

# Needlestick!

Occupational Exposure to Blood and Body Fluids



## Needlestick! Help Files

### Contingency Tables

Below you will find a series of contingency tables which contain the medical logic that the Needlestick! program is based on. The tables work as follows:

Questions are listed in **Blue**

Answers are listed in black

The action is listed in **Green**

Affirmative actions are in **Red**

Non-affirmative actions are in **Bold**

Begin by answering the question in the top left hand corner. Proceed to the next question and follow the logic down a particular column until you reach a suggested action at the bottom of the table.

### 1. Is it a high risk or low risk event?

**Table 1a. HBV Transmission Risk assessment:**

<b>Fluid</b>	HBV, HBV+ lab material, blood, bone marrow, semen, vaginal secretions, CSF, joint fluid, pericardial, peritoneal, pleural, amniotic, any fluid or stool containing visible blood			All other body fluids
<b>Type of event</b>	Percutaneous	MM or non-intact skin		Intact skin
<b>Risk</b>	<b>Yes</b>	<b>Yes</b>		<b>No</b>

**Table 1b. HCV Transmission Risk assessment:**

<b>Fluid</b>	HCV, HCV+ lab material, blood, bone marrow, semen, vaginal secretions, CSF, joint fluid, pericardial, peritoneal, pleural, amniotic, any fluid or stool containing visible blood			All other body fluids	
<b>Type of event</b>	Percutaneous	MM or non-intact skin		Intact skin	
<b>Volume</b>		< 5 cc	> 5 cc		
<b>Duration</b>		< 5 min	> 5 min		
<b>Risk</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>

**1c) HIV Transmission Risk assessment:**

<b>Fluid</b>	HIV+ lab material, blood, bone marrow, semen, vaginal secretions, CSF, joint fluid, pericardial, peritoneal, pleural, amniotic, any fluid or stool containing visible blood			All other body fluids	
<b>Type of event</b>	Percutaneous		MM or non-intact skin		Intact skin
<b>Volume</b>			< 5 cc	> 5 cc	
<b>Duration</b>			< 5 min	> 5 min	
<b>Depth = superficial, surface scratch</b>	Yes	No			

<b>Puncture = not bloody/ not in vein/artery</b>	Yes		No						
<b>Object = large hollow bore needle</b>	Yes	No							
<b>Risk</b>	<b>High</b>	<b>Medium</b>	<b>High</b>	<b>High</b>	<b>Low</b>	<b>Medium</b>	<b>Medium</b>	<b>Not at risk</b>	<b>Not at risk</b>

## 2. Specific risk status of source for different viruses

### 2a. Source Hepatitis B Status

This table determines if the source might be antigenemic (HBsAg +)

Source Hepatitis B risk status:

<b>Sex Worker?</b>	No		Yes
<b>History of IVDA?</b>	No	Yes	
<b>Status</b>	<b>Not at risk</b>	<b>At risk</b>	<b>At risk</b>

## 3. Testing of the source patient (source of the contaminating fluid)

The source can be unknown (a needle in a trash can, or a lab specimen from an unknown source), a known living person, a specimen from a specific known living person, or laboratory material known to contain one of the viruses. The following tables apply to the testing of a known living being. The issue is moot for laboratory specimens for which the viral status is already known. Laboratory specimens, for which the source person cannot be tested should be tested (if possible) when the exposed is not immune to or infected with the virus.

### 3a. Source HBsAg test

<b>Source HBsAg positive</b>	No/Unk						Yes
<b>Exposed ever Anti-HBs positive?</b>	No/Unk						Yes
<b>Exposed infected (HBsAg positive)?</b>	No/Unk					Yes	
<b>Hepatitis B Transmission Risk?*</b>	Yes				No		
<b>Source HBsAg negative in past 30 days?</b>	No/Unk	Yes					
<b>Source IVDA or Sex Worker?</b>		Yes	No/Unk				
<b>Test source for HBsAg?</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

\*see Table 1a above

### 3b Source Anti-HCV testing

<b>Source Anti-HCV positive?</b>	No/Unk						Yes
<b>Exposed Anti-HCV positive?</b>	No/Unk						Yes
<b>Hepatitis C Transmission Risk?*</b>	Yes					No	

Source Anti-HCV negative in past 30 days?	No/Unk	Yes				
Source IVDA or Sex Worker?		Yes	No/Unk			
Test source for Anti-HCV?	Yes	Yes	No	No	No	No

\* See Table 1b above

### 3c) Source Anti-HIV testing

Source Anti-HIV positive?	No/Unk				Yes
Exposed Anti-HIV positive?	No/Unk			Yes	
HIV Transmission Risk? *	Yes		No		
Source Anti-HIV negative in past 30 days?	No/Unk	Yes			
Source IVDA or Sex Worker?		Yes	No/Unk		
Test source for Anti-HIV?	Yes	Yes	No	No	No

\* See Table 1c above

## 4. Tables for determining testing on the exposed (the HCW who was stuck)

### 4a. Exposed Anti-HBS test

Exposed ever Anti-HBs positive?	No/Unk				Yes
Exposed infected (HBsAg positive)?	No/Unk/Yes			Yes	
Hepatitis B Transmission Risk? *	Yes		No		
Source HBsAg negative in past 30 days?	No/Unk	Yes			
Source IVDA or Sex Worker?		Yes	No/Unk		
Test exposed for Anti-HBs?	Yes	Yes	No	No	No

\*see Table 1aabove

### 4b. Exposed Anti-HCV testing

Exposed Anti-HCV positive?	No/Unk				Yes
Hepatitis C Transmission Risk? *	Yes		No		
Source Anti-HCV negative in past 30 days?	No/Unk		Yes		
Source IVDA or Sex Worker?			Yes	No/Unk	
Exposed Anti-HCV negative in past 30 days?	Yes	No/Unk	Yes	No/Unk	
Test exposed for Anti-HCV?	No	Yes	No	Yes	No

\* See Table 1b above

### 4c. Exposed Anti-HIV testing

Exposed Anti-HIV positive?	No/Unk				Yes
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<b>HIV Transmission Risk? *</b>	Yes				No	
<b>Source Anti-HIV negative in past 30 days?</b>	No/Unk		Yes			
<b>Source IVDA or Sex Worker?</b>	Yes			No/Unk		
<b>Exposed Anti-HIV negative in past 30 days?</b>	Yes	No/Unk	Yes	No/Unk		
<b>Test exposed for Anti-HIV?</b>	No	Yes	No	Yes	No	No

\*See Table 1c above

## 5. Treatment of the exposed

5a. Tetanus (dT .5 cc IM) [diphtheria/tetanus] (protocol assumes that none of the wounds would require Hypertet and includes dT .5 cc IM

<b>dT within the past 10 years?</b>	Yes	No
<b>Give dT?</b>	No	Yes

### 5b. HBIG

HBIG 0.06cc/Kg

<b>Hepatitis B Transmission Risk? *</b>	Yes											No			
<b>Exposed ever Anti-HBS positive?</b>	Neg after vax/Unknown											Yes			
<b>Source sample available for testing?</b>	Yes						No								
<b>Source HBSAg</b>	Pos		Unk or (Neg but > 30 days)			Neg in past 30 days									
<b>Source at Risk**</b>			No	Yes		No	Yes	No	Yes						
<b>Neg after vax</b>	No	Yes		No	Yes				No	Yes					
<b>Exposed HBV immunization? ***</b>	No	Yes		No	Yes				No	Yes					
<b>Number of vaccinations</b>			3-5	6											
<b>Give HBIG now?</b>	Yes	Wait+	Yes	Wait+	Yes	Wait+	Yes	No	Wait+	No	Yes	Wait+	Yes	No	No

\* See Table 1a

See Table 2a. If source blood unavailable, use results from unknown source screen

Number of HBV is 1,2,3,>3, or immunized with Unk# of shots

+Wait = Treat as a "No" in the logic [it is for our internal records for future advice]

### 5c. HBV 1 cc IM

Exposed Anti-HBS status?	Unknown								Pos	Negative after vax	
	1		2		>=3	O	Unk #*	Unk **		<6	>=6
Number of HBV shots											
Last HBV < 1 month ago?	Yes	No									
Last HBV < 5 months ago?			Yes	No							
Give HBV?	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No

#\* Had shots, unknown number

\*\* Unknown if had shots

### 5d. Anti-retrovirals

Exposed HIV status	Neg/Unk											Pos				
Risk of HIV transmission? (Table 1c)	Yes											No				
Source of exposure unknown	No								Yes							
Source tested HIV neg w/in 30 days?	No					Yes										
Source IVDA or Sex Worker?						Yes		No								
Source HIV positive?	Yes				Unk or (Neg but > 30 days)											
Transmission risk (from 1c)	Low		Medium		High	Low		Medium or High		Low		Medium or High				
Unknown source & high risk area											No		Yes			
Source with high viral load/clinically ill	Yes	No	Yes	No												
Anti-Retroviral Rx?	2G	2G	3	2	3	2G	2G	2G	2G	No	No	No	2G	No	No	

Anti-retrovirals – 2 = gives 2 drugs      3 = give 3 drugs      2G means 2 drugs optional

**Note:** This is the only section of the program to use 3 color logic. Black indicates not recommended. Green is optional (the box should not be checked). Red, as always means suggested and the accompanying box is checked.

**Note:** One of the pathways on this table is missing. It is when you have a laboratory specimen that has tested negative for HIV. It leads to no treatment, and its own rationales/discharge instructions.

