

# Superior Health Council

**New recommendations for vaccination of HIV-infected patients**

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**2.3. Adults and teenagers  $\geq$  16 years**

VACCINES	DISORDERS						HIV CD4 < 200/mm <sup>3</sup>	HIV CD4 > 200/mm <sup>3</sup>	PID
	IMiD on ISD	PRIOR to SOT	AFTER SOT	Oncology	PRIOR to HSCT	AFTER HSCT			
<b>INACTIVATED VACCINES</b>									
dTpa (or DTPa)	S	S	S	S	S	A (DTPa only)	S	S	S
IPV	R	R	R	R	R	A	R	R	S
Haemophilus influenzae b	NA	R	R	NA	S	A	NA	NA	S
Hepatitis A	R	R	R	R	R	R	R	R	R
Hepatitis B	R	A	A	R	A	A	A	A	S
Influenza	A	A	A	A	A	A	A	A	A
Pneumococcal PPV23	A	A	A	A	A	A	A	A	A
Pneumococcal PCV13	A	A	A	A	A	A	A	A	A
Men ACWY (conjugated)	R	R	R	R	R	A	R	R	A
Men B	R	R	R	R	R	A	R	R	A
HPV	R	R	R	R	R	A	A	A	A
Zoster (inactivated)***	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>LIVE VACCINES</b>									
MMR	CI#	A**	CI#	CI#	CI#	A <sup>-</sup>	CI#	A	CI



**2.3. Adults and teenagers ≥ 16 years**

VACCINES	DISORDERS								
	IMiD on ISD	PRIOR to SOT	AFTER SOT	Oncology	PRIOR to HSCT	AFTER HSCT	HIV CD4 < 200/mm <sup>3</sup>	HIV CD4 > 200/mm <sup>3</sup>	PiD
<u>Varicella</u>	CI	A**	CI#	CI	CI#	A <sup>-</sup>	CI#	A	CI
Zoster (live)	CI	R**	CI	CI	CI	A <sup>-</sup>	CI	A	CI
<b>INACTIVATED VACCINES FOR TRAVEL-RELATED EXPOSURES</b>									
Rabies	R	R	R	R	R	R	R	R	R
Japanese encephalitis	R	R	R	R	R	R	R	R	R
Typhoid fever - inactivated	R	R	R	R	R	R	R	R	R
TBE	R	R	R	R	R	R	R	R	R
Cholera	R	R	R	R	R	R	R	R	R
<b>LIVE VACCINES FOR TRAVEL-RELATED EXPOSURES</b>									
Yellow fever	CI#	R**	CI	CI	CI	R*#	CI	R	CI
Typhoid fever - oral	CI	R**	CI	CI	CI	R*	CI	R	CI

\*R > 24 months post HSCT in absence of immunosuppressive therapy and/or GVHD

# after consultation with a specialist (in case of epidemiological or personal risk)

\*\* > 4 weeks prior to activation transplant list

\*\*\* not available yet

2.3. Adults and teenagers $\geq$ 16 years									
VACCINES	DISORDERS						HIV CD4 < 200/mm <sup>3</sup>	HIV CD4 > 200/mm <sup>3</sup>	PID
	IMiD on ISD	PRIOR to SOT	AFTER SOT	Oncology	PRIOR to HSCT	AFTER HSCT			
<b>INACTIVATED VACCINES</b>									
dTpa (or DTPa)	S	S	S	S	S	A (DTPa only)	S	S	S
IPV	R	R	R	R	R	A	R	R	S
Haemophilus influenzae b	NA	R	R	NA	S	A	NA	NA	S
Hepatitis A	R	R	R	R	R	R	R	R	R
Hepatitis B	R	A	A	R	A	A	A	A	S
Influenza	A	A	A	A	A	A	A	A	A
Pneumococcal PPV23	A	A	A	A	A	A	A	A	A
Pneumococcal PCV13	A	A	A	A	A	A	A	A	A
Men ACWY (conjugated)	R	R	R	R	R	A	R	R	A
Men B	R	R	R	R	R	A	R	R	A
HPV	R	R	R	R	R	A	A	A	A
Zoster (inactivated)***	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>LIVE VACCINES</b>									
MMR	CI#	A**	CI#	CI#	CI#	A <sup>-</sup>	CI#	A	CI



*We advise to administrate vaccines in HIV positive subjects with suppressed viral load.*

- **Hep A:** control antibodies of hepatitis A after primary vaccination in patients immunized when CD4 <200/ $\mu$ l, and also 2 to 5 years after primary immunization (2 doses) because cases of hepatitis A infection have been reported in fully vaccinated HIV-patients.
- **Influenza:** there are no recent data on increased mortality of Influenza in HIV patients, but in theory they have a higher risk for (post-influenza) pneumonia.



- **Meningococcal disease:** discrepant data about relative risk of IMD in HIV patients. Vaccination is advised for MSM attending crowded gay events.
- **HPV:** vaccinate adolescents, men and women; recommended until 26 years old and until 40 for MSM- considered between 26 and 40 years for others- always prefer 9-valent vaccine. Consider also in secondary prevention after treatment of high grade squamous intraepithelial lesion (HSIL).

*always 3 doses even in adolescents (no data with less than 3 doses)*



- **Typhoid fever:** HIV-infected patients have an increased risk of *Salmonella spp.* infections including complicated disease with bacteremia and relapsing and/or persistent infection → low threshold to immunize, especially Visiting Friends and Relatives (VFR) travelers.



# Clinical cases





## MSM 21y, newly diagnosed HIV

CD4 T-cell count=450/mm<sup>3</sup>, HIV VL= 60 000 cop/ml

Negative Ab for Hepatitis A and B

Multiple sex partners and traveling from pride to pride

→ your vaccination schedule?



## Check DiTePe +

1. Hep B, Pneumo and Flu- start vaccinating asap
2. Hep A and B, MenACWY, HPV, Pneumo and Flu- start vaccinating asap
3. Hep A and B, MenACWY, HPV, Pneumo and Flu- wait a bit for viral control to vaccinate



## Woman 17y, Cameroonian, new HIV diagnosis

CD4 T cell-count=180/mm<sup>3</sup>-HIV VL=100 000 cop/ml

Wish to travel to Cameroon in a few months

Possibly HIV vertical transmission

→ your vaccination schedule?



## Check DiTePe+

1. Yellow fever, Men ACWY, Pneumo and Flu- start vaccinating asap
2. Yellow fever, HPV, check MMR and VZV, Pneumo and Flu when CD4>200/mm<sup>3</sup> and controlled VL
3. Yellow fever, HPV, Pneumo and Flu when CD4>200/mm<sup>3</sup>



## Man 32y, HIV treated since 5 years

CD4 T-cell count= 840/mm<sup>3</sup>, HIV VL<20 cop/ml since 5 y

Street male nurse, takes care of drug addicts

HBs Ab<10 UI/ml- had already 2 courses of 3 HepB vaccines (one when HIV was untreated, one when HIV VL was controlled since 1y)

The other vaccinations: ok

→ What is your plan ?



1. Forget it, he may be protected by cellular immunity, no one knows
2. Placing him under cART containing TDF or TAF will protect him from hepatitis B
3. a double-dose rescue vaccination regimen can still be tried twice at two-month intervals (2-2-2) - if this does not work, he should be placed under a cART containing TDF or TAF



Thank you for your  
attention

