



BLK-MAX
Super Speciality Hospital

ADULT IMMUNIZATION IN INDIA - AN UPDATE

**BLK CENTRE FOR CHILD HEALTH
(BLK TELE PEDS WEBINAR)**

Dr Amit K Tyagi

WHY Adult Immunization ?

Key Reasons

- ✦ Greatly neglected - No standardized schedule in UIP
- ✦ NCDs increase risk of infection - Hospitalizations & Deaths
- ✦ Immune systems weakens with age - Susceptible to infections
- ✦ Occupational exposure and International travel

Impact of Adult Immunization

- ✦ Reduce the burden of illness /VPD
- ✦ Improved Herd immunity reduce transmission and prevent outbreaks
- ✦ Increased Life expectancy and Economic Productivity

Adult vaccination Centre at AIIMS Jodhpur - 1388 Individuals during its first 12 months. Adult Vaccination Clinic Data Summary 2019

Category	Vaccine Type	Patients	(%)
Post-Exposure	TT Vaccine	583	42%
Post-Exposure	Anti-Rabies Vaccine	278	20%
Pre-Exposure	Yellow Fever	208	15%
Pre-Exposure	Hepatitis B	111	8%
Pre-Exposure	Pneumococcal Vaccine	97	7%
Pre-Exposure	Typhoid	42	3%
Pre-Exposure	Influenza	14	1%
Other	Meningococcal, Hepatitis A, Varicella, OPV	56	4%

23%

List of vaccines

Age requirement

Pneumococcal

Influenza

Tdap

Shingles (Herpes Zoster)

HPV

Lack immunity or With Risk Factor

Chickenpox

MMR

Hepatitis B

Hib B

DPT

CoViD

Travel Risk

Typhoid

Cholera

Japanese Encephalitis

Meningococcal

Yellow Fever

Hepatitis A

Poliomyelitis

Rabies

Not approved/ Not Available

Dengue

Chikungunya

Malaria

RSV

Anthrax

Others

Categories of Vaccines

Inactivated vaccines	Live-attenuated vaccines	mRNA pDNA vaccines	Subunit, recombinant, polysaccharide, and conjugate vaccines	Toxoid vaccines	Viral vector vaccines
Hep A Influenza (Injectable only) Polio (Injectable only) Rabies Cholera	Chickenpox Influenza Japanese Encephalitis MMR Yellow fever	COVID-19	Hib Hep B HPV Pertussis (Tdap) Pneumococcal Meningococcal Shingles (Herpes Zoster)	Diphtheria Tetanus	COVID-19

Pneumococcal Conjugate Vaccine - PCV10, PCV 13, PCV 14, **PCV 15, PCV 20, PCV 21**

Pneumococcal polysaccharide- PPSV 23

Catagories of Vaccine - VED Strategy

Vital Vaccines

High Morbidity and Mortality

Emphasize Universal coverage

Herd immunity

Essential Vaccines

Mod to High Burden

Targeted vaccination
strategies

Desirable Vaccines

Additional health
benefits

Individual risk
Assessment and
Cost-effectiveness

Vaccines	Diabetes Mellitus	Chronic Liver Disease Alcoholism	Cardiac or Lung Disease	CKD Haemodialysis	Asplenia Complement Deficiency Sickle Cell Disease	Individuals with Cancer	HIV positive / Immunocompromised states
Tdap , Td	Vital	Vital	Vital	Vital	Vital	Vital	Vital
Hepatitis B	Vital	Vital	Vital	Vital	Vital	Vital	Essential
MMR	Vital	Vital	Vital	Vital	Vital	Vital	C.I.
Chickenpox	Vitals	Vitals	Vitals	Vitals	Vitals	Vitals	C.I.
HPV (<45yr)	Vitals	Vitals	Vitals	Vitals	Vitals	Vitals	vital
Shingles	Essential	Essential	Essential	Essential		Essential	Essential
Pneumococcal	Essential	Essential	Essential	Essential	Essential	Essential	Vital
Covid 19	Essential	Essential	Essential	Essential	Essential	Essential	Essential
Hib	Essential	Essential	Essential	Essential	Essential (AR)	Essential	Essential
Influenza	Desirable	Desirable	Desirable	Desirable	Desirable	Desirable	Desirable
Meningococcal	Desirable{AR)	Desirable{AR)	Desirable{AR)	Desirable{AR)	Essential		Essential

Vaccines	Pregnancy	Cancer
<i>Tdap , Td</i>	Vital	Vital
Hepatitis B	Essential	Vital
MMR	C.I	Vital
Chickenpox	C.I.	Vitals
HPV (<26yr)	Post preg	Vitals
Shingles	-----	Essential
Pneumococcal	-----	Essential
Covid 19	Essential	Essential
Hib	-----	Essential
Influenza	Desirable	Desirable
Meningococcal	-----	----

Vaccines	Travelers
All Routine	
Hepatitis A ,B	
MMR	
Chickenpox	
Typhoid	
Polio	
Yellow Fever	
Japanese Encephalitis	
Rabies	
Influenza	
Meningococcal	

Health Care Personnel

Vaccines	Dose	Frequency	Recommendation Rank
Tdap	1	Every 10 years	Vital
* Hepatitis B	3	Every 5 years	Vital
* MMR	2 (unimmunized)	(4 weeks apart) --	Vital
* Chickenpox	2	--	Vital
* Typhoid	1	3-7 years in endemic setup	Essential
* Covid-19	1	Annually	Essential
* Pneumococcal (with additional risk)	PCV13 followed by PPSV23 1 year later	PPSV23 booster dose after 5 years	Essential
* Influenza	1	Annually	Desirable

✦ Vaccine type:

- Inactivated (IIV) -Trivalent and Quadrivalent • Live attenuated (LAIV). Intranasal

Recommendations: Inactivated vaccine IIV

Yearly (1 dose) > 50 years age & During pregnancy

Co-administered with PCV and Shingles vaccine

Egg allergy - No contraindication with IIV and LAIV ; Precaution - GBS

Vaccine	Age ≥50 yrs	Age 18 - 49 years										
		Pregnancy	Immuno- compromised	HIV infection	Asplenia, complement deficiencies	CKD HD	Heart lung disease	CLD alcoholism	DM	HCP	Traveller	Mass gathering
IIV RIV	R	R	R	R	R	R	R	R	R	R	R	R
LAIV	NR	NR	NR	NR	NR	BR	BR	BR	BR	R	R	R

No longer viewed solely as seasonal protection

Current Status (2025–2026): The "Simplified" Era

In August 2025, **Prevenar 20** was launched in the Indian market for adults.

Shifted the strategy to **"single-shot" approach.**

✦ **What's New?**

Broader Coverage: The original 13 strains plus **7 additional aggressive strains** (8, 10A, 11A, 12F, 15B, 22F, and 33F).

Single-Dose Convenience: For most adults, **one single dose of PCV20** replaces the old two-vaccine (PCV13 + PPSV23) sequence.

Paediatric: The government program still uses PCV10/PCV13/PCV14

A combination of two different vaccines

PCV13 (Prevenar 13): Provided "memory" to the immune system but narrower range.

PPSV23 (Pneumovax 23): Broader cover but lacked long-term immune memory and required boosters.

✳ **The Problem:** Patients had to get PCV13 first, wait 2-12 months, and then get PPSV23. High "drop-out" rate leaving them partially unprotected.

≥19 years :

Immunocompromised, CSF leak, Cochlear implant : 1 PCV13 followed by PPSV23 8 weeks later

Chronic medical conditions : 1 PCV13 followed by PPSV23 1 year later f/b booster 5 yr later PPSV

≥50 years: 1 dose PCV13 followed by PPSV23 (1 year later)

Immunocompromised Conditions

- ✱ Chronic renal failure, nephrotic syndrome
- ✱ Immunodeficiency, iatrogenic immunosuppression, generalized malignancy, HIV infection
- ✱ Hodgkin disease, leukemia, lymphoma, multiple myeloma
- ✱ Solid organ transplant
- ✱ Congenital or acquired asplenia, or
- ✱ Sickle cell disease or other hemoglobinopathies.

Chronic Medical Conditions

Chronic Heart disease, including congestive heart failure and cardiomyopathies

Chronic liver disease (CLD)
Alcoholism

Chronic lung disease, including chronic obstructive pulmonary disease, emphysema, and asthma

Cigarette smoking
Diabetes mellitus

Who should get PCV20 ?

- ✱ **All Adults 50+:** Even if healthy, the age for "routine" vaccination was lowered from 65 to 50 in late 2024.
- ✱ **Adults 18-49 with Comorbidities:** Immunocompromised state , Chronic medical condition, CSF leak and Cochlear Implant
- ✱ **Smokers:** High risk for invasive pneumococcal disease.

Adults aged ≥ 50 years

Vaccine received Previously

None or PCV7 only at any age

PPSV23 only

PCV13 only

PCV13 at any age and
PPSV23

Option for vaccination

A single dose of PCV20 .

A single dose of PCV20 ≥ 1 year after the
last PPSV23 dose

A single dose of PCV20 ≥ 1 year after the PCV13

A single dose of PCV20 ≥ 5 years after the last Dose

Adults aged 19–49 years

- Immunocompromising condition
- CSF leak or A cochlear Implant
- Chronic medical conditions

None or PCV7 only at any age

A single dose of PCV20 .

PPSV23 only **Or** PCV 13 Only

A single dose of PCV20 ≥ 1 year after the last dose

PCV13 + 1 Dose of PPSV23

A single dose of PCV20 ≥ 5 years after the last Dose

PCV13 + 2 Doses of PPSV23

Reviewed when person turns 50 yr or alternately a single dose of PCV20 ≥ 5 years after the last Dose

✱ Vaccine type: Toxoids and acellular pertussis antigens

✱ If not vaccinated, vaccinate immediately

3 doses at 0, 1,6 Month- **Tdap : Td /Tdap : Td /Tdap** with Td /Tdap every 10 years

In each pregnancy one dose of Tdap (b/w 27 and 36 wk)

Wound management: >10 years for clean & minor wounds : >5 years for other
(Prefer Tdap for those without previous Tdap history)

Indian Consensus Recommendations:												
Vaccine	Age ≥50 yrs	Age 18 - 49 years										
		Pregnancy	Immuno- compromised	HIV infection	Asplenia, complement deficiencies	CKD HD	Heart lung disease	CLD alcoholism	DM	HCP	Traveller	Mass gathering
Td	R	BR	R	R	R	R	R	R	R	R	R	R
Tdap	BR	R	BR	BR	BR	BR	BR	BR	BR	BR	R	BR
R: Recommended NR: Not recommended BR: May be considered after benefit risk evaluation AR: With additional risk CKD: Chronic kidney disease HD: Haemodialysis DM: Diabetes mellitus CLD: Chronic liver disease HCP: Health care personnel CV: Cardiovascular ICU: Intensive care unit												

Human Papilloma Virus Vaccine (HPV)

- ✱ Vaccine type: Recombinant protein capsid, liquid vaccine
- ✱ HPV4- (6,11, 16,18) & Nonavalent (HPV9) +31,33,42,52,58
- ✱ Doses: Single , Two (0-6mo) and 3 dose schedule (0,2,6)
- ✱ Before the first sexual encounter
- ✱ A gender-neutral use - In male adults at risk.

	Gardasil 4	Gardasil 9	Cervavac (4)
Age recommendation	Females : 9 - 45 years	Females : 9 - 26 years Males : 9 -14 years	Male and Females : 9 - 26 years
	Single dose 9-14 yr Three Doses 15 -45 yr	Female Single dose 9-14 yr Male 2 doses 9-14 yr Female 3 doses >15yr	Female Single dose 9-14 yr Male 2 doses 9-14 yr Male & Female 3 dose >15yr

For Immunocompromised and at risk individuals - 3 dose schedule

Indian Consensus Recommendations:											
Age ≥46 yrs	Age 18 - 45 years										
	Pregnancy	Immuno- compromised	HIV infection	Asplenia, complement deficiencies	CKD HD	Heart lung disease	CLD alcoholism	DM	HCP	Traveller	Mass gathering
NR	NR	R	R	R	R	R	R	R	R	NR	NR
R: Recommended NR: Not recommended BR: May be considered after benefit risk evaluation AR: With additional risk CKD: Chronic kidney disease HD: Haemodialysis DM: Diabetes mellitus CLD: Chronic liver disease HCP: Health care personnel CV: Cardiovascular ICU: Intensive care unit											

Targeted at lowering the burden of Cervical, Anal, Oropharyngeal, and other HPV-related cancers (7.5%)

- ✱ **Vaccine type:** Recombinant Zoster Vaccine (Shingrix -RZV)
- ✱ I.M, 2 doses, 2-6 mo apart :
All Immunocompetent ≥ 50 years age and 18-50 yr age at risk
- ✱ Recommended even after resolution of Herpes Zoster Risk 20%
- ✱ **Vaccine Efficacy :** (50-70yr) 91.3% and in Immunocompromised 67-71%
Against PHN - 100% and 93% in 70-90yr age group, 87% in Immunocompromised

Indian Consensus Recommendations:											
Age ≥ 50 yrs	Age 18 - 49 years										
	Pregnancy	Immuno-compromised	HIV infection	Asplenia, complement deficiencies	CKD HD	Heart lung disease	CLD alcoholism	DM	HCP	Traveller	Mass gathering
R	NR	R	R	AR	R	R	R	AR	AR	NR	NR
R: Recommended NR: Not recommended BR: May be considered after benefit risk evaluation AR: With additional risk CKD: Chronic kidney disease HD: Haemodialysis DM: Diabetes mellitus CLD: Chronic liver disease HCP: Health care personnel CV: Cardiovascular ICU: Intensive care unit PHN - Post herpetic Neuralgia											

Incidence of Herpes zoster is 3-5/1000 per year in 50 year old

R in Cancer, CKD, CVD, transplants, or on biologics

- ✳ Vaccine Type: Live attenuated
- ✳ S.C. 2 doses 0.5 ml > 13 year of age 4-8 weeks apart
- ✳ Recommendations - At risk -OR- No Evidence of immunity (IgG <100 IU/L)
Susceptible household contacts of Immunocompromised individual
- ✳ Post-exposure vaccination: within 5 days of exposure

Indian Consensus Recommendations:											
Age ≥50 yrs	Age 18 - 49 years										
	Pregnancy	Immuno- compromised	HIV infection	Asplenia, complement deficiencies	CKD HD	Heart lung disease	CLD alcoholism	DM	HCP	Traveller	Mass gathering
NR	NR	NR	NR	R	R	R	R	R	R	NR	NR
R: Recommended NR: Not recommended BR: May be considered after benefit risk evaluation AR: With additional risk CKD: Chronic kidney disease HD: Haemodialysis DM: Diabetes mellitus CLD: Chronic liver disease HCP: Health care personnel CV: Cardiovascular ICU: Intensive care unit											

Measles, Mumps and Rubella (MMR)

- ✦ Vaccine type: Live-attenuated combined vaccine
- ✦ If Unvaccinated 2 doses 4 weeks apart S.C.
Functional, neutralizing antibodies levels **>120 mIU/mL** indicate protection
- ✦ Post-exposure prophylaxis - within 3 days of exposure (Measles Only)

Indian Consensus Recommendations:											
Age ≥50 yrs	Age 18 - 49 years										
	Except during outbreaks	Immuno- compromised	HIV infection	Asplenia, complement deficiencies	CKD/ HD	Heart/ lung disease	CLD/ alcoholism	DM	HCP	Traveller	Mass gathering
	NR	NR	NR	R	BR	BR	BR	BR	R	NR	NR
R: Recommended NR: Not recommended BR: May be considered after benefit risk evaluation AR: With additional risk											

Precautions

- Moderate or severe acute illness with or without fever.
- If blood, plasma or immune globulin were given - Wait for 3 months (2 weeks Vice versa)
- History of thrombocytopenia or thrombocytopenic purpura.

✱ **Vaccine type:** Polysaccharide **(MPSV)** - Not Marketed in India (>2yr age)

Conjugate Vaccine **(MCV)** -

Quadrivalnet

A C Y W135

Menectra 9mo -55yr

Menveo 2yr - 55 yr

Pentavalent

A C Y W135 X (sii)

Menfive 18yr -85 yr

Monovalent (PsA-TT)

A (Licensed but not marketed Sii)

1 yr - 29yr

Low incidence in India - Routinely not recommended.

Only in **Special High Risk Situations**

Endemic disease - Highest attack rate in 3-12 month of age.

Epidemic involves children but shift is noted to adolescent and young adults **(A)**

Meningococcal Vaccine (MCV).....

Single Dose - Conjugate vaccine

- High-risk travelers and mass gatherings- Hajj
- Microbiologist/Lab workers
- Students going to study abroad /USA
- Militray camps
- Close contacts

Booster every 5 yrs if ongoing risk

2 Doses Conjugate vaccine : 8-12 weeks apart

- Anatomical or functional asplenia/Hyposplenia
- Sickle cell disease
- HIV infection
- Complement deficiency
- Complement inhibitor (e.g. eculizumab, ravulizumab)

Booster every 5 yrs if ongoing risk

Indian Consensus Recommendations:

Vaccine	Age ≥50 yrs	Age 18 - 49 years										
		Pregnancy	Immuno- compromised	HIV infection	Asplenia, complement deficiencies	CKD HD	Heart lung disease	CLD alcoholism	DM	HCP	Traveller	Mass gathering
Men ACWY	AR	AR	AR	R	R	AR	AR	AR	AR	AR	R	R

R: Recommended | **NR:** Not recommended | **BR:** May be considered after benefit risk evaluation | **AR:** With additional risk |

Haemophilus influenzae type b (Hib) infection

- ❖ Vaccine type: Lyophilized killed Conjugate Vaccine (PRP-T)
- ❖ Available as: Pentavalen or Hexavalent injection
- ❖ Recommendation in Adults - At risk* (1 or 3 doses)
- ❖ Dose : IM 0.5 ml - **1 dose** ; For HSCT Recipients **3 doses** at least 4 weeks apart (after 6-12mo)

Indian Consensus Recommendations:											
Age ≥50 yrs	Age 18 - 49 years										
	Pregnancy	Immuno-compromised	HIV infection	Asplenia, complement deficiencies	CKD HD	Heart lung disease	CLD alcoholism	DM	HCP	Traveller	Mass gathering
R	-	R (3 doses for HSCT)	AR	AR	R	R	R	R	NR	NR	NR
R: Recommended NR: Not recommended BR: May be considered after benefit risk evaluation AR: With additional risk											

CSF Leak
R

Schedule : ≥ 19 year Age IgG >20IU/L : Protective

HepA-HepB (Twinrix) : 4 doses at 0, 7, and 21–30 days & Booster at 12 mo (**Accelerated**)

Post exposure Prophylaxis within 2weeks (Inactivated Vaccine)

> 40 yr age Or
CLD & Immuno-
compromised

: Single Dose + Standard IM Immunoglobulin 0.1 ML/kg
(Complete 2 dose series)

At Risk Individuals (2 doses) : 1 if already immunized

Chronic liver disease (e.g., Persons with Hepatitis B, Hepatitis C, Cirrhosis, Fatty liver disease, Alcoholic liver disease, Autoimmune hepatitis, [ALT/AST] level greater than twice the upper limit of normal)

Undergoing liver transplant

- ✱ HIV infection
- ✱ Immunocompromising condition
- ✱ Homosexuals, Drug users, Homeless persons
- ✱ Travellers to High Endemic Area

Indian Consensus Recommendations:											
Age ≥50 yrs	Age 18 - 49 years										
	Pregnancy	Immuno-compromised	HIV infection	Asplenia, complement deficiencies	CKD HD	Heart lung disease	CLD alcoholism	DM	HCP	Traveller	Mass gathering
	AR	AR	R	AR	AR	AR	R	AR	AR	AR	NR

R: Recommended | NR: Not recommended | BR: May be considered after benefit risk evaluation | AR: With additional risk |

Hepatitis B Vaccination

- ✧ **Vaccine Type** : HbsAg Recombinant DNA in Pichia Pastoris (yeast)
- ✧ **Route** : IM in Deltoid
- ✧ **Dose** : 20 micg /1 ml - 0, 1, 6 mo : No booster in Healthy Immunized
: At risk* Nonimmunized : 3 doses at 0, 1 & 6 mo - Booster evry 5 yr

Asses Anti HBs levels : > 10 IU/L

2 months Post-Vaccination in at risk Individuals*

Annually if Ongoing HBV exposure Risk : Vaccinate If <10 IU/L

Nonresponders - Despite 2 primary series <10 IU/L

Indian Consensus Recommendations:											
Age ≥50 yrs	Age 18 - 49 years										
	Pregnancy	Immuno- * compromised	HIV * infection	Asplenia, complement deficiencies	CKD HD	Heart lung disease	CLD alcoholism	DM	HCP*	Traveller	Mass gathering
AR	R	R	R	R	R	R	R	R	R	R	NR

R: Recommended | NR: Not recommended | BR: May be considered after benefit risk evaluation | AR: With additional risk |

✦ Vaccinate with **4 dose** Primary series 0, 1, 2, 6 mo - Double doses (**20+20 micg**)

✦ **Post-Vaccination Serology Testing (anti-HBs Ab)-**

1. **High Response (> 100 IU/L)** - Test serology annually

< 100 IU/L : A single booster dose (HepB-S, *HepB-AS04*, or *HepB-CpG*).

2. **Medium Response (10–100 IU/L)** - A single booster dose of HepB-S

3. **Low/No Response (< 10 IU/L)Action:**

Repeat primary immunization - Retest 4 weeks post-vaccination

If < 10 IU/L: No further vaccinations

✱ **Vaccine Type:** Inactivated Vero cell-derived vaccine

- ✱ 1. JENVAC (Kolar starin) by BBIL
- ✱ 2. JEEV (SA 14-14-2) by BE (6micg)

Live Attenuated Chimaric Vaccine

- 1. JE-CV (SA 14-14-2/YF)
- (Used Under UIP at 9 & 18mo)

Dosage : IM , 2-Dose 4 weeks apart

✱ Recommended for Travelers staying 1 month or longer in endemic Zone

Indian Consensus Recommendations:

Age ≥46 yrs	Age 18 - 49 years										
	Pregnancy	Immuno-compromised	HIV infection	Asplenia, complement deficiencies	CKD HD	Heart lung disease	CLD alcoholism	DM	HCP	Traveller	Mass gathering
BR	BR	BR	BR	BR	BR	BR	BR	BR	AR	R	BR

R: Recommended | NR: Not recommended | BR: May be considered after benefit risk evaluation | AR: With additional risk |

Key Recommendation Categories-

✦ **Unvaccinated or Partially Vaccinated Adults (HCP/Travelers)**

3 doses of IPV(0,1,6-12mo) or IPV-bOPV schedule (1 or 2 doses of IPV followed by ≥ 2 dose bOPV)

✦ **International Travellers:** (MoHFW) Travelling between India and countries with **Endemic Wild Polio Virus (WPV 1)** - Afghanistan , Pakistan **cVDPV - Vaccine-derived polioviruses (13)**

A single dose of bOPV or IPV (with Certificate by DIO) 4 weeks prior to departure and is valid for 1 year.

A single lifetime IPV booster dose if fully vaccinated

✦ **At Risk Professionals:** Healthcare workers, laboratory personnel ,Direct exposure risks **A single lifetime IPV booster dose if fully vaccinated**

Indian Consensus Recommendations:

Age ≥50 yrs	Age 18 - 49 years										
	Pregnancy	Immuno- compromised	HIV infection	Asplenia, complement deficiencies	CKD HD	Heart lung disease	CLD alcoholism	DM	HCP	Traveller	Mass gathering
	NR	NR	NR	NR	NR	NR	NR	NR	BR	R	NR

R: Recommended | **NR:** Not recommended | **BR:** May be considered after benefit risk evaluation | **AR:** With additional risk |

Yellow Fever Vaccination

- ✦ Yellow Fever Vaccine : Live attenuated vaccine
- ✦ Single dose of 0.5 ml / S.C. : Confers immunity only after 10 days of and persists till life long
- ✦ Indicated if Travel to high-risk countries : Africa and Central and South America with Valid Certification.
- ✦ **Contraindication:** Egg, Chicken or Gelatin allergy | pregnancy & lactation | Immunosuppression | Infant < 9mo age.

Indian Consensus Recommendations:

Age ≥50 yrs	Age 18 - 49 years										
	Pregnancy	Immuno-compromised	HIV infection	Asplenia, complement deficiencies	CKD HD	Heart lung disease	CLD alcoholism	DM	HCP	Traveller	Mass gathering
NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	R	NR

R: Recommended | **NR:** Not recommended | **BR:** May be considered after benefit risk evaluation | **AR:** With additional risk |

- ✦ Inactivated Vaccines - In pandemic or local epidemic only
 - ✦ 2-dose series (4wks apart) - Booster in special situations after 12 mo.
- Older adults and adults with significant comorbidities or severe obesity

Indian Consensus Recommendations:											
Age ≥50 yrs	Age 18 - 49 years										
	Pregnancy	Immuno-compromised	HIV infection	Asplenia, complement deficiencies	CKD HD	Heart lung disease	CLD alcoholism	DM	HCP	Traveller	Mass gathering
R	R	R	R	R	R	R	R	R	R	R	R
R: Recommended NR: Not recommended BR: May be considered after benefit risk evaluation AR: With additional risk											

> 6 yr **COVAXIN, CORBEVAX**

>12 yr ZyCoV-D, COVOVAX

> 18yr COVISHIELD, , INCOVACC, Moderna vaccine , SPUTNIK-V , Janssen Vaccine , HGCO-19

Approved by CDSCO in India

Typhoid - 1 dose ViPS repeat 2 yearly OR 1 dose TCV **up to 45 yrs.**

Professional food handlers , Unvaccinated Adults in endemic areas

Travelers , During outbreaks

Rabies - Pre-exposure: 3 doses (0, 7, 28 days for high-risk groups)

Postexposure: 5 doses (0, 3, 7, 14, and 28 days)

Cholera - Not Recommended Routinely (Shancol)- Inactivated Whole cell Bivalent

Oral vaccine 2 doses at least 2 weeks apart, **1 - 65yr age**

Travelers , Potential exposure to cholera patients, Exposure to contaminated water and food, During natural calamity , During endemic|outbreak

Chikungunya

Not yet approved | available for clinical use in India

Dengue Vaccine

Approved by DCGI in India , will be available by 2027

- ✱ Vaccine type: Recombinant Vaccine with or without Adjuvant

CDC Recommendation

Schedule :

Age 60 years or older: Based on shared clinical decision-making 1 dose

Pregnancy at 32 weeks - 36 weeks and 6 days : 1 dose (without adjuvant)

Not yet approved for clinical use in India

Hematopoietic Stem Cell Transplant (HSCT) Recipients

✱ Considered "Never Vaccinated" - Complete **Post-transplant** revaccination schedule

Timeline	Vaccine Category	Vaccines	
3 to 6 Months	Inactivated Vaccines	Pneumococcal (13) - 3+1 , Influenza -1	
6-12 Months		<u>DTaP, Hib, IPV, Hep B</u> -3 Meningococcal -2 , Shingles -2, HPV -3	DTP ,HPV Vital
≥ 24 Months	Live-Attenuated Vaccines	MMR -2 , Varicella -2 <i>(Only if no GvHD and off immunosuppressants 3mo)</i>	Vital

- ✦ Accelerated Immunization schedule

- ✦ **Recipient Vaccination-**

Pre-transplant vaccination preferred before immunosuppression begins.

Post-transplant vaccination: No Live vaccines , Only inactivated vaccines Boosters

- ✦ **Donors** : Up-to-date on routine immunizations

- ✦ Inactivated Vaccines : 2 weeks prior

Live-Attenuated Vaccines: 4 weeks prior to the surgery

Solid Organ Transplant.....

Inactivated vaccines	Recipient & Donor	Inactivated vaccines	Recipient & Donor	Live Vaccine	Recipient & Donor
Pneumococcal (v)	PCV13 PPSV23-8 weeks later	IPV	Complete Schedule	MMR (v)	Pretransplant
Meningococcal	2 doses those at risk	Tdap (v)	1 dose – 2 weeks before Transplant	Varicella (v)	Pretransplant 2 doses
Hib	Schedule as in normal individuals	HPV (v)	3 doses at 0, 2, 6 mo.	Yellow Fever	Contraindicated
Influenza	1 dose annually	Shingles	2 doses - Recipient Only		
Hepatitis A	2 doses, 6 mo. apart	Typhoid	Polysaccharide: 1 dose (Booster after 3 years) Conjugated: 1 dose (No booster)		
Hepatitis B	3-4 doses pretransplant	COVID-19	2 doses 4 weeks apart		

1. Are you sick today? _____
2. Any Allergie - Latex , Gelatin, egg allergy etc.
3. Any serious Post vaccintion reaction
4. Any long-term health problem , Aspirin therapy
5. Having Cancer, Leukaemia, HIV| AIDS, Immune system problem
6. Family member with an Immune system problem
7. In the past 3 mo - Steroids (1 mo), Anticancer, Drugs for rheumatoid arthritis, Crohn's disease, or psoriasis, Radiation or Anticoagulants
8. Any seizure or Nervous system problem
9. Transfusion of blood or blood products / Immunoglobulin /Antiviral drug in past 1 yr
10. Pregnant or pregnant during the next month
11. Any vaccinations in the past 1 month
12. Any travel internationally

Key Message

Increase Awareness, Access and Address Hesitancy

Every Encounter Counts

Prevention Equals Longevity

An Act of Community Protection

*"Immunization is one of the most powerful, cost-effective health investments we can make in our lifetime. Do not wait for an outbreak to seek protection —
Vaccinate today to secure a healthier tomorrow."*

Thank You



A large, light orange watermark is repeated diagonally across the entire slide. It reads "BLK-CCH-THEPEDI" in a stylized, blocky font.



A solid teal bar runs horizontally across the bottom of the slide, with a dark blue section on the right side.