The Republic of Indonesia, a signatory to the UN Millennium Declaration, has committed to achieving the Millennium Development Goals, which establish targets for remedying various aspects of extreme poverty by 2015. However, recent estimates suggest that the country is not on target to meet the two goals devoted to reducing deaths of children under age 5 and deaths of women during and after childbirth. The most recent estimates released by the Indonesian government suggest that the maternal mortality ratio, defined as the number of maternal deaths in pregnancy and childbirth per 100,000 live births, actually rose in recent years.

To help change that trajectory, the Indonesian Academy of Sciences and the U.S. National Academy of Sciences appointed a joint committee of experts from the two nations to identify steps that could reduce the number of childbirth-related deaths and improve maternal and child health.

The committee’s report concludes that the Indonesian government’s efforts to reduce maternal and neonatal mortality in line with the UN’s Millennium Development Goals have been largely ineffective. The report recommends steps the nation should take to reduce the number of deaths associated with childbirth. For example, Indonesia should set a goal of enabling every woman to give birth in a medical facility, providing access to life-saving interventions such as blood transfusions and caesarean sections in the event of an obstetrical emergency.
Enabling Births in Certified Medical Facilities

The world’s countries are divided with respect to women’s childbirth-related mortality rates. In most of the wealthier and industrialized nations, nearly all births take place in competent facilities, and maternal mortality rates are less than 20 deaths per 100,000 live births. In most less-developed countries, most births take place at home or in underequipped facilities under the care of traditional birth attendants or midwives, and maternal mortality ratios exceed 200 deaths per 100,000 births. Indonesia is in a transitional state, with an increasing percentage of births currently taking place in clinics or hospitals.

However, many births in Indonesia still take place at home. Most home births are attended by midwives or traditional birth attendants who frequently lack the skills and experience needed to save lives in the face of obstetrical emergencies. While the great majority of births are normal and safe, when complications do occur, they all too often go unrecognized in the home until it is too late. Effective treatment for these mothers and newborns may require drugs, blood transfusions, and/or cesarean section, which are not available or cannot be performed in a home setting.

It is unlikely that further reductions in mortality will be made before more women are able to give birth in accredited facilities that are equipped to handle obstetrical emergencies, the report says. Indonesia should set a goal of enabling every woman to give birth in a facility that satisfies World Health Organization standards for childbirth care, with service and transport available 24
hours a day, 7 days a week, and insurance that will pay the costs where required. The nation should make a commitment to direct all births toward such facilities, a proven path.

**Improving the Care System**

The nation's medical facilities, personnel, and financial systems require considerable strengthening. Currently, the level of government spending on health and the number of physicians are far below national targets and unequally distributed, especially specialists produced in Indonesia who are critical to providing emergency obstetrical services.

The system of care for women and their newborns should be coordinated and centralized under one Indonesian government agency that is represented within the central government and at the provincial, district, or municipality, and community levels. This system should address population-based planning and the implementation of all services involved in childbirth. Strategies to achieve the goal of enabling all women to give birth in certified facilities will vary by region, and local administrative and government units must be included in the planning.

Training for health care workers should also be improved. The system for training skilled birth attendants should be revised to include the training of physicians and nurses who specialize in emergency obstetric, neonatal, and anesthesia services. Training for midwives should be strengthened to emphasize the recognition of obstetric emergencies and the design and implementation of birth plans that include a planned birth at a certified facility and early referral for complications. As an interim step as births shift to certified facilities, all midwives should be trained in neonatal resuscitation, and simple resuscitation equipment should be a standard item in the midwifery kit.

In addition, financing mechanisms for obstetric and newborn services should be established by the government to ensure universal access to quality care. These mechanisms should include sufficient overall funding for needed services, appropriate incentives for women to deliver at a certified facility and for providers to reduce unnecessary or inappropriate care, and effective monitoring to ensure accountability.

Programs for education and empowerment of women also will have a positive effect on maternal and newborn survival. The government has made progress on these issues during the last decade, but a new initiative is required in the present situation.

**Collecting Data to Inform Decisions**

To make appropriate decisions about programs likely to reduce maternal and newborn mortality rates in Indonesia and to allocate resources appropriately, Indonesia will need to collect high-quality data on the relevant rates and causes of mortality. The current periodic household surveys the nation relies on to obtain official measures of maternal and child deaths lack the necessary sample sizes and most reliable methods of determining mortality rates. Instead, a civil registration system for births and deaths should be established and used to monitor childbirth-related mortality.
JOINT COMMITTEE ON REDUCING MATERNAL AND NEONATAL MORTALITY

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For More Information

Copies of Reducing Maternal and Neonatal Mortality in Indonesia: Saving Lives, Saving the Future are available from the National Academies Press (NAP); call (800) 624-6242 or (202)334-3313 (in the Washington metropolitan area), or visit the NAP website at www.nap.edu. For more information on the project, visit the Policy and Global Affairs website at www.nationalacademies.org/pga.