COMMUNITY (NON-OCCUPATIONAL) BLOOD OR BODILY FLUID EXPOSURE

ALGORITHM 1. Sexual Assault

Suspected or reported sexual assault

Consult social work for every case of suspected or reported sexual assault

Assess risk of exposure: Has bodily fluid made contact with a mucosal surface?

No

Yes

Obtain labs (see Table 1):
- Hepatitis B antiGEN
- GC/CT urine PCR
- Hepatitis C antiBODY
- HIV 1 and 2 antiBODY screen
- Urine pregnancy test
- Rapid plasma reagin (RPR)
- Trichomonas urine PCR
- If starting antiretrovirals (ARVs) for HIV (see below), order CBC and CMP as baseline labs

No specific labs or prophylaxis indicated

Remainder of medical care based on medical history, provider discretion, or patient/family concern

Recommended prophylaxis for patients younger than 12 years (see Table 2):
- Hepatitis B vaccine for all exposed patients; HBIG if indicated
- Call ID and/or CPT to determine need for prophylaxis against STIs and pregnancy

Recommended prophylaxis for patients 12 years or older (see Table 2):
- Plan B for emergency contraception
- Antibiotics for GC/CT/trichomonas
- Hepatitis B vaccine for all exposed patients; HBIG if indicated

>72 hours

No HIV prophylaxis indicated; if assailant or type of contact high risk for HIV, discuss with ID – ARVs may be recommended

≤72 hours

Consider the risks and benefits of ARVs for HIV prophylaxis (see Table 4). If patient desires ARVs, give first dose in ED AND give starter pack AND prescription to take home

Follow Up:

Combined Child Protection Team/Infectious Disease Clinic held on Thursday mornings at 8:30am
- If ARVs are started for HIV prophylaxis, appointment should be made on the Thursday following initial visit
- Routine appointment for all other sexual assault patients (for injury healing, mental health resources, STI testing) should be made within 1-2 weeks
- PCP follow up for coordination of care, laboratory testing, hepatitis B vaccines, mental health support
- Laboratory tests are indicated at 6 weeks, 3 months, and 6 months after exposure (see Table 5)
- Additional hepatitis B vaccines are indicated if patient previously received <3 doses and/or 6 week titer is below protective level

Inclusion criteria:
- Patient reports sexual assault OR
- Patient’s parent/caregiver reports concern for sexual assault
ALGORITHM 2. Needle Stick or Other Bodily Fluid Exposure

Needle Stick or Other Blood/Bodily Fluid Exposure

Assess risk of exposure:
- Has a sharp object contaminated with blood/bodily fluid punctured the skin, AND/OR
- Has blood/bodily fluid made contact with a mucosal surface?

Inclusion criteria:
- Needle sticks/injuries penetrating skin AND/OR
- Mucosal exposure to blood or bodily fluid (e.g., bites or ingestion)

Exclusion criteria:
- Injuries in which skin was not broken AND blood/bodily fluids did not contact mucous membranes
- Occupational exposures

Obtain labs (See Table 1):
- Hepatitis B antiGEN
- Hepatitis C antiBODY
- HIV 1 and 2 antiBODY screen
- If starting antiretrovirals (ARVs) for HIV (see below), order CBC and CMP as baseline labs

Recommended prophylaxis (See Table 2):
- Hepatitis B vaccine for all exposed patients; HBIG if indicated
- Tetanus vaccine if >5 years since last immunization; TIG if indicated

How long since exposure occurred?
- >72 hours
- ≤72 hours

No HIV prophylaxis indicated; if source of bodily fluid or type of contact high risk for HIV, discuss with ID – ARVs may be recommended

Consider the risks and benefits of ARVs for HIV prophylaxis (See Table 4). If patient desires ARVs, give first dose in ED AND give starter pack AND prescription to take home

Follow Up:
- If ARVs are started for HIV prophylaxis, schedule appointment with Infectious Disease Clinic within 7 days
- PCP follow up for coordination of care, laboratory testing, and hepatitis B vaccines
  - Laboratory tests are indicated at 6 weeks, 3 months, and 6 months after exposure (see Table 5)
  - Additional hepatitis B vaccines are indicated if patient previously received <3 doses and/or 6 week titer is below protective level
TABLE OF CONTENTS

Algorithm 1. Sexual Assault
Algorithm 2. Needle Stick or Other Blood or Bodily Fluid Exposure
Target Population
Background | Definitions
Initial Evaluation – Sexual Assault
Initial Evaluation – Needle Sticks and Other Exposures
Clinical Management
  Laboratory Studies
  Prophylaxis
  HIV Post-Exposure Prophylaxis
Risk of Transmission
Discharge Planning Checklist
Follow-Up Request Form
Patient | Caregiver Education
References
Clinical Improvement Team

TARGET POPULATION: SEXUAL ASSAULT

Inclusion Criteria
  • Pediatric patients reporting sexual assault—defined as any forced or coerced sexual behavior that occurs without consent, AND/OR
  • Pediatric patients whose parents report concern for sexual assault

Exclusion Criteria
  • Severe physical trauma necessitating emergent operation or repair (Must address trauma first, proceed with workup and prophylaxis once stable. Alert CPT and/or ID to pending need for workup and prophylaxis).

TARGET POPULATION: NEEDLE STICK INJURY/OTHER BLOOD OR BODILY FLUID EXPOSURE

Inclusion Criteria
  • Needle sticks that penetrate the skin, due to discarded needles found in a community setting, AND/OR
  • Other injuries that penetrate that skin, due to any sharp object contaminated with blood or bodily fluids, AND/OR
  • Mucosal exposure to blood or bodily fluid, such as a bite injury, or ingestion of any material contaminated with blood or body fluid

Exclusion Criteria
  • Any injury in which skin was not broken AND blood/bodily fluids did not contact mucous membranes
  • Occupational needle sticks or other injuries or exposures that occur in a workplace setting
BACKGROUND | DEFINITIONS

These clinical care recommendations are designed to help medical providers identify, screen, and treat children at-risk of transmission of infectious agents from blood or bodily fluid exposure in the community (including community needle sticks and sexual exposures).

Definitions
ARV: Antiretroviral drugs
CPT: Child Protection Team
HIV: Human Immunodeficiency Virus
ID: Infectious Diseases
PEP: Post-Exposure Prophylaxis
STI: Sexually Transmitted Infection

INITIAL EVALUATION: SEXUAL ASSAULT

Prior to evaluation of unconscious, intoxicated, or altered patients, consult with CPT.

History
- Details of exposure
  - Type of sexual contact
  - Mucosal surface(s) involved
- Patient factors
  - Pubertal status
  - Vaccination status for hepatitis B
- Assailant risk factors
  - Is the assailant known to be infected with HIV, hepatitis B, or hepatitis C?
  - Does the assailant agree to be tested for HIV, hepatitis B, or hepatitis C?

Physical Exam
- Perform a comprehensive physical exam, noting any injuries that could increase the risk of exposure
- Exam should be performed by a trained provider

INITIAL EVALUATION: NEEDLE STICKS AND OTHER EXPOSURES

History
- Details of exposure
  - In what setting was the contaminated object or material found?
  - If needle stick, was blood visible in the syringe? Was the sharp hollow bore or solid?
- Patient factors
  - Vaccination status for tetanus
  - Vaccination status for hepatitis B
- If the source of blood/body fluid is known:
  - Is the source known to be infected with HIV, hepatitis B, or hepatitis C?
  - Does the source agree to be tested for HIV, hepatitis B, or hepatitis C?
If the source of blood/body fluid is unknown:
  o Blood from discarded needles should NOT be tested for viral infections.

Physical Exam
  • Perform a comprehensive physical exam, noting any injuries
  • Document the location and severity of any wounds that penetrated skin.

CLINICAL MANAGEMENT

Laboratory Studies

Labs indicated for: Patients with a blood or bodily fluid exposure of ANY TYPE, including sexual assault
  • Hepatitis B AntiGEN – to rule out infection prior to current exposure. Hepatitis B antiBODY is not indicated, as Hepatitis B vaccination is recommended for all exposed patients, regardless of antibody titers
  • Hepatitis C AntiBODY – to rule out infection prior to current exposure
  • HIV 1 and 2 AntiBODY screen – to rule out infection prior to current exposure

Labs indicated for: Patients with known or suspected oral, vaginal, penile, or anal sexual contact
  • Gonorrhea/Chlamydia (GC/CT Urine PCR) – culture was previously gold standard, but PCR is sufficiently sensitive to make a diagnosis. Ensure that patient does not clean their genitals prior to collecting urine sample.
  • RPR – screening test for syphilis
  • Urine Pregnancy Test – to determine whether patient was already pregnant at time of suspected assault, as it would be too early to diagnose new pregnancy
  • Trichomonas Urine PCR – should be sent in place of vaginal pathogen screen

Labs indicated for: Patients who will be starting ARVs for HIV post-exposure prophylaxis
  • Complete Blood Count (CBC) with differential – to provide a baseline; if patient is severely neutropenic, anemic, or thrombocytopenic, call ID.
  • Comprehensive Metabolic Panel (CMP) – to provide a baseline; if renal function is abnormal or liver enzymes are elevated, call ID.

TABLE 1: Recommended Immediate Testing after Exposure

<table>
<thead>
<tr>
<th>Source* (If available)</th>
<th>All At-Risk Exposures</th>
<th>ADD IF Sexual Exposure</th>
<th>ADD IF Starting HIV PEP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hep B Surface AntiGEN</td>
<td>Hep C Ab</td>
<td>HIV 1 and 2 Ab screen</td>
</tr>
<tr>
<td></td>
<td>HIV RNA PCR</td>
<td>Chemistry Hold serum + plasma</td>
<td>Urine GC/CT PCR*</td>
</tr>
<tr>
<td>Exposed Patient</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

* Performance characteristics of the urine GC/CT PCR have not been established for children 13 years of age and younger.
# “Source” is defined as the person whose blood or bodily fluids contacted the patient. In the case of sexual assault, “source” refers to the assailant. In the case of a needle stick, blood from a syringe should never be tested for infections.
Prophylaxis

Prophylaxis for patients with a blood or bodily fluid exposure of ANY TYPE, including sexual assault:

- HIV – consider PEP after discussion of risks/benefits (see pages 8-10)
- Hepatitis B – give vaccine to all exposed patients. Give Hep B Immune Globulin (HBIG) only if the exposed patient is unvaccinated, has received <3 doses of vaccine, or vaccination status is unknown, AND source is KNOWN TO BE INFECTED with hepatitis B.1,2
- Hepatitis C – no prophylaxis is available.
- Tetanus – vaccine is indicated for needle stick or wound, if most recent tetanus vaccine was >5 years ago. Give Tetanus Immune Globulin (TIG) only if the exposed patient is unvaccinated, has received <3 doses of vaccine, or vaccination status is unknown.3

Prophylaxis against STIs and pregnancy for post-pubertal children (≥ 12 years old) with known or suspected sexual exposure:

- Gonorrhea – all patients ≥ 12 years old with sexual exposure (do not await results of PCR testing)
  - Weight < 45 kg - Ceftriaxone IV/IM 125 mg once
  - Weight > 45 kg - Ceftriaxone IV/IM 250 mg once
  - If renal insufficiency, please contact ID for alternative
- Chlamydia – all patients ≥ 12 years old with sexual exposure (do not await results of PCR testing)
  - Weight < 50 kg - Azithromycin 20 mg/kg PO once
  - Weight > 50 kg - Azithromycin 1000 mg PO once
- Trichomonas – patients ≥ 12 years old and ≥ 45 kg with positive trichomonas PCR. Note that metronidazole can cause nausea and vomiting; recommend pre-medicating with ondansetron. Recent consumption of alcohol greatly increases the likelihood of nausea and vomiting.
  - Metronidazole 2000 mg PO once
- Pregnancy – female patients with negative pregnancy test, <120 hours since sexual contact
  - Ulipristal (Ella®) 30 mg PO once

Prophylaxis against STIs and pregnancy for pre-pubertal children (< 12 years old) with known or suspected sexual exposure:

- Call ID and/or CPT for all sexual assaults in patients less than 12 years of age to determine the need for STI and/or pregnancy prophylaxis.
- If prophylaxis is not administered after discussion with ID and/or CPT, perform all screening labs and PCP should follow up on these labs and treat if necessary. Labs can be repeated at 6 weeks post exposure or sooner if symptomatic.
### TABLE 2: Recommended Prophylaxis for Exposed Patients

<table>
<thead>
<tr>
<th>Condition</th>
<th>Population Indicated</th>
<th>Prophylaxis</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV</td>
<td>Patient/parent decision after discussion of risks/benefits (see pp. 8-10)</td>
<td>HIV PEP regimen PO x4 weeks</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>All exposed patients, even if fully vaccinated</td>
<td>Hep B vaccine</td>
</tr>
<tr>
<td></td>
<td>Patients who are unvaccinated against Hep B, received &lt;3 doses of Hep B vaccine, or vaccination status unknown</td>
<td>Source is KNOWN TO BE INFECTED with Hep B Hep B vaccine PLUS Hep B Immune Globulin (HBIG) 0.06 mL/kg IM</td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Tetanus</td>
<td>Needlestick/Wounds: more than 5 years since most recent tetanus vaccine</td>
<td>Tetanus vaccine only</td>
</tr>
<tr>
<td></td>
<td>Needlestick/Wounds: unvaccinated or &lt;3 doses tetanus vaccine</td>
<td>Tetanus vaccine PLUS Tetanus Immune Globulin (TIG) 250 Units IM</td>
</tr>
<tr>
<td>Gonorrhea*</td>
<td>Sexual Exposure, weight less than 45 kg</td>
<td>CefTRIAXone IV/IM 125 mg once</td>
</tr>
<tr>
<td></td>
<td>Sexual Exposure, weight greater than 45 kg</td>
<td>CefTRIAXone IV/IM 250 mg once</td>
</tr>
<tr>
<td>Chlamydia*</td>
<td>Sexual Exposure, weight less than 50 kg</td>
<td>Azithromycin PO 20 mg/kg once</td>
</tr>
<tr>
<td></td>
<td>Sexual Exposure, weight greater than 50 kg</td>
<td>Azithromycin PO 1000 mg once</td>
</tr>
<tr>
<td>Trichomonas*</td>
<td>Sexual Exposure, positive trichomonas PCR, weight greater than 45 kg</td>
<td>Metronidazole PO 2000 mg once</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>Sexual Exposure (within 120 hours), negative pregnancy test, patient choice</td>
<td>Ulipristal (Ella®) PO 30 mg once</td>
</tr>
</tbody>
</table>

* For patients under 12 years of age, call ID and/or CPT to determine the need for prophylaxis.

### HIV Post-Exposure Prophylaxis (PEP)

The risk of HIV transmission varies greatly depending on the particular exposure. Given that each exposure is unique in its risk profile, a discussion of the risks of transmission, potential benefits of PEP, and potential complications of PEP with the patient/parents is recommended using the information provided below. Please call the on-call infectious diseases provider for help with PEP recommendations.

#### Potential Benefits of HIV Post-Exposure Prophylaxis

The potential benefit of HIV PEP depends on the efficacy of the regimen, timing of PEP initiation after exposure, and adherence to the entire regimen.

1. **Efficacy of Regimen:** PEP using single-drug therapy following occupational exposure decreases transmission by 81%\(^1\). Experts now recommend the use of a multi-drug regimen with more potent antiretroviral agents, which is likely to increase this efficacy.

2. **Timing of Exposure:** PEP is most effective when begun as soon as possible after exposure and becomes less effective as time from exposure increases. PEP is less likely to be effective 72 hours after exposure, but the interval after which no benefit is gained is unknown\(^1\). If >72 hours have passed since exposure to a source whose HIV status is unknown, PEP is not recommended; however, testing per Table 1 should still be conducted. If >72 hours have passed since exposure to a source who is known to be HIV infected, please contact ID for recommendations on PEP.
3. **Adherence to PEP:** The efficacy of PEP depends upon adherence to the entire 28-day course of medication. The most common reason for PEP discontinuation is side effects. Although side effects of PEP regimens are common, they are rarely severe or serious (see Table 3 for regimen-specific side effects). The side effect profile of newer antiretrovirals is improved compared with older drugs.

**PEP Drug Regimens**

All regimens are FOUR WEEKS in duration. Prescribe 7 days of ondansetron (Zofran®) with every PEP regimen to ensure tolerability.

A. **12 years or older and weight at least 40 kg:** Prescribe **both of** the medications listed below:

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truvada® (tenofovir 300 mg/ emtricitabine 200 mg; TDF/FTC)</td>
<td>1 tablet PO once daily</td>
</tr>
<tr>
<td>Raltegravir 400 mg tablet (RAL)*</td>
<td>1 tablet PO TWICE daily</td>
</tr>
</tbody>
</table>

*These medications should be given with a full meal. Absorption is impaired by simultaneous administration of medications that contain polyvalent cations, such as antacids, laxatives, or multivitamins, UNLESS they are taken with food.

B. **Younger than 12 years and/or weight less than 40 kg:** Prescribe **all three** medications listed below:

1. **Can swallow pills:**

<table>
<thead>
<tr>
<th>Medication</th>
<th>Strength</th>
<th>Weight</th>
<th>AM dose</th>
<th>PM dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamivudine (3TC)</td>
<td>150 mg tablet</td>
<td>14-20 kg</td>
<td>75 mg</td>
<td>75 mg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21-25 kg</td>
<td>75 mg</td>
<td>150 mg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>≥25 kg</td>
<td>150 mg</td>
<td>150 mg</td>
</tr>
<tr>
<td>Zidovudine (AZT, ZDV)</td>
<td>100 mg capsule</td>
<td>21-30 kg</td>
<td>200 mg</td>
<td>200 mg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>≥30 kg</td>
<td>300 mg</td>
<td>300 mg</td>
</tr>
<tr>
<td>Raltegravir (RAL)*</td>
<td>100 mg chew tab</td>
<td>14-19 kg</td>
<td>100 mg</td>
<td>100 mg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20-27 kg</td>
<td>150 mg</td>
<td>150 mg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>28-39 kg</td>
<td>200 mg</td>
<td>200 mg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>≥40 kg</td>
<td>300 mg</td>
<td>300 mg</td>
</tr>
</tbody>
</table>

*These medications should be given with a full meal. Absorption is impaired by simultaneous administration of medications that contain polyvalent cations, such as antacids, laxatives, or multivitamins, UNLESS they are taken with food.

2. **Cannot swallow pills:**

<table>
<thead>
<tr>
<th>Medication</th>
<th>Strength</th>
<th>Weight</th>
<th>Dose (given BID)</th>
<th>Max dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamivudine (3TC)</td>
<td>10 mg/ml liquid</td>
<td>≤40 kg</td>
<td>4 mg/kg/dose</td>
<td>150 mg/dose</td>
</tr>
<tr>
<td>Zidovudine (AZT, ZDV)</td>
<td>10 mg/ml liquid</td>
<td>4-8 kg</td>
<td>12 mg/kg/dose</td>
<td>300 mg/dose</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9-29 kg</td>
<td>9mg/kg/dose</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>≥30 kg</td>
<td>300 mg</td>
<td></td>
</tr>
<tr>
<td>Raltegravir (RAL)*</td>
<td>100 mg chew tab dissolved in 5 mL water#</td>
<td>3-3.9 kg</td>
<td>20 mg (1 ml)</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4-5.9 kg</td>
<td>30 mg (1.5 ml)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6-7.9 kg</td>
<td>40 mg (2 ml)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>8-10.9 kg</td>
<td>60 mg (3 ml)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>11-13.9 kg</td>
<td>80 mg (4 ml)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>14-19.9 kg</td>
<td>100 mg (5 ml)</td>
<td></td>
</tr>
</tbody>
</table>

*These medications should be given with a full meal. Absorption is impaired by simultaneous administration of medications that contain polyvalent cations, such as antacids, laxatives, or multivitamins, UNLESS they are taken with food.

# RAL chew tabs dissolve in water after ~15 minutes. The tablet should be fully dissolved before administration.
TABLE 3. Common Side Effects Experienced with the Recommended PEP Regimens

<table>
<thead>
<tr>
<th>Intended patients</th>
<th>PEP regimen</th>
<th>Adverse Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥12 years and ≥40 kg</td>
<td>Truvada® / raltegravir</td>
<td>Common but mild: fatigue, dizziness, insomnia, headache, nausea, diarrhea, liver enzyme elevation. Rare but severe: muscle pain due to myositis.</td>
</tr>
<tr>
<td>&lt;12 years and/or &lt;40 kg</td>
<td>Lamivudine / zidovudine / raltegravir</td>
<td>Common but mild: fatigue, dizziness, insomnia, headache, nausea, diarrhea, anemia, neutropenia, liver enzyme elevation, rash. Rare but severe: muscle pain due to myositis.</td>
</tr>
</tbody>
</table>

**RISK OF TRANSMISSION**

Risk of transmission of HIV or hepatitis B or C is based on the probability that the source was infected, the viral load of an infected source, and the type of exposure.

1. Probability source was infected:
   a. HIV: As of 2015, the seroprevalence of HIV in Colorado is 0.24% (239.2 HIV-infected persons per 100,000 people)\(^4\). Certain risk groups, including sexual assailants, injecting drug users, and men who have sex with men have a higher seroprevalence. Seroprevalence also varies by county, with higher rates in Denver metro and El Paso counties\(^4\).
   b. Hepatitis B: The Colorado Dept. of Public Health and Environment estimates that there are currently about 16,370 (range of 10,913 to 21,826) people in Colorado living with chronic HBV. This estimate is based on the U.S. Census 2015 Colorado population estimated population and a national published HBV prevalence rate estimate of 0.3% (range of 0.2%-0.4%)\(^4\).
   c. Hepatitis C: The Colorado Dept. of Public Health and Environment estimates that there are currently about 70,935 (range of 54,566 to 109,131) people in Colorado living with chronic, unresolved HCV. This estimate is based on the U.S. Census 2015 Colorado population estimated population and a national published HCV prevalence rate estimate of 1.3% (range of 1.0% to 2.0)%\(^4\).

2. Risk of HIV Transmission Based on Type of Exposure\(^1\) – See Table 4 on the next page.
### TABLE 4. Risk of HIV Transmission Based on Exposure Type

<table>
<thead>
<tr>
<th>Exposure Type</th>
<th>Transmission Risk per Exposure to a Known HIV Positive Source</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exposure to Contaminated Sharp</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidental needle stick</td>
<td>0.23% (1 per 435)</td>
<td>• Discarded needles are low-risk exposures, as HIV is intolerant to environmental conditions. There has never been a reported case of HIV transmission from a discarded needle, as of 2016.</td>
</tr>
<tr>
<td>Needle-sharing during injection drug use</td>
<td>0.63% (1 per 159)</td>
<td>• Risk of transmission from a needle stick depends on the bore of the needle and depth of penetration.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Discarded small bore needles (i.e. insulin syringes) or solid sharps (i.e., scalpels) with shallow penetration from a low risk population (i.e., diabetics) would be of very low risk.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Newly discarded hollow bore needles with visible blood from areas frequented by high HIV seroprevalent populations (i.e. injecting drug users) would be of higher risk.</td>
</tr>
<tr>
<td><strong>Sexual Exposures</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receptive anal intercourse</td>
<td>1.38% (1 per 72)</td>
<td>• Risk of HIV transmission due to sexual assault or abuse associated with trauma, bleeding, and tissue injury is significantly higher than that of consensual sexual contact.</td>
</tr>
<tr>
<td>Receptive vaginal intercourse</td>
<td>0.08% (1 per 1,250)</td>
<td>• Although oral sex with intact mucosa is a low risk transmission event, the presence of oral sores or mucosal injuries increases the risk of transmission.</td>
</tr>
<tr>
<td>Insertive anal intercourse</td>
<td>0.11% (1 per 909)</td>
<td>• Most experts would recommend PEP in cases of sexual assault or abuse, or sexual contact with a known HIV-positive source.</td>
</tr>
<tr>
<td>Insertive vaginal intercourse</td>
<td>0.04% (1 per 2,500)</td>
<td></td>
</tr>
<tr>
<td>Oral sex with ejaculation</td>
<td>Low risk</td>
<td></td>
</tr>
<tr>
<td><strong>Mucous Membrane Exposures</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral exposure to blood</td>
<td>Negligible</td>
<td>• Biting: HIV transmission from bites is extremely rare. A bite without a break in the skin is not considered an exposure. A bite involving a high-risk source with breaks in the skin and blood exposure increases transmission risk.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Kissing/Mouth to Mouth Resuscitation: Should not be considered an exposure without mucosal damage or blood exposure.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Saliva contaminated with blood poses a substantial exposure risk. HIV transmission by this route has been reported.</td>
</tr>
<tr>
<td><strong>Non-intact Skin Exposures</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Rare cases of HIV transmission after non-intact skin exposure to infected blood have been documented, but the risk has not been quantified.</td>
</tr>
</tbody>
</table>
DISCHARGE PLANNING CHECKLIST

LABS

[ ] Obtain proper laboratory studies (see Table 1):

<table>
<thead>
<tr>
<th>All Exposures</th>
<th>Sexual Exposure</th>
<th>Starting HIV PEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hep B Surface AntiGEN</td>
<td>GC/CT PCR</td>
<td>Hep B Surface AntiGEN</td>
</tr>
<tr>
<td>Hep C Antibody</td>
<td>RPR for Syphilis</td>
<td>HIV 1 and 2 Antibody Screen</td>
</tr>
<tr>
<td>HIV 1 and 2 Antibody Screen</td>
<td>Pregnancy Test</td>
<td>Trichomonas PCR</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>All Exposures</th>
<th>Sexual Exposure</th>
<th>Starting HIV PEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hep B Surface AntiGEN</td>
<td>GC/CT PCR</td>
<td>Hep B Surface AntiGEN</td>
</tr>
<tr>
<td>Hep C Antibody</td>
<td>RPR for Syphilis</td>
<td>HIV 1 and 2 Antibody Screen</td>
</tr>
<tr>
<td>HIV 1 and 2 Antibody Screen</td>
<td>Pregnancy Test</td>
<td>Trichomonas PCR</td>
</tr>
</tbody>
</table>

PROPHYLAXIS

[ ] Provide prophylaxis for Hepatitis B, tetanus, GC/CT, trichomonas, and/or pregnancy as indicated in Table 2.

[ ] Discuss risks/benefits of HIV PEP (pp. 8-10). If starting PEP:

[ ] Give FIRST DOSE of ARVs in the Emergency Department with ondansetron (Zofran®) 4mg PO once.

[ ] Call inpatient pharmacy to obtain PEP STARTER PACK (Free 7-day supply of ARVs dispensed from Children’s Hospital Colorado pharmacy, intended to bridge patient until follow-up in ID/CPT clinic.) Patient should LEAVE THE ED WITH STARTER PACK in hand.

[ ] Write a 7-day PRESCRIPTION FOR ONDANSETRON (Zofran®).

[ ] Write a 28-day PRESCRIPTION FOR ARVs. Instruct patient NOT TO FILL PRESCRIPTION unless directed by ID or CPT. Walgreens within CHCO is the preferred pharmacy for ARV prescriptions.

FOLLOW-UP

[ ] Schedule follow up in ID and/or CPT clinics via one of the following:

1) EPIC in-basket message (link in discharge SmartSet; preferred method)
2) Fax the PEP Follow-Up Request Form to 720-777-7295 (see attached)

Victims of sexual assault on HIV PEP should follow up THIS THURSDAY at 8:30am in combined ID/CPT clinic. Victims of sexual assault NOT on HIV PEP should follow up within 2 weeks in CPT clinic. Victims of needle sticks or other exposures on HIV PEP should follow up within 7 days in ID clinic. (If not on HIV PEP, these patients should follow up with PCP only; see guidance below.)

Victims of sexual assault on HIV PEP should follow up THIS THURSDAY at 8:30am in combined ID/CPT clinic. Victims of sexual assault NOT on HIV PEP should follow up within 2 weeks in CPT clinic. Victims of needle sticks or other exposures on HIV PEP should follow up within 7 days in ID clinic. (If not on HIV PEP, these patients should follow up with PCP only; see guidance below.)

[ ] Notify Social Work of all cases of confirmed or suspected sexual assault.

[ ] Contact Information: Confirm preferred patient contact information, including confidential contact number if adolescent sexual assault. List both in Demographics section of chart and on PEP Follow-Up Request Form, if using.

[ ] Give copy of PATIENT/PARENT EXPOSURE HANDOUT.

[ ] PCP Follow-Up is important for coordination of care, follow-up laboratory testing, vaccines, and mental health support. Follow-up tasks include labs as per Table 5, and vaccines as follows:

- HPV vaccines should be administered according to the routine 3-dose series.
- Hepatitis B vaccines may be indicated to complete the 3-dose series (see CDC catch-up immunization schedule). Indications for additional Hepatitis B vaccines:
  - Patient determined to be unvaccinated/undervaccinated against hepatitis B prior to the exposure
  - Hepatitis B surface antibody at 6 weeks is below the protective level

TABLE 5: Recommended Follow-Up Labs

<table>
<thead>
<tr>
<th>ALL EXPOSURES</th>
<th>SEXUAL EXPOSURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hep B Surface AntiGEN</td>
<td>GC/CT PCR</td>
</tr>
<tr>
<td>Hep B Surface AntiBODY</td>
<td>RPR</td>
</tr>
<tr>
<td>Hep C Abaw</td>
<td>Pregnancy Test</td>
</tr>
<tr>
<td>HIV 1 and 2 Ab screen</td>
<td></td>
</tr>
<tr>
<td>6 Weeks</td>
<td>X</td>
</tr>
<tr>
<td>3 Months</td>
<td>X</td>
</tr>
<tr>
<td>6 Months</td>
<td>X</td>
</tr>
</tbody>
</table>

* Only if did NOT receive prophylaxis against GC/CT during initial visit.
# Only if did NOT receive emergency contraception during initial visit.
$ Only if 6 week Hep B Surface Antibody is undetectable.
COMMUNITY (NON-OCCUPATIONAL) BLOOD AND/OR BODILY FLUID EXPOSURE

Post-Exposure Prophylaxis Clinic Follow-Up Request:

FAX TO: 720-777-7295

This form required ONLY if ID or CPT teams were NOT notified by EPIC in-basket message

Patient Name (Last, First): __________________________________________
Date of Birth: ____________ MR# ____________________________ Patient Weight: ______
Patient Address: ______________________________________________________
Phone #: __________________________ (H) __________________________ (C)
Preferred Confidential Phone # (if adolescent sexual exposure): __________________________
Insurance: __________________________ Other ID #: __________________________
Primary Care Physician: __________________________ PCP Phone Number: __________________________
Exposure Date/Time: __________________________
Brief Description of Exposure: __________________________________________

HIV PEP:

PEP started? [ ] yes [ ] no
If yes, regimen prescribed: __________________________ __________________________
First Dose Given in ED [ ] yes [ ] no
Starter Pack Given [ ] yes [ ] no
28-Day Prescription Given [ ] yes [ ] no

[ ] CBC/diff [ ] LFTs [ ] BUN/Cr

<table>
<thead>
<tr>
<th>WBC</th>
<th>AST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hct</td>
<td>ALT</td>
</tr>
<tr>
<td>Plts</td>
<td>T bili</td>
</tr>
</tbody>
</table>

Other Lab Work/Prophylaxis:

[ ] HIV Antibody [ ] positive [ ] negative [ ] pending
[ ] STD screen sent (sexual exposures)
   [ ] RPR [ ] Chlamydia [ ] Gonorrhea [ ] Trichomonas
   [ ] Prophylaxis given: __________________________ __________________________
   [ ] CBC/diff [ ] LFTs [ ] BUN/Cr

[ ] Pregnancy Screen (sexual exposures) [ ] positive [ ] negative
   [ ] Emergency Contraception given [ ] yes [ ] no

[ ] Hepatitis Screen
   Hep B AntiGEN [ ] positive [ ] negative [ ] pending Hep
   C AntiBODY [ ] positive [ ] negative [ ] pending Hepatitis B
   Vaccine given [ ] yes [ ] no
   If SOURCE is KNOWN TO BE Hepatitis B positive:
   Hepatitis B Immune Globulin given [ ] yes [ ] no

[ ] Tetanus Vaccine [ ] up-to-date [ ] vaccine given [ ] TIG given

Treating Provider Name: __________________________ Pager #: __________________________
Date: __________________________ Time: __________________________
PATIENT | CAREGIVER EDUCATION

- Sexual Assault and Possible Exposure to Disease: For Teen
  - English
  - Spanish
- Sexual Assault and Possible Exposure to Disease: For Parent of Child
  - English
  - Spanish
- Needle Sticks and Other Exposure to Blood
  - English
  - Spanish
REFERENCES


CLINICAL IMPROVEMENT TEAM MEMBERS

Christiana Smith, MD | Pediatric Infectious Diseases
Betsy McFarland, MD | Pediatric Infectious Diseases
Heather Heizer, PA | Pediatric Infectious Diseases
Antonia Chiesa, MD | Child Protection Team
Denise Abdoo, PhD, NP | Child Protection Team
Bernadette Johnson, MD | Emergency Medicine
Jessica Kraynik, MD | Emergency Medicine
Jason Child, PharmD | Clinical Pharmacist, Pediatric Infectious Diseases
Sarah Nickels, PhD | Evidence Based Practice Project Manager
Elise Rolison, RRT-NPS | Project Manager

APPROVED BY

Clinical Pathways and Measures Committee – April 11, 2017
Antimicrobial Stewardship – March 2017
Pharmacy & Therapeutics Committee – May 4, 2017, medication change approved on November 2, 2017

<table>
<thead>
<tr>
<th>MANUAL/DEPARTMENT</th>
<th>Clinical Care Guidelines/Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORIGINATION DATE</td>
<td>June 23, 2014</td>
</tr>
<tr>
<td>LAST DATE OF REVIEW OR REVISION</td>
<td>May 4, 2017</td>
</tr>
</tbody>
</table>

APPROVED BY

Medical Director, Clinical Effectiveness

REVIEW | REVISION SCHEDULE

Scheduled for full review on May 4, 2021.

Clinical pathways are intended for informational purposes only. They are current at the date of publication and are reviewed on a regular basis to align with the best available evidence. Some information and links may not be available to external viewers. External viewers are encouraged to consult other available sources if needed to confirm and supplement the content presented in the clinical pathways. Clinical pathways are not intended to take the place of a physician’s or other health care provider’s advice, and is not intended to diagnose, treat, cure or prevent any disease or other medical condition. The information should not be used in place of a visit, call, consultation or advice of a physician or other health care provider. Furthermore, the information is provided for use solely at your own risk. CHCO accepts no liability for the content, or for the consequences of any actions taken on the basis of the information provided. The information provided to you and the actions taken thereof are provided on an “as is” basis without any warranty of any kind, express or implied, from CHCO. CHCO declares no affiliation, sponsorship, nor any partnerships with any listed organization, or its respective directors, officers, employees, agents, contractors, affiliates, and representatives.
Discrimination is Against the Law. Children's Hospital Colorado complies with applicable Federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex. Children's Hospital Colorado does not exclude people or treat them differently because of race, color, national origin, age, disability, or sex.

Children's Hospital Colorado provides free aids and services to people with disabilities to communicate effectively with us, such as: Qualified sign language interpreters, written information in other formats (large print, audio, accessible electronic formats, other formats). Children's Hospital Colorado provides free language services to people whose primary language is not English, such as: Qualified interpreters, information written in other languages.

If you need these services, contact the Medical Interpreters Department at 720-777-9800.

If you believe that Children's Hospital Colorado has failed to provide these services or discriminated in another way on the basis of race, color, national origin, age, disability, or sex, you can file a grievance with: Corporate Compliance Officer, 13123 E 16th Avenue, B450, Aurora, Colorado 80045, Phone: 720.777.1234, Fax: 720.777.7257, corporate.compliance@childrenscolorado.org. You can file a grievance in person or by mail, fax, or email. If you need help filing a grievance, the Corporate Compliance Officer is available to help you.

You can also file a civil rights complaint with the U.S. Department of Health and Human Services, Office for Civil Rights, electronically through the Office for Civil Rights Complaint Portal, available at [portal.hhs.gov/ocr/portal/lobby.jsf] or by mail or phone at: U.S. Department of Health and Human Services, 200 Independence Avenue, SW Room 509F, HH Building Washington, D.C. 20201 1-800-368-1019, 800-537-7697 (TDD) Complaint forms are available at [www.hhs.gov/ocr/office/index.html].

Children's Hospital Colorado complies with applicable Federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex.

ATENCIÓN si habla español, tiene a su disposición servicios gratuitos de asistencia lingüística. Llame al 1-720-777-9800.

CHÚ Ý. Nếu bạn nói Tiếng Việt, có dịch vụ hỗ trợ ngôn ngữ miễn phí dành cho bạn. Gọi số 1-720-777-9800.


注意: 如果您使用繁體中文，您可以免費獲得語言援助服務。請致電1-720-777-9800。

ВНИМАНИЕ: Если вы говорите на русском языке, то вам доступны бесплатные услуги перевода. Звоните 1-720-777-9800.

МУТАТУ: Ако говорите на македонски језик, можемо да ви обезбедиме безплатни услуги за превод. Можете да нас пресметате на 1-720-777-9800.


注意事項：日本語を話される場合、無料の言語支援をご利用いただけます。1-720-777-9800 まで、電話にてご連絡ください。