Immunisation schedule for people living with HIV* (Last update: September 2026) -Always check BREACH website for last version.			
Vaccine/ disease targeted	**16-45 years**	**60-64 years**	**≥65 years**
HPV	2** or 3 doses (0 and 6 or 0, 2, and 6 months)	>45 years: generally, not recommended	
Influenza (2026-2027)	1 dose IIV3 annually in all PLHIV, consider aIIV3		≥ 65 years: high-dose IIV3
COVID-19[1]	1 dose annually, following national guidelines: IS status, including CD4<200/µl, obese or comorbidities: renal, cardiac, metabolic, pulmonary or neurological diseases		
Pneumococcal disease	1 dose PCV20 (16–49 years old or PCV20/21 (≥50 years old); no routine revaccination; catch-up PCV20/21 based on prior vaccination (≥1–5y interval).		PVC21 is preferred for ≥85 years
RSV	Considering during pregnancy[2]	1 dose (patients ≥60 years with co-morbidities)	
Varicella zoster (chickenpox)	2 doses (Week 0, week 6) (f no immunity and CD4 ≥ 200 mm^3)		
Herpes zoster (shingles)	RZV: 2 doses at month 0 and month 2-6 if ≥18 years old		
Tetanus, Diphtheria, and Pertussis (Tdap)	1 dose of Tdap. Revaccination: every 10 years. During pregnancy: between the 24th and 32nd week.		
Measles, Mumps, Rubella (MMR)	2 doses (with minimum 4 weeks in between) (if no immunity and CD4 ≥ 200 mm^3).		
Hepatitis A[3]	2 doses, Month 0 and Month 6-12 if no immunity. Check serology Hep A IgG 1 month later		
Hepatitis B[4]	If no prior vaccination and no immunity: 3 doses (months 0, 1, and 6) with a high-dose vaccine or an adjuvanted vaccine. Check anti-HBs 4–8 weeks later. Immunity is defined as >10 IU/L, but target is anti-HBs ≥100 IU/L.		
Meningococcal[5]	ACWY: 1 dose, lack of data about revaccination (recommended if persisting risk factors (RF): every 5 years) Meningococcal B vaccine: if specific risk factors, 2 vaccines 8 weeks apart, revaccination: every 5 years -if RF persists		
Mpox	2 doses (day 0, ≥28 days) if risk factors. Consider PEP if exposed (initiate ASAP, ideally ≤4 days).		
Rabies (travel)	2 doses (2IM or 2ID): day 0, day 7. Alternative: 3IM day 0, day 7, day 21-28		
Dengue (travel)	If previous infection: 2 doses, month 0 and 3 (if CD4 ≥ 200 mm^3)		
Chikungunya (travel)	One dose of recombinant virus-like particle (VLP) vaccine (non-live vaccine) if travelling to risk area		
Yellow fever (travel)[5]	1 dose + a single yellow fever revaccination is recommended for all PLWHIV and should preferably be administered before the next travel to a yellow fever endemic area with a minimal interval of 28 days. (if CD4 ≥200 mm^3).		≥70 years (shared decision making)
Red: live-attenuated vaccines: If the CD4 count ≤ 200 cells mm^3, live-attenuated vaccines should not be given (e.g. MMR, yellow fever, dengue, chikungunya.)			

HD-IIV3 = high-dose IIV3 (Efluelda), IIV3= trivalent inactivated influenza vaccine, aIIV3 = MF59-adjuvanted IIV3 (Fluad)

__Asses before immunisation__: CD4 count, viral load, presence of immunity (Hep A IgG, Hep B (HbsAg, anti-Hbc, anti-Hbs), measles IgG, Varicella IgG, rubella IgG, mumps IgG. ** 2 dose: Increasing evidence suggests that a 2-dose HPV vaccination schedule provides immunogenicity and effectiveness comparable to the traditional 3-dose schedule. 3 doses reimbursed from 1 June 2026 for people living with HIV.*

1. *Follow up-to-date national COVID-19 guidelines. mRNA vaccine Comirnaty (in case of CI Bimervax: limited availibility)*

2. *Available vaccines: Arexvy®, Abrysvo®. Not yet available: MResvia® . Only Abrysvo® is registered for use during pregnancy. Consult up-to-date guidelines. SHC supports nirsevimab as the primary strategy for direct infant protection, with maternal vaccination as alternative strategy.*

3. *If Twinrix® is used: 3 doses M0, M1, M6 .*

4. *Hep B: In immunocompromised individuals, a higher antigen dose or an adjuvanted hepatitis B vaccine is preferred over the standard-dose regimen due to higher rates of non-response and lower antibody titres with conventional vaccination, with the choice also guided by local preference and availability.*

5. *See explanation below and Superior Health Council (SHC) recommendation nr. 9759. Meningococcal B vaccination is not recommended for gonorrhoea prevention.*

6. *See SHC advice 9844. If the primary vaccination was given when the HIV viral load was detectable, the revaccination should be administered as soon as possible but preferably when the HIV viral load has been undetectable for ≥6 months. The optimal timing for revaccination in other scenarios remains uncertain, but it is always preferable to re-vaccinate when the viral load is undetectable for ≥6 months. Currently, there is no data on the necessity for a third or fourth yellow fever vaccination.*

Timing of vaccinations: *Vaccinate individuals with HIV regardless of CD4 count, except for PPV-23 (pneumovax-23), which is recommended if CD4 ≥ 200 mm^3. Immune response to vaccination is always better when HIV VL is undetectable for at least 6 months. In general: higher CD4 counts and undetectable viral loads are ideal, but vaccines are important at lower CD4 counts due to increased disease risk.*

This schedule (version 22-04-2026) has been compiled with the utmost care, based on current guidelines (including Belgian SHC, Wanda, EACS, and CDC/ACIP). However, information may become outdated or contain inaccuracies over time. The authors accept no liability for any consequences arising from the use of this information.

Blue = shared decision making / if deemed necessary and/ or epidemiological situation requires vaccination
Yellow = recommended for all PLWHIV

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Overview of vaccines

Indication	Available vaccines + price (per dose, €, BCFI) / Reimbursement	Schedule / Key remarks
Seasonal influenza	All PLHIV. Use any available vaccine. Reimbursed for PLHIV. Guidelines 2026-2027 season: Standard-dose influenza vaccines (Alpharix®, Vaxigrip®, Influvac®): third-party payer system applies. For ≥ 65 yrs, follow national guideline (Efluelda or Fluad). • Adjuvanted vaccine (Fluad®) and high-dose vaccine (Efluelda®): reimbursed from age 65 and older (Chapter IV – see BCFI).	Annually, single dose (only during flu season).
Pneumococcal disease	All PLHIV, especially older adults and those with comorbidities. Prevenar 20 (PCV-20): € 67.78 (reimbursed > 65-80 years with specific risk factors) Capvaxive (PCV21) € 85,99 (reimbursement unknown).	**Primo vaccination:** 1 dose PCV20 (16–49 years old) or PCV20/21 (≥50 years old; PCV21 preferred ≥85 years old); no routine revaccination; catch-up PCV20/21 based on prior vaccination (≥1–5 year interval). **If vaccinated before against pneumococcal disease:** • Previous PPV23 only (any number of doses): give PCV20 or PCV21 ≥1 year after the last PPV23 dose • Previous PCV13 or PCV15 only: give PCV20 or PCV21 ≥1 year after the last dose

		• Previous PCV13 or PCV15 followed by PPV23: consider PCV20 or PCV21 ≥5 years after the PPV23 dose • Previous PCV20 or PCV21: no further pneumococcal vaccination needed **Revaccination: not recommended** • consider case-by-case revaccination in those who remain severely immunocompromised or at particularly high risk of invasive pneumococcal disease
Tetanus, diphtheria, pertussis (Tdap)	If last vaccination > 10 yrs ago. Triaxis/Boostrix®: fully reimbursed (Flanders, not in Wallonia/Brussel). Boostrix Polio or Revaxis if no polio revaccination after 16 years old and travel to Africa/Asia.	• One dose every 10 yrs. If last dose > 20 yrs ago: second dose after 6 months. • During pregnancy: between the 24th and 32nd week.
Hepatitis A (HAV)	If HAV IgG negative (travel or MSM, IVDU or HBV/HCV coinfection). Havrix® (HAV): € 45.66. Avaxim ® (HAV): Twinrix® (HAV/HBV): € 54.60 but the two fist doses are needed to be protected against HAV. No reimbursement except for workers with recognized occupational exposure. See here.	HAV vaccines: 2 doses 6-12 months apart. Twinrix: 3 doses at 0–1–6 months. • Prioritise vaccination for travellers, close contact with children, MSM, people who inject drugs, those with active HBV or HCV infection or chronic liver disease, sex workers, transgender people, and individuals with sexual exposure through oro-faecal contact.

		• Check anti-HAV IgG ≥1 month after completion of the vaccination series to confirm immune response • If CD4 count is <200 cells/mm^3 prefer deferring the vaccination until several months after ART initiation
Hepatitis B (HBV)	Primary + check anti-HBs. Response if ≥10 IU/L, but monitor if risk ↑; aim >100 IU/L for durability. Booster if <10 IU/L, especially in PLWHIV with ongoing risk or suboptimal immune status (e.g. low CD4 or detectable VL). If anti-HBc+ and HBsAg–: interpret cautiously. If <10 IU/L after full series: consider revaccination (e.g. double-dose schedule). Fendrix: 0-1-2-6 or 0-1-6 months, not reimbursed unless renal deficiency, graft list Alternative Engerix® € 27.83 (less immunogenic). Booster: not routinely indicated in PLWHIV with well-controlled HIV and adequate CD4. Consider booster if anti-HBs <10 IU/L in those with uncontrolled HIV, low CD4, or ongoing risk (e.g. MSM, PWID).	Engerix/Twinrix: 3 doses at 0–1–6 months (or accelerated 4-dose + 1-year booster). Fendrix: 0-1-2-6 or 0-1-6 months *Key*: The hepatitis B vaccination strategy for PLWH depends on their immune status. HIV-positive individuals with low CD4 counts, like other immunocompromised patients, may require higher doses of vaccine. See EASL 2025 Hep B guideline https://www.journal-of-hepatology.eu/article/S0168-8278(25)00174-6/fulltext
Human papillomavirus (HPV)	All persons aged 9–45 yrs. Secondary prophylaxis in high-grade dysplasia. Gardasil-9® € 132.34. Reimbursement: People living with HIV up to and including the age of 45 years (from 1-6-2026) (€12.80 per dose; a full 3-dose course costs €38.40.)	3 doses at 0–2–6 months. If cost prevents 3, give at least 2 and delay booster. Emerging evidence suggests that an abbreviated two-dose schedule (at months 0 and 6) provides immunogenicity and protection against HPV infection and related disease outcomes comparable to the

		standard three-dose schedule. However, as reimbursement will be available from 1 June 2026 for all people living with HIV, we recommend the three-dose schedule.
Measles, mumps, rubella (MMR)	Protection if 2 doses of vaccine or previous infection (born before 1970> considered as protected). Measles serology may help in case of doubt. If rubella IgG negative in women planning pregnancy (1 dose is enough for rubella) or incomplete/negative serology. Priorix ®/ MMR VaxPro® (live) : fully reimbursed in Flanders ; fully reimbursed <20 yrs or in student in Fédération Wallonie-Bruxelles with partial reimbursment for others	2 doses ≥ 1 month apart. Only if CD4 > 200. Contra-indicated in pregnancy (but OK pre/post-partum). • Persons born between 1970 and 1985 may have incomplete vaccination, as MMR was introduced in 1986 and the second dose only in 1996. Vaccination status should therefore be reviewed; in case of uncertainty, administer 2 doses (≥1 month apart) or consider measles serology. • Special attention to people living with HIV infected perinatally, as vaccination status and long-term immunity may be uncertain; review status carefully and consider serology or revaccination if indicated.
Herpes zoster (shingles)	From 16 years old: administer Shingrix® as a 2-dose schedule (0, 2 months; 2–6 months acceptable). Shingrix® reimbursed for PLHIV (€ 12.80; else € 163.34). If VZV IgG negative: VZV: 2 doses 2 months apart (if CD4 Count >200) (live-attenuated vaccine)	RHZ (Shingrix®): 2 doses 2–6 months apart. • Vaccinate all PLWHIV with RHZ, but especially those >50 years old, with prior herpes zoster or with comorbidities/immunosuppression.

		• In Belgium, >95% are VZV IgG positive; serology is not required before vaccination but may be considered if status is uncertain (e.g. non-European origin). If VZV IgG negative and CD4 >200, consider primary varicella vaccination (Varivax®/Varilrix®) followed by full Shingrix vaccination; if CD4 <200 or live vaccine is contraindicated, Shingrix can be given off-label, with possibly reduced protection.
Varicella zoster (chickenpox)	2 doses week 0, week 6, only if no immunity and CD4>200 Price 50,28 per dose, no reimbursement. (live attenuated vaccine)	• In Belgium, >95% are VZV IgG positive; ask serology if status is uncertain (e.g. non-European origin). • If VZV IgG negative and CD4 >200, consider primary varicella vaccination (Varivax®/Varilrix®) and subsequently herpes zoster (Shingrix) vaccination
Mpox	SC: 2 doses of 0.5 mL (upper arm). ID: 2 doses of 0.1 mL (one-fifth dose). Minimum interval 28 days; 2–3 months (or longer) preferred if no immediate exposure risk. PEP: initiate as soon as possible, ideally within 4 days (up to 14 days may reduce severity); complete the 2-dose series.	• Vaccinate individuals with frequent or high-risk sexual exposure (e.g. multiple/changing partners, sex work). Vaccination is most effective in those with controlled HIV (CD4 >200 cells/mm^3 and suppressed viral load), but should not be withheld in others based on immune status. • Previous smallpox vaccination does not alter current recommendations.

		Eligible individuals should receive the standard 2-dose schedule. • **Boosters:** Not routinely recommended; insufficient evidence to support use. Reassessment pending emerging data.
COVID-19	Follow national recommendations for PLHIV.	As per national programme.
RSV	≥ 60 yrs and risk factors (IS, cardiopulmonary disease) or living in nursing homes; all ≥ 75 yrs. No HIV-specific data. Arexvy® € 191.49, reimbursed for 65+ living in congregated facilities or with comorbidities including PLHIV with CD4 < 200). Abrysvo € 186.01 (not reimbursed as of 2026).	Single IM dose; protection ≈ 2-3 seasons (early booster not needed). Passive immunization of newborn (mAbs) could be preferable (instead of vaccination) for pregnant women living with HIV
Meningococcal (ACWY and B)	Higher risk with asplenia, travel to meningitis belt, MSM, but recommended for all PLWH. Nimenrix® (MenACWY) € 52.60. Bexsero® (MenB) € 86.52. RCT evidence does not currently support a protective effect of 4CMenB against gonorrhoea. Importantly, the available randomised trials were conducted in populations at high risk of gonorrhoea, including MSM/GBM with a recent or previous history of Neisseria gonorrhoeae infection. In DOXYVAC, 4CMenB was associated with a non-significant reduction in gonorrhoea, while GoGoVax found no protective effect. More recently, the MenGO randomised clinical trial in gay and bisexual men also found no significant	Nimenrix: 1 dose, delay for booster unclear (5-10 y?). If CD4 < 200: 2-dose primary (0–1 month). Bexsero: 2 doses 1 month apart. Booster if persistent risks: (5-10 years?)

	reduction in gonorrhoea incidence after 4CMenB vaccination, with an incidence rate ratio of 0.78 (95% CI 0.40–1.51; p=0.457). Although observational studies have suggested possible cross-protection, three randomised trials have now failed to confirm a clinically meaningful protective effect. Therefore, 4CMenB should not be promoted for gonorrhoea prevention at present.	
Rabies (travel)	As indicated by destination and exposure. Rabipur® € 12.10.	2 doses (0–7 days). If CD4 < 200: consider 2 doses 0-7 then measure NAbs or consider 3 doses (0–7–21/28 days)
Dengue (travel)	Traveling to endemic areas with a history of previous dengue infection: • Two-dose schedule (months 0 and 3), subcutaneous injection • The first dose can be administered up to 14 days before travel Live attenuated vaccine: Qdenga® (TAK-003), against dengue virus serotypes 1, 2, 3 and 4 (89,70 €) (no reimbursement)	• Contraindicated in patients with symptomatic HIV, CD4 count <200 cells/mm^3, during pregnancy or while breastfeeding. • Vaccination ≥ 6 months after dengue infection.
Yellow fever (travel)	For travel to endemic areas (if indicated). No reimbursement. (Stamaril, live-attenuated vaccine)	Single live dose — only if CD4 ≥ 200. A single yellow fever revaccination is recommended for all PLWHIV and should preferably be administered before the next travel to a yellow fever endemic area with a minimal interval of 28 days.

Chikungunya (travel)	As per travel medicine guidance (SHC 9905).	Single-dose schedule (per product info). Vaccination against chikungunya is recommended for people travelling to a region with a high risk of infection No data in PLWH. No data on booster. Preferred vaccine: Vimkunya® (VLP) (= non-live vaccine). Alternative is Ixchiq, however, not recommended in frail individuals; Individuals with uncontrolled comorbidities; People aged ≥ 60 years

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Use of this document:

This document was developed to harmonise vaccination guidance for people living with HIV (PLHIV) across Belgium. HIV Reference Centres (HRCs) remain free to adapt these recommendations to local practices and circumstances.

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