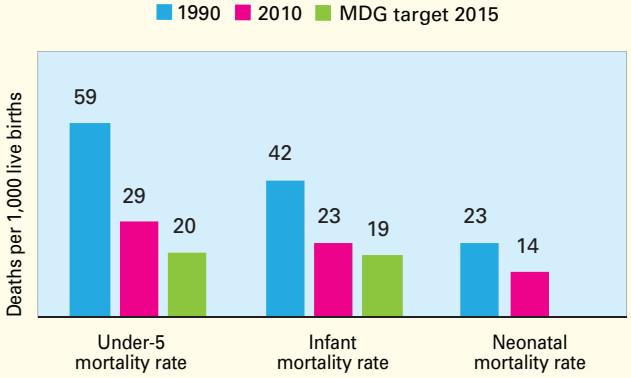
Philippines

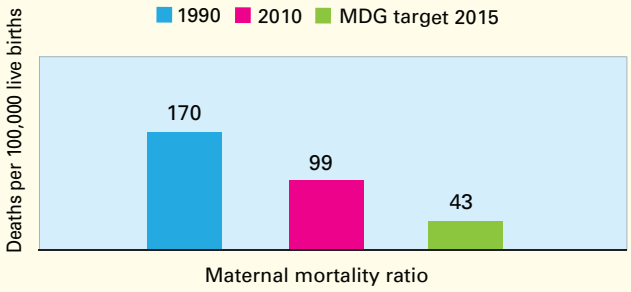
The Philippines is on track to achieve MDG 4, with its annual rate of under-5 mortality reduction at 3.8 between 1990 and 2011. A concentrated response to the wide disparities in child survival is needed to improve the health outcomes for children living in the poorest and most rural households. A focus on preterm births is required to further accelerate progress on reducing neonatal mortality. The efforts to achieve MDG 5 can be bolstered by attention to the quality of antenatal care and to improving access to institutional delivery and reproductive health services.

TRENDS AND POLICIES

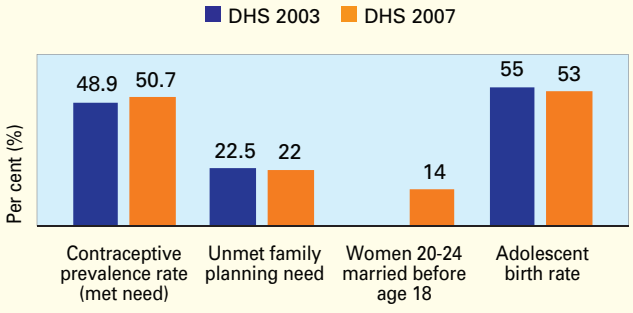
Trends in child mortality



Trends in maternal mortality



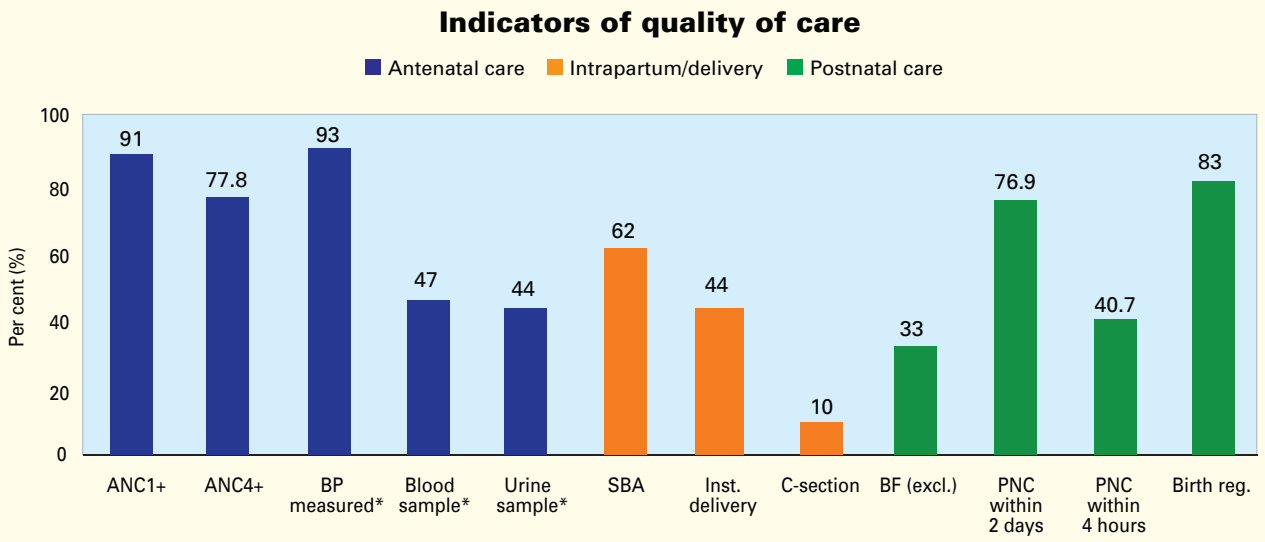
Trends in maternal indicators



National health policies and services	Availability
Per capita total expenditure on health (US$), 2007–2011[1]	77
Out-of-pocket expenditure (% of private expenditure on health), 2007–2011[1]	83.6
Specific notification of maternal deaths	Partial
Midwifery personnel authorized to administer core set of lifesaving interventions	Yes
Costed national implementation plans for maternal, newborn and child health available	Yes
Number of basic emergency obstetric and newborn care facilities[2]	1,750
Facilities per 1,000 births[3]	0.75
Community treatment of pneumonia with antibiotics	No
Oral rehydration solution and zinc for management of diarrhoea	Yes

Sources: Confirmed with the Philippines UNICEF Country Office unless specified; [1] World Health Organization National Health Account database 2012 (retrieved from www.data.worldbank.org); [2] Zenaida Recidoro, Department of Health Program Manager for Women's Health and Safe Motherhood Project, personal communication, 1 April 2013; [3] WHO/UNICEF, Countdown to 2015 Philippines Country Profile, 2012.

Sources for figures: Trends in child mortality: 1990 and 2010 child data from UN Inter-agency Group for Child Mortality Estimation, *Levels & Trends in Child Mortality*, 2011; 2015 targets from *Levels & Trends* (U5MR) and Philippines Progress Report on the Millennium Development Goals 2010 (IMR); National Demographic Health Survey (NDHS), 2008. **Trends in maternal mortality:** WHO/UNICEF, Countdown to 2015 Philippines Country Profile, 2012; National Demographic Health Survey (NDHS), 2008. **Trends in maternal indicators:** UNDP 2012 Update for the MDG database (retrieved from www.un.org/esa/population). Notes: Contraceptive prevalence rate proportion of currently married women aged 15–49 who were using some method of family planning at the time of the survey; unmet family planning need: % of women with an unmet need for family planning (spacing or limiting); adolescent birth rate: annual number of births among women aged 15–19 per 1,000 women in the age group. The UNDP estimates are based on the NDHS 2003 and NDHS 2008.



Source: All data from the NDHS 2008 except for birth registration, which is from Countdown to 2015 Philippines Country Profile, 2012.
Note: ANC1+: % of women who received ≥1 ANC visit; ANC4+: at ≥4 ANC visits; *% of ANC visit that included measuring blood pressure (BP) and collecting blood and urine samples; SBA: % of births delivered by a skilled birth attendant (doctor, nurse, midwife); inst. delivery: % of births delivered at a health facility; C-section: % of births delivered by caesarean section; BF (excl.): % of children younger than 6 months who were exclusively breastfed; PNC within 2 days: % of women who received a postnatal check-up within 2 days of delivery (calculated by adding the sum of the % of women who received PNC within less than 4 hours, 4–23 hours and within 2 days of delivery and mentioned in the NDHS); birth reg.: % of children younger than 5 years whose birth was registered with the State.

AVAILABILITY OF NATIONAL POLICIES[1] FOR HIGH-IMPACT INTERVENTIONS SHOWN TO IMPROVE NEONATAL SURVIVAL THROUGHOUT THE CONTINUUM OF CARE[2]

Preconception	Antenatal	Intrapartum	Postnatal
- Folic acid supplmentation	- Tetanus toxoid immunization - Syphilis screening - Pre-eclampsia and eclampsia prevention - Presumptive malaria treatment - Detection and treatment of asymptomatic bacteriuria	- Skilled maternal and neonatal care - Emergency obstetric care - Antibiotics for PROM - Steroids for preterm labour - C-section - PMTCT - Labour surveillance - Clean delivery practices	- Resuscitation of newborn baby - Breastfeeding - Prevention and management of hypothermia - Kangaroo mother care - Community-based pneumonia management - Emergency neonatal care

Legend: **green:** covered by policy; **red:** no policy or clear guideline in place.
Sources: [1]Department of Health, *Maternal, Newborn, Child Health and Nutrition Strategy Manual of Operations* (2011); [2]Darmstadt et al., 2005. PROM: premature rupture of membranes; emergency obstetric care: management of complications-obstructed labour, haemorrhage, hypertension, infection; C-section: caesarean section (detection and management of breech); PMTCT: prevention of mother-to-child transmission of human immunodeficiency virus (HIV); labour surveillance (including partograph) for early diagnosis of complications); kangaroo mother care (care for low birth weight infants in health facilities); emergency neonatal care: management of serious illness (infections, asphyxia, prematurity, jaundice).
Reference: Darmstadt, G.L. et al., 'Evidence-Based, Cost-Effective Interventions: How many newborn babies can we save?' *The Lancet*, 2005: 365 (9463).

READINESS FOR NATIONAL SCALING UP OF NEWBORN CARE

Agenda setting

- National needs assessment for newborn care conducted
- Local evidence generated for newborn survival
- Existence of a convening mechanism for newborn health issues
- Focal person for newborn health in Department of Health
- Maternal and newborn indicators included in national surveys (e.g. neonatal mortality rate)
- Local evidence disseminated for newborn survival

Policy formulation

- National newborn policy endorsed
- Newborn policy integrated into other health policies or strategies
- National behaviour change communication strategy
- Essential drug list includes injectable antibiotics for primary level care
- Midwives authorized to perform neonatal resuscitation
- National targets to track newborn health established
- Maternal and newborn indicators included in national health information systems
- Community-based cadres authorized to perform neonatal resuscitation (for midwives, RNs, MDs)
- Primary-level cadres authorized to administer injectable antibiotics for newborn infections
- Community-based cadres authorized to administer injectable antibiotics for newborn infections (for midwives)
- Reproductive, maternal, newborn, child health expenditure per child younger than 5 years and per woman aged 19-49
- Costed implementation and for maternal, newborn and child health

Policy implementation

- Supervision system for maternal, newborn, and child health established at primary health centre level
- Integrated management of childhood illness algorithm adapted to include the first week of life
- Resource requirement for primary health care level available for newborns
- Resource requirement for scaling up home-based newborn care available
- Resource requirement for secondary-level health care available for newborns
- System for perinatal death audits exists
- Cadre identified for home-based newborn care
- In-service newborn care training materials for community-based cadres
- In-service newborn care training materials for facility-based cadres
- Pre-service newborn care education for facility-based cadres

Agenda setting

Policy formulation

- Primary-level cadres authorized to perform neonatal resuscitation (not for *barangay* health service)
- Community-based cadres authorized to perform neonatal resuscitation (not for *barangay* health service)
- Community-based cadres authorized to administer injectable antibiotics for newborn infections (not for *barangay* health service)

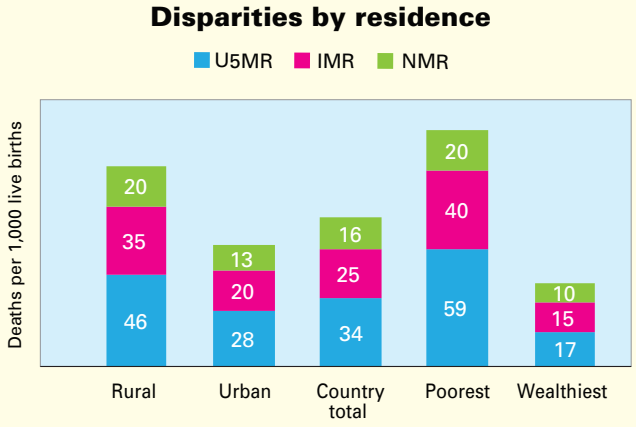
Policy implementation

- Pre-service newborn care education for community-based cadres
- Protocol or standard for district hospital care of sick newborns in place
- System for neonatal death audits exists

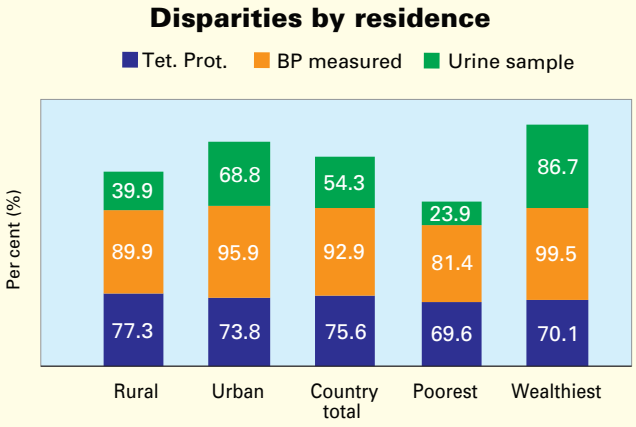
Legend: green: benchmark met; **red:** benchmark not met.
Source: Moran, A.C. et al., 2012. Availability of benchmarks as per UNICEF Philippines Country Office.
Reference: Moran, A.C. et al., 'Benchmarks to Measure Readiness to Integrate and Scale Up Newborn Survival Interventions', *Health Policy Planning*, 2012: 27 (iii29-iii39).

CONTINUING INEQUITIES: Indicators by residence, wealth quintiles and provinces

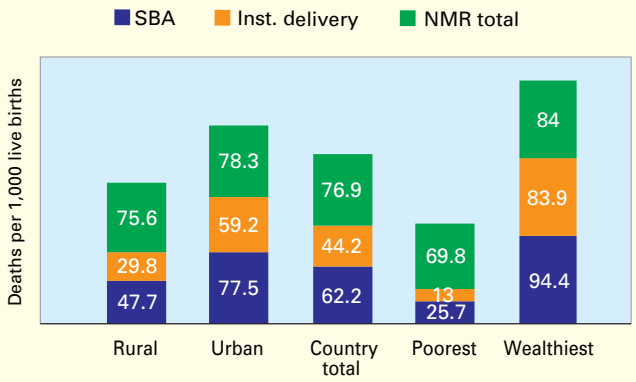
Disparities by residence



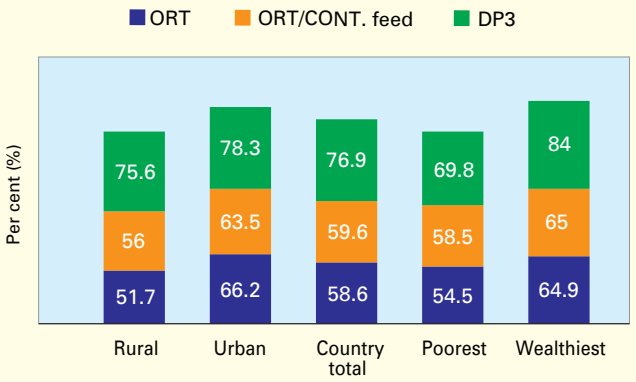
Disparities by residence



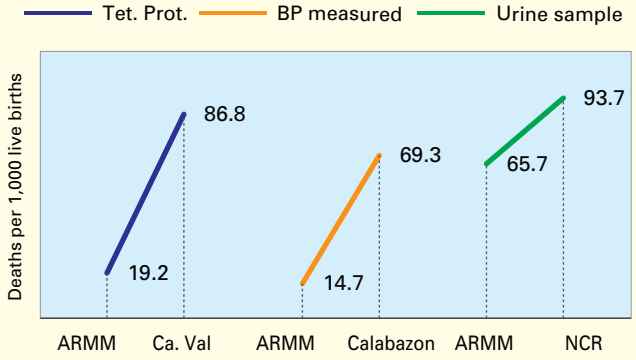
Disparities by wealth quintiles



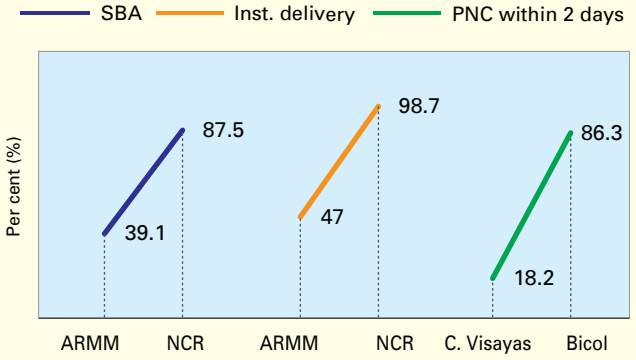
Disparities by wealth quintiles



Most and least affected provinces



Most and least affected provinces



Source: Philippines NDHS, 2008.
Notes: Comparison of data is by residence (rural versus urban versus country total), wealth quintiles (poorest versus richest versus country total), and by regions (most affected versus least affected); U5MR: Mortality for children younger than 5 years of age; IMR: infant mortality rate; Tet. Prot: (neonatal tetanus protection) % of mothers aged 15–49 whose last birth was protected against neonatal tetanus; urine sample: % of pregnant women who had their urine sample taken during an antenatal care (ANC) visit; BP measured: % of pregnant women who had their blood pressure taken during an ANC visit; SBA: % of pregnancies delivered by a skilled birth attendant; Inst. delivery: % of births delivered at a health facility; PNC within 2 days: % of women aged 15–49 who received a postnatal check-up within 2 days of delivery; ORT: % of children with diarrhoea who received oral rehydration therapy (ORS (oral rehydration solution) or increased fluids); ORT/CONT. feed.: % of children with diarrhoea who received oral rehydration therapy or increase intake and at the same time was continuously fed; DPT3: % of children aged 12–23 months who received the recommended 3 doses of DPT by 12 months. **Regions:** ARMM: Autonomous Region in Muslim Mindanao; NCR: National Capital Region; Cag. Val.: Cagayan Valley; C. Visayas: Central Visayas).

EQUITY FOCUS: Indicators by residence, wealth quintiles and provinces

Indicator	Residence		Quintiles		Most and least affected provinces
	Rural	Urban	Poorest	Wealthiest	
U5MR (country avg: 29 from Countdown 2012 report and 34 from NDHS 2008)	46	28	59	17	M: ARMM (94); L: National Capital Region (24)
NMR (country avg: 14 from Countdown 2012 report and 16 from NDHS 2008)	20	13	20	10	M: Western Visayas 28; L: Zamboanga Peninsula (6)
IMR (country avg: 23 from Countdown 2012 report and 25 from NDHS 2008)	35	20	40	15	M: ARMM (56); L: Zamboanga Peninsula (14)
Antenatal					
ANC4 (% of pregnant women receiving ANC from any provider 77.8%)	72.6	83	-	-	-
% mothers 15–49 whose last birth was protected against neonatal tetanus (75.6%)	77.3	73.8	69.6	70.1	M: ARMM (39.1); L: Cagayan Valley (87.5)
Blood pressure taken (country avg: 92.9%)	89.9	95.9	81.4	99.5	M: ARMM (47); L: Calabarzon (98.7)
Blood sample (country avg: 46.6%)	32.7	60.7	21.6	77.9	M: ARMM (16.8); L: National Capital Region (81.2)
Urine sample taken at ANC, % (country level 54.3%)	39.9	68.8	23.9	86.7	M: ARMM (18.2); L: National Capital Region (86.3)
Intrapartum					
Birth attended by any skilled attendant (country level: 62.2%)	47.7	77.5	25.7	94.4	M: ARMM (19.2); L: National Capital Region (86.8)
Institutional delivery (44.2%)	29.8	59.2	13.0	83.9	M: ARMM (14.7); L: National Capital Region (69.3%)
Caesarean section (country level: 9.5%)	5.3	13.8	1.3	27.7	M: ARMM (2.7); L: Calabarzon (16.3)
Postpartum					
No postnatal check-up (9%)	8.8	9.2	11.3	5.3	M: SOCCSKSARGEN (15); L: Bicol (0.7)
PNC within 2 days (76.9%)	75.6	78.3	69.8	84	M: Central Visayas (65.7); L: Bicol (93.7)
Birth registration (country avg: 83%)	87	78	-	-	-
Children younger than 5 years					
% who received oral rehydration therapy (oral rehydration solution or recommended home fluids or increased fluids (country level %: 58.6%)	51.7	66.2	54.5	64.9	-
% continued feeding and given ORT (country avg: 59.6%)	56	63.5	58.5	65.0	-
DPT3 (country avg: 85.6%)	82.9	88.2	71.3	94.0	M: Bicol (79.9); L: Western Visayas (95.0)
Median duration of exclusive breastfeeding for children born in the last 3 years (mean for all children: 4.9 months)	4.2	4.5	3.9	3.8	M:Kandal (2.2); L: Svay Rieng (5.5)

Source: All data from NDHS 2008 (U5MR, IMR and NMR country average) and also from WHO/UNICEF, Countdown to 2015 Philippines Country Profile, 2012.

Reviewing tragic maternal deaths saves other women's lives

Maternal death reviews (MDRs) offer exceptional opportunities for a group of health staff and community members to learn from tragic – and often preventable – events. UNICEF promotes the innovative "software" to improve the quality of obstetric care and reduce maternal and neonatal mortality by providing insight into the cause of a death and determining corrective actions to better treat women in similar situations.

A large number of maternal deaths occur in Eastern Samar Province, reported at 400 per 100,000 live births in 2000. Acutely aware of the complacency surrounding the reporting, let alone any discussion, of the cause of death in maternal cases, the Provincial Health Office of Eastern Samar in 2001 introduced the use of MDRs, which the Department of Health and UNICEF adapted for the Philippine context. Reviews take place at four levels: (village), municipal, inter-local health zone and provincial. An inter-local health zone is any arrangement for coordinating the operations of an array and hierarchy of health providers and facilities. This typically includes primary health providers, core referral hospital and end-referral hospital, jointly serving a common population within a local geographic area under the jurisdictions of more than one local government.

In the quarterly MDRs, details of maternal deaths are presented, followed by an analysis to determine where the health services failed and how such failures can be remedied. The priority is to understand the weaknesses of the system without ever finger-pointing. OB-GYN consultants from tertiary hospitals advise on how the management of specific cases could have been done differently, with the aim that health care workers learn from this analysis.

The MDR forum in Eastern Samar has led to a range of services and innovations to improve the health delivery system for pregnant women. First was a province-wide campaign to encourage deliveries by skilled health workers, ideally midwives, and to discourage traditional birth attendant-assisted deliveries. Then followed the practice of "pregnancy tracking" through the use of a standard form to motivate health workers and community-based Women's Health Team to encourage all pregnant women to complete their recommended visits. In addition, the MDRs revealed which supplies and equipment were missing in facilities.

Because of the MDRs, maternal deaths are now considered a "mortal sin" or a cause for "feeling bad" and health workers are committed to doing everything that can be done to prevent recurrences. Maternal mortality in Eastern Samar has been steadily decreasing, from 400 in 2000 to 121 in 2008.

Background

In the Philippines, 13 mothers die every day from pregnancy-related complications. An estimated 5,000 maternal deaths occur annually – and may be on the increase. The most recent health survey indicated that the maternal mortality ratio had increased, from 162 per 100,000 live births in 2006 to 221 in 2011 (the Millennium Development Goal target ratio is 52 deaths). Post-partum haemorrhage is the major cause of maternal mortality (at 41 per cent). Often maternal deaths are not reported.

A barangay health centre and village health team providing antenatal care

Health officials at the inter-local health zone level in Eastern Samar next plan to invite private OB-GYN practitioners to join the MDRs and to extend the case analysis to include "near misses" – those that would have ended in a maternal death had it not been for outstanding life-saving interventions. Such interventions should thus be studied and/or refined so that these can be standard practices throughout the province whenever appropriate. The Department of Health is also advocating for a policy on maternal death notification, including neonatal death reviews, provincial maternal death surveillance and reporting committees and possibly a community system of maternal death reporting.