

Immunization in Ethiopia

- Globally, Immunization program is one of the most cost effective public health intervention
- The government of Ethiopia launched immunization program in 1980 to prevent six vaccine preventable diseases /polio, tuberculosis, measles, Diphtheria, Tetanus, Pertussis/
- Initially the vaccination was given for under two years of children and in 1986 it revised to vaccinate only under one year of children.
- Women of child bearing age are targeted for Tetanus Toxoid vaccines
- Hep B and Hib as pentavalent combination was introduced in 2007, Pneumococcal conjugate vaccine /PCV/ introduced in October 2011, Rota vaccine introduced in November 2013, and inactivated polio vaccine /IPV/ introduced in November 2015.
- Human Papilloma Virus /HPV/ vaccine introduced in 2018 and given to 14 years girls to prevent cervical cancer in the long run. More than 1.1 Million 14 years girls are vaccinated the HPV vaccine.

- Measles Second doses vaccine introduced for 15 months of children in February 2019
- Currently 12 antigens are included in the routine immunization services delivery
- More than 8000 SDDs are procured and distributed for health facilities
- National Effective vaccine management assessment was conducted in March 2019 and the findings are presented to MoH, RHBs and partners.
- Ethiopia conducted synchronized mOPV2 vaccination campaigns with Somalia and Kenya to eradicate the current outbreak of cVDPV2 in Horn of African Countries.

Major Achievements/success

- Ethiopia has become wild polio free since January 2014. This success of wild polio free status has been recognized and accepted by the African Regional Certification Commission (ARCC) in 2017
- Ethiopia also achieved Elimination of Maternal and Neonatal Tetanus (MNTE) in 2017.
- Reduction of disease burden /morbidity, mortality of children from vaccine preventable diseases/

The routine immunization administrative data report /HMIS/ showed that performance of immunization indicators has shown increment in coverage and have improved over time. Example in B/n 2007 to 2011 EFY:

- Pentavalent 3 coverage reached from 94% to 97%
- Measles /MCV1/ reached from 90% to 91%
- Fully vaccination coverage reached from 86% to 88%

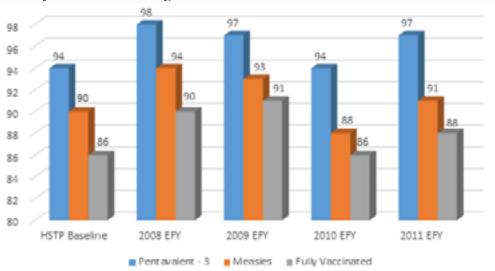


Figure 1: Administrative report /HMIS/ of Pentavalent 3, Measles and fully vaccinated coverage, 2007-2011 EFY

Vaccination Dropout Rate

The national pentavalent-1 to measles /MCV1/ vaccination dropout rate was 13% in 2011 EFY. The data clearly showed that 13% of targeted children who started pentavalent 1 vaccination did not receive measles /MCV1 / vaccination.

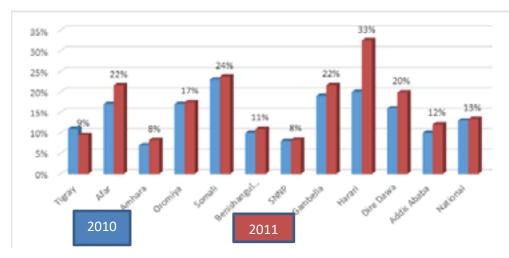


Figure 2: Dropout Rate: Pentavalent 1 to Measles /MCV1/vaccination 2010-2011 EFY

As per the Ethiopian mini Demographic and Health Survey /EDHS/ findings, vaccination coverage is lag behind from the administrative report.

S.No	Type of Antigen	Administration Report 2011 EFY / HMIS/	DHS 2016 Report	Mini EDHS Report 2019	HSTP Target- ed for 2011 EFY
1	Pentavalent 3	97%	53%	61%	97%
2	Measles / MCV1/	91%	54%	59%	95%
3	Fully Vacci- nation	88%	39%	43%	93%

Table1: Immunization data from different sources.

Ethiopia implemented the Reaching Every District /Community/ RED/c approach to reach every targeted children for vaccination. Periodic intensification routine immunization (PIRI) is one of the strategies of REC to improve the immunization coverage and minimize the frequent occurrence of outbreaks due to vaccine preventable diseases in developing regions and unreached populations.

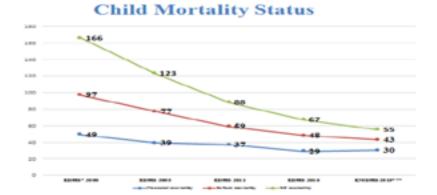


Figure 3: Progress of child mortality in Ethiopia b/n 2000-2019

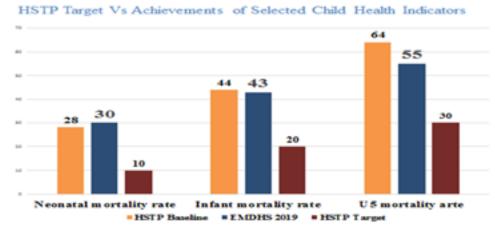


Figure 4: HSTP I target Vs Achievements of Selected Child Health indictors in Ethiopia

Major Challenges on Immunization Program

- Data quality problems /high discrepancy b/n administrative data & survey reports
- Presence of measles outbreak in some districts
- Emergence of circulating vaccine derived polio virus type 2 /cVDPV2/ in Somali region of Ethiopia and other horn of African countries
- Disparity to access to immunization by wealth, education and place of residence.
- Limited outreaches services in hard to reach communities
- Presence of immunization services interruption because of supply shortage
- EPI Staff turnover