

A. Vaccines that MUST be given to all PLHIV REGARDLESS OF CD4 + T CELL COUNT

Vaccine / Dose / Route / Schedule of Immunization	Adverse reactions and/ or hypersensitivity reactions
<p>Hepatitis B 20 ug/ml/vial, administer 2 vials on a 3-dose schedule Intramuscularly (IM) day 0, 1 month, and 6 months Alternative regimens: Accelerated schedule using 4 doses Intramuscularly (IM) day 0, 1 month, 2 months and 12 months If combined with Hepatitis A, doses at days 0, 7, and 21 and a booster dose should be given at 1 year</p>	<p>Common: transient soreness, erythema and induration at injection site</p> <p>Uncommon: - fatigue, dizziness, syncope, hypotension, arthritis, arthralgia, lymphadenopathy, rash and urticaria - influenza-like symptoms, such as low-grade fever, malaise, headache, myalgia - gastrointestinal upsets, such as abdominal pain, diarrhea, vomiting, nausea and abnormal liver function tests - neurological manifestations include rarely paresthesia and extremely rarely paralysis, neuropathy, and neuritis (including Guillain-Barre syndrome, multiple sclerosis and optic neuritis) - severe skin disorders such as erythema multiforme</p>
<p>Influenza 0.5 mL Single dose IM (or by deep subcutaneous injection) SC (in case of bleeding disorders) ANNUALLY</p>	<p>Most frequent: Soreness at the injection site</p> <p>Rare: - Fever, malaise, muscle pain, arthralgia (beginning 6-12 hrs after immunization and lasting up to 48 hrs); - allergic reactions may occur most likely due to hypersensitivity to residual egg protein; - Guillain-Barre syndrome has been reported but causal relationship with the vaccine has not been established</p>
<p>Pneumococcal 0.5 ml Single dose of the 23 polyvalent polysaccharide vaccine SC or IM injection, preferably into the deltoid</p>	<p>Most frequent: Soreness, swelling and redness at injection site; resolves within 48 hrs</p> <p>Rare: Fever, malaise and muscle pain Allergic reactions Local reactions reported more frequently following a second dose of PPV-23 than after the first dose, especially if < 3 years interval from the first injection</p>

C. Vaccines that CAN BE GIVEN SAFELY to PLHIV if INDICATED, and if they are ASYMPTOMATIC, with a CD4 T cell count of > 200 cells/cu.mm³

Vaccine / Dose / Route / Schedule of Immunization	Indications, Adverse reactions and/ or hypersensitivity reactions
<p>Measles, Mumps, Rubella Two doses deep SC or IM injection preferably in the deltoid. second dose given at any time but at least one month after the first.</p>	<p>Indications: PLHIV who wants to be protected and immune against measles, mumps and rubella infections, rubella IgG seronegative women with CD4 counts > 200 cells/ul, second MMR dose if the patient remains rubella IgG seronegative.</p> <p>Adverse reactions: Fever and rash, arthralgia and/or arthritis are reported in up to 25% of vaccinated women and are usually mild and transient, transient lymphadenopathy vaccination, parotitis and deafness occur rarely and are attributable to the Mumps component</p>
<p>Varicella 0.5 mL-Two doses SC injection, preferably in the deltoid 3 months interval between doses if HIV (+)</p>	<p>Indications: VZV IgG negative, PLHIV with uncertain history of Varicella infection, PLHIV who are at risk of exposure (e.g. HCW)</p> <p>Adverse reactions: rash, localized at the site of injection or generalized, within one month of immunization fever</p>
<p>Yellow Fever 0.5 ml- Single dose SC injection, preferably in the deltoid. Booster after 10 years for those at risk</p> <p>Other live-virus vaccines may be given concurrently; alternatively 4 weeks should be allowed to elapse between sequential vaccinations</p>	<p>Indications: those who intend to travel/live in areas where yellow fever is endemic (S. America or Africa) and are at risk of exposure to the infection, or protection against mosquitoes cannot be guaranteed, those who will travel to countries where yellow fever vaccine is a requirement</p> <p>Adverse reactions: Common: injection site reactions Rare: hypersensitivity or anaphylaxis, neurotropic disease and viscerotropic disease influenza-like illness in 2-10% of vaccine recipients Severe: risk of Encephalitis</p>

D. Vaccines that are CONTRAINDICATED

1. Oral Polio Vaccine
2. BCG
3. Ty 21-oral Typhoid Vaccine
4. Influenza – intranasal
5. Herpes Zoster

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PHILIPPINE CLINICAL PRACTICE GUIDELINE SERIES



2010

**Philippine Guideline on
 Immunization for Adults Living
 with Human Immunodeficiency
 Virus (HIV)**



B. Vaccines that MAY BE GIVEN safely to PLHIV IF INDICATED, REGARDLESS OF CD4+ T CELL COUNT

Vaccine / Dose / Route / Schedule of Immunization	Indications, Adverse reactions and/ or hypersensitivity reactions
<p>Cholera - Dissolve buffer in 1 glass water. Add 1 vial vaccine. Mix well and drink Oral Vaccine (against Cholera and Enterotoxigenic E. coli-ETEC) 2 doses at 10 – 14 days interval</p> <p>- If > 6 weeks has elapsed between doses, repeat course Booster after 2 years if continuous protection is required</p>	<p>Indications: - For travelers visiting areas with on going epidemics/outbreaks, long term travelers who drink un treated water, orr who eat poorly cooked or raw seafood in disease endemic areas in highly endemic areas in unsanitary conditions without access to medical care - Persons with compromised gastric defense mechanisms visiting cholera risk areas - Refugees in countries where cholera is known to be present, Aid workers assisting in disaster relief or refugee camps</p> <p>Common adverse reactions: upset stomach, nausea, vomiting loss of appetite Rare: fever, malaise, dizziness, runny nose, cough, dizziness Very rare: fatigue, joint pains, sweating, sore throat, rash, severe diarrhea, itching, swelling of lymph glands</p>
<p>Haemophilus influenza type B 0.5 mL IM injection (or SC injection in persons with bleeding disorders), preferably in the deltoid Single dose</p>	<p>Indications: - PLHIV who acquire splenic dysfunction, whether or not they were immunized in infancy. - PLHIV who have recovered from Hib disease and have risk factors for further disease, those with recurrent pulmonary infections or other risk factors for severe disease</p> <p>Common adverse reactions: fever, restlessness, prolonged crying, loss of appetite, vomiting and diarrhea, redness and pain at injection site. Potentially Fatal: Anaphylaxis.</p>
<p>Hepatitis A 1 mL IM route (deltoid) CD4 count >300: 2- dose at either 0 and 6 through 12 months CD4 count <300: 3-dose schedule over 6-12 months</p> <p>Alternative dose schedule: 4-dose schedule: days 0, 7, and 21 to 30 followed by a booster dose at month 12 (for travelers to endemic areas, vaccine should be given at least 2 weeks before travel)</p>	<p>Indications: - people with chronic liver disease , people with occupational risk of infection (e.g. health care workers, some laboratory workers), men who have sex with men (MSM), injecting drug users, people with clotting factor disorders (e.g.hemophiliacs), people traveling to certain parts of the world, people from non-endemic countries who are traveling to countries with high or intermediate risk of HAV infection</p> <p>Common adverse reactions: Injection site reactions such as soreness, induration, redness and swelling Less common: headache, malaise, fatigue, fever, nausea, & loss of appetite Rare: serious allergic reactions</p>
<p>Human Papilloma Virus Quadrivalent vaccine: 3 doses within 6 months at 0, 2, 6 months Bivalent HPV vaccine: 3 doses within 6 months at 0, 1, 6 months IM (deltoid) Minimum intervals: 4 weeks between doses 1 and 2 12 weeks between doses 2 and 3</p>	<p>Indications: Before potential exposure to HPV through sexual activity , females who are sexually active, sexually active females who have NOT been infected with any of the four HPV vaccine types</p> <p>Local adverse reactions: mostly pain and swelling injection site Others: Fever, Syncope (fainting) especially in adolescents and young adults. Syncope, sometimes associated with falling, has occurred after vaccination with quadrivalent HPV recombinant vaccine. Therefore, vaccinees should be carefully observed for approximately 15 minutes after administration of quadrivalent HPV recombinant vaccine</p>
<p>Japanese B encephalitis 3 doses deep SC route Days 0, 7–14 and 28 - Last dose should be administered at least 10 days before the commencement of travel to ensure an adequate immune response and access to medical care in the event of delayed adverse reactions. - For those aged >60 years, a 4th dose is recommended 1 month after completion of the initial course. - A booster is recommended after 3 years for those at continued risk.</p>	<p>Indications: people living in endemic areas, travellers to south-east Asia and the Far East who will be staying for more than 30 days in endemic areas, especially if travel will include rural areas, travellers to and residents of areas experiencing epidemic transmission, persons with extensive outdoor activities in rural areas, expatriates whose principal area of residence is an area where JEV is endemic or epidemic</p> <p>Adverse reactions tend to occur within 48 hours for the first dose but around 96 hours for the second. Common: tenderness, redness, swelling, and other local effects Less common: fever, headache, malaise, rash, and other reactions such as chills, dizziness, myalgia, nausea, vomiting, and abdominal pain Rare: severe hypersensitivity, including angioedema or urticaria</p>
<p>Meningo-coccal Single dose 0.5ml Deep SC or IM injection preferably in the deltoid Boosters are recommended after 5 years for those at continuous risk</p>	<p>Indications: Household contacts of cases of meningococcal infection , persons who travel to or reside in countries in which N. meningitidis is hyperendemic or epidemic, particularly if contact with the local population will be prolonged , college students living in dormitories; military recruits, microbiologists who are routinely exposed to isolates of N. meningitidis , persons who have terminal complement component deficiencies persons who have anatomic or functional asplenia , PLHIV at risk of infection through travel, travelers who will be living or working with local people in an area of risk backpackers; travelers visiting an area of risk during an outbreak</p> <p>Common adverse reactions: transient local pain with associated swelling or redness (neurological) complications or anaphylaxis</p>
<p>Polio Vaccine- Inactivated 0.5 mL 3 doses IM or SC in persons with bleeding disorders First 2 doses are given at 4-8 week interval and a 3rd dose 6 to 12 months after the second dose. Booster dose: given after 5 and 10 years</p>	<p>Indications: Household members or other household contacts, nursing personnel in close contact unvaccinated or incompletely vaccinated PLHIV who intend to travel to a polio endemic area such as India, Pakistan, Afghanistan and Nigeria., those PLHIV with a history of incomplete vaccination to complete a five-dose vaccination course, regardless of the interval since the last dose and type of vaccine received previously</p> <p>Common adverse reactions: injection site reactions</p>
<p>Rabies IM (deltoids) Pre-exposure prophylaxis: D0,D7, and D28 Post exposure prophylaxis: 1 dose each on Days 0, 3, 7, 14, 28 or 30: or 2 doses on Day 0, and 1 IM dose each on D7 and D21 If currently asymptomatic, with CD4 >400cells/mm, with completed pre-exposure prophylaxis: 1 IM dose on Day 0, and 1 IM dose on Day 3</p>	<p>Indications: health care workers in hospitals that handle dog bites and rabies cases, rabies research and diagnostic lab worker, rabies biologic production workers, veterinarians and vet students, animal control and wildlife handlers, spelunkers and other animal handlers, field workers (bill collectors, mailmen, delivery men), morticians and embalmers</p> <p>Common adverse reactions: soreness, swelling or itching in duration at injection site headache, dizziness, nausea, abdominal pain Rare: neurologic reactions reported, resolved spontaneously</p>
<p>Td / Tdap Td 0.5 mL IM 2 doses of Td at 4 to 8 weeks apart followed by 3rd dose Tetanus diphtheria pertussis (Tdap) to be given 6 to 12 months later Booster every 10 years with Tdap In pregnancy 3rd dose given at least two weeks before delivery Adults who have received a full primary course (three doses) as Infants and a booster at pre-school age (total of four doses) require a single booster dose. Persons who have received five vaccine doses require a booster dose at 10-yearly intervals if with increased risk of exposure or if they are due to travel to remote areas where they may not be able to receive tetanus immunoglobulin (TIG) in the event of a tetanus-prone injury</p>	<p>Indications: Tetanus and Diphtheria adults who have NOT been immunized previously or have an uncertain vaccination history Pertussis: For individuals at high risk of infection (for example those exposed in the household or in high-risk occupations), a single dose of a pertussis-containing vaccine (Tdap) could be considered.</p> <p>Common adverse reactions: Local: pain at the injection site Systemic: headache, generalized body aches, tiredness, fever Rare: severe systemic reactions such as generalized urticaria, anaphylaxis or neurological complications</p>
<p>Typhoid Vi polysaccharide (Parenteral) 25 mcg (0.5 ml)- Single dose IM (preferably in the deltoid) or SC in persons with bleeding disorders) At least 2 weeks before expected exposure. Booster recommended every 3 years in those who remain at risk. This interval might be reduced to 2 years if the CD4 count is <200 cells/µL</p>	<p>Indications: those with significant risk of exposure to S. typhi (i.e. local outbreaks, travel to high risk areas), those who will have close contact with a documented S. typhi carrier laboratory workers exposed to S. typhi</p> <p>Common adverse reactions: Mild reactions: fever, headache, redness or swelling at the site of the injection Very rare: severe allergic</p>