

Emergency Department Blood & Body Fluid Exposure Flowsheet

>> Attach patient label of exposed person at the top of this form <<

>> This form will be scanned, to become a part of the exposed person's chart <<

Date and time of exposure:

Unit/Area where exposure occurred:

Role of exposed person at Mount Sinai:

Best phone number for exposed person:

1. If clinics are currently open, the exposed person should **not** be registered to be seen in the ED (unless there is a medical issue other than the exposure, such as an injury that requires evaluation). Refer the exposed person to the appropriate clinic (Employee Health or Jack Martin Clinic, see #12, below). If the wound wasn't thoroughly cleansed at the time it occurred, do this promptly. If mucous membrane exposure (see 2b), flush with water. If ocular exposure in contact lens wearer, remove and dispose of contacts.

2a. Was this a clinically relevant exposure? Non-clinically relevant exposures do not require any management. Exposure to non-bloody saliva, urine, feces, emesis, sweat, and tears is **not** considered clinically relevant and the exposed person does **not** require any management. Brief exposure of infectious body fluids to **intact skin** is not considered clinically relevant.

2b. The following routes of exposure are considered clinically significant: mucous membrane (lips, oral mucosa, conjunctiva, perineum), **non-intact skin** (cuts, sores, psoriasis, etc), prolonged/extensive contact with intact skin, and percutaneous (needle, bite).

2c. The following are considered infectious: Blood, CSF, semen, vaginal secretions, synovial fluid, peritoneal fluid, pleural fluid, pericardial fluid, amniotic fluid, breast milk, concentrated HIV laboratory specimen, or any other visibly bloody fluid or tissue.

3. Verify that the exposed person has notified her/his supervisor, who should contact the nursing administrator who, after hours, functions as the needlestick coordinator. The nursing administrator should see to it that appropriate blood tests are performed on the source patient, and should refer the exposed person to the ED with an *Employee Accident/Injury Report* (the same form that employees use when they are injured on the job - you should fill out the bottom portion as usual) and the *BBFE Worksheet*, which should have been filled out on the unit and provides information on the source patient, including the anonymous testing code. If the exposed person does not have these materials, don't worry about it - your most important role is to determine if the exposed person needs post-exposure prophylaxis and if so, to administer it quickly.

4. Source patient's HIV status? Circle one:

Source known HIV+

Source HIV test pending

Source HIV test negative (refer to part 11b, below)

Unknown source

5. In the unusual event that the exposed person is **known to not be vaccinated** for Hepatitis B or **known**

to be a non-responder to the Hepatitis B vaccine, then **treat with Hepatitis B post-exposure prophylaxis**. This is HBIG and Hepatitis B vaccine, administered at two different sites (doses below). Most exposed persons will not know whether they are vaccinated, or if they are a responder to the Hep B vaccine. In those cases, **do not treat**, and **do not try to figure out if they're vaccinated/a vaccine responder**. This will be clarified at clinic followup, which should occur on the next business day. The exception to this is when the next business day is more than 72 hours away, for example on a holiday weekend. In that case, treat with Hep B PEP.

6. There is no post-exposure prophylaxis for Hepatitis C. The management of Hep C exposure is only to draw baseline blood tests, which are repeated in followup.

7. If the patient is not known to have had tetanus vaccine in the past 10 years, treat with Adacel (Tdap).

8. In your HPI (in Epic), describe the details of the exposure, including what type of fluid the patient was exposed to (see 2c, above) and whether the exposure was a sharp vs. a splash. If a sharps exposure, note whether it was a hollow or solid needle, whether the needle had been in a blood vessel of the source patient, and whether the exposed person was wearing gloves or other relevant personal protective equipment.

9. **Send these SEVEN studies on the exposed person:**

- a. CBC
- b. ER Venous Panel
- c. ER Abdominal Pain Panel
- d. Hepatitis B Surface Antibody (**not** antigen)
- e. Hepatitis C Antibody
- f. HIV 1/2 Antibody
- g. Urine HCG (if woman of reproductive age)

If the exposed person refused blood work, please note this in the Epic chart and write "refused" here:

10. **Testing the source patient.** *Unless the source patient is an ED patient, blood tests on the source patient should be done by the floor nursing supervisor. Contact the nursing administrator on call if there is any question about this. If the source patient is in the ED, contact the ED nursing administrator to arrange for testing of the source patient and completion of an employee accident/injury report.*

11. Treatment

The risk of **HIV** transmission from percutaneous injury is thought to be about 1 in 325. The odds of transmission are increased if the exposure occurred by a large bore hollow needle, a deep puncture, a needle used in the patient's artery or vein, a device visibly contaminated with blood, and a source patient with a high HIV viral load. Mucous membrane exposure is thought to be about 1 in 1100. Post-exposure prophylaxis is thought to reduce the chance of HIV transmission by up to 80%.

The risk of **Hepatitis C** transmission by percutaneous injury is thought to be about 1 in 50. Risk of Hep C transmission by mucous membrane exposure is not known but thought to be less than that of HIV mucous membrane exposure. There is no post-exposure prophylaxis available for Hep C.

The risk of **Hepatitis B** transmission by percutaneous injury is roughly 1 in 3 if the source is positive for the "e" antigen, and 1 in 20 if the source is HBeAg negative. Post-exposure prophylaxis (Hepatitis B

immune globulin, plus HBV vaccine) is thought to provide >75% protection and is thought to be effective if given within 72 hours.

The agents now used for HIV post-exposure prophylaxis are very well tolerated with minimal side effects. Our recommendation is that for most clinically significant exposures, when the source patient is not known to be HIV negative, that HIV PEP be initiated as early as possible, and that the harms and benefits of continuing PEP be more fully explored in clinic followup. The goal is to administer PEP within 90 minutes of exposure. Err on the side of administering PEP, we recommend that ED clinicians NOT wait for results of source HIV testing to initiate the first dose of PEP.

The HIV PEP kit consists of Truvada (Emtricitabine 200 mg/Tenofovir 300mg), Reyataz (Atazanavir) 300 mg, and Norvir (Ritonavir) 100 mg - all are dosed one tab daily. 1-day and 5-day kits are stocked in the ED Pyxis; use the **sexual assault order set (#643)** to find and place the order. If clinic follow up will occur the next day, order the 1-day PEP kit, which should be dispensed and taken immediately. If follow up cannot occur the next day (weekend/holiday), order and dispense the 5-day kit and have the patient take the first dose immediately.

If the exposed person is pregnant, or the source patient is known to be HIV positive on HAART, page ID to discuss the case with them, as there might be a slight risk to the fetus (though the drugs in HIV PEP are approved in pregnancy), and if the source patient has a drug-resistant strain of HIV, a different combination of PEP agents may be indicated. If there is a delay in reaching ID, **administer the standard PEP.**

Please circle all relevant options, below:

HIV prophylaxis recommended

HIV prophylaxis NOT recommended

Hep B immune globulin (HBIG) administered (0.06mL/kg IM)

Hep B vaccine administered (1mL IM)

Tdap (Adacel) booster administered (0.5mL IM)

11b. If the source patient is unable to consent to have rapid HIV testing, this is performed using an anonymous method. If you wish to check the results of the source patient HIV test, follow the instructions below. Again, we recommend that for any clinically significant exposure, the first dose of PEP **not** be delayed for these results. The nursing administrator is instructed to page the ID fellow on call, who will contact the exposed person once the results for the source patient are available. If this doesn't happen, the exposed person can be apprised of source patient results in followup and discontinue PEP if source is negative.

To access anonymous rapid HIV testing results in Epic:

- a. click on the EPIC menu (top left)
- b. in this menu, select **Patient care**
- c. a submenu appears, select **Chart** [not ED Chart]
- d. Enter patient name as follows: **Stick, Needle**
- e. use the **Results Review**
- f. note the anonymous code, which is identified with results, correlated with date & time

* The ED Chart function, though it looks identical to the hospital chart function, accesses different records and cannot display anonymous HIV test results.

* If the source patient consented to testing, or to access previously drawn (non-anonymous) source patient HIV test results in EPIC, use actual source patient name or MRN. Remember that the source patient could have acquired HIV since an old negative test result.

12. Follow Up.

Mount Sinai Employees or volunteers report to **Employee Health Services** the next business day. Monday - Friday, 8am-4pm. (212) 824-7690. 17 East 102nd street, 2nd floor.

Everyone else (including med students) reports to **Jack Martin Clinic** the next business day. Monday-Friday, 8:30am-4:30pm. (212) 241-7968. 17 East 102nd Street, 3rd floor.

13. **Discharge.** Make **2 additional copies** of this form. Upon discharge make sure that the exposed person has the following documents:

- a. A copy of this document, including the PEP patient information sheet.
- b. ED discharge instructions
- c. **Copy** of the Employee Accident/Injury report.

Give copy #2 of this form to the BA to scan into the chart, and put copy #3 of this form **including the original, signed Employee Accident/Injury Report** into the purple folder behind the specimen desk in the main adult ED - this is how the needlestick team is alerted to the exposure, so that they can followup.

HIV PEP (Post-Exposure Prophylaxis) Patient Information Sheet

These are instructions for exposed individuals who have decided to take HIV post-exposure prophylaxis following a blood or body fluid exposure.

You have either taken a single day's worth of medication (if clinic followup is available the next day) or you have been given a five day course of medication (if clinic followup is not available the next day). On the next working day following your exposure, you should follow up in clinic for the results of any testing and recommendations for completion of the 4-week course.

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Other options for follow-up include:

* Faculty Practice Associates Infectious Disease
Dr. D. Caplivski (5 E. 98th st.): 212-241-3150 or
Drs. Gumprecht, Hammer, and Neibart (1100 Park Ave.): 212-427-9550

* Adolescent Health Clinic at 312 E, 94th St. (212) 423-3000 [ages 10-22]

* Your personal physician

If you cannot get into a clinic for followup by the end of your course of medication, for whatever reason, return to the Mount Sinai ER or any other emergency room for re-evaluation.

Drug Information:

Truvada® (Emtricitabine 200-mg / Tenofovir 300 mg) One tablet once daily.

You may take this medication with or without food. If the medicine upsets your stomach, try taking it with food. Call your doctor right away if you have any of these side effects: Very weak or tired; unusual (not normal) muscle pain; Trouble breathing; Stomach pain with nausea and vomiting; Feel cold, especially in arms and legs; Dizzy or lightheaded; Fast or irregular heartbeat.

Reyataz® (Atazanavir 300 mg) one tablet once daily.

Norvir® (Ritonavir 100 mg) one tablet once daily.

If you are taking a stomach acid suppressing medication known as a proton pump inhibitor (such as Nexium, Protonix, or Prilosec), take Reyataz and Norvir 12 hours after the dose. If you are taking a stomach acid suppressing medication known as an H2-blocker (such as Pepcid or Zantac), take Reyataz and Norvir at the same time as or at least 10 hours after the H2-blocker. If you are taking other antacid medications, take Reyataz and Norvir 2 hours before or 1 hour after the antacid.

Call your doctor right away if you have any of these side effects: Skin rash; Dark-colored urine or pale stools; Nausea, vomiting, loss of appetite, pain in your abdomen or stomach; Yellowing of your skin or the whites of your eyes; Chest pain or heart palpitations.

If you are having a serious allergic or adverse reaction to these medications, seek immediate medical assistance.

Store these medications at room temperature in the containers provided, away from heat, moisture, and direct light.