

National Newborn and Child Survival Strategy Document Brief Summary 2015/16-2019/20



FMOH/MCH Directorate
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The Federal Democratic Republic of Ethiopia
Ministry of Health

Executive Summary

In Ethiopia, under-five mortality rate has declined by two thirds from the 1990 figure of 204/1,000 live births to 68/1,000 live births in 2012, thus meeting the target for Millennium Development Goal 4 (MDG 4) on child survival three years ahead of time. In absolute numbers the under-five deaths in Ethiopia has declined from nearly half a million, 444,000 a year in 1990, to about 196,000 in 2013. However, the mortality reduction was not uniform across the different childhood age groups, geographic and socio-demographic population groups. Disaggregation of the mortality data by age reveals that the decline in neonatal mortality is not as impressive as the infant and child mortality figures. It has fallen only by 42% during the same period; from 54/1000 live births in 1990 to 28/1000 live births in 2013. About 44% of the childhood deaths occur within the first 28 days of life, thus increasingly accounting for a larger proportion of the under five deaths. There is also wide geographic variation in under-five mortality according to the EDHS 2011 ranging from as low as 53/1000 live births in Addis Ababa to as high as 169/1000 live births in Benishangul-Gumuz region. Similarly, significant variation is also observed among different socio-economic groups within the same geographic areas.

Over two-thirds of childhood deaths in Ethiopia are caused by few and easily preventable conditions; mainly infections, neonatal conditions and malnutrition. The major direct causes of under five mortality, based on the 2014 WHO/CHERG estimates are pneumonia (18%), diarrhea (9%), prematurity (11%), newborn infection (9%), asphyxia (14%), injury (6%), measles (2%), malaria (3%), congenital anomalies (4%), HIV (2%), and others (21%). Under nutrition is a major underlying cause contributing to nearly half of childhood deaths. Even though underweight, stunting and wasting has declined by 39%, 31% and 25% respectively during the last 15 years, the 2014 mini EDHS estimates of stunting (40%), underweight (25%) and wasting (9%) are still very high.

A package of 34 high impact and cost effective newborn and child survival interventions are prioritized with coverage targets for 2020. The continuum of care approach will be used to rollout the delivery of the selected high impact newborn and child health interventions addressing particular needs of women and children across time (pre-pregnancy, pregnancy, delivery, postnatal period, infancy and childhood) and the different mix of the interventions are packaged to be delivered at household/community, population oriented outreach services and individualized clinical care levels. In rural area health posts, health centers and primary hospitals will serve as service delivery points while the health development army platform will be used to empower and engage the community. In urban areas the first entry to the health system will be health centers that will provide basic and emergency care for communities, hospitals will serve as referral facilities for advanced newborn and child health care. Health development army working hand in hand with the urban health extension workers will be the crucial community networks that will mobilize communities and engage them in the planning and implementation newborn and child health services in urban. The strategy emphasizes the need for intensified effort in regions requiring equitable development to address the visible gap in survival and development of newborns and children across regions.

The goal of this National Newborn and Child Survival Strategy (2015-2020) is to reduce under five mortality from 64/1,000 (2013 level) to at least 29 /1,000, infant mortality rate from 44/1000 to 20/1000 and NMR from 28 to 11/1,000 by 2020. The key guiding principles for implementation of the revised strategy focus on: equity and accessibility; community engagement, empowerment and ownership; efficient use of resources; innovation and use of evidence based interventions, provision of quality MNCH services, strong monitoring and dissemination of best practices. Optimal implementation of the key interventions will prevent

deaths of 415,688 and 210,234 under-five and neonatal deaths, respectively, over the period of six years. Optimal implementation of the selected newborn and child survival interventions requires mobilizing a total of **US\$ 1.2 billion (ETB 24.5 billion)** in six year period.

Introduction and Background

Ethiopia is situated in the horn of Africa covering about 1.1 million square kilometers area. The country shares border with Djibouti, Eritrea, Kenya, Somalia, South Sudan and Sudan. It has great geographical diversity, with high peaks ranging from 4,550m above sea level to low depressions of 110m below sea level. Malaria transmission in Ethiopia occurs mainly in areas up to 2000 meters, which accounts for about 75% of the total landmass.

Ethiopia is the second most populous country in Africa with a total population of 90.1 million, of which more than 84% live in rural areas. It has a broad geographic spectrum and over 80 distinct ethnic groups. Ethiopia's population is young with 45% being under the age of 15 and 14.6% (13.2 million) being under the age of 5. The average household size is 4.8 people, with the urban population having a smaller mean household size (3.6) than the rural population (5.1) (CSA, 2014). Life expectancy at birth is 64 for both sexes with 65 years for women and 62 years for men (WHO, 2014).



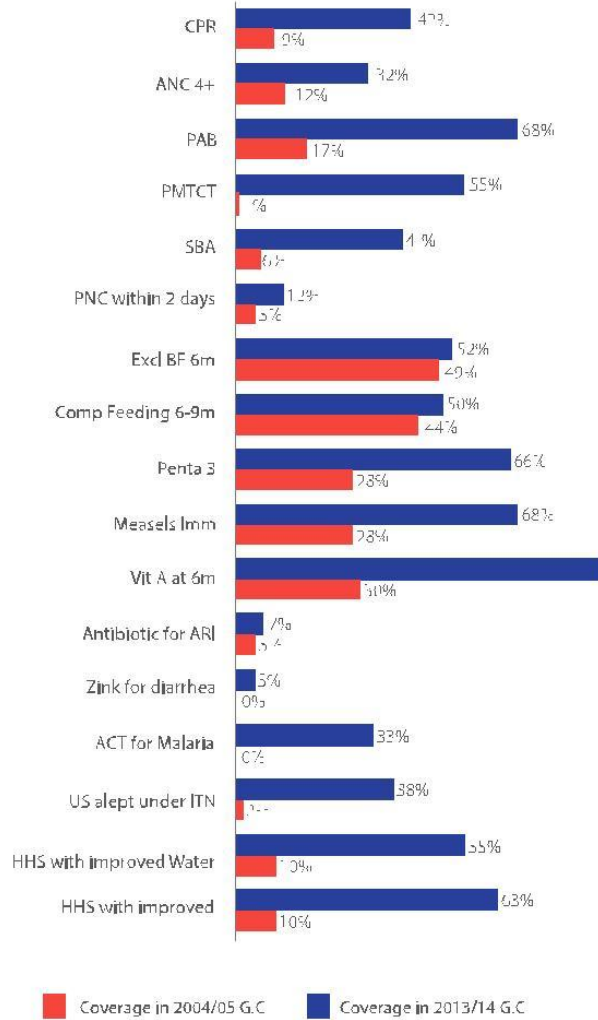
Ethiopia has a federal system of government. The country is divided into nine administrative regions: Afar, Amhara, Benishangul-Gumuz, Gambela, Harari, Oromiya, Somali, Tigray, and the Southern Nations, Nationalities and Peoples Region (SNNPR); as well as two city administrations, Addis Ababa and Dire Dawa. The regions are divided into zones, woredas, and kebeles which is the lowest level of administration. The woreda is the most important local government structure, acting as the basis for most administration and management. Currently there are 956 woredas, representing around 100,000 people each and 16,541 kebele (FMOH, 2014/15), with average catchment populations of 5,000 people each.

The health care delivery system in Ethiopia is organized in three-tier system. The primary level health care delivery system in rural setting includes five Health Posts associated with Health Centers and Primary Hospital. In urban setting the the Health Center is primary entry point to the health system. The secondary level health care includes General Hospitals and tertiary level health care include Tertiary Hospitals. As more than 80 percent of the Ethiopian population resides in the rural part of the country, the HSDPs have given more focus to the primary health care units while strengthening the referral care at secondary and tertiary levels.

Ethiopia's flagship Health Extension Program (HEP) is the platform for delivery of community based basic promotive, preventive and curative health services. Two Health Extension Workers (HEWs), based in the health posts that serve an average of 5,000 populations, are the primary point of entry to the health system for the rural community. HEWs, supported by the Health Development Armies (HDAs) – a network created between five households and one model family to influence one another in practicing healthy life style, work to empower the community to generate its own health

The MOH developed the first comprehensive National Child Survival Strategy (2005-2015) in 2005 which was being implemented as part of the 3rd and 4th HSDP cycles. The implementation of this strategy had boosted the child survival efforts of the country through improved coordination, partnership, resource mobilization and scale up of high impact interventions. As a result of these efforts, Ethiopia has recorded significant reduction in childhood mortality and had achieved the MDG4 target in 2012. Several factors are believed to contribute to the reduction in under five mortality including the improvement in overall socio-economic status and the significant increase in access to primary health care services, from 68% in 2005 to 92% in 2010. In terms of interventions; reductions in malnutrition, increases in vaccination, Vitamin A, ITNs, family planning and water & sanitation were the main contributors for the improvements in child survival in the last two decades.

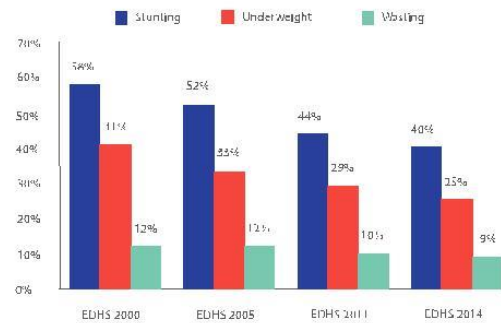
Coverage of key neonatal and child survival interventions in 2004/05 G.C and 2013/14 G.C



Trends in under-five, infant and neonatal mortality rates and estimated levels for 2015 (source EDHS and IGME estimates)



Trends in under-five nutritional status (source EDHS)



Sources: EDHS 2005, EDHS 2011, mini-EDHS 2014, HMIS 2013/14, MIS 2011, ICS 2012, WASH Inventory 2012

Rationale for the Strategy

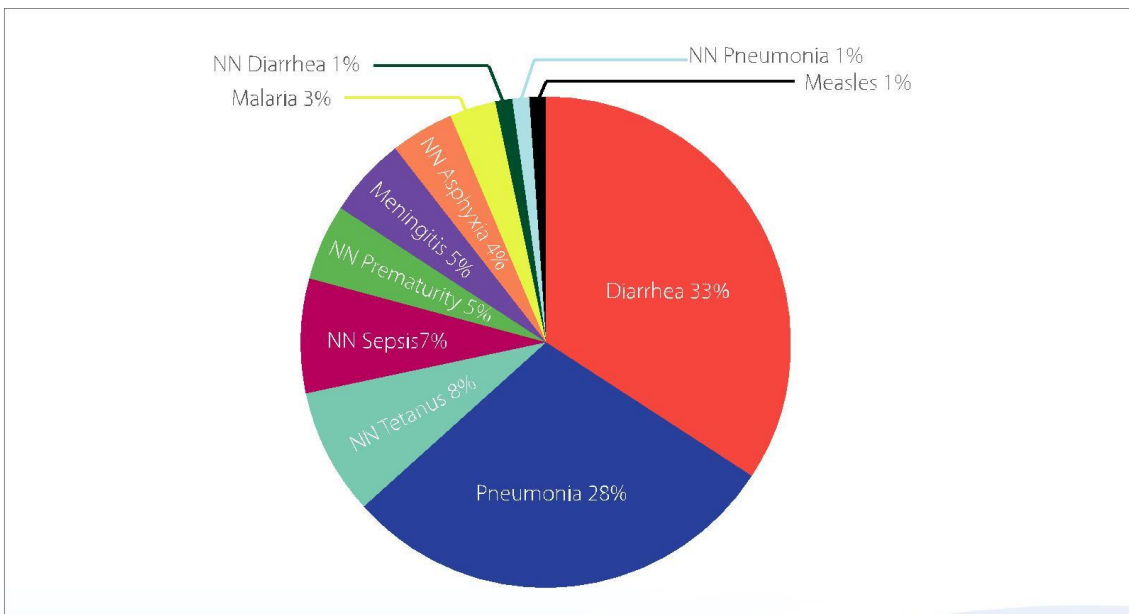
A number of new interventions including community management of childhood illness (pneumonia, diarrhea, malaria, and malnutrition/iCCM) and neonatal sepsis (CBNC), community based nutrition (CBN), Haemophilus influenza type b vaccine, hepatitis vaccine, Pneumococcal & Rota virus vaccines, and “Option B+” for PMTCT, were already introduced. Other new high impact interventions including corticosteroids for preterm labor at hospital level and chlorhexidine for cord care at community and facility level are in the process of introduction to address the high neonatal mortality.

There is also a need to scale up existing high impact interventions whose population coverage lags behind the target such as skilled birth attendance & early postnatal care; and treatment interventions including ORS & Zinc, antibiotics for pneumonia, ACT for malaria and ART for HIV infected children. In line with the current focus on facility delivery, clean and safe delivery by HEW is no longer included in the list of newborn and child survival interventions in areas where there are accessible health centers. Thus, the revision of the current strategy was imperative to consolidate the encouraging gains in child survival and the long-term vision of the country to end all preventable child deaths by 2035

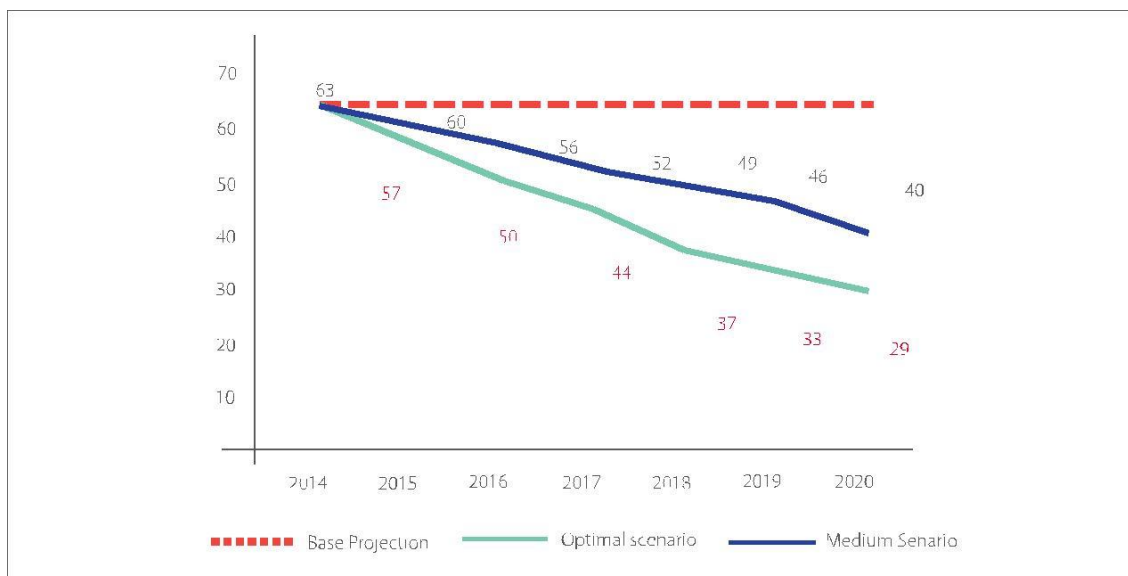
Target Conditions for Child Survival

The target conditions account for the majority of the under-five mortality in Ethiopia, and are therefore the focus for interventions in this Strategic Plan. The 2013 global LiST estimates for Ethiopia showed that neonatal complications (prematurity, asphyxia, neonatal sepsis, neonatal tetanus, neonatal pneumonia, and other neonatal causes) are the leading causes of under-five mortality in Ethiopia. Pneumonia and diarrhea remain to be leading causes of death for children who passed their neonatal period. As shown in Figure , pneumonia, diarrhea and the three newborn conditions account for nearly 90% of childhood lives to be saved during 2015-2020 by implementing the package of newborn and child survival interventions.

Proportions of lives saved by addressing leading target conditions, 2015-2020



Under-five mortality rate (deaths per 1,000 live births) projections



Vision

- By 2035, every child in Ethiopia enjoys the highest attainable standard of health and development with an end to all preventable child deaths.

Goals

- To reduce under-five mortality from 2013 level of 64/1,000 to 29/1,000, infant mortality rate from 44/1000 to 20/1000 and NMR from 28 to 11/1,000 by 2019/20.

Objectives

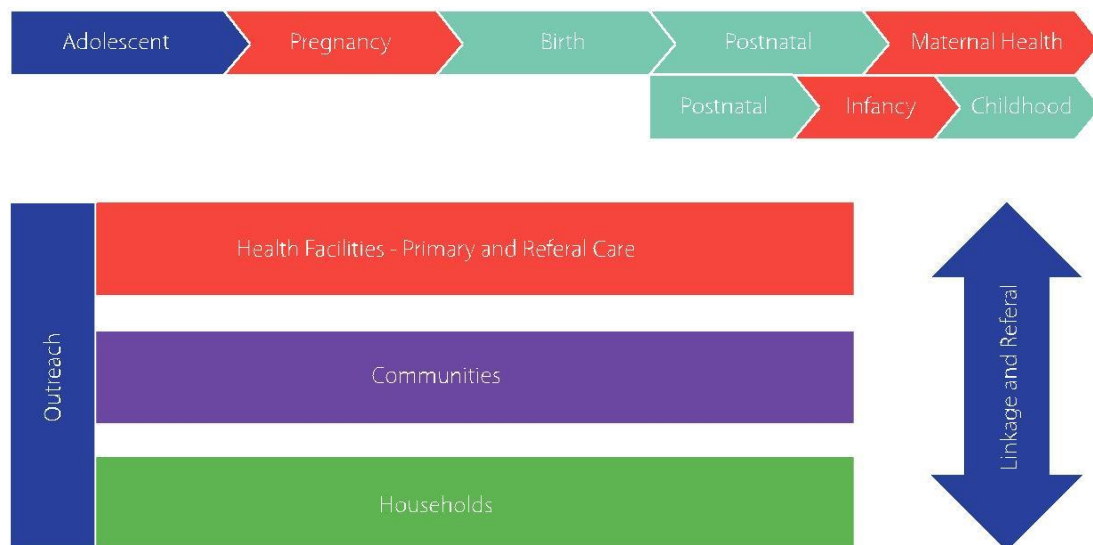
- To ensure effective universal coverage of high impact neonatal and child survival interventions with special focus on the poorest and marginalized sections of the population including in regions requiring equitable development
- To ensure provision of high quality essential health care for mothers, newborns and children at the community and health facility levels
- Ensure community empowerment and demand creation for effective use of newborn and child survival interventions and promote key family and community care practices

The continuum of care approach as a service delivery model is comprehensive on many fronts. The central premise of the model is the delivery of essential services for mothers, newborns and children in an integrated package at critical points in the life cycle, in a dynamic health system. The continuum of care has two dimensions: time of care giving and place and approach of care giving.

In time - an effective continuum of care connects essential maternal, newborn and child health packages throughout adolescence, pregnancy, childbirth, postnatal and newborn periods and into childhood building upon their natural interactions throughout life. Through ensuring linkage across maternal, newborn and child health service delivery points within health facilities it will be possible to avoid missed opportunities and provide comprehensive service for newborns and children at community and facility levels.

In place - an effective continuum of care strengthens the links between the home and the first level facility and hospital assuring the appropriate care is available in each place (Figure 9). Strategies involve improving the skills of health workers, strengthening health system supports, and improving household and community practices and community actions for health. This approach brings care closer to the home through outreach services and promotes referral by strengthening access to and improving the quality of services at peripheral and district level facilities.

Continuum of care approach: time of care giving and place and approach of care giving



The key guiding principles for strategy implementation are:

- Country ownership, leadership and accountability
- Equity and Accessibility
- Community engagement, empowerment and ownership
- Integration
- Partnership
- Efficient use of resources
- Innovation and use of technology
- Responsiveness
- Evidence based decision-making
- Quality of health care services

The service delivery strategy is presented in line with the three key objectives and based on the implementation of high impact interventions at each service delivery level starting from the household/community up to the referral or specialized care facilities.

Community Eased Interventions: Ethiopia has demonstrated that basic health services can be made accessible to large proportion of the population through the government-led cost effective community based health delivery platform. Building on the government flagship health extension program at the community level priority will be given to scale up of community based newborn and child survival interventions through HEWs and HDAs. The main objective is to achieve universal coverage with community-based promotive, preventive and curative interventions and strengthen the capacity of HEWs and HDA networks.

Population Oriented Outreach Services: In a country like Ethiopia, where geographical access presents major barriers, population oriented outreach preventive-promotive interventions provide an avenue for community action, expanded access and coverage for preventive, promotive and basic curative services; and creates the required linkages between community services and health facilities. The newborn and child survival strategy will provide population-oriented scheduled services by health workers with basic skills during regular outreach services, child health days and campaigns. This may be delivered through routine and scheduled outreach or mobile health care in a health facility in a scheduled manner. When scheduling outreach and mobile health services attention will be paid to variations in access to services within the community. Focus will be on areas or populations that are under served. Outreach and mobile health services will be planned with the community and community members will provide support to services such as tracking defaulters.

Individual Oriented Clinical Services: This service- delivery mode requires effective functional and referral coordination among the health service extension workers, health workers with advanced skills (nurses, midwives, health officers and physicians trained in emergency obstetric, newborn and child health care) and that are available on a permanent basis. It addresses individual specific clinical services required by newborns, children or pregnant women who are sick or giving birth. Although preventive and promotive services are important in reducing under-five morbidity and mortality ending preventable newborn and child deaths requires back-up facility-based services for referral care for sick children, pregnant women presenting with complications, and women requiring emergency obstetric care to the very minimum.

Existing funding channels (channel 1a, channel 1b, channel 2 and channel 3) will continue to be used as financing arrangement in the implementation the interventions through direct funding by the government or by health development partners. In addition, the FMOH will strengthen its effort to expand the fund base of the Technical Assistance Pooled Fund and will work with the health development partners to continue the MDG Performance Fund after the end of the MDG period in some form or shape. The international and national partnership for newborn and child survival will continue to be major stakeholder in mobilizing resources and implementing the strategy. FMOH will also work with regional governments and health bureaus to scale up the Community Based and Social Health Insurance schemes to insure financial sustainability of the health system.

National newborn and child survival partnerships and coordination platforms will be strengthened at all levels (from national to Kebele levels) under the leadership of the FMOH. Structures to scale up selected newborn and child survival interventions will be strengthened through harmonization of efforts and mobilization of needed resources. Progress will be monitored annually using standard indicators. HMIS, population surveys including the EDHS in 2015 and 2020 will be used to monitor progress over years and evaluate achievement of the planned targets.

Monitoring and evaluation will be an integral part of the strategy. Continuous monitoring of progresses and evaluations of outcome and impacts will provide an evidence-based decision for effective, efficient and synergistic implementation of programs. Moreover, it will be integrated into knowledge management efforts that will help document lessons and sharing of experiences both nationally and to international arena.

Package of high impact Child survival interventions along continuum of care, current coverage & 2020 targets

Continuum of Care level	S.N.	Key intervention	Delivery Level	Baseline coverage (2013/14)	2020 target	Source of current baseline data
Pre-pregnancy	1	Family Planning (CPR)*	All levels	42%	55%	Mini EDHS 2014
Pregnancy	2	Focused ANC (4/more visits) *	All levels	32 %	95%	Mini EDHS 2014
	3	Iron Folate Supplementation *	All levels	34 %	95%	Mini EDHS 2014
	4	ART for HIV+ pregnant women *	Clinical Care	61%	95 %	HMIS 2006 EFY
	5	Tetanus Toxoid immunization (PAB)	All levels	68%	90%	EPI Cluster Survey 2012
	6	ITNs for pregnant women (malarious areas) *	All levels	35%	80%	MIS 2011
	7	Antenatal Corticosteroids for preterm labor*	Clinical care (Hospital)	No data	90%	
	8	Mg So4 during pregnancy & at Birth*	Clinical care	1%	90%	UNICEF 2012
Birth and postnatal	9	Skilled attendance at birth*	Clinical care	15 %	95 %	Mini EDHS 2014
	10	Neonatal resuscitation	All levels	No data	90%	
	11	Chlorhexidine for cord care	All levels	0%	90%	
	12	Thermal regulation	All levels	25%	95%	Mini EDHS (Assisted by skilled attendant and HEW)
	13	KMC	All levels	10	90	
	14	Antibiotics for Premature Rupture of Membranes (PROM) *	Clinical care	No data	90%	
	15	Postnatal visit for mothers and newborns within 48 hours*	All levels	12%	50%	Mini EDHS 2014
	16	Antibiotics for neonatal sepsis	All levels	No data	80%	
	17	Early initiation of breastfeeding (within 1 hour of birth)	All levels	51%	90%	EDHS 2011

Continuum of Care level	S.N.	Key intervention	Delivery Level	Baseline coverage (2013/14)	2020 target	Source of current baseline data
Infancy	18	Exclusive breastfeeding (up to 6 months)	All levels	52 %	80%	EDHS 2011
	19	Penta_3 (DPT-HepB-Hib) vaccination	All levels	66%	96 %	EPI Coverage survey 2012
	20	Pneumococcal vaccine	All levels	80%	96%	HMIS EFY 2006
	21	Rota Virus vaccine	All levels	42%	96%	HMIS EFY 2006
	22	Measles immunization	All levels	68%	96 %	EPI Coverage Survey 2012
	23	Vitamin A supplementation every 6 month*	All levels	88%	95%	Post EOS/CHD validation survey
Childhood	24	Antibiotics for pneumonia	All levels	7 %	80 %	EDHS 2011
	25	Oral Rehydration Therapy (ORS)/ Zinc treatment for Diarrhea	All levels	31%/5%	90%	EDHS 2011
	26	Malaria ACT treatment	All levels	33%	100 %	Malaria indicator survey 2011
	27	Antibiotics for dysentery	Clinical care	14.4%	80%	EDHS 2011
	28	Pediatric ART*	Clinical care	9.5%	80%	National HAPCO 2014
	29	Children sleeping under insecticide-treated nets (ITNs) *	Community/ Outreach	38%	80%	Malaria indicator survey 2011
	30	Complementary feeding for children*	All levels	28%	80%	Program report
	31	Management of children with SAM*	All levels	70%	90%	Program report
	32	Improved drinking water (household) *	All levels	55%	100 %	WASH Inventory 2012
	33	Improved sanitation facilities (household) *	All levels	63 %	100%	WASH Inventory 2012
34	Deworming*	All levels	88%	95%	HMIS 2005	

*All these interventions are cost effective evidence based interventions that are known to impact newborn and child mortality and being on practice in Ethiopian, the costing for these interventions is not included in this Newborn and Child Survival Strategy. The cost of these interventions is addressed by all specific programs and by the HSTP where all programs align to the national plan and targets.

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