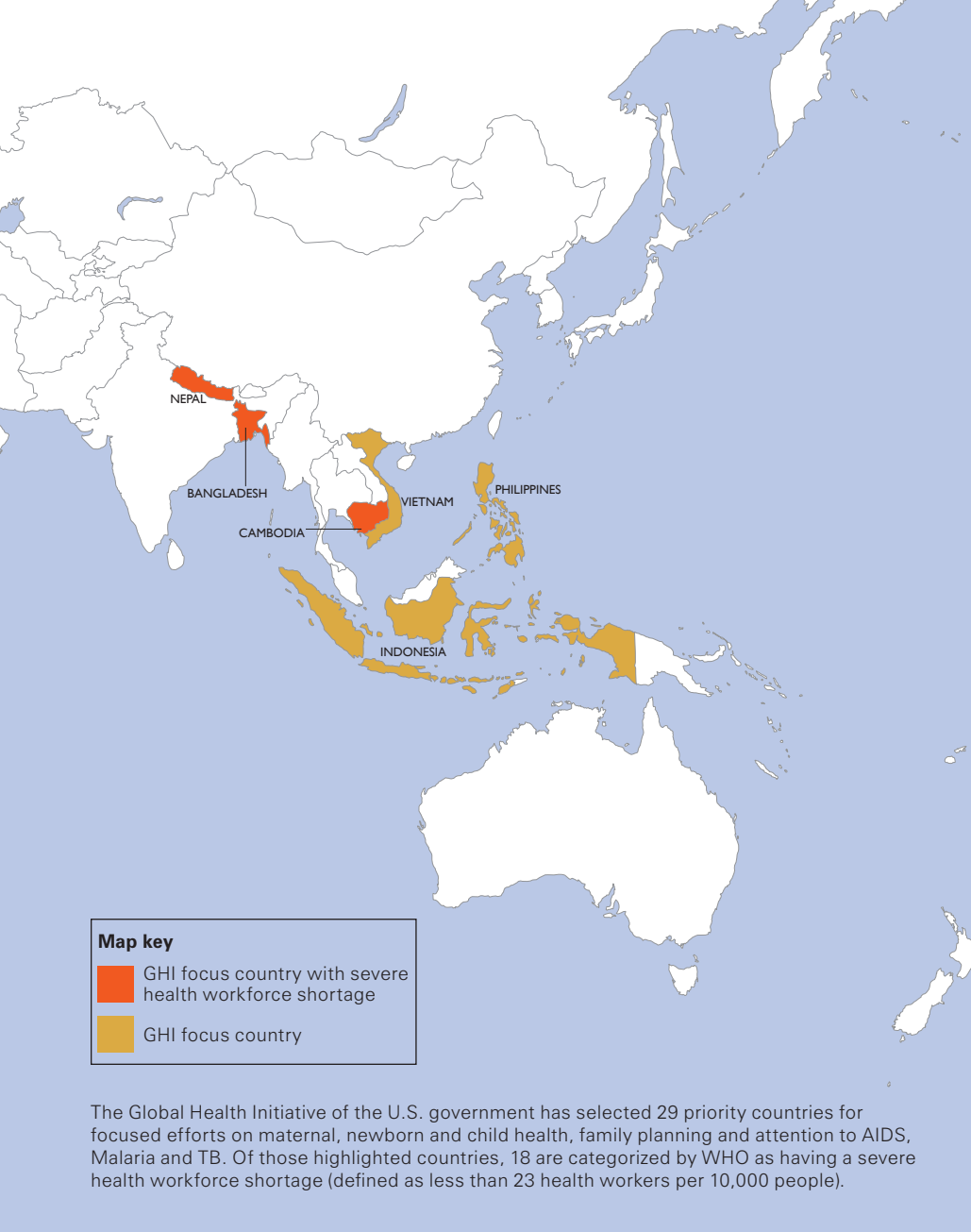
## U.S. Leadership Can Prevent Needless Deaths

Members of the new Frontline Health Workers Coalition are urging the U.S. government to make greater and more strategic investments in frontline health workers in the developing world as the most cost-effective way to save lives and improve global health. The Coalition is calling on the U.S. government to improve the capacity and impact of existing frontline health workers and invest to train and support more frontline health workers as part of a comprehensive health workforce strengthening strategy.

The health workforce crisis is widely recognized as a critical obstacle to achieving the global health goals of the U.S. government. As its contribution toward closing the shortfall of more than 1 million frontline health workers worldwide, the U.S. government should set a goal to increase the number of health workers trained and supported with U.S. assistance to 250,000 by 2015. This goal can be met in partnership with nongovernmental organizations and American private sector players who have a vested

interest in a healthy workforce and healthy communities.

As the map above illustrates, the Coalition encourages the U.S. government to help train and deploy these frontline health workers in countries that have severe health worker shortages and in which the U.S. is already making a substantial investment to improve health through its Global Health Initiative. The absolute expansion of the frontline health workforce should be accompanied by



## WHAT IS A FRONTLINE HEALTH WORKER?

In the developing world, many barriers stand in the way of the millions of poor families seeking health care—for example, distance to clinics, transportation costs, language or cultural differences, lack of information, and shortage of time. Frontline health workers are a critical yet undervalued resource for overcoming the barriers that too often prevent people from getting the health care they need.

Frontline health workers deliver advice and services to patients in their homes and in clinics, serving as counselors, educators and treatment providers. Because they often come from the communities they serve, frontline health workers understand the beliefs, practices and norms of those communities, allowing them to provide more culturally appropriate health care.

Frontline health workers are those typically providing services where they are most needed, especially in remote and rural areas. They include: community health workers, midwives, peer counselors, village pharmacists, health extension workers, physician’s assistants, clinical officers and nurses. Some physicians may also be considered frontline health workers when they serve in local clinics and address basic health needs. Frontline health workers provide a range of services for families from pre-pregnancy through maternal and newborn care, child health and management of chronic and communicable diseases such as tuberculosis, AIDS and diabetes.

investments in health school capacity, health worker remuneration and retention, health worker productivity, and strategic review of policy, skills and supply gaps that constrain their effectiveness.

The U.S. international affairs budget represents about 1 percent of total federal outlay. A well-designed program to train and equip a million 250,000 frontline health workers would cost a small fraction of this 1 percent.

America’s security and prosperity demand appropriate engagement in development issues around the world. Investments in frontline health workers will save lives in the developing world, slow rapid population growth, and support American jobs by expanding exports, fostering stability and helping to open markets overseas to U.S. products and services.

# Frontline Health Workers Coalition

The new Frontline Health Workers Coalition is a dynamic and influential coalition working together to urge greater and more strategic U.S. investment in frontline health workers in the developing world as the most cost-effective way to save lives and foster a healthier, safer and more prosperous world. The Coalition invites membership applications from organizations with a history of and an interest in U.S. global health advocacy. For the most updated list of members, how to become a member and other ways to stay connected, visit [frontlinehealthworkers.org](http://frontlinehealthworkers.org).

## FOR MORE INFORMATION

### Chair

Mary Beth Powers, Save the Children, [mpowers@savechildren.org](mailto:mpowers@savechildren.org)

### Co-Chairs, Policy Working Group

Maurice Middleberg, IntraHealth, [mmiddleberg@intrahealth.org](mailto:mmiddleberg@intrahealth.org)  
Nora O'Connell, Save the Children, [noconnell@savechildren.org](mailto:noconnell@savechildren.org)

### Co-Chairs, Communications Working Group

Laura Hoemeke, IntraHealth, [lhoemeke@intrahealth.org](mailto:lhoemeke@intrahealth.org)  
Betsy Kovacs, AMREF, [bkovacs@amref.org](mailto:bkovacs@amref.org)

**Phone:** 1-203-221-3761

**Email:** [frontlinehealthworkers@savechildren.org](mailto:frontlinehealthworkers@savechildren.org)

[frontlinehealthworkers.org](http://frontlinehealthworkers.org)

## ENDNOTES

<sup>1</sup> High Level Taskforce on Innovative International Financing for Health Systems. *Background Paper for the Global Strategy for Women and Children's Health: Access for All to Skilled, Motivated and Supported Health Workers*. 2010

<sup>2</sup> See for example: Kaiser Family Foundation. *U.S. Global Health Policy: 2010 Survey of Americans on the U.S. Role in Global Health*. (Menlo Park, CA: September 2010)

<sup>3</sup> The Earth Institute of Columbia University. *One Million Community Health Workers*. (New York: 2011)

<sup>4</sup> UNFPA. *State of World's Midwifery 2011*. (New York: 2011)

<sup>5</sup> WHO. *World Health Report 2006: Working Together for Health*. (Geneva: 2006)

## CREDITS

### Strategic Advisor

Dianne Sherman

### Writer

Tracy Geoghegan

### Contributors

Donna Barry, Gary Darmstadt, Nikki Gillette, Monika Gutestam, Susannah Hurd, Troy Jacobs, Mary Kinney, Joy Lawn, David Oot, Estelle Quain, Oying Rimon, Mandy Slutsker, Eric Starbuck, Eric Swedberg

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## COALITION MEMBERS

(as of 1/1/2012)

### Abt Associates

[abtassociates.org](http://abtassociates.org)

### AMREF

[amref.org](http://amref.org)

### Family Care International

[familycareintl.org](http://familycareintl.org)

### Bill & Melinda Gates Foundation

[gatesfoundation.org](http://gatesfoundation.org)

### GAPPS (Global Alliance to Prevent Prematurity and Stillbirth)

[gapps.org](http://gapps.org)

### IAPAC (International Association of Physicians in AIDS Care)

[iapac.org](http://iapac.org)

### IntraHealth International

[intrahealth.org](http://intrahealth.org)

### Jhpiego

[jhpigo.org](http://jhpigo.org)

### Partners In Health

[pih.org](http://pih.org)

### PSI

[psi.org](http://psi.org)

### Public Health Institute

[phi.org](http://phi.org)

### RESULTS

[results.org](http://results.org)

### Save the Children

[savethechildren.org](http://savethechildren.org)

### The White Ribbon Alliance for Safe Motherhood

[whiteribbonalliance.org](http://whiteribbonalliance.org)

### World Vision

[worldvision.org](http://worldvision.org)