Last updated
9-15-22

Sexual Assault Pathway

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Disclaimer: This clinical pathway is provided as a general guideline for use by Licensed Independent Provider's (LIP) in planning care and treatment of patients. It is not intended to be and does not establish a standard of care. Each patient's care is individualized according to specific needs.

Inclusion Criteria:

Patients of sexual assault exposed to potentially hazardous body fluids

Exclusion Criteria:

Neonates (postnatal age < 4 weeks)
Recommend ID consult to assist with HIV PEP

Body Site Testing:

- Gonorrhea (Urine NG(GC) PCR)*
- Chlamydia (Urine Chlamydia PCR)*
- Urine Trichomonas PCR
- Syphilis Screening PCR
- Pregnancy Test

* Obtain cultures from any other sites of penetration (eg. pharynx, rectum)

≤ 72 hours since exposure

NO → Post-Exposure Prophylaxis (PEP) not recommended

YES

How to Perform a Sexual Abuse/ Assault Exam in the ED

Substantial risk of HIV acquisition (Assailant is known to be HIV-positive)

NO → Case-by-case determination for PEP

Consider additional factors that increase risk

YES

Discuss key issues with family and patient before initiating PEP

Post-Exposure Prophylaxis (PEP) Recommended

YES → Select appropriate Pediatric Post-Exposure Prophylaxis regimen based on age

NO

Post-Exposure Management for Hepatitis B Virus

Review HPV Vaccine Status if ≥ 9 years

Review tetanus vaccine status

*Patients with tetanus-prone wounds (e.g., exposure to dirt or soil): administer tetanus immunoglobulin (if primary series of tetanus vaccine is incomplete) and/or tetanus toxoid vaccine, as clinically appropriate

º If decision to initiate HIV PEP is made

‡ If not completely vaccinated for Hepatitis B, or if vaccination status is unknown

** If sex trafficking is suspected OR source is known to have Hepatitis C or is a known IV drug user

Order Labs:

- Complete blood count with differential º
- Comprehensive metabolic panel º **
- HIV 1/2 Ag/Ab
- Hepatitis B surface antibody
- Hepatitis B surface antigen ‡
- Hepatitis B core antibody ‡
- Hepatitis C antibody **
- Rapid plasma reagin (RPR)

Postpubertal

- Ceftriaxone 500 mg IM x 1 (1 g for persons weighing ≥ 150 kg)

AND

- Doxycycline 100 mg PO BID x 7 days
  - Azithromycin 1g PO x1 if concern for poor compliance and unlikely to complete 7 day course

AND

- Metronidazole 500 mg PO BID x 7 days **(FEMALES ONLY)**
  - Metronidazole 2g PO x1 if concern for poor compliance and unlikely to complete 7 day course

Prepubertal

- Refer to TCAR for follow-up
- Indications for Infectious Diseases Referral:
  - Neonates (postnatal age < 4 weeks)
  - Patient or assailant with known HIV infection
- Monitoring

Return to Sexual Assault Pathway

Case-by-Case Determination

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Post-Exposure Prophylaxis (PEP) should be initiated as soon as possible, and no more than 72 hours after the exposure. If the exposure occurred more than 72 hours before presentation, PEP is unlikely to be effective in reducing transmission. Even if PEP is not initiated (window period has elapsed or patient/parental refusal), testing and follow up are still indicated.

Case-by-Case Evaluation for PEP Assess for factors that increase for HIV acquisition and discuss risk/benefits with patient/ caregiver before recommending initiation of PEP	• HIV status of assailant is unknown • Reported exposure presents a substantial risk for transmission of the source does have HIV infection - Insertive anal intercourse - Insertive penile-vaginal intercourse - Oral-vaginal contact (receptive & insertive) - Oral-anal contact (receptive & insertive) - Receptive penile-oral contact with or without ejaculation - Insertive penile-oral contact with or without ejaculation
	Factors that increase risk: • Assailant is known to be from a high-risk group (i.e., man who has sex with men, person who injects drugs who shares needles or equipment) • Oral mucosa that is not intact (patient or assailant) - Oral lesions - Gingivitis - Wounds • Blood exposure - Note: blood exposure can be minimal and may not be recognized by exposed person • Assailant has presence of genital ulcer disease or other sexually transmitted infections

Risk of HIV acquisition depends on the characteristic of the exposure. It is important to understand the risk of transmission when evaluating the pediatric patient. This information can be used by physicians and families to decide if use of PEP would be beneficial. Risk of HIV transmission is summarized below:

Type of Exposure	Risk* per 10,000 exposures
Receptive anal intercourse	138
Insertive anal intercourse	11
Receptive penile-vaginal intercourse	8
Insertive penile-vaginal intercourse	4
Insertive and receptive oral intercourse	Low
Biting and spitting ^	Negligible

* Factors that may increase the risk of HIV transmission include sexually transmitted diseases, acute and late-stage HIV infection, and high viral load.

^HIV transmission through these exposure routes is technically possible but unlikely and not well documented.

Source: http://www.cdc.gov/hiv/policies/law/risk.html

Return to Sexual Assault Pathway

Discuss Key Issues

Initiation of HIV PEP is time-sensitive and decision should not rely on testing of offender

1. Significance and timing of the exposure in relationship to the potential risk of HIV transmission:
   - PEP should be initiated as soon as possible and no more than 72 hours after the exposure
   - PEP is unlikely to be beneficial in reducing transmission if the exposure occurred more than 72 hours prior to presentation

2. Adherence:
   - Assess readiness and likeliness of adherence for the family/caregiver(s) to administer and/or child/adolescent to take antiretroviral therapy (2-3 drugs for 30 days)

3. Importance of clinical and laboratory follow-up with provider
   - Even if PEP is not initiated, testing and follow-up are still indicated

4. Potential risk and benefits of antiretroviral therapy, including common side effects:

Drug	Common Side Effects	
Tenofovir (TDF) Avoid in chronic kidney disease	• Abdominal pain • Nausea, vomiting • Diarrhea	• Insomnia • Headache
Emtricitabine (FTC)	• Headache • Insomnia • Nausea, vomiting • Diarrhea	• Abdominal pain • Hyperpigmentation • Rash
Raltegravir (RAL)	• Nausea, diarrhea • Fatigue	• Increase serum ALT
Zidovudine (ZDV; AZT)	• Headache • Nausea, vomiting	• Anemia • Rash
Lamivudine (3TC)	• Headache • Nausea	• Rash
Lopinavir/Ritonavir (LPV/RTV)	• Nausea • Vomiting	• Diarrhea

5. Contact TCAR (501-364-2680) during business hours or ED (501-364-1186) during evenings and weekends immediately if experiencing the following signs or symptoms: fever, generalized gland swelling, sore throat, rash (theses may indicate acute HIV infection)

If ACH Outpatient Pharmacy is open (M-F 8a-6p & Sat 10am-2pm): 28 day supply prescription should be e-prescribed to ACH Outpatient Pharmacy.
- If sending prescription to outpatient pharmacy on Saturday, **send prescription by 12PM**

If ACH Outpatient Pharmacy is closed: 28 day supply prescription should be printed and sent to Inpatient Pharmacy to fill (see order set for further details)

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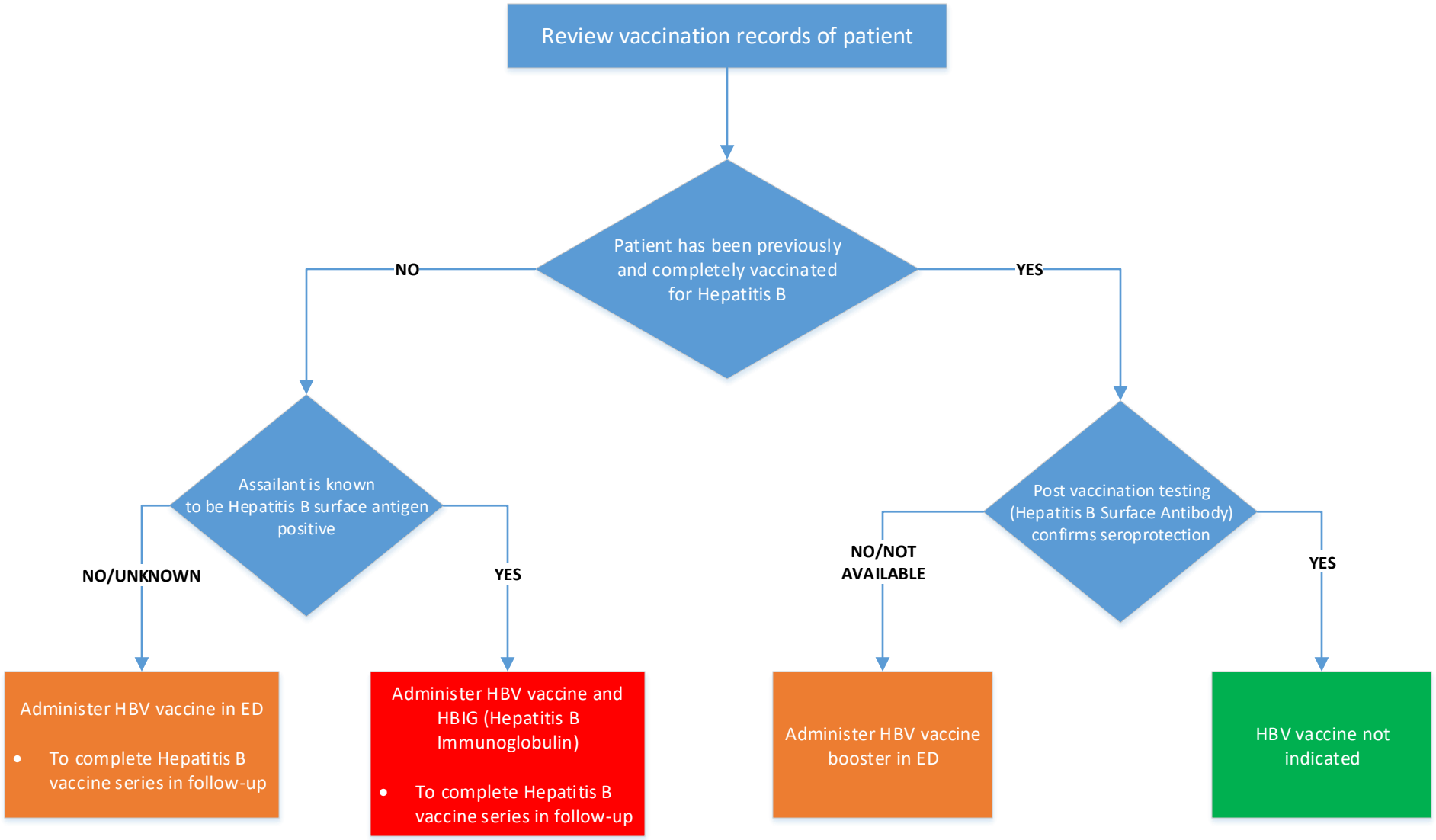
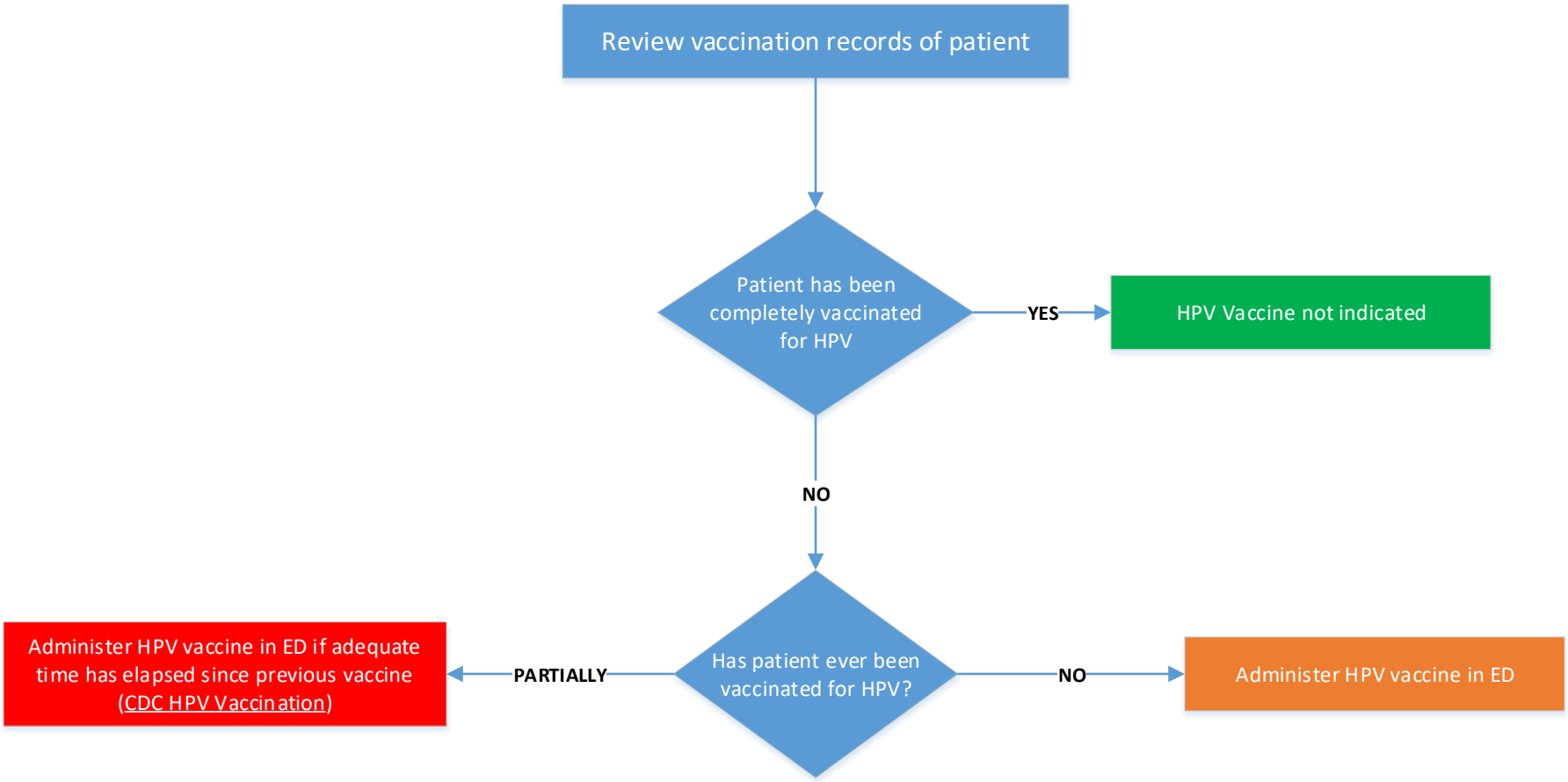
Post-Exposure Management for Hepatitis B Virus (HBV)



Return to Sexual Assault Pathway

Human Papillomavirus Virus (HPV) Vaccine Status



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Monitoring and Follow-Up

Monitoring Labs				
	Baseline	**4-6 weeks after exposure**	**3 months after exposure**	**6 months after exposure**
CBC diff	✓º			
CMP	✓º±			
HIV 1/2 Ag/Ab	✓	✓	✓	
Hepatitis B surface antigen	✓‡			
Hepatitis B surface antibody	✓			
Hepatitis B core antibody	✓‡			
Hepatitis C antibody	✓±			✓±
Hepatitis C PCR		✓¶		
Syphilis testing (RPR)	✓	✓	✓	
Gonorrhea PCR	✓	✓*		
Chlamydia PCR	✓	✓**		
Trichomonas PCR	✓			

º If decision to initiate HIV PEP is made

‡ If not completely vaccinated for Hepatitis B, or if vaccination status is unknown

± If sex trafficking is suspected OR source is source is known to have Hepatitis C or is a known IV drug user

¶ If source is known to have Hepatitis C

* In person with pharyngeal gonorrhea, test of cure is indicated

** When non-adherence is suspected or if azithromycin regimen was prescribed during initial evaluation, post-treatment evaluation is recommended

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Vaccine Follow-Ups

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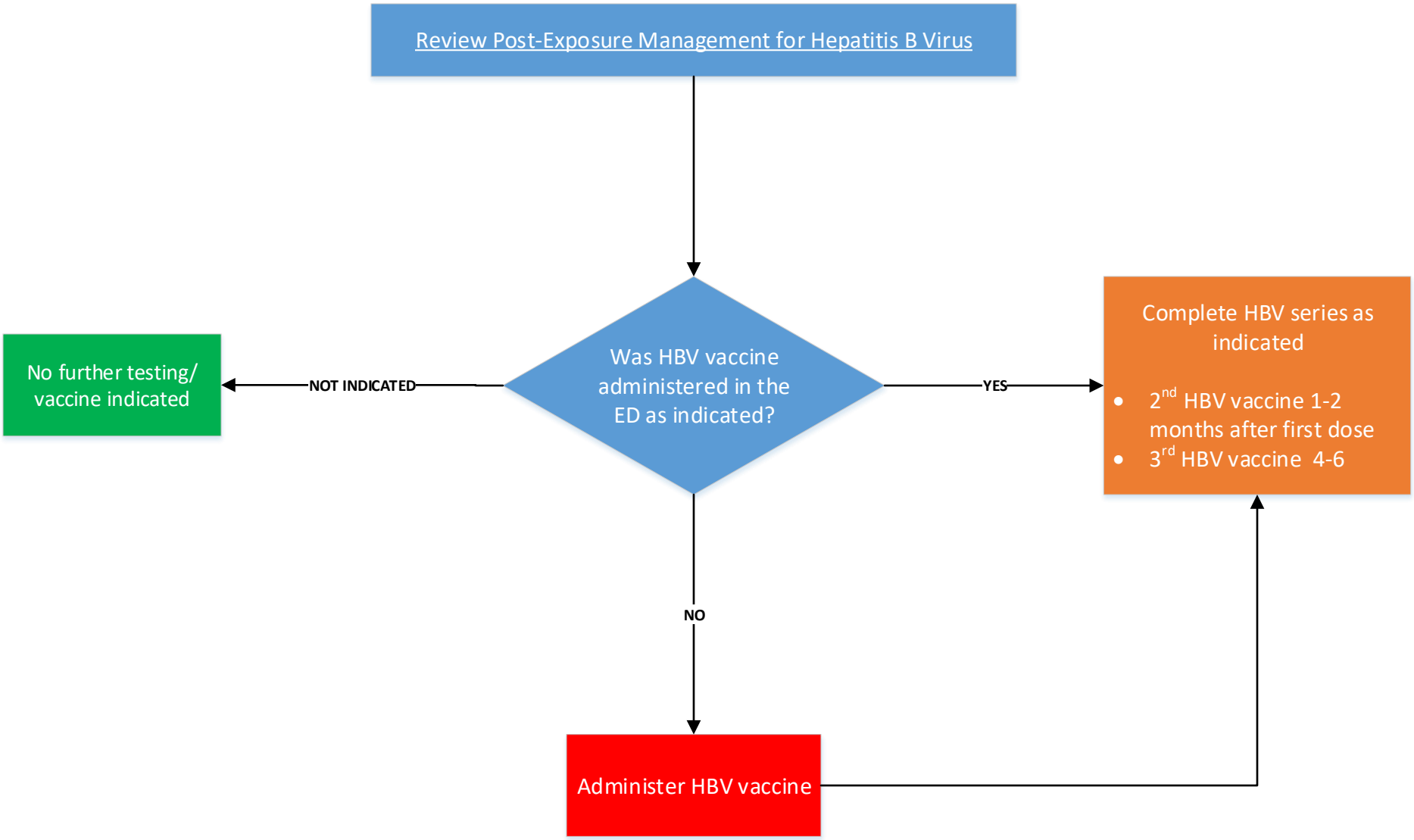
Hepatitis B Vaccine (HBV)



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Vaccine Follow-Ups

Human Papillomavirus

- HPV vaccination can be administered beginning at the age of 9 years and catch-up HPV vaccination recommended for all persons through age 18 years if not adequately vaccinated
- 2- or 3-dose series depending on age at initial vaccination
- Age 9-14 years at initial vaccination: 2-dose series at 0, 6-12 months
- Age 15 years or older at initial vaccination: 3-dose series at 0, 1-2 months after first dose, 6 months after first dose

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HIV Post-Exposure Prophylaxis

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Antiretroviral Regimens

Age group	Preferred Regimen	Medication
Adults and adolescents aged ≥ 13 years (including pregnant women) with normal renal function	3-drug regimen consisting of: • Tenovofivr and fixed dose combination Emtricitabine • Raltegravir	Raltegravir (Isentress) 400 mg PO twice daily **AND** Truvada 1 tablet PO once daily (Truvada = Tenofovir 300 mg + Emtricitabine 200 mg)
Children aged 2 – 12 years (or those who cannot take pills)	3 drug regimen consisting of: • Tenofovir DF • Emtricibtaine • Raltegravir	Raltegravir (Isentress) **AND** Tenofovir (Viread) **AND** Emtricitabine (Emtriva) *Each drug dosed to age and weight
Children ≥ 4 weeks to < 2 years	3 drug regimen consisting of: • Zidovudine • Lamivudine • Lopinavir/Ritonavir	

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HIV Post-Exposure Prophylaxis

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Antiretroviral Dosing

Drug	Formulation	Age and/or Weight (kg)	Dose Adjustment
Tenofovir (TDF)	Powder: 40 mg/supplied scoop • (Mix with 2-4 oz of soft food (e.g. applesauce, yogurt). Stir with a spoon until well mixed. Ingest immediately to avoid bitter taste. Do not add liquid since powder will float to top. Tablet: 150 mg 200 mg 250 mg 300 mg	2 – 11 years and > 10 kg	8 mg/kg/dose once daily
		17 – <22 kg	150 mg once daily
		22 to <28 kg	200 mg once daily
		28 to < 35kg	250 mg once daily
		≥ 35 kg	300 mg once daily
Emtricitabine (FTC)	Capsule: 200 mg Oral solution: 10 mg/mL	>33 kg	200 mg capsule once daily **OR** Liquid based on age and weight below
		1-3 months	3 mg/kg once daily
		≥ 3 months	6 mg/kg once daily
Raltegravir (RAL)	Tablet: 400 mg Chewable Tablet: 25 mg 100 mg	≥ 6 years and >25 kg	400 mg twice daily **OR** Chewable tablet based on weight below
		11 to <14 kg	75 mg twice daily
		14 to < 20 kg	100 mg twice daily
		20 to < 28 kg	150 mg twice daily
		28 to < 40 kg	200 mg twice daily
		≥ 40kg	300 mg twice daily
Zidovudine (ZDV; AZT) ≥35 weeks post conception AND ≥ 4 weeks post-delivery AND body weight > 4kg	Syrup: 10 mg/mL Tablet: 300 mg	4 to < 9 kg	12 mg/kg/dose twice daily
		9 to < 30kg	9 mg/kg/dose twice daily
		≥ 30 kg	300 mg tablet twice daily
Lamivudine (3TC)	Solution: 10 mg/mL Tablet: 150 mg	≥ 4 weeks to 3 months and < 14 kg	4 mg/kg/dose twice daily
		> 3 months and < 14 kg	5 mg/kg/dose twice daily
		14 to <20 kg	75 mg/dose (½ tablet) twice daily
		20 to <25kg	75 mg (½ tablet) in AM and 150 mg (1 tablet) in PM
		≥25kg	150 mg/dose (1 tablet) twice daily
Lopinavir/Ritonavir (LPV/RTV) ≥ 42 weeks postmenstrual age	Solution: 80/20 mg/mL (max 400/100 mg [5mL] /dose)	>4 weeks to 12 months	16 mg/kg/dose twice daily LPV
		12 months to 24 months	12 mg/kg/dose twice daily LPV
		< 15 kg	12 mg/kg/dose twice daily LPV
		> 15 to 40 kg	10 mg/kg/dose twice daily LPV
		> 40 kg	400 mg twice daily LPV

Return to Sexual Assault Pathway

Metrics

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References

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