

## REDUCING MATERNAL MORTALITY

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*MacArthur seeks to reduce maternal death and illness in the developing world, with a special focus on Mexico, Nigeria, and India, where the Foundation has offices.*



### AT-A-GLANCE

- More than 340,000 women die each year due to complications during pregnancy and childbirth, most of which could be prevented with appropriate maternal health services and care.
- In 2008, more than 50 percent of all maternal deaths occurred in only six countries: India, Nigeria, Pakistan, Afghanistan, Ethiopia, and the Democratic Republic of the Congo.
- Reducing maternal mortality is a worthy goal in itself, but it is also a good indicator that women are receiving the reproductive health services they need.
- After years of stagnation in the number of maternal deaths around the world, recent research shows signs of progress, offering hope that maternal mortality can be reduced.
- MacArthur's grantmaking to reduce maternal mortality focuses on developing innovative models that can eventually be scaled up, enhancing the skills of health professionals, promoting informed advocacy on issues related to maternal mortality, and research.

Data used in this information sheet are from Hogan MC, et al. Maternal Mortality for 181 countries, 1980-2008: a systemic analysis of progress towards Millennium Development Goal #5. Lancet 2010. 375: 1609-1623.

### BACKGROUND

For two decades, there were few signs of progress in reducing maternal mortality around the world. Recent estimates show that some progress has been made — between 1980 and 2008 the global maternal mortality ratio decreased from 422 maternal deaths per 100,000 live births to 251, although progress varies greatly by country.

Although most maternal deaths are preventable with sufficient resources and commitment, more than 340,000 women die each year due to complications during pregnancy and childbirth. The vast majority of these deaths occur in the developing world.

Reducing maternal mortality is not only a worthy goal in itself, but it is also an important indicator that women are receiving the reproductive health services they need. The international community identified the reduction of maternal mortality as a key component of alleviating world poverty at the United Nations Millennium Summit in 2000 and agreed to work toward Millennium Development Goal #5, reducing the maternal mortality ratio by 75 percent by 2015. According to recent estimates, only 23 countries are on track to achieve this goal.

While a solution to high rates of maternal death lies partly in the hands of the health system, it is also dependent upon the educational status of women and on countries' legal systems. Women need access to good care, but they also need an enabling legal environment to protect their rights, and their health needs must be recognized and respected by their partners, families, and communities.

### WHAT WE FUND

MacArthur's grantmaking to reduce maternal mortality strives to increase resources for women's health and to improve the quality and reach of publicly provided reproductive health services. Most of MacArthur's grantmaking to reduce maternal mortality and morbidity is carried out in India, Nigeria, and Mexico, where the Foundation maintains offices.

MacArthur's support for efforts to reduce maternal mortality focuses on:

- Developing innovative models;
- Enhancing the skills of health professionals to improve the quality and availability of services;
- Promoting informed advocacy on critical issues related to maternal mortality to ensure that policymakers have the evidence and motivation to successfully address the problem; and
- Research that crosses disciplinary boundaries, covering topics such as socioeconomic consequences of maternal deaths, budget analysis, and computer modeling of real-life scenarios.

The Foundation also funds selected international organizations in the population and reproductive health field whose work promotes innovation in policy, programs, and services.

### Postpartum Hemorrhage

In 2003, the Foundation made its first grant (to the University of California San Francisco) to explore the use of the AntiShock Garment (ASG) to help reduce postpartum hemorrhage, which accounts for approximately 30 percent of all maternal deaths. The garment is a low-cost

neoprene suit that is designed to help stabilize women who experience severe bleeding after childbirth. It requires little training to put on and can buy time for women who often must be transported long distances in order to reach a health facility. The ASG is just one part of the continuum of care model being developed and tested by Pathfinder International. The model promotes the use of active management of the third stage of labor, the AntiShock Garment, and community transportation and communication networks. The hope is that it that this continuum of care model will be incorporated into the standard package of services for postpartum hemorrhage in developing countries.

### Eclampsia

Globally, eclampsia accounts for about 12 percent of maternal deaths. In 2006, the Foundation began investing in interventions to prevent and treat eclampsia, with a special focus on the proven drug of choice, magnesium sulfate. MacArthur has made a series of grants to identify country-specific barriers to the availability and use of magnesium sulfate, develop strategies to overcome those barriers, and establish a dialogue among key international and country level stakeholders on these issues. The Foundation has also invested in innovative models to improve clinician education and training on magnesium sulfate as well as in research on appropriate delivery systems and procedures.



## REPRESENTATIVE GRANTS

### International

BIXBY CENTER FOR GLOBAL REPRODUCTIVE HEALTH  
UNIVERSITY OF CALIFORNIA,  
SAN FRANCISCO

*San Francisco, California*

\$325,000 to research and disseminate findings on the AntiShock Garment.

ENGENDERHEALTH

*New York, New York*

\$310,000 to support the use of magnesium sulfate for the treatment of eclampsia, via the development of an e-learning module.

FAMILY CARE INTERNATIONAL

*New York, New York*

\$500,000 in support of a longitudinal study on the costs and consequences of maternal death and morbidity, and global

advocacy efforts to build political will for Millennium Development Goal #5.

GUTTMACHER INSTITUTE

*New York, New York*

\$100,000 to analyze recent trends in abortion incidence around the world.

GYNUITY HEALTH PROJECTS

*New York, New York*

\$100,000 to raise awareness about the use of misoprostol for postabortion care.

HARVARD UNIVERSITY SCHOOL OF PUBLIC HEALTH  
*Boston, Massachusetts*  
\$500,000 in support of the development and application of a maternal morbidity and mortality policy model.

INTERNATIONAL CENTRE FOR DIARRHOEAL DISEASE RESEARCH, BANGLADESH  
*Dhaka, Bangladesh*  
\$250,000 to research the economic and social consequences of maternal mortality.

PATHFINDER INTERNATIONAL  
*Watertown, Massachusetts*  
\$10,700,000 to implement a package of interventions for reducing maternal mortality and morbidity due to postpartum hemorrhage in India and Nigeria.

PROGRAM FOR APPROPRIATE TECHNOLOGY IN HEALTH  
*Seattle, Washington*  
\$400,000 to support the manufacture and scale-up of the AntiShock Garment for postpartum hemorrhage treatment.

TURLY PICTURES, LLC  
*White Plains, New York*  
\$55,000 in support of the dissemination of a maternal health documentary film.

UNIVERSITY OF ABERDEEN  
*Aberdeen, United Kingdom*  
\$500,000 to research infection control practices for reducing maternal deaths and for initial development of a journal on maternal and newborn health.

WHITE RIBBON ALLIANCE FOR SAFE MOTHERHOOD, GLOBAL SECRETARIAT  
*Washington, D.C.*  
\$400,000 in support of general operations.

WORLD HEALTH ORGANIZATION  
*Geneva, Switzerland*  
\$500,000 to support the Partnership for Maternal, Newborn, and Child Health to increase global awareness and reduce maternal mortality and morbidity.

### Other International Grants

INTERNATIONAL RESCUE COMMITTEE WOMEN'S REFUGEE COMMISSION  
*New York, New York*  
\$300,000 to bridge the gap in reproductive health interventions for displaced women and girls.

PATHFINDER INTERNATIONAL  
*Watertown, Massachusetts*  
\$365,000 to strengthen reproductive health care services in refugee and displaced persons camps.

PLANET CARE/GLOBAL HEALTH ACCESS PROGRAM  
*Berkeley, California*  
\$270,000 to pilot and document effects of a project to increase access to reproductive and child health services by internally displaced persons.

UNITED NATIONS POPULATION FUND  
*New York, New York*  
\$500,000 to identify near-term post-earthquake needs in Haiti and to support funding for longer term maternal health efforts.

WORLD HEALTH ORGANIZATION  
*Geneva, Switzerland*  
\$440,000 to strengthen institutional capacity to deliver reproductive and maternal health care in emergency humanitarian settings.

### Mexico

COMUNICACION E INFORMACION DE LA MUJER  
*Mexico City, Mexico*  
\$180,000 In support of using new Internet-based technologies to increase the quantity and improve the quality of media coverage on maternal mortality and morbidity in Mexico.

EQUIDAD DE GENERO CIUDADANIA, TRABAJO Y FAMILIA  
*Mexico City, Mexico*  
\$250,000 to promote Millennium Development Goal #5 to decrease maternal mortality.

FUNDAR, CENTRO DE ANALISIS E INVESTIGACION  
*Mexico City, Mexico*  
\$270,000 to monitor and report on the operations and budgets of principal maternal health programs.

IPAS  
*Chapel Hill, North Carolina*  
\$300,000 in support of advancing access to safe legal abortion in three Mexican states.

K'INAL ANTSETIK  
*Mexico City, Mexico*  
\$210,000 to scale up a model for community based maternal mortality prevention strategies in Mexico.

MEXICO NATIONAL SAFE MOTHERHOOD COMMITTEE  
*Comite Promotor Por Una Maternidad Sin Riesgos En Mexico*  
*San Cristobal de las Casas, Mexico*  
\$350,000 to support efforts to decrease maternal mortality in Mexico.



NUEVE LUNAS, S.C.

*Oaxaca, Mexico*

\$180,000 to improve the delivery of skilled attendance at birth in rural indigenous areas of Oaxaca and generating support for midwifery training systems.

SOCIEDAD MEXICANA PRO  
DERECHOS DE LA MUJER

*Mexico City, Mexico*

\$700,000 to strengthen local capacity and organizing to decrease maternal mortality in rural indigenous areas of Mexico.

### India

ACTION RESEARCH & TRAINING  
FOR HEALTH

*Udaipur, India*

\$375,000 to improve the quality of maternal-newborn health services, and pilot an intervention to improve young women's access to reproductive health services in Rajasthan.

CENTRE FOR DEVELOPMENT AND  
POPULATION ACTIVITIES

*Washington, D.C.*

\$260,000 to support the White Ribbon Alliance for advocacy to reduce maternal mortality and morbidity in India and the state of Rajasthan.

INDIAN INSTITUTE OF MANAGEMENT  
AHMEDABAD

*Ahmedabad, India*

\$190,000 to evaluate two government programs that aim to reduce maternal mortality and morbidity by promoting institutional delivery in the states of Gujarat and Madhya Pradesh.



IPAS  
*Chapel Hill, North Carolina*  
\$400,000 to support scaling up of Comprehensive Abortion Care services in the public sector in the states of Maharashtra, Gujarat, and Rajasthan.

KARUNA TRUST  
*Bangalore, India*  
\$400,000 to scale up a public-private partnership model of delivering maternal and reproductive health services in India.

MAHILA SEWA TRUST  
*Ahmedabad, India*  
\$200,000 to scale up health insurance to reduce maternal mortality and morbidity in Gujarat and nationally.

SEVA MANDIR  
*Udaipur, India*  
\$150,000 to support a comprehensive community-based project to reduce maternal mortality and morbidity in the Udaipur and Rajsamand districts of rural Rajasthan.

SOCIETY FOR EDUCATION WELFARE AND ACTION-RURAL  
*Dist. Bharuch, India*  
\$200,000 to test model interventions to reduce maternal mortality and morbidity in the state of Gujarat.

SOCIETY FOR EDUCATION, ACTION & RESEARCH IN COMMUNITY HEALTH  
*Gadchiroli, India*  
\$550,000 to research and demonstrate a program on reducing maternal mortality and morbidity and promote young people's sexual and reproductive health in Maharashtra.

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## Nigeria

AHMADU BELLO UNIVERSITY  
TEACHING HOSPITAL

*Zaria, Nigeria*

\$300,000 to support the Community  
Prevention of Postpartum Hemorrhage  
Initiative.

WOMEN'S HEALTH AND ACTION  
RESEARCH CENTRE

*Benin City, Nigeria*

\$250,000 in support of research to  
improve policies and programs for  
promoting maternal health in six states  
of Nigeria.

CENTRE FOR DEVELOPMENT AND  
POPULATION ACTIVITIES

*Washington, DC*

\$270,000 to accelerate efforts to save  
mothers' lives through task shifting of  
human resources for health and  
integrated ambulance services.

COMMUNITY HEALTH AND  
RESEARCH INITIATIVE

*Kano, Nigeria*

\$175,000 to work with 10 local govern-  
ments and the Kano state government to  
reposition the commitment to address  
maternal mortality and morbidity through  
improved budgetary allocation and  
service delivery.

FEDERAL MINISTRY OF HEALTH

*Abuja, Nigeria*

\$500,000 in support of promoting the  
use of magnesium sulfate.

IPAS

*Chapel Hill, North Carolina*

\$500,000 to increase access to post-  
abortion care services in Nigeria.

SOCIETY OF GYNECOLOGY AND  
OBSTETRICS OF NIGERIA

*Jos, Nigeria*

\$250,000 in support of reducing  
maternal mortality.

### **For More Information**

About MacArthur's efforts to reduce maternal mortality

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### **About the MacArthur Foundation**

The John D. and Catherine T. MacArthur Foundation supports creative people and effective institutions committed to building a more just, verdant, and peaceful world. In addition to selecting the MacArthur Fellows, the Foundation works to defend human rights, advance global conservation and security, make cities better places, and understand how technology is affecting children and society.

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