

Economic Development and Research Center (EDRC)  
Տնտեսական զարգացման և հետազոտությունների կենտրոն



## Maternal and child health Achievement of Millennium Development Goals 4 and 5 in Armenia

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# Millennium Development Goals

- Signing of Millennium Declaration and adoption of 8 MDGs by 189 states at UN Millennium Summit in 2000
- Signing of Millennium Declaration by the Government of Armenia and involvement of MDGs in development strategic programs
- Reduction of maternal and child mortality, improvement of maternal and child health according to MDG 4 and 5
- A number of outcome documents aiming at maternal and child health improvement during 2000-2003 adopted by UN:
  - “Beijing Declaration and Platform for Action (Beijing + 5)”, New York, 2000
  - “Millennium Declaration”, New York, 2000
  - “Fight against HIV/AIDS”, New York, 2001
  - “A World Fit for Children”, New York, 2002

# STRATEGIES ADOPTED BY RA GOVERNMENT

- “Maternal and child health care 2003-2015 strategy”, 2003
- Development and adoption of reproductive health improvement national strategy implementation mechanism, in 2007-2015

## MDG 4. REDUCE CHILD MORTALITY

**Target 5.** Reduce by two-thirds, between 1990 and 2005, the under-five mortality rate

*Indicators:*

- under-five mortality rate, per 1,000 live births
- infant mortality, per 1,000 live births
- immunization rate in %

under-five mortality  
rate, per 1,000 live  
births

targeted



< 10, up to 2015

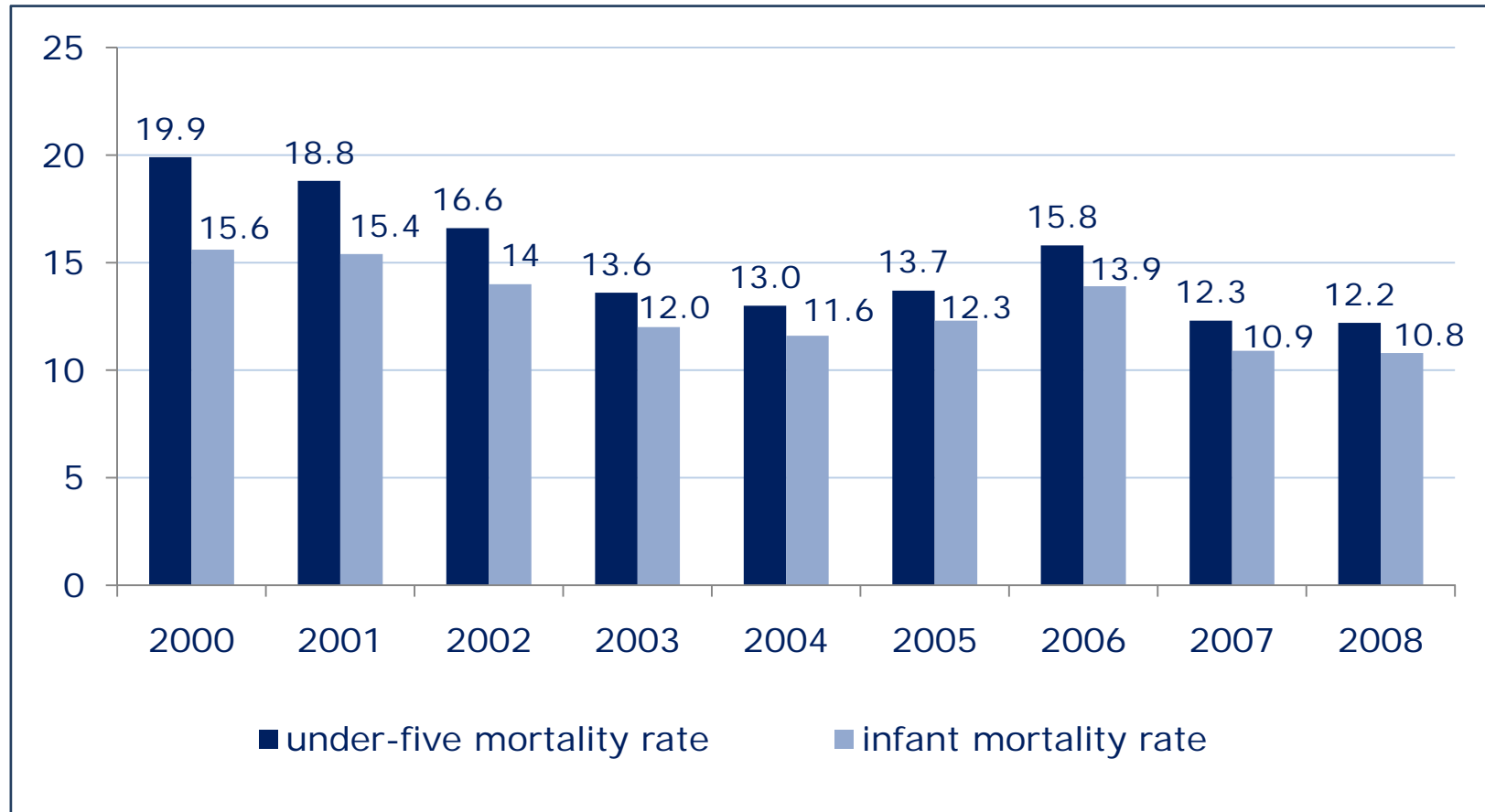
actual



**12.2 (12.1 rev.)** in 2008

# CHILD MORTALITY IN ARMENIA

Under-five and infant mortality, per 1,000 live births



# MDG 5. IMPROVE MATERNAL HEALTH

**Target 6.** Reduce by three-quarters, between 1990 and 2005, the maternal mortality ratio

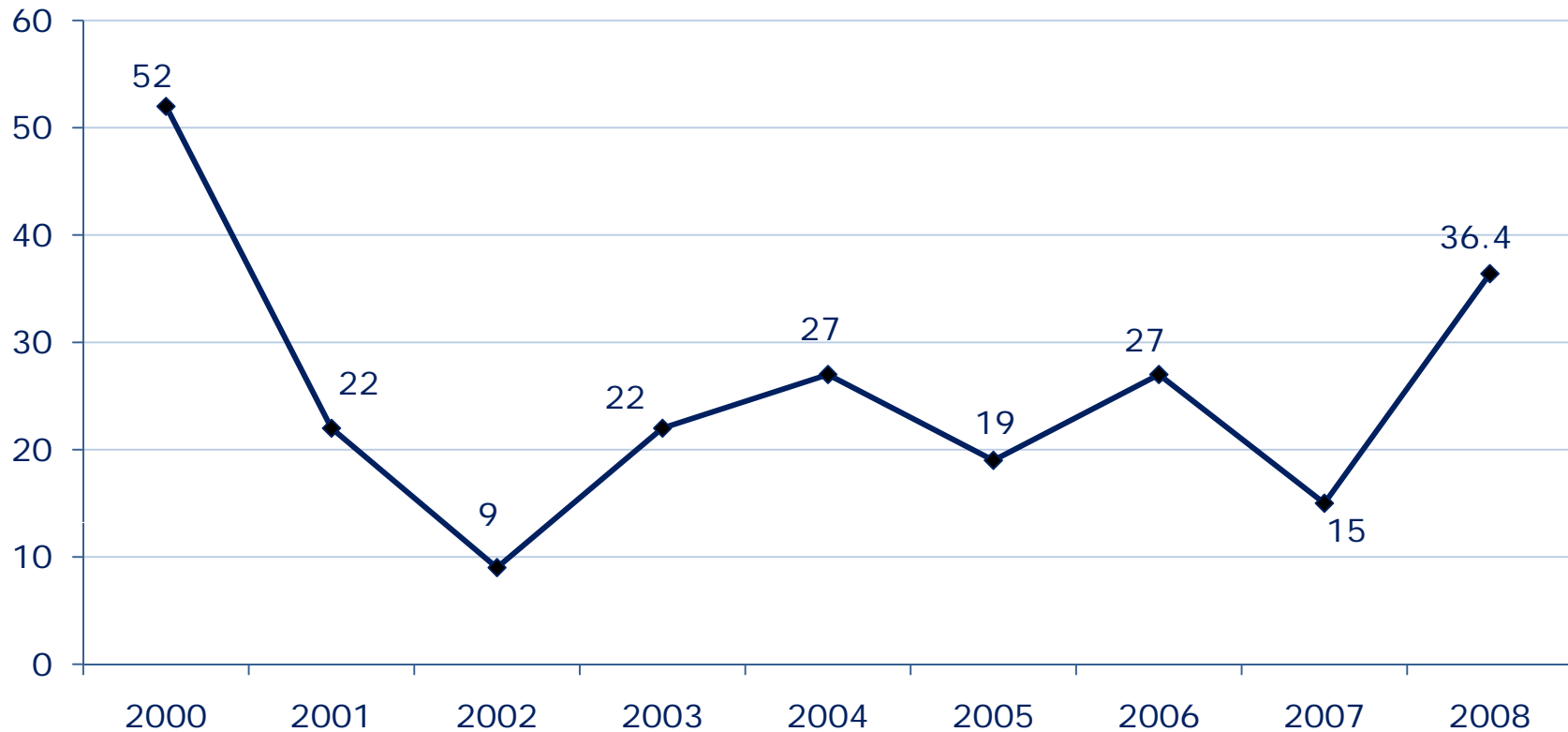
*Indicators:*

- maternal mortality, per 100,000 live births
- proportion of births attended by skilled healthcare personnel, in %

maternal mortality rate, per 100,000 live births	targeted →	< 10 in 2015
	actual →	<b>36.4 (38.8 rev.)</b> in 2008

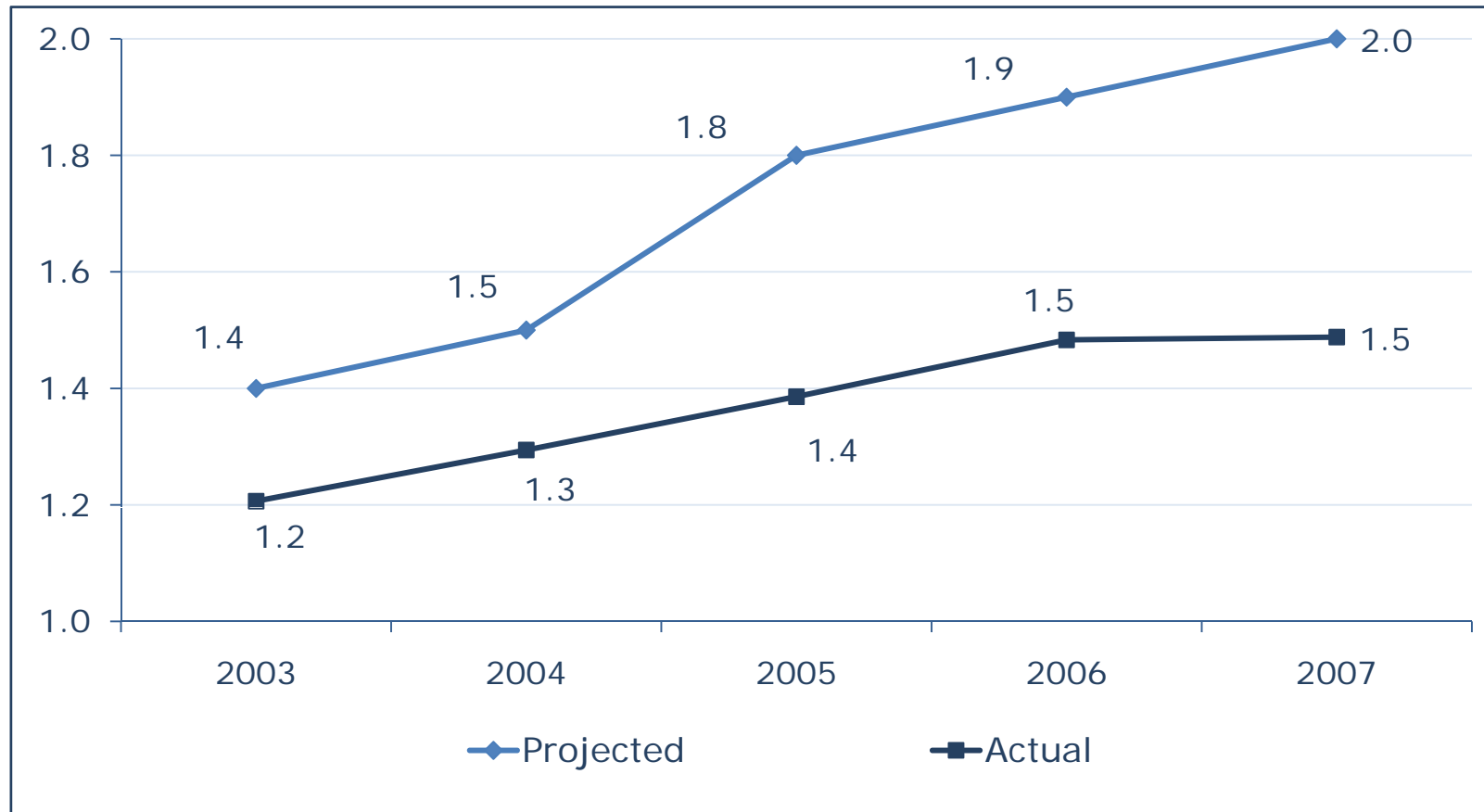
# MATERNAL MORTALITY IN ARMENIA

maternal mortality, per 100,000 live births



# PUBLIC HEALTH FINANCING BY THE GOVERNMENT

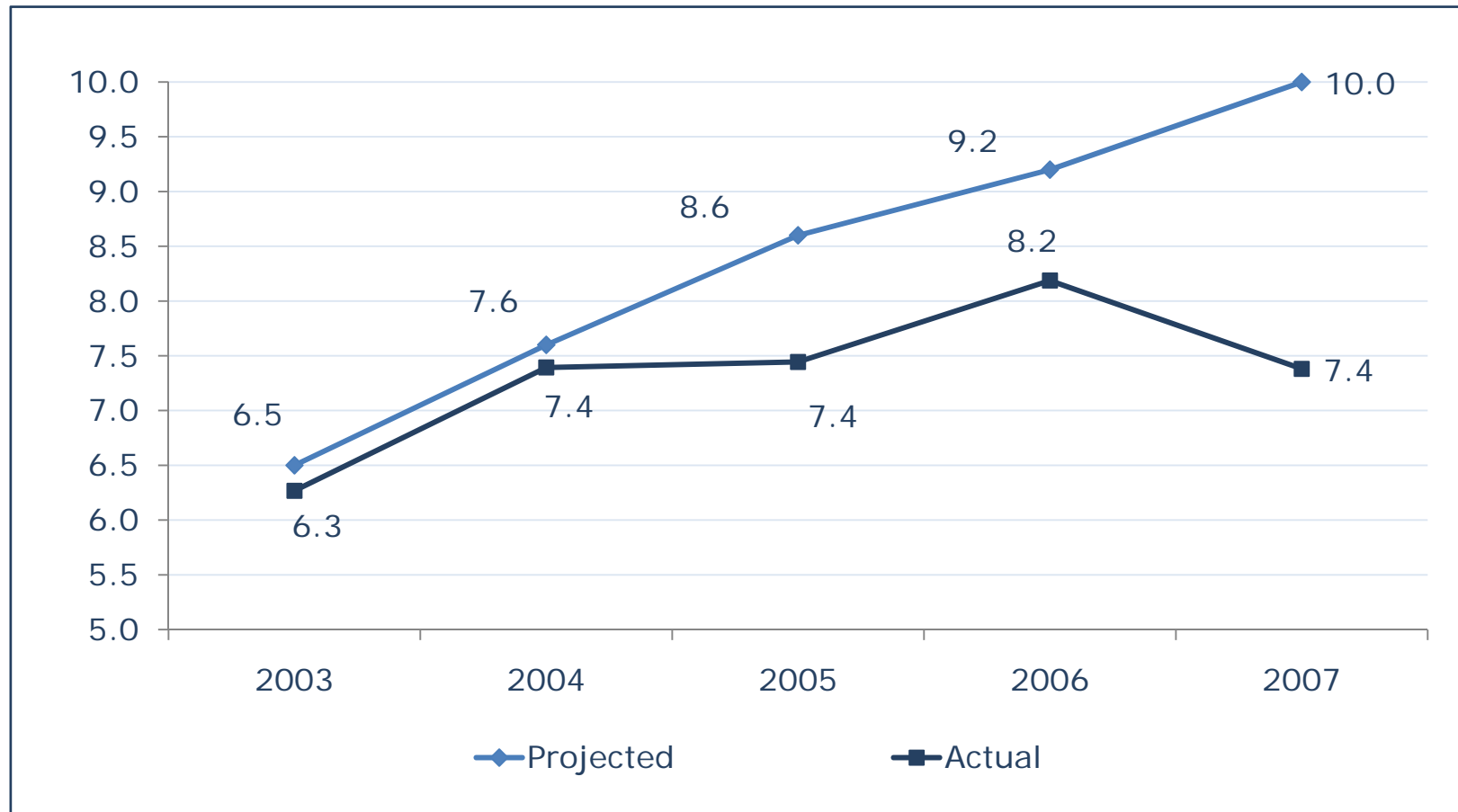
PH sector financing in GDP, projected in PRSP and actual, %





# PUBLIC HEALTH FINANCING BY THE GOVERNMENT (2)

PH sector financing in state budget, projected in PRSP and actual, %



# MATERNAL AND CHILD HEALTH PROTECTION PROGRAMS FINANCED BY STATE BUDGET

- *obstetric-gynaecological care services*
- *medical care services for sexually transmitted diseases*
- *prevention of HIV/AIDS (research)*
- *hygienic and anti-epidemic services*
- *medical care services for under-7 age children*

# MAIN CAUSES OF CHILD MORTALITY IN 2007

- certain conditions originating in the perinatal period, 56.4 %
- congenital malformations, deformations and abnormalities, 20.6 %
- diseases of the respiratory system, 12.9 %
- infectious and parasitic diseases, 4.4 %
- accidents, poisonings, injuries, 0.7 %
- diseases of the digestive systems, 0.23 %
- other causes, 4.9 %

# MAIN CAUSES OF MATERNAL MORTALITY IN 2007

- extrauterine pregnancy, 10 %
- obstetric bleeding, 30 %
- other delivery, post- delivery complications, 60 %

# ACTIVITIES TOWARDS REDUCING CHILD MORTALITY AND STILLBIRTHS

- women health protection and improvement during pregnancy
- assurance of proper provision of necessary care to mother and child during delivery and after it
- provision of children with necessary antenatal care during first several weeks

# MATERNAL MORTALITY REDUCTION MECHANIZMS (BY UNICEF, UNFPA, WHO)

- prevention of undesired pregnancy
- prevention of possible complications risen during pregnancy, women health protection
- taking of necessary steps and proper management of any challenging situation

# IMMUNISATION AGAINST NUMBER OF CHILD DISEASES

percent in total number of under-one children	2007
Children with immunisation against diphtheria	87.6
Children with immunisation against poliomyelitis	90.0
Children with immunisation against pertussis	84.8
Children with immunisation against tuberculosis	93.6
Children with immunisation against measles	92.0

# TARGETING OF MATERNAL AND CHILD MORTALITY INDICATORS IN SDP

Indicators	2008	2009	2010	2012	2015	2018	2021
infant mortality, per 1,000 live births	12.0	11.5	10.9	10.3	8.2	7.9	7.6
under-five mortality rate, per 1,000 live births	14.1	13.5	12.8	12.1	9.6	9.3	8.9
maternal mortality, per 1,000 live births	18.5	14.5	14.0	13.4	10.3	8.4	7.0



# GDP AND PH SECTOR FINANCING: TARGETING IN SDP

Indicators	2009	2010	2011	2012	2015
GDP, billion AMD	4,169.3	4,703.2	5,280.7	-	7,837.7
PH sector financing from state budget in GDP, %	1.6	1.7	2.0	2.2	2.5

# CROSS-COUNTRY COMPARISONS

Indicators Countries	Under-five mortality, per 1,000 live births				Infant mortality, per 1,000 live births			
	2000	2005	2006	2007	2000	2005	2006	2007
Estonia	21	7	7	6	17	6	5	5
Hungary	9	8	7	7	8	7	6	6
Czech Republic	5	4	4	4	5	3	3	3
Croatia	8	7	6	6	8	6	5	5
Latvia	21	11	9	10	17	9	6	9
Lithuania	21	9	8	7	17	7	7	6
Slovak Republic	9	8	8	8	8	7	7	6
Armenia	20	14	16	12	16	12	14	11

# REGRESSION ANALYSIS

## METHODOLOGY

Data of 7 Eastern Europe countries for 2000-2006:

- ✓ infant mortality, per 1,000 live births (dependent variable)
- ✓ under-five mortality rate, per 1,000 live births (dependent variable)
- ✓ PH financing by Government in GDP, % (independent variable)

## RESULTS

Increase in share  
of PH financing  
by Government  
in GDP by 1  
percentage point



Under-five mortality  
indicator reduction by 2.33



Infant mortality indicator  
reduction by 1.79

# CACULATION OF CHILD MORTALITY REDUCTION ANNUAL RATE

Indicator	2008	2015	Difference	Annual rate of reduction
Under-five mortality rate, per 1,000 live births	12.2	9.6	2.6	<b>2.6 / 7 YEARS = 0.37</b>
Infant mortality, per 1,000 live births	10.8	8.2	2.6	<b>2.6 / 7 YEARS = 0.37</b>

# TARGETED AND SUGGESTED LEVELS OF PH FINANCING BY GOVERNMENT IN GDP



**X=0.16 percentage points, following the same logic, X=0.21 percentage points for infant mortality.**

Indicators	2009	2010	2011	2012	2015
Share of government spending in PH sector in GDP, % (projected rate in SDP)	1.6	1.7	2.0	2.2	2.5
Share of government spending in PH sector in GDP, % (suggested)	1.7*	1.8	2.0	2.2	2.8

\* 1.7 = 1.44 (in 2008 ) + 0.21 (annual reduction rate)

## KEY FINDINGS

- still high level of under-five mortality rate in 2008 (12.2 per 1,000 live births), in spite of its reduction during recent two years
- rapid growth of maternal mortality rate in 2008 compared with previous year (36.4 per 100,000 live births)
- PH sector financing from state budget by 49.97 bln. AMD (1.37 % of GDP) against the projected 54.48 bln. AMD (1.55 % of GDP)
- lack of data on PH financing from state budget by marzes
- execution of financing of programs towards maternal and child health protection almost entire

# RECOMMENDATIONS

- to ensure budget transparency of government spending data in marzes
- to mobilise resources of donor organisations
- to ensure increases of public health sector financing both as a percentage of GDP and in absolute money terms. PH sector financing in GDP is suggested to be 1.8% in 2010, 2% in 2011, 2.2% in 2012, and 2.8% in 2015.
- not to reduce financing of maternal and child health protection programmes
- to ensure appropriate provision of the services aiming at improving maternal and child health
- to raise the awareness of women on the fact that medical care and services during and after pregnancy are free of charge in the framework of public programmes

**THANK YOU**

