

VACCINATION

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EPI Vaccination Schedule

Vaccine

BCG - (Live vaccine)

BCG

Bacillus Calmette -Guérin

Against Disease

Tuberculosis

Ideal age

At Birth

Important : Instruction

(only one dose)

(within 1 week) to mother about Scar

Dose

0.05 ml

Form

Powdered

Site

Deltoid muscle (Rt. Arm)

Route of

Intra-Dermal

Administration

Side Effect

Rare - Scar after 3-6 months

Immunity Achieved

80% against Pulmonary TB

100% against Tuberculous Meningitis (TBM)

EPI Vaccination Schedule

Vaccine

**OPV - (Live
vaccine)**

OPV

Oral Polio Vaccine

Against Disease

Poliomyelitis

**Ideal age (four
doses)**

**At Birth OPV0 (within 1 week), 6
(OPV1), 10 (OPV2) & 14 (OPV3) weeks**

Dose

Two drops

Form

Liquid

Site

Mouth

**Route of
Administration**

Orally

Side Effect

No

Immunity Achieved

**70% In Developing countries
100% In Developed countries**

EPI Vaccination Schedule

Vaccine

Measles (Live Vaccine)

Against Disease

Measles

Ideal age (two doses)

At 9 months & 15 months (Booster)

Dose

0.5 ml

Form

Powdered

Site

Deltoid muscle (Lt. Arm)

Route of Administration

Sub- Cutaneous

Side Effect

Generally No

Immunity Achieved

95 - 98%

EPI Vaccination Schedule

Vaccine

PENTA

PENTA

D + P+ T + HBV + HIB

(Toxoid-D&T, Dead-P& others HBV & HIB)

Against Disease

**Diphtheria, Pertussis, Tetanus,
Hepatitis B & Haemophilus Influenza
type B**

**Ideal age (three
doses)**

**6 (Penta1), 10 (Penta2) & 14 (Penta3)
weeks**

Dose

0.5 ml

Form

Powdered

Site

Anterio-Lateral site – Mid Left Thigh

**Route of
Administration**

Intra-Muscular

Side Effect

**Fever, tenderness Injection site &
Rarely fits**

Immunity Achieved

95 – 98 %

EPI Vaccination Schedule

Vaccine

PCV

(other method)

Pneumococcal Vaccine

PCV

Against Disease

**Due to Pneumococcal bacteria
(Pneumonia, Meningitis etc.)**

**Ideal age (three
doses)**

**6 (PCV1), 10 (PCV2) & 14 (PCV3)
weeks**

Dose

0.5 ml

Form

Liquid

Site

**Anterio-Lateral site - Mid Right
Thigh**

**Route of
Administration**

Intra-Muscular

Side Effect

Generally No

Immunity Achieved

95 - 98%

EPI Vaccination Schedule

Vaccine

TT

TT

Tetanus Toxoid

Against Disease

Tetanus

Ideal age (five doses)

According to schedule

Dose

0.5 ml

Form

Liquid

Site

Deltoid muscle – Left Arm

Route of Administration

Intra-Muscular

Side Effect

Generally No

Immunity Achieved

100%

EPI Vaccination Schedule

Vaccine

BCG - (Live vaccine)

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Bacillus Calmette -Guérin

Against Disease

Tuberculosis

Ideal age

At Birth

Important : Instruction

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Site

Deltoid muscle (Rt. Arm)

Route of

Intra-Dermal

Administration

Side Effect

Rare - Scar after 3-6 months

Immunity Achieved

80% against Pulmonary TB

**100% against Tuberculous Meningitis
(TBM)**

Vaccination Schedule for Females 15- 45 years (Child Bearing Age - CBA)

Tetanus Toxoid	TT₁	TT₂	TT₃	TT₄	TT₅
Intra-Muscular	At 1 st Contact as early as possible OR during 7 th months of	At least 4 Weeks after TT ₁	At least 6-12 Months after TT ₂	At least 1 year after TT ₃	At least 1 year after TT ₄
Immunity Achieved	No	3 years	5 years	10 years	20 years OR Live long

EPI Vaccination Schedule

Age	Vaccines to be given	Dose	Form	Site	Route of Administration
At Birth	BCG OPV ₀	0.05 ml	Powdered	Deltoid (Rt. Arm)	Intra-Dermal Oral
At 6 Weeks	PENTA ₁ (DPT ₁ + HBV ₁ + Hib ₁) OPV ₁	0.5 ml	Liquid	Ant. Lat. Lt. Thigh	Intra-Muscular Oral
	PCV ₁	0.5 ml	Liquid	Rt. Thigh	Intra-Muscular
At 10 Weeks	PENTA ₂ (DPT ₂ + HBV ₂ + Hib ₂) OPV ₂	0.5 ml	Liquid	Ant. Lat. Lt. Thigh	Intra-Muscular Oral
	PCV ₂	0.5 ml	Liquid	Rt. Thigh	Intra-Muscular
At 14 Weeks	PENTA ₃ (DPT ₃ + HBV ₃ + Hib ₃) OPV ₃	0.5 ml	Liquid	Ant. Lat. Lt. Thigh	Intra-Muscular Oral
	PCV ₃	0.5 ml	Liquid	Rt. Thigh	Intra-Muscular
At 9 Months	Measles	0.5 ml	Powdered	Deltoid (Lt. Arm)	Sub- Cutaneous
At 15 Months (Booster)	Measles	0.5 ml	Powdered	Deltoid (Lt. Arm)	Sub- Cutaneous

	IPV	Fractional IPV (fIPV)
Volume per dose	0.5 mL	0.1 mL
Schedule	1 dose: 14 weeks	2 doses: 6 and 14 weeks
Administration	Intramuscular (IM) injection	Intradermal (ID) injection
Site of administration	Thigh	Upper arm
Syringe	0.5 mL AD syringe	0.1 mL AD syringe
Are two fractional doses as effective as a single standard dose?	Two fractional doses of IPV (ID) given at 6 and 14 weeks produces better immunogenicity than a single standard dose (IM) given at 14 weeks	

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Site

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**Route of
Administration**

Orally

Side Effect

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- Diphtheria
- Pneumonia
- Hepatitis B
- Measles
- Meningitis
- Mumps
- Pertussis
- Poliomyelitis
- Rubella
- Tetanus
- Tuberculosis
- Yellow Fever

VACCINE PREVENTABLE DISEASES

A vaccine-preventable disease is an infectious disease for which an effective preventive vaccine exists.(1)

25 Diseases – WHO. (2)



Live attenuated (LAV)

- Tuberculosis (BCG)
- Oral polio vaccine (OPV)
- Measles
- Rotavirus
- Yellow fever

Inactivated (killed antigen)

- Whole-cell pertussis (wP)
- Inactivated polio virus (IPV)

Subunit (purified antigen)

- Acellular pertussis (aP),
- *Haemophilus influenzae* type B (Hib),
- Pneumococcal (PCV-7, PCV-10, PCV-13)
- Hepatitis B (HepB)

Toxoid (inactivated toxins)

- Tetanus toxoid (TT),
- Diphtheria toxoid

SIX GOALS OF THE GLOBAL VACCINE ACTION PLAN

CLOSE
THE IMMUNIZATION
GAP

IMMUNIZATION AGAINST DIPHTHERIA, TETANUS AND PERTUSSIS

Target



Immunization coverage with 3 doses of diphtheria, tetanus and pertussis vaccines



Gap: **65 countries**

18.7 million children unvaccinated

MEASLES MORTALITY REDUCTION

Target



At least 4 WHO Regions to eliminate measles in 2015



Gap: **15%**

15% of all children not being immunized with one dose. Only one Region has eliminated measles

RUBELLA ELIMINATION

Target



Eliminate rubella from at least two WHO regions in 2015



Gap: **1/2**

Half of all children do not receive the rubella vaccine

MATERNAL AND NEONATAL TETANUS ELIMINATION

Target



Eliminate maternal and neonatal tetanus in 59 priority countries



Gap: **21 countries**

21 countries have not yet eliminated maternal and neonatal tetanus

POLIO ERADICATION

Target



A world free of polio



Gap: **2 countries**

Remain polio endemic

USE OF NEW OR UNDERUTILIZED VACCINES

Target



At least 90 low- and middle-income countries introduce one or more new or underutilized vaccine



On **TRACK**

66 low- and middle-income countries added at least one new or underutilized vaccine

IMMUNIZATION FOR ALL
THROUGHOUT LIFE

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