# Attachment 4(d)

# Adult and Pediatric HIV/AIDS Confidential Case Reports for National HIV/AIDS Surveillance OMB No. 0920-0573

Supplemental Surveillance Activity 3: Enhanced Perinatal Surveillance (EPS) Summary of Form Changes and EPS User Guide Instructions for Data Abstraction Form

# Listing of Changes to EPS Form 5/26/2009

## I. Summary of Changes

- Title of form Enhanced HIV/AIDS Surveillance to Maximally Reduce Perinatal HIV Transmission changed to: Enhanced Perinatal Surveillance (EPS)
- Burden statement will be updated to 60 minutes
- Format of the form was changed to include check boxes and clear delineation of sections
- Removed designation of HARS or M-HARS after specific variables
- Public burden statement moved to end of form from first page
- Addition of list of abbreviations to the last page

## List of abbreviations

AIDS Clinical Trials Group	NRTI	nucleoside reverse transcriptase inhibitor
antiretroviral therapy	NRR	no risk factor reported
enzyme immunoassay	OB-GYN	obstetric-gynecologic or obstetrician-gynecologist
HIV/AIDS Reporting System	PCP	Pneumocystis jirovecii pneumonia [jirovecii is now preferred to carinii;
health maintenance organization		abbreviation is the same]
International Classification of Diseases, Ninth Revision	PI	protease inhibitor
International Classification of Diseases, Tenth Revision	PID	pelvic inflammatory disease
immunofluorescent assay	STAT	immediately (statim)
not documented	WB	Western blot
nonnucleoside reverse transcriptase inhibitor		
	antiretroviral therapy enzyme immunoassay HIV/AIDS Reporting System health maintenance organization International Classification of Diseases, Ninth Revision International Classification of Diseases, Tenth Revision immunofluorescent assay not documented	antiretroviral therapy enzyme immunoassay HIV/AIDS Reporting System health maintenance organization International Classification of Diseases, Ninth Revision International Classification of Diseases, Tenth Revision immunofluorescent assay not documented NRR PCP PCP PCP PCP STAT WB

This report to the Centers for Disease Control and Prevention (CDC) is authorized by law (Sections 304 and 306 of the Public Health Service Act, 42 USC 242b and 242k). Response in this case is voluntary for federal government purposes, but may be mandatory under state and local statutes. Your cooperation is necessary for the understanding and control of HIV/AIDS. Information in CDC's HIV/AIDS surveillance system that would permit identification of any individual on whom a record is maintained is collected with a guarantee that it will be held in confidence, will be used only for the purposes stated in the assurance on file at the local health department, and will not otherwise be disclosed or released without the consent of the individual in accordance with Section 308(d) of the Public Health Service Act (42 USC 242m).

## II. Changes to specific questions (changes indicated in highlighted (yellow) areas)

1. Records abstracted: (REQUIRED <mark>FI</mark>	ELD)
(1=Abstracted, 2 <mark>=Attempted, but record n</mark> e	ot available, 3=Not abstracted, 4=Attempted, will try again)
Prenatal care records	Pediatric medical records (non HIV clinic/provider)
Maternal HIV clinic records	Birth certificate
Labor and delivery records	Death certificate
Pediatric birth records	Health department records
Pediatric HIV medical records	Other, specify
Changed to:	
1. Records abstracted (Required)	
(1 = Abstracted, 2 = Attempted—record	ed not available, $3 = \text{Not abstracted}$ , $4 = \text{Attempted}$ —will try again)
Prenatal care records	Pediatric medical records (non-HIV clinic or provider)
Maternal HIV clinic records	Rirth certificate

Labor and delivery records	Death certificate
Pediatric birth records	Health department records
Pediatric HIV medical records	Other (Specify.)
Description of changes above:	
The word FIELD was removed. 2=Attempted	d, but record not available,
Changed to 2 = Attempted—record not avail	able;
Pediatric medical records (non HIV clinic Changed toPediatric medical records (non	± ,
2. Infant	
Soundex	
Changed to Soundex code	
$\underline{Description\ of\ change\ above} \hbox{:}\ The\ word\ code$	was added
Sex at Birth (HARS)	
Changed to	
Sex at birth	
□ M □ F	
<u>Description of change above</u> : Male and female	e options were added
3. Mother	
Soundex	
Changed to	
Soundex code	
<u>Description of change above:</u> The word code v	was added
4a. If Country is unknown, but Continent of b	irth is known, specify
Changed to	
4a. If mother's country of birth is not specif	
<u>Description of change above:</u> Minor changes i	in wording

6. Mother's Race (Mark all that apply) (M-HARS-modified)  ☐ Hawaiian/Pacific Islander
Changed to
☐ Hawaiian/Other Pacific Islander
Trawarian/Other racine islander
Other Race, specify
Changed to
☐ Other (Specify.)
Description of change above:
Other was added to Pacific Islander
Race was added to Other (Specify.)
8. Mother's HIV risk factor (Mark all that apply) (HARS)  Injection drug user (IDU) Person with hemophilia Heterosexual contact with IDU Heterosexual contact with bisexual male Heterosexual contact with person with hemophilia Heterosexual contact with transfusion recipient with documented HIV Heterosexual contact with transplant recipient with documented HIV Heterosexual contact with male with HIV/AIDS with unknown risk
Transfusion recipient
☐ Transplant recipient (tissue/organ or artificial insemination) ☐ Perinated European (a.g., mother was perinatedly infected)
<ul> <li>Perinatal Exposure (e.g. mother was perinatally infected)</li> <li>Unknown/Other documented risk (discuss with NRR Coordinator within your State)</li> </ul>
If Other, specify
Changed to
8. Mother's HIV risk factor (Mark all that apply.) Heterosexual contact with (cont)
☐ Injection drug use ☐ HIV-infected male, risk factor not specified
Heterosexual contact with   Hemophilia with documented HIV
□ injection drug user □ Receipt of transfusion
□ bisexual male □ Receipt of transplant(tissue/organ or artificial insemination) □ male with hemophilia with documented HIV □ Perinatal exposure (i.e. mother was perinatally infected)
☐ transfusion recipient with documented HIV infection ☐ Unknown
☐ transplant recipient with documented HIV infection ☐ Other documented risk (Discuss with the NRR coordinator in your state.)  If Other, specify
<u>Description of changes above:</u> change in formatting and minor word changes not changing meaning of responses
9. Did mother receive any prenatal care for this pregnancy?  \[ \text{Yes}  \text{No} \left( \text{Go to Q15} \right)  \text{Not Documented } \left( \text{Go to Q15} \right) \]  Changed to:  9. Did mother receive any prenatal care for this pregnancy?

☐ Yes ☐ No (Go to 15.) ☐ Not documented (Go to 15.) ☐ Unknown
<u>Description of changes above</u> : This question added an unknown option
<b>12. Date of last prenatal care visit </b> prior to delivery://(mm/dd/yyyy) Changed to:
12. Date of last prenatal care visit before delivery// (mm/dd/yyyy)
Description of changes above: Prior to changed to before
13. Number of prenatal care visits: (e.g., visits specifically for prenatal care) (99=unk) (HARS) Changed to:
<b>13. Number of prenatal care visits</b> (99 = unknown)
<u>Description of changes above:</u> e.g., visits specifically for prenatal care) was removed from this question
14. In what type of facility was prenatal care primarily delivered? (Mark only one)  □ OB/GYN clinic □ Correctional facility □ ACTG site □ HMO clinic (for prenatal care) □ Private care (OB/GYN, midwife) □ Not Documented Changed to:  14. In what type of facility was prenatal care primarily delivered? (Check only one box.)
□ OB/GYN clinic □ Private care (OB/GYN, midwife) □ Other (Specify.) □ Adult HIV specialty clinic □ Correctional facility □ Not documented
☐ HMO clinic (for prenatal care) ☐ ACTG site ☐ Unknown
<u>Description of changes above</u> : This question added an unknown option
15. Was the mother screened for any of the following during pregnancy?  (Use test done prior to birth but closest to delivery date or at admission for labor & delivery)  Yes Date (mm/dd/yyyy) No Not Documented Record Not Available
Group B Strep
Hepatitis B (HBsAg) $\square$ / $\square$ $\square$
Rubella
Syphilis
Changed to:

(Check test performed before birth, but closest to date of delivery or admission to labor and delivery.)						
		y) No Not document				
Group B strep				_ _ _	_ _ _	
<u>Description of changes above:</u>	This question	added an unknown optic	on			
<b>16. Mother's diagnosis of the</b> See "Instructions for Data Abs		0	gnancy (	or at the tim	e of labor ar	ı <mark>d delivery.</mark>
See Histractions for Data Aus	Yes	Date of Diagnosis (mm/dd/yyyy)	<u>No</u>	Not Doc	RNA	
Bacterial vaginosis		//				
Chlamydia		//				
Genital Herpes		//				
Gonorrhea		//				
Group B Strep		//				
Hepatitis B (HbsAg+)		//				
Hepatitis C		//				
Pelvic Inflammatory Disea	se(PID)	//	_ 🗆			
Syphilis		//				
<b>Trichomonas</b>		//	_ 🗆			
Changed to:						
16. Diagnosis (for the mother delivery	e) of the follow	ving conditions during	this preg	nancy or at	the time of l	abor and
(See Instructions for Data	Abstraction fo	r definitions.)				
Yes	Date of d	O	docume	nted Record	not availab	le <mark>Unknowr</mark>
Bacterial vaginosis		(mm/dd/yyyy) / /				
Chlamydia trachomatis int		//				
Genital herpes		//				<u>_</u>
Group R strep		/				
Group B strep Hepatitis B (HbsAg+)						
Hepatitis C						

<u>Description of</u> Chlamydia Ch	changes nanged to	above: Chlamydia trachomatis i	nfection	n				
Pelvic Inflamn Changed to PID	natory D	isease (PID)						
Trichomonas Changed to Trichomoniasi	S							
This question a	added an	unknown option						
18. Complete	the char	t below for all siblings:						
	DOB /dd/yyyy)	Age yrs:mos as of mm/yy		<u>HIV</u> Status*	State no.		City no.	
Sib 1/		: as of/	′					*HIV Status:
Sib 2/		: as of/	/					[1] Infected
Sib 3/		: as of/						[2] Uninfected [3] Indeter-minate
Sib 4/		: as of/	<u> </u>					[9] Not Documented
Sib 5/		: as of/						
Sib 6/	/	: as of/						
Changed to:								
18. Complete the	chart for	all siblings.						
Date of birt (mm/dd/yyy		Age (yrs: mos as of mm/yyyy)		serostatus see list.)	State No.		City N	o.
//		: as of/						
/		: as of/			<u> </u>			
		: as of/						
		: as of/ : as of/						
		: as of/						
HIV serostatus: 1 = Infected, 2 = Not infected, 3 = Indeterminate, 9 = Not documented U=Unknown								
		· · · · · · · · · · · · · · · · · · ·	- ,					

PID

Syphilis Trichomoniasis

Description of changes above

This que	estion added an unkno	wn option.		
Change	☐ Yes ☐No ( <i>Go to Q2</i> I to: substance use durin	23) □Record Not	the medical or social work Available (Go to Q23)  the medical or social work ble (Go to 20.)  Unknow	records?
Descript	ion of changes above:	This question added	an unknown option.	
Changed	<ul> <li>□ Alcohol</li> <li>□ Amphetamines</li> <li>□ Barbiturates</li> <li>□ Benzodiazepines</li> <li>□ Cocaine</li> <li>□ Crack Cocaine</li> <li>I to:</li> </ul>	<ul> <li>☐ Hallucinoge</li> <li>☐ Heroin</li> <li>☐ Marijuana (</li> <li>THC, cannal</li> <li>☐ Methadone</li> </ul>	☐ Nicotine / T cannabis, Dinoids) ☐ Opiates ☐ Other, speci ☐ Not Docum	tamines  obacco  fy  ented which drug(s)
19a. If y	ves, indicate which su Alcohol	ibstances were used o ☐ Cocaine	during pregnancy. (Check all ☐ Marijuana (cannabis, THC,	that apply.)  • Opiates
	☐ Amphetamines	☐ Crack cocaine	cannabinoids)	☐ Other (Specify.)
	☐ Barbiturates ☐ Benzodiazepines	☐ Hallucinogens☐ Heroin	<ul><li>☐ Methadone</li><li>☐ Methamphetamines</li><li>☐ Nicotine (any tobacco product)</li></ul>	☐ Specific drug(s) not documente
(Mark al Changed	tion of changes above ll that apply) l to all that apply.)			
Changed	ine / Tobacco I to ine (any tobacco prod	uct)		
Changed	Oocumented which drud to fic drug(s) not docum			
19b. If a	□ Yes □ No	were any of the drug  Not Documented ance(s) were injected:	•	

Status changed to serostatus Sib 1-Sib 6 was removed.

Changed to:  19b. If substances used, were any injected?  ☐ Yes ☐ No ☐ Not documented ☐ Unknown	n Specify injected substance(s).
Description of changes above: 19b. If any substances used, were any of the drugs injectanged to 19b. If substances used, were any injected?	ected?
Specify which substance(s) were injected:  Changed to Specify injected substance(s).	
20. Was a toxicology screen done on the mother du	ring pregnancy or at delivery?
☐ Yes, positive, please specify (Check all that	
☐ Alcohol ☐ Hallucinogens	
☐ Amphetamines ☐ Heroin	□ Nicotine / Tobacco
☐ Barbiturates ☐ Marijuana (car	<del>-</del>
☐ Benzodiazepines THC, cannabin	· · · · · · · · · · · · · · · · · · ·
☐ Cocaine ☐ Methadone	□ Not Documented which drug(s)
☐ Yes, negative ☐ No ☐ Not Documented  Changed to:  20. Was a toxicology screen done on the mother (eit ☐ Yes, positive result (Check all that apply.)	ther during pregnancy or at the time of delivery)?
☐ Alcohol ☐ Cocaine	☐ Marijuana (cannabis, THC, ☐ Opiates
☐ Amphetamines ☐ Crack cocaine	cannabinoids)
<ul><li>□ Barbiturates</li><li>□ Hallucinogens</li><li>□ Benzodiazepines</li><li>□ Heroin</li></ul>	☐ Methadone ☐ Methamphetamines ☐ Nicotine (any tobacco product) ☐ Capacitic drug(s) not documented
☐ Yes, negative result ☐ No ☐ Toxicology screen	not documented
Description of changes above:  □ Nicotine / Tobacco Changed to □ Nicotine (any tobacco product) □ Not Documented which drug(s) Changed to	

☐ Specific drug(s) not documen	nted				
☐ Crack cocaine was added to be similar to the other drug questions					
21. Was a toxicology screen do  Yes, positive, please s  Alcohol Amphetamines Barbiturates Benzodiazepines Cocaine		at apply): ens cannabis,	<ul> <li>□ Methamphetami</li> <li>□ Nicotine / Tobac</li> <li>□ Opiates</li> <li>□ Other, specify _</li> <li>□ Not Documented</li> </ul>	<del>cco</del>	
☐ Yes, negative ☐ No ☐ Not Documented Changed to: 21. Was a toxicology screen do ☐ Yes, positive result (Check a		birth?			
☐ Alcohol ☐ Amphetamines ☐ Barbiturates ☐ Benzodiazepines	☐ Cocaine ☐ Crack cocaine ☐ Hallucinogens ☐ Heroin	☐ Marijuana (c cannabino ☐ Methadone ☐ Methamphet ☐ Nicotine (an	pids)	☐ Opiates ☐ Other (Specify.) ☐ Specific drug(s) not documented	
☐ Yes, negative result ☐ 1	No  Toxicology scre	een not documente	ed		
Description of changes above:  ☐ Yes, positive, please specify Changed to ☐ Yes, positive result (Check a ☐ Yes, negative Changed to		y):			
☐ Yes, negative result					
□ Not Documented Changed to □ Toxicology screen not documented					
□ Nicotine / Tobacco Changed to □ Nicotine (any tobacco product)					
<ul><li>□ Not Documented which drug</li><li>Changed to</li><li>□ Specific drug(s) not document</li></ul>					

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☐ Crack cocaine was added to be similar to the other drug questions
<ul> <li>22. If indication of substance use, was the mother referred for treatment during or after this pregnancy?  ☐ Yes ☐ No ☐ Not Documented</li> <li>Changed to:</li> <li>22. If the results of the toxocology screen indicated substance use, was the mother referred for treatment (during or after this pregnancy)?</li> <li>☐ Yes ☐ No ☐ Not documented ☐ Unknown</li> </ul>
<ul> <li>Description of changes above:</li> <li>22. If indication of substance use, was the mother referred for treatment during or after this pregnancy?</li> <li>Changed to</li> <li>22. If the results of the toxocology screen indicated substance use, was the mother referred for treatment (during or after this pregnancy)?</li> </ul>
This question added an unknown option.
23. The mother was diagnosed as being HIV positive: (HARS)    (Mother refused HIV testing)   Before child's birth, exact period unknown   After the child's birth   HIV-infected, unk when diagnosed   HIV-infected, unk when diagnosed   HIV-positive before child's birth, date unknown   HIV-positive before this pregnancy   HIV-positive after child's birth   HIV-positive during this pregnancy   HIV-positive, date unknown   HIV-positive at time of delivery   HIV-positive, date unknown   HIV-positive at time of delivery
Description of changes above:
23. The mother was diagnosed as being HIV positive: (HARS) Changed to 23. Mother's HIV serostatus
☐ (Mother refused HIV testing) Changed to ☐ Mother refused HIV testing
☐ Before child's birth, exact period unknown Changed to

☐ HIV-positi	ive before child's birth, dat	e unknown		
☐ Before this	s pregnancy			
Changed to	. 1 0 .1:			
☐ HIV-positi	ive before this pregnancy			
☐ After the c	hild's birth\			
Changed to				
☐ HIV-positi	ive after child's birth			
☐ During this	s pregnancy			
Changed to				
☐ HIV-positi	ive during this pregnancy			
☐ HIV-infect	ted, unk when diagnosed			
Changed to	,			
☐ HIV-positi	ive, date unknown			
☐ At time of	delivery			
Changed to	,			
☐ HIV-positi	ive at time of delivery			
	nother's first positive con tory test is Western Blot o		iest known test):/	_/(HARS)
Commina	tiony test is western bloco	(IIIII/dd/yyy	<i>y)</i>	
Changed to:	41	-14 C	4 - 4 (WD IF A)	
	nother's first positive res (mm/dd/yyyy		ory testing (WB of IFA)	
D . '.'	C 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1.		
Description o	of changes above: Minor c	nanges in wording		
25 N/L-41 }-				
25. Mother's	s HIV screening during p	regnancy.		
	<u>Results</u> §	<u>Test</u> *	<b>Date</b>	
	(see below)	(see below)	(mm/dd/yyyy)	
	25a. First Screening		,	
			//	
			_	
	25b. Second Screening	(if negative or refus	<mark>ed first screening</mark> )	
		*Tests	//	
		Rapid	_	
		Expedited EIA EIA		
		Not Documented		

	st. Timu streening [	if negative or refused second scr	reening)	
_		/_	/	
hanged to:	§ Results Positive Negative Indeterminate Results not found Not tested	*Tests Rapid EIA Not Documented		
5. Results of moth	Not tested, known to be infecte Refused Unknown	Test (See list in 26.)	<b>Date</b> (mm/dd/yyyy)	
25a. First scre		ive or mother refused first correspine	//	
		ve, or mother refused first screening)	//	_
	coming (in result was negative	•, or mound reladed several servering	5/	
Results		 Tests	//	_ Military time

<u>Description of changes above:</u>
(if negative or refused first screening)
Changed to (if result was negative, or mother refused first screening)

Results not found to Results not available

Added Expedited EIA

# ${\bf 26.\ Mother's\ HIV\ screening\ at\ time\ of\ labor\ and\ delivery.}$

Results <sup>§</sup>	Test *		L&D Time <sup>†</sup> Results	<mark>at</mark>
(see below)	(see below)	(mm/dd/yyyy)	<u>L&amp;D</u> (see below)	
26a. First Screening		//		
<b>26b. Second Screening</b> (if a	pplicable)	//	 :::	
26c. Confirmatory Test		//	——	
§ Results Positive Negative Indeterminate Results not found	*Tests Rapid Expedited EIA EIA Not Documented	d	† Military tim noon = 12:00 4:30pm = 16: midnight = 00 12:30am = 00	30 :00
26. Moth Not tested, known to be infected Refused Unknown (See list.)	or and delivery	Test (See list.)	Date of results in labor and delivery (mm/dd/yyyy)	Time of results in labor and delivery (See military time.)
26a. First screening			//	:
<b>26b. Second screening</b> (if applicable)			//	:
26c. Confirmatory test			//	:
Results Positive Negative Indeterminate Results not available Not tested Not tested but known to be infected Refused Unknown	EL	pid pedited EIA	_	Military time noon = 12:00 4:30 pm = 16:30 Midnight = 00:00 12:30 am= 00:30

Description of char	nges above:			
(see below)				
Changed to				
(See list.)				
Date Results at L&	,D			
(mm/dd/yyyy)	<u>,D</u>			
Changed to				
Date of results in				
labor and delivery				
(mm/dd/yyyy)				
d.				
Time <sup>†</sup> Results at L	<u>&amp;D</u>			
(see below)				
Changed to	. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
Time of results in l	•			
(See military time.	)			
Results not found t	o Results not avai	lable		
27. Were CD4 cou	<mark>ınts obtained dur</mark>	<mark>ing pregnan</mark>	<mark>cy?</mark>	
□ Yes	□ No ( <i>Go to Q28</i> )	□ Not D	ocumented (Go to Q28)	☐ Record Not Available ( <i>Go to Q28</i> )
A. TO				
				e CD4 counts closest to delivery. If CD
	to record.)	ed during pre	egnancy, CD4 counts with	nin 6 months before pregnancy would b
uscrur	to record.)			
	Example: CD	4 count 174,	12% would be coded as:	
	-		/12/2000	
		ercent 08	/12/2000	
	CD4 Result	<u>Units</u>	<b>Date blood drawn</b>	
			(mm/dd/yyyy)	<u> </u>
		<b>Count</b>		
		<b>Percent</b>	//	
		Count	//	

Percent Count

**Percent** 

<mark>%</mark>

	D4 counts	determined during p	regnancy o	r within 6 ma	onths before pregnanc	ey?		
□ Ye	es 🗆 No	(Go to 28.)	documented	(Go to 28.)	☐ Record not availab	ole (Go to 2	8.)	nown
		<b>elow.</b> (If more than 3 core not determined during						
	Example	: CD4 count of 174 cel be recorded as	•	August 12, 20	000, would <u>174</u>		cells/μL	08/12/2000
			1		<u>12</u>	1	%	08/12/2000
D4 esult	Unit	Date blood drawn (mm/dd/yyyy)	CD4 result	Unit	Date blood drawn (mm/dd/yyyy)	CD4 result	Unit	Date blood drawn (mm/dd/yyyy)
	cells/μ L	//		_ cells/μL	//		_ cells/μL	//
	%	//			//		_ %	//
durir Changed t If more t	ng pregna to han 3 co	e in record, prioritize in record, prioritize ancy, CD4 counts wants in record, priority pregnancy, record	vithin 6 m	onths before CD4 counts,	e pregnancy would starting with the c	be useful ount close	to record.)	
Changed 1 ells/µL	to							
ercent w	as remov	ved; % was retained	•					
his ques	tion adde	ed an unknown opti	on.					

28a. If yes, list all results below (If more than three in record, prioritize those viral load tests closest to delivery. If viral load tests were not conducted during pregnancy, viral loads within 6 months before pregnancy would be useful to record.)

	Result in copies/mL #	Result in logs	Date blood drawn (mm/dd/yyyy)	
			//	J
			//	
Changed to:			//	
28. Were viral quantificatio			e mother during pregnancy or v  Record not available (Go to	vithin 6 months before pregnancy?  29.) ☐ Unknown
28a. If yes, list all resul	ts below. (If more tha	an 3 in record, <b>prio</b>	ritize the results of viral load tests	s, starting with the result closest to 6 months of pregnancy if possible.)
-	_	Result in logs	Date blood drawn (mm/dd/yyyy)	
			//	
		-		
			//	
Description of changes a		-	<del></del>	
28. Did mother have vir. Changed to	al quantification to	ests performed (	i.e., viral load) during pregn	ancy?
28. Were viral quantification	ation tests (ie, vira	al load) perform	ed on the mother during preg	gnancy or within 6 months
before pregnancy?				
conducted during p	· •		sts closest to delivery. If viranths before pregnancy would	
Changed to (If more than 3 in record	d, prioritize the res	sults of viral loa	d tests, starting with the resu	lt closest to delivery. If viral load
			nonths of pregnancy if possi	
This question added an u	unknown option.			
Result in copies/mL #				
Result in No. of copies/1	mL			
29. What was mother's	s most advanced l	HIV classificati	on during pregnancy:	
☐ HIV, not AID			AIDS, indicator condition	☐ HIV negative ☐ Not Doc
<u> </u>	er's most advanc	ed HIV serosta	ntus during pregnancy?	
☐ HIV infection	n, not AIDS	AIDS, CD4 cri	teria only  AIDS, inc	
29. What was mother's  HIV, not AID  Changed to:  29. What was the moth  HIV infection	s most advanced loss. AIDS, CD4 of the contract advances, not AIDS.	criteria only ced HIV serosta AIDS, CD4 cri	AIDS, indicator condition tus during pregnancy?	dicator condition

Description of changes above:
29. What was mother's most advanced HIV classification during pregnancy:
Changed to
29. What was mother's most advanced HIV classification during pregnancy:
☐ HIV, not AIDS
Changed to
☐ HIV infection, not AIDS
☐ HIV negative
Changed to
☐ HIV-negative
□ Not Doc
Changed to  ☐ Not documented
a not documented
$\square$ RNA
Changed to
☐ Record not available
This question added an unknown option.
20. West mostly and IIIV status moted in how manuful cone modical monands?
30. Was mother's HIV status noted in her prenatal care medical records?  ☐ Yes, Positive ☐ Yes, Negative ☐ No ☐ No prenatal care ☐ Record Not Available
Changed to:
30. Was the mother's HIV serostatus noted in her prenatal care medical records?
☐ Yes, HIV-positive ☐ Yes, HIV-negative ☐ No ☐ No prenatal care ☐ Record not available
□ Unknown
Description of changes above:
Status
Changed to
serostatus
☐ Yes, Positive
Changed to
☐ Yes, HIV-positive
□ Vos Nogativo
☐ Yes, Negative Changed to
☐ Yes, HIV-negative
This question added an unknown option.

<b>Drug Name</b> (Use drug list)	Was Drug Refused		rug Started m/dd/yy)	Gestational Age Started (weeks, round down)	Stopped No NE		Date Stopp (mm/dd/y		Dru Sto Cod
	□Yes	/_	/			If ye	es,/	_/	
	_ □Yes	/_	/			If ye	e <mark>s</mark> ,/	_/	
	_ □Yes	/_	/			If ye	es,/	_/	
	□Yes	/_	/			If ye	es,/	/	_
	□Yes	/_	/			If ye	es,/	/	
	□Yes	/_	/			If ye	es,/	/	
	_ □Yes	/_	/			If ye	es,/	/	_
					_ 🗆		/	dd/yyyy) _/ _/	
			/		_				
					_ 🗆			/	
							/	/	
				 			/	J	
							/	/	
i				 			/	J	 

☐ Record not available (Go to 32.)
Other (specify) was added to drug name
Was Drug Refused Changed to Drug refused
Gestational Age Started (weeks, round down) Changed to Gestational age drug started (weeks; round down)
If yes,// Changed to//
Drug Stop Codes Changed to Stop codes (See list on p. 8.)
This question added an unknown option.
31a. If no ARV was prescribed during pregnancy, indicate reason:  □ No prenatal care □ HIV status of mother unknown □ Other reason, specify
☐ Mother known to be HIV negative during pregnancy ☐ Not Documented  Changed to:  31a. If no antiretroviral drug was prescribed during pregnancy, check reason.  ☐ No prenatal care ☐ Mother known to be HIV-negative during pregnancy
□ Not documented □ Unknown □ Mother refused □ Other (Specify.)
<u>Description of changes above:</u> 31a. If no ARV was prescribed during pregnancy, indicate reason: Changed to 31a. If no antiretroviral drug was prescribed during pregnancy, check reason.
☐ Other reason, specify Changed to ☐ Other (Specify.)
This question added an unknown option.

32. Was mother's HIV sta	<mark>tus</mark> noted in l	ner labor/delivery m				
☐ Yes, Positive	☐ Yes, Neg	gative   No	☐ Record N	ot Availa	ble	
Changed to:  32. Was mother's HIV ser  ☐ Yes, HIV-positive	ostatus noted □ Yes, HIV	l in her labor and de -negative ☐ No	livery records? □ Record not	available		Unknown
Description of changes above Status Changed to serostatus	<u>ve</u> :					
☐ Yes, Positive Changed to ☐ Yes, HIV-positive						
☐ Yes, Negative Changed to ☐ Yes, HIV-negative						
This question added an unk	nown option.					
33. Did mother receive and ☐ Yes (Complete T	_	nedication during lal o ( <i>Go to Q33A</i> ) □ N		•		□ RNA <i>(Go to Q34)</i>
<b>Drug Name</b> (Use drug list)	Was	Date Received	Time <sup>†</sup> Received	Ту	ype of	Administration
(Ose drug list)	Drug Refused	(mm/dd/yy)	(see below)	Oral	IV	Revd, route not doc
i	$\Box Yes$	//	:			
ii	$\Box Yes$	//	:			
iii	$\Box$ Yes	//	:			
iv	$\Box$ Yes	//	:			
v	$\Box$ Yes	//	:			
vi	$\Box$ Yes	//	:			
vii. (After completing table, 0	□Yes	<u>/</u>	;;;	ma: noon	_ _ 12	:00 midnight = 00:00
(Arter completing table, C	o to questic	nı 34 <i>)</i>	mmtary ti	me. Hoon	= 12	.00  Initial light = 00.00

Yes (Complete table.)			labor and delivery? ☐ Not documented (Go to 34.)	Record not availa	ble ( <b>Go</b>	to 34.)	nknown
Drug Name (See list.)	Other (specify)	Drug refused	Date received (mm/dd/yyyy)	Time received (See military time.)	Oral	Type of admin	istration Not documente
i			//	:			
ii				:			
iii			//	:			
iv				:			
V			//	:			
vi				:			
vii				:			
ter completing table, go to 3				Military time: noo	n = 12:0	0; midnight = 0	0:00
ther (specify) was add as Drug Refused hanged to rug refused	ed to drug na	ame					
	unknown op	tion.					
his question added an t	as received of the second seco	during l TAT <mark>c-s</mark> ninistere anknown	d □ Mother □ Other r	te reason: r tested HIV negat r refused reason, specify ocumented	ive du	ring pregna	ncy
his question added an a  33a. If no ARV wa  Precipitou  Prescribed  HIV status	as received of the second seco	during l TAT <mark>c-s</mark> ninistere anknown	ection	r tested HIV negat r refused reason, specify	ive du	ring pregna	ncy
his question added an a  33a. If no ARV wa  Precipitou Prescribed HIV status Birth outst	as received of the second seco	during l TAT c-s ninistere unknowr al	ection	r tested HIV negat r refused reason, specify ocumented	ive dui	ring pregna	ncy

☐ Prescribed but not admi	inistered 📙 Bir	rth not in hospital		Not documented Unknown
Description of changes above 33a. If no ARV was received Changed to 33a. If no antiretroviral drug	during labor &	-		
Status				
Changed to				
Serostatus				
☐ Birth outside of hospital				
Changed to				
☐ Birth not in hospital				
This question added an unknown	own option.			
34. Was mother referred for Yes No (Go  Changed to:  34. Was mother referred for Yes No (Go  Unknown	to Q36) $\Box$ r HIV care af	Not Documen		cord Not Available ( <i>Go to Q36</i> ) cord not available ( <i>Go to 36</i> .)
Description of changes above	e: This question	n added an unk	nown option.	
35. If yes, indicate first vira	l load and/or	CD4 after disc	<mark>charge from hospital <u>up</u></mark>	oto 6 months:
35a. CD4:				
□ Not Done	CD4 Result	<u>Units</u>	<u>Date blood drawn</u> (mm/dd/yyyy)	1
□ Not Available		Count	//	
35b. Viral Load:		Percent	//	· <b>—</b>
□ Not Done	Result in copies/mL #	Result in logs	<u>Date blood drawn</u> (mm/dd/yyyy)	
☐ Not Available				

\_

\_

\_\_\_\_\_

Changed to:							
35. If yes, indicate first	t CD4 result o	r first viral load	l after disch	arge from hospital (U	ıp to 6 mo	nths after discharg	e).
35a. CD4 result	■ Not done	■ Not available	e	35b. Viral load	☐ Not	done	lable
Result	Unit	Date blood dra (mm/dd/yyyy		Result in co	opies/mL	Result in logs	Date blood drawr (mm/dd/yyyy)
	cells/µL	//					//
	%	//					
Description of chan 35. If yes, indicate to 35. If yes, indicate to	first viral loa				-		after discharge)
35a. CD4: Changed to 35a. CD4 result							
CD4 Result Changed to Result							
Units Change to Unit							
Result in copies/mI Changed to Result in copies/mI							
<b>36. Type of birth:</b> ☐ Single	(HARS)	□ Triplet	or greater	□ Record Not A	Avoilabl		
Changed to:  36. Type of birth	□ Single	☐ Triplet o		☐ Record not avai			
Description of chan  ☐ Triplet or greater  Changed to  ☐ ≥3							
This question added	d an unknow	n option.					
				<u>Time*</u>		Date dd/yyyy)	

37. Birth information:	Onset of labor	:	/	_/	
☐ Birth Outside Hospital	Admission to L/D	::	/	_/	
☐ Record Not Available	Rupture of Membranes	::	/	_/	
	Delivery	:	/	_/	
	*r	nilitary time: nooi	n=12:00 r	midnight=00:00	
Changed to:					
	th not in hospital  Time Date (mm/dd/yyyy)  e military time.)   Military time: noon = 12:00; midnig	Rupture of men	· ·	ee military time.)	I
Description of changes abo  ☐ Birth Outside Hospital  Changed to ☐ Birth not in hospital					
39. Mode of Delivery: (Ha  □ Vaginal (Go to go	Q40) on section own type silable (Go to Q41)  ☐ Unknown elivery ean delivery unknown type				
Description of changes about C-section Changed to Cesarean delivery	<u>ve:</u>				
This question added an unk	known option				
☐ HIV indic ☐ Previous ☐ Malprese	elivery, mark all the follow cation (high viral load) C-section(repeat) ntation (breech, transverse l d labor / failure to progress	☐ Fetal distro Placenta abruptia	ess / previa rpes, disp	• • •	

☐ Personal / Physician's Preference ☐ Not specified	
Changed to:  39a. If Cesarean delivery, mark all the following indications that apply.    HIV indication (high viral load)	
transverse lie Changed to transverse	
□ Personal / Physician's Preference Changed to □ Mother's or physician's preference	
40. Instrumentation used:  None Forceps Vacuum Forceps and vacuum Not specified  Changed to:  40. Instrument used None Forceps Vacuum Forceps and vacuum Not specified	he
Description of changes above:  40. Instrumentation used: Changed to 40. Instrument used	
42. Was mother's HIV status noted on the exposed child's birth record?  ☐ Yes, Positive ☐ Yes, Negative ☐ No ☐ Record Not Available Changed to:  42. Was mother's HIV serostatus noted on the child's birth record?  ☐ No ☐ Yes, HIV-positive ☐ Yes, HIV-negative ☐ Record not available ☐ Unknown	
Description of changes above Status Changed to serostatus	

☐ Yes, Positive Changed to ☐ Yes, HIV-positive ☐ Yes, Negative	ve								
Changed to ☐ Yes, HIV-negati	ve								
This question added	d an unknowr	option.							
43. Was child prescr	ribed any anti	i <mark>retroviral</mark> 1	medication (	during the firs	t six v	veeks of lif	e? (HAF	<mark>kS</mark> )	
☐ Yes (Com	plete Table)	□ No ( <i>Go</i>	to Q43A)	☐ Not Docum	nentec	(Go to Q4	<b>(4</b> )	RNA (Go to Q4	<mark>4)</mark>
<b>Drug Name</b> (Use drug list)	Was Drug Refused	Date Dru (mm/o		Time <sup>†</sup> Started (see below)	C	Regimen ompleted		Stop Date (mm/dd/yy)	Drug Stop Codes
	retuseu	(11111)	ad 99)		Yes	No ND		(mm adayy)	Coucs
i	_ \textsup Yes	/	_/	:			If no,	//	
ii	_ \textsup Yes	/	_/	:			If no, _	/	
iii	\textsup Yes	/	_/	:			If no, _	//	
iv	_ \textsup Yes	/	_/	:			If no, _	//	
V	□Yes	/	_/	:			If no,	//	
vi	□Yes	/	_/	:			If no,	//	
vii.	_ \textsup Yes	/	_/			n = 12:00 midn	$\frac{\text{If no,}}{\text{ight = }00.00}$	//	
Changed to:				mintary ui	<b>me</b> : noo	n = 12:00 mian	ignt = 00:00		
43. Were antiretrovira						_		<i>(</i> 2	
Yes (Complet  Drug name	e table.) <b>L</b> N <mark>Other</mark>	lo ( <b>Go to 43a</b> .) Drug	Date drug starte	cumented ( <b>Go to 4</b>	,	Record no	ot available	(Go to 44.) Ur	n <mark>known</mark> Stop codes
		refused	(mm/dd/yyyy)	(See milit time.)	tary	Completed? Yes No ND UN		nerapy not completed) (mm/dd/yyyy)	(See list on p. 8.)
i		<u> </u>	_//	:_			<b>]</b> /		
ii		<b>-</b>	_//	:_	_		<b>]</b>		
iii		<b>-</b>	_//	:_			<b>_</b>		
iv		<b>-</b>	_//	:_	-		<b>]</b> /		
V		<u> </u>	_//				<b>]</b> /	'	
vi		<b>-</b>	_//		_		<b>]</b> /		
vii		<b>-</b>	_//	:_			<b>]</b> /		

viii.	
Description of changes above:  43. Was child prescribed any antiretroviral medication during the first six weeks of life? (HARS Changed to  43. Were antiretroviral drugs prescribed for the child during the first 6 weeks of life?	
□ RNA (Go to Q32) Changed to □ Record not available (Go to 32.)	
Other (specify) was added to drug name	
Was Drug Refused Changed to Drug refused	
Regimen Completed Yes No ND Changed to ART Completed? Yes No ND UNK	
If no,// Changed to//	
Drug Stop Codes Changed to Stop codes (See list on p. 8.)	
This question added an unknown option.	
43a. If no ARV was prescribed during the first six weeks of life, indicate reason:  ☐ HIV status of mother unknown ☐ Other reason, specify ☐ Mother known to be HIV negative during pregnancy ☐ Not Documented ☐ Mother refused  Changed to:	
43a. If no antiretroviral drug was prescribed during the first 6 weeks of life, indicate re	
☐ HIV serostatus of mother unknown ☐ Other (Specify.)	□ Not documented
☐ Mother known to be HIV-negative during pregnancy	☐ Not documented

Description of changes above: 43a. If no ARV was prescribed du	ring the first six weeks	of life, indicate reason:		
Changed to:				
43a. If no antiretroviral drug was p	prescribed during the in	rst 6 weeks of life, indi	cate reason.	
Status Changed to Serostatus				
44. Infant's HIV antibody testing.				
Results <sup>§</sup> (see below)	Test * (see below)	<u>Date Blood Drawn</u> (mm/dd/yyyy)		
i		//	_	
ii		//	_	
iii		//	_	
§ Results Positive Negative Indeterminate Results not found Not tested Refused Unknown	*Tests Rapid Expedited EIA EIA Not Documented			
44. Infant's HIV antibody testing	_			
Results (See list.) i	<b>Test</b> (See list.)		Date blood drawn (mm/dd/yyyy)	
ii iii.				
Results	Tests			
Positive Negative	Rapid Expedited EIA			
Indeterminate Results not available Infant not tested Mother refused Unknown	EIA Not documented			
Description of changes above: Results not found Changed to Results not available				
Same for Q45				
46. What is the child's current <mark>H</mark>	<mark>HV status</mark> ? (HARS-me	odified)		

☐ Confirmed HIV infected (not AIDS) ☐ HIV negative
☐ Indeterminate as of//(mm/dd/yyyy)
Changed to:  46. What is the child's current HIV infection status?  □ AIDS □ Confirmed HIV infected (not AIDS) □ HIV-negative □ Indeterminate as of □ / / (mm/dd/yyyy)
Description of changes above : HIV status? (HARS-modified) Changed to HIV infection status?
47. If child's HIV status is indeterminate, indicate why: (HARS-modified)  ☐ Moved from state ☐ Lost to Follow-up ☐ Child less than 18 months of age ☐ Provider out of state ☐ Died before status determined ☐ Not Documented  Changed to:  47. If child's HIV spreadatus is indeterminate, indicate reason
47. If child's HIV serostatus is indeterminate, indicate reason.  ☐ Moved from state ☐ Lost to follow-up ☐ Provider out of state ☐ Died before serostatus determined ☐ Child <18 months of age ☐ Not documented
Description of changes above: 47. If child's HIV status is indeterminate, indicate why: (HARS-modified) Changed to: 47. If child's HIV serostatus is indeterminate, indicate reason.
Status Changed to serostatus
48. Was PCP prophylaxis prescribed in the first year of life? (HARS)  ☐ Yes, date started / / ☐ No ☐ Not Documented ☐ Record Not Available  Changed to:  48. Was PCP prophylaxis prescribed during the first year of life?  ☐ Yes Date received / /
Description of changes above: Yes, date started Changed to Date received

This question added an unknown option

49.Was child breastfed? (HARS)  ☐ Yes, duration days weeks not doc ☐ No Changed to:  49.Was child breastfed?  ☐ Yes Duration _ days weeks  ☐ Duration not documented  ☐ No ☐ Not documented ☐ Record not available	
Description of changes above: not doc Changed to Duration not documented	
This question added an unknown option	
50. Were any birth defects noted in the first year of life  ☐ Yes ☐ No (Go to Q51) ☐ Record No	ot Available (Go to Q51)
50a. If yes, specify type(s):	
Code: Code: Changed to:	Code:
50. Were birth defects noted during the first year of life?  ☐ Yes ☐ No (Go to 51.) ☐ Record not available (Go to 51.)  ☐ Unknown	Code       Code         Code       Code
<u>Description of changes above:</u> This question added an unk	nown option.
51. If child deceased, from death certificate, list (Please (Include ICD9 codes only if code appears on death certificate)	
Immediate cause of death	
Underlying cause of death	
Underlying cause of death	

Underlying cause of death
Contributing cause of death
NOTE: If the child has died and you are completing this portion of the abstraction form, please verify that a date of death has been entered for the infant on page 1, Basic Demographics, Question 2. Changed to:
<b>51.</b> If child is deceased, please obtain the following from the death certificate. (Print legibly. Include ICD-9 or ICD-10 codes only if code appears on death certificate.)
Cause of death
Immediate
Underlying
Underlying
Underlying
Contributing
<b>Note.</b> Please be sure that a date of death has been entered on page 1, under Demographic Information (2. Infant).
51. If child deceased, from death certificate, list (Please print legibly):
(Include ICD9 codes only if code appears on death certificate)
Changed to
51. If child is deceased, please obtain the following from the death certificate. (Print legibly. Include ICD-9 or ICD-

NOTE: If the child has died and you are completing this portion of the abstraction form, please verify that a date of death has been entered for the infant on page 1, Basic Demographics, Question 2. Changed to

Note. Please be sure that a date of death has been entered on page 1, under Demographic Information (2. Infant).

Please include any comments or clinical information you feel is relevant to the overall understanding of this child's HIV-exposure or infection status. Include where the information came from and the relevant date.

# Changed to:

Please include comments or clinical information you consider relevant to the overall understanding of this child's HIV exposure or infection status. State the date and source of the information.

# Antiretroviral Drugs and Stop Codes

10 codes only if code appears on death certificate.)

Antiretroviral Drug List	NRTI Abassuir (Ziaran ABC)	PROTEASE INHIBITORS	<u>OTHER</u>
NNRTI Delavirdine (Rescriptor) Efavirenz (Sustiva) Nevirapine (Viramune, NVP)	Abacavir (Ziagen, ABC) Combivir (AZT & 3TC) Didanosine (ddl, Videx) Lamivudine (3TC, Epivir) Stavudine (d4T, Zerit) Trizivir (AZT & 3TC & Abacavir)	Amprenavir (Agenerase) Indinavir (Crixivan) Kaletra (Lopinavir, Ritonavir) Nelfinavir (Viracept)	Adefovir dipivoxil (bis-POM, PMEA, Preveon) Atripla (Efavirenz & Tenofovir & Emtricitabine)
	Viread (Tenofovir)	Ritonavir (Norvir)	If an antiretroviral drug

	Zalcitabine (ddC, Hivid) Zidovudine (AZT, Retrovir)	Saquinavir (Fortavase, Invirase) Tipranavir (Aptivus)	not on this list, call CDC
S1 = Adverse events (toxicity S2 = (Blank for EPS) S3 = Drug resistance detecter S4 = Poor adherence S5 = Inadequate effectivenes	j	S9 = Pregnancy S10 = Child determined to b S11 = Improving effectivene S12 = Improving convenience S13 = Reason not indicated S14 = Mother couldn't afford	ess ce d, unknown
S7 = Drug interactions S8 = Patient choice		Sxx = Other reason	

NRTI (cont)

# Changed to:

# Antiretroviral drugs and stop codes

NNRTI

1111222	1 (2222 (00110)	11000000 11111101001	0 11101			
Delavirdine (Rescriptor)	Epzicom (Abacavir/3TC, Kivexa)	Amprenavir (Agenerase)	Adefovir dipivoxil (bis-POM,			
Efavirenz (Sustiva)	Lamivudine (3TC, Epivir)	Darunavir (Prezista)	PMEA, Preveon)			
Nevirapine (Viramune, NVP)	Stavudine (d4T, Zerit)	Indinavir (Crixivan)	Atripla (Efavirenz & Tenofovir &			
NDEX	Trizivir (AZT & 3TC & Abacavir)	Kaletra (Lopinavir, Ritonavir)	Emtricitabine)			
NRTI	Truvada (Tenofovir DF/Emtricitabine)	Lexiva (Fosamprenavir)	Fuzeon (Enfuvirtide or T20)			
Abacavir (Ziagen, ABC)	Videx <sup>®</sup> EC (Didanosine)	Nelfinavir (Viracept)	Hydroxyurea (Droxia, Hydrea)			
Combivir (AZT & 3TC)	Viread (Tenofovir)	Reyataz (Atazanavir or ATV)	Intelence			
Didanosine (ddI, Videx)	Zalcitabine (ddC, Hivid)	Ritonavir (Norvir)	Selzentry			
Emtriva (Emtricitabine or FTC)	Zidovudine (AZT, Retrovir)	Saquinavir (Fortavase, Invirase)	Isentress			
		Tipranavir (Aptivus)	If an antiretroviral drug not on			
			this list, call CDC			
<b>Stop codes</b> (2 codes allowed; if more, choose the 2 most important)						
S1 = Adverse events (toxicity, lack of		ption (planned drug holiday) S1	1 = Improving effectiveness			
S2 = ART completed S7 = Drug interactions			2 = Improving convenience			
S3 = Drug resistance detected	S8 = Mother's choice	S1	S13 = Reason not indicated; unknown			
S4 = Poor adherence	S9 = Pregnancy	S1	4 = Mother couldn't afford drugs			
S5 = Inadequate effectiveness	<b>S10</b> = Child determined not to	be HIV infected Sx	$\mathbf{x} = $ Other reason			

Protease inhibitor

Other

# <u>Description of changes above:</u>

S2 = (Blank for EPS)

Changed to

S2 = ART completed

S8 = Patient choice

Changed to

S8 = Mother's choice

S14 = Mother couldn't afford medications

Changed to

S14 = Mother couldn't afford drugs

The following drugs were added to the drug list:

Emtriva (Emtricitabine or FTC);Epzicom (Abacavir/3TC, Kivexa);Truvada (Tenofovir DF/Emtricitabine);Videx® EC (Didanosine);Darunavir (Prezista);Reyataz (Atazanavir or ATV);Fuzeon (Enfuvirtide or T20);Hydroxyurea;(Droxia, Hydrea);Intelence;Selzentry; Isentress

# Enhanced HIV/AIDS Surveillance to Maximally Reduce Perinatal HIV Transmission Instructions for Completing the Data Abstraction Form

#### **General Comments**

The purpose of this document is to provide guidance for filling out the data abstraction form, to define medical terms, and to suggest the best places in the medical records to find specific pieces of information.

Information on children who are perinatally-HIV exposed or who have HIV/AIDS are collected under a federal assurance of confidentiality. Information on HIV-exposed children must be collected on both the HARS case report form and on the Enhanced Perinatal Surveillance Supplemental Data Abstraction Form (referred to as the Enhanced Surveillance Form or EPS Form). All information that is collected using the enhanced surveillance abstraction form should be promptly included/updated in the HARS software. HARS is the gold standard for this project. Where data differs between the enhanced surveillance data abstraction form and HARS, the HARS data will be used. The Enhanced Perinatal Surveillance System (EPSS) and HARS/Ehars should be updated with information collected during abstraction. The HIV/AIDS pediatric case reporting form and software were updated in 1995, then in 1996 with the Ryan White CARE Act, and again in 2000 to allow for evaluation of the implementation and impact of the Public Health Service recommendations on the prevention of perinatal HIV transmission, to accommodate surveillance requirements of the Ryan White CARE Act Amendment signed into law on May 20, 1996, and to accommodate the revised 2000 HIV case definition for perinatal HIV exposure, pediatric infection, and those perinatally exposed but not infected with HIV. The Enhanced Perinatal Surveillance Data Abstraction Form collects additional standardized data related to prevention of perinatal transmission beyond those in the HARS system. These data taken together will assist in monitoring the implementation of the new pediatric case definition and impact of the PHS recommendations (counseling and voluntary testing of pregnant women and use of Zidovudine (ZDV) to prevent perinatal transmission) on pediatric HIV/AIDS trends, responding to selected requirements of the Ryan White Care Act, and evaluating of perinatal prevention efforts.

Be sure to think critically about the data you are abstracting. The information should make sense overall. For example, the dates of receipt of prenatal care, CD4 and viral load testing, receipt of antiretrovirals, etc should make sense based on the infant's date of birth. If you find inconsistent information in the medical records indicate that information in the comments section on the data abstraction form. This will let us know that the inconsistency was in the medical record and was not an error having to do with the abstraction, notation or data entry of the information.

The Enhanced Perinatal Surveillance Coordinator in each project area, or their designee, should review all data abstraction forms before the data is entered.

#### **Qualifications of Abstractors**

- Abstractors must be familiar with the various components of the medical record (demographic/financial information, doctor's progress or S.O.A.P. notes, prenatal care records, labor & delivery records, nurse's notes, operative notes, lab results section, discharge summaries, problem lists, drug lists, etc.)
- Abstractors need to be familiar with medical abbreviations and terminology, especially as related to HIV.
- Abstractors need to be familiar with the procedures required to abstract records from the various providers/facilities.
- Abstractors must be trained in confidentiality and security procedures and sign a statement to that
  effect. Most health departments and academic institutions have such training in existence and
  methods in place to document completion of this training.

#### Records to be Abstracted

At a minimum the following records should be reviewed. There may be particular instances where other records are also reviewed (i.e., STD records, Health Department Records)

<u>Mother</u> <u>Infant</u>

Maternal prenatal records Pediatric birth records (hospital records)

Maternal labor and delivery records Birth certificate

Maternal HIV clinic records Pediatric medical records (HIV clinic, non HIV clinic,

other medical records)

Death certificate

#### **Abstraction of Mother's Records**

All maternal variables refer to information on the infant's biologic mother.

- If it is not possible to obtain any chart at all on the mother, the Enhanced Surveillance Form should still be filled out and Questions 1, 2, and 3 should be completed as much as possible.
- If information on the mother is available in the infant's chart but also in the mother's chart, use the mother's chart as the 'gold standard' for questions related to the mother's care.

#### **Abstraction of Infant's Record**

• Complete this form only for <u>live births</u>. It is not feasible for surveillance to collect data for all pregnancies (which would include fetal loss). The definition of a live birth as defined by WHO is:

'...the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which, after such separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached; each product of such a birth is considered live born.'

In other words, if a birth certificate has been completed for the infant, the record should be abstracted.

- If a woman has had <u>several pregnancies during the project</u> period, each pregnancy should be considered a separate event and should be <u>abstracted separately</u>.
- If the outcome of a pregnancy is <u>multiple births (e.g. twins)</u>, a separate HARS and supplemental EPS form should be used for each infant, but the maternal information only needs to be abstracted on one form.

#### Follow-up Chart Review

You will be reviewing the pediatric chart at 6 months, 12 months, and 18 months (and at 6 month intervals thereafter if the child's infection status is still undetermined). When reviewing the pediatric chart, be sure to abstract all data needed for HARS updates (e.g., HIV diagnostic tests, CD4 counts, treatment, prophylaxis, AIDS-defining conditions, birthweight, vital status, birth defects, etc). You will need to complete a new EPS form documenting the updates. On the additional EPS form you should complete the demographics section for both the mother and the infant and then only those portions of the form that need to be newly completed or updated (**Q.43 – Q.51**). The updated infant's HIV diagnostic tests, CD4 counts, and viral load test results should be entered directly into HARS.

## Indicating 'Unknown'

A '99' should be checked or written in if you wish to indicate an unknown value for any question. Type of response is indicated on the form. Unknown should only be checked if the source records are not available.

### **Not Documented**

Responses of 'Not documented' should only be checked if the source records are available but there is no indication in the affirmative or negative for the question being asked.

### **Record Not Available**

Record not available should only be marked if the information cannot be obtained from any record source and the primary record as indicated in the hierarchy at the beginning of each section is not available.

### **Dates**

All dates on this abstraction form should be written as Month/Day/Year (MM/DD/YYYY) or Month/Year (MM/YYYY) as indicated on the form. If all or part of a date is unknown, ''(blank) should be entered into the appropriate space (e.g., 02/../2005). No not use '99" to indicate unknown/missing dates. Be sure the dates indicated on the form make sense. For example, be sure that the infant's date of birth is consistent with the date of delivery indicated and that the dates of receipt of prenatal care, CD4 and viral load testing, receipt of antiretrovirals, etc make sense based on this date of birth.

### Records That Are 'Not Available'

Records will be considered 'not available' after two separate attempts, separated in time, have been made to review the record. Before a chart is considered 'not available', attempt to locate other sites of care where the chart may be located.

### If Conflicting Information is Found

The chart which could be considered the gold standard for a specific question depends on the question itself. An example of a situation which may arise is as follows: the maternal obstetrical chart and the HIV chart may have different dates for receipt of prenatal care. We recommend that you use the information from the obstetrical chart. Similarly, if there are different start dates for administration of ZDV, use the HIV infectious disease (HIV/ID) chart as the gold standard unless the obstetrical chart documents a good reason to the contrary (e.g., the OB/GYN physician may have also managed the patient's antiretroviral therapy). Therefore, in general, obstetrical information should be pulled from the obstetrical prenatal or postnatal chart and HIV/ID information should be pulled from the HIV/ID chart.

### **Error Correction**

When correcting errors on the abstraction form, draw a single line through the error and write the correct information next to or above it. Please do not attempt to write the correct information over top of the original line, making it hard to decipher which is the correct information. It is also best not to use 'white out'. Confidential information written anywhere in the form margins can usually be covered by black 'magic' marker.

### **Required Fields**

There are three fields which are required on the abstraction form: Initials of the Abstractor filling the form, Infant reporting state, Infant state number and Infant date of birth. <u>Initials of the Abstractor filling the form and infant state number are required fields in the EPSS application.</u> These fields are necessary for linkage to HARS data and as a quality control tool to ensure duplicate records are not entered into the database.

### Text boxes

Enter comments, specifics, or additional information (missing values can be left blank or entered using two periods [..]).

This introductory first section would include all identifying information (not sent to CDC) as well as information on the abstractor, whether the information was complete and if it is a new form or an updated form, information on how the infant was identified and what types of records were abstracted.

**NEW FORM/UPDATED FORM**: Indicate by marking the appropriate box if the data abstraction form is a new case abstraction or update of information for a previously abstracted case.

**INITIALS OF ABSTRACTOR**: This is a required field. Abstractors should <u>legibly print</u> their initials. If more than one person abstracts records for a single data form, the initials of all abstractors should be noted. These initials allow for follow-up with the abstractor for clarification and resolution of questions that may come up.

### **INFORMATION COMPLETE FOR ANALYSIS: (Y/N)**

A 'Yes' response indicates that the data included on the data abstraction form is ready to be included in the analysis dataset. Whether or not the data is ready is a decision which should be made by the EPS Coordinator, Surveillance Coordinator, or another designee, not the data entry specialist. The following guidelines will be helpful in deciding if the data is ready for analysis:

- An attempt has been made to abstract all available records. If minimal information is available and there are no further resources for obtaining information, the form may be judged as 'complete for analysis' even though information on the mother and infant is incomplete.
- Information through the birth history should have been obtained.
- Completeness should be judged based on what information is abstracted that is most helpful to the state in performing any particular analysis.
- Note: Expected follow-up, such as documented HIV serostatus, will come later.

**DATE FORM COMPLETED**: This should be the date that the data abstraction form is completed (e.g. all medical records have been abstracted or two attempts have been made to abstract) and record abstraction is concluded. Updates to the abstraction form and to HARS are always possible at any time.

**DATE FORM RECEIVED BY MAIN FACILITY:** This should be the date that the data abstraction form is received by the main facility or health department. If a site has external partners completing data abstractions, the date of receipt by the main facility (EPS Coordinator) should be included.

**DATE CASE WAS REPORTED:** This should be the date the case was initially reported or identified as an exposure to the health department, whether through routine case reporting or birth registry match. The date of report should be linked to the method in which the infant was first identified.

**HOW INFANT FIRST IDENTIFIED**: Please check the <u>first</u> method through which the infant was identified (e.g. an infant might have been identified through the maternal HARS record, and later been identified through the registry match. This should be coded as 'maternal report'). 'Maternal report' means that an infant was identified because the mother's case report indicated that she was pregnant at the time of diagnosis or that she delivered a live-born infant after 1977. Additionally, a child's birth information may be included on the mother's case report or there may be a notation in the comment section of the form that

indicates an HIV-exposed child was born. 'Pediatric report' means an HIV-exposed child was first identified through the child's case report.

**IF MATERNAL INFORMATION IS NOT AVAILABLE, WAS THE CHILD ADOPTED, IN FOSTER CARE, OR ABANODONED:** Only complete check 'Yes' if the maternal information is not available due to child being adopted, in foster care or abandoned. If the maternal information is not available for other reasons, check 'No'. Else, check 'Not applicable'.

**RECORDS ABSTRACTED**: For each type of record, <u>code</u> whether it was - abstracted (1), attempted but record was not available (2), not abstracted (3), or attempted, will try again (4). Do not simply indicate an X for each record abstracted.

### I. Basic Demographics

### **Questions 2-8**

This section details the basic demographics of the infant and mother, including reporting state, statenos, citynos, soundex, dates of birth and death, sex of the infant, mother's race/ethnicity, mother's marital status and mother's HIV transmission category.

REPORTING STATE (mother and infant): The infant's reporting state is a required field.

**STATE NO./CITY NO.(mother and infant):** The infant's stateno is a required field. A HARS record will be entered for each mother and infant investigated as part of Enhanced Perinatal Surveillance if permissible under state reporting laws. The HARS State No. (and possibly City No.) generated for each case should be entered here. For sites without HIV exposure reporting, a project ID number should be created. A unique number should be assigned for each person, regardless of diagnostic status at first report or changing status throughout the course of disease. These numbers will be used to communicate with project areas regarding specific case reports and to link HARS records with the enhanced perinatal data collected. **State patient numbers should never be reused.** 

**SOUNDEX (mother and infant):** Enter the soundex code for the mother and the infant unless legally prohibited from doing so. The soundex code can be generated from the patient's last name using the HARS software. Soundex should be entered in the EPSS application (will not be automatically generated by the system). The soundex should be the same as generated by HARS.

**DATE OF BIRTH (mother and infant)**: The infant's date of birth is a required field. If all or part of the mother's date of birth is unknown, ' '(blank) should be coded in appropriate field (e.g. 02/../56).

**DATE OF DEATH (mother and infant):** If the mother and/or infant have died, enter their date of death. If the infant dies after the initial report is submitted, date of death must be updated in HARS.

SEX AT BIRTH (infant): M=Male, F=Female

- Q. 4 COUNTRY OF BIRTH: Write out the country of the mother's birth. The data management system will code when the country is entered into the system. EPSS has a dropdown menu to select the country. If specific name of US Dependency is not known, a selection on the dropdown menu which indicates "US Dependency" can be checked.
- **Q. 4a** If the mother's country of birth is unknown, but her <u>continent of birth</u> is known, enter the continent name in the space provided. The Continents are: Africa, Asia, North America, South America, Europe, and Antarctica. (Australia is the seventh continent, but this will be captured under country of birth so there is no need to indicate this as a continent of birth.)
- Q. 5 HISPANIC ETHNICITY (mother): Indicate whether or not the mother is of Hispanic ethnicity (Yes, No, Unknown).

**Q. 6 RACE (mother):** More than one race can be selected. The five minimum race categories are American Indian/Alaska Native, Asian, Black/African American, Hawaiian/Pacific Islander, White, and Other.

The minimum categories for data on race and ethnicity for Federal statistics, program administrative reporting, and civil rights compliance reporting are defined as follows:

- American Indian or Alaska Native. A person having origins in any of the original peoples
  of North and South America (including Central America), and who maintains tribal
  affiliation or community attachment.
- Asian. A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
- Black or African American. A person having origins in any of the black racial groups of Africa. Terms such as "Haitian" or "Negro" can be used in addition to "Black or African American."
- Hispanic or Latino. A person of Cuban, Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin, regardless of race. The term, "Spanish origin," can be used in addition to "Hispanic or Latino."
- **Native Hawaiian or Other Pacific Islander.** A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
- White. A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.
- Q. 7 MARITAL STATUS: Check only one. This refers to the mother's marital status at the time of delivery.
- Q. 8 MOTHER'S HIV RISK: If a risk is found for a mother whose HARS record does not contain any risk information, update HARS with the appropriate risk. If additional, or more specific, risk information is found, update the HARS record but do not delete a risk already in the record (i.e. do not delete an existing IDU risk if heterosexual risk is found through your medical record reviews, add the heterosexual risk to HARS.) If an unusual transmission circumstance is suspected, notify the State NIR Coordinator immediately.

After 1977, this child's biologic mother: (Mark all categories that apply)

<u>Intravenous drug user</u> (IDU, injected nonprescription drugs) <u>Person with hemophilia</u>

'Coagulation disorder' or 'hemophilia' refers only to a disorder of a clotting factor, which are any of the circulating proteins named 'Factor I', 'Factor II', 'Factor III', etc., through 'Factor XII'. These disorders include Hemophilia A and Von Willebrands disease (Factor VIII disorders) and Hemophilia B (a 'Factor IX' disorder). They do not include other bleeding disorders, such as thrombocytopenia, treatable by platelet transfusion. If only a transfusion of platelets, other blood cells, or plasma was received, then the risk would be 'transfusion'. See comments for 'transfusion' below.

### Heterosexual contact with

Intravenous drug user

Bisexual male

Person with hemophilia/coagulation disorder

See comments for 'coagulation disorder' above.

Transfusion recipient with documented HIV infection

This refers to someone whose partner has documented HIV infection and whose HIV risk was receipt of a transfusion of blood cells (red cells, white cells, platelets) or plasma.

Transplant recipient with documented HIV infection

This refers to someone whose partner has documented HIV infection and whose

HIV risk was receipt of a transplanted organ or tissue.

Male with AIDS or documented HIV infection, risk not specified

This category should be checked if the heterosexual partner is known to be HIV positive, and only if his specific risk for HIV is unknown.

<u>Transfusion Recipient</u> (other than clotting factor)

Refers to the recipient of a transfusion of blood cells (red cells, white cells, platelets) or plasma.

### Perinatal Exposure

Refers to the <u>mother's status</u>. The mother herself was infected with HIV perinatally. Unknown/Other documented risk

Discuss with NRR Coordinator within your state if the mother's risk factor is unknown. If 'Other', then specify the documented risk.

### **II. Prenatal Care**

### **Questions 9-18**

This section on prenatal care provides information on whether the mother received prenatal care during her pregnancy, dates of first and last prenatal care visits and number of visits, type of prenatal care facility, prenatal care screenings and diagnoses of medical conditions, mother's reproductive history, and infant's sibling(s) information.

**Hierarchy of records for response gold standard:** If conflicting information is found for any of the prenatal care questions, refer to this list to determine which response to include unless abstractor is positive of the correct response.

- 1. Prenatal Care
- 2. Labor and Delivery
- 3. Pediatric Birth
- 4. Birth Certificate
- 5. Pediatric non-HIV
- 6. Pediatric HIV
- 7. Health Department
- Q. 9 DID MOTHER RECEIVE ANY PRENATAL CARE FOR THIS PREGNANCY: A prenatal care visit is defined as a visit to a health care provider (including a physician, nurse practitioner, midwife, nurse, or physician's assistant) specifically for obstetrical/gynecological services prior to delivery of the baby. A visit by a prenatal care provider to the woman's home would be considered a prenatal care visit if it is done in the context of providing prenatal care to the woman. Sometimes the number of prenatal care visits is summarized on one sheet within the prenatal chart which lists the prenatal lab(s) and ultrasounds done at each visit, including the lab results. At time of delivery this information is tallied and a total number of prenatal care visits will be noted on the labor and delivery intake sheet. If the prenatal care record contains a prenatal care flow chart, there is usually a list of the dates of visits. Also, most birth certificates now list the number of prenatal care visits as well. (Note: the birth certificate is a notoriously poor source of data regarding prenatal care. Only use this information if no other prenatal care information is available from medical records.) If you find conflicting numbers of visits between the medical records and the birth certificate, use the number of visits found in the medical records.

The following <u>do not constitute a prenatal care visit</u>: a visit to the lab to have blood tests only; a visit for the sole purpose of picking up prenatal vitamins or other medication refills; a visit solely for an illness or other medical problem not related to pregnancy; an emergency room visit; a visit to an infectious disease practitioner for care of the woman's HIV disease, a visit solely with the WIC counselor, nutritionist, social worker, pharmacist, business office personnel, office receptionist, ultrasonographer, EKG technician, HIV counselor (unless there is also a consultation with a health care provider); a visit to the home of the woman by someone who is not a prenatal care provider.

If no prenatal care is received or it is unknown if prenatal care was received, skip to Q.15.

- DATE OF FIRST PRENATAL CARE VISIT: A prenatal care visit is the first visit where intake information is obtained. Normally a woman knows she is pregnant at the time of this first prenatal care visit. A visit to a doctor to confirm pregnancy status would not be considered the first prenatal care visit unless intake data and other services typical of the first prenatal care visit are obtained at the time of that confirmation. Such services would include intake prenatal blood tests, etc. If the woman had been seen by more than one prenatal care provider, then we would like the date of the visit to the first prenatal care provider seen. If this date is unknown, put ' // spaces should be left blank). If part of the date is unknown, ' ' (blank) should be coded in appropriate field (i.e., 02/ /2005).
- MONTH OF PREGNANCY PRENATAL CARE BEGAN: Record the month of pregnancy (01 to Q. 11 09) that the woman began prenatal care. Do not leave this question blank. Enter '09' if care began in the ninth month or later. If month is not noted in the chart but the gestational age in weeks when prenatal care began is available, record the weeks. Mark ' ' (blank) if unknown what month the first visit occurred.
- Q. 12 DATE OF LAST PRENATAL CARE VISIT PRIOR TO DELIVERY: This is the last visit for prenatal care **prior to** delivery of the baby. For definition of a prenatal care visit, see **Q. 9** above.
- Q. 13 NUMBER OF PRENATAL CARE VISITS: See comments for Q. 9. If the number of visits is unknown enter '99'. If there is a range of visits reported, i.e., 10-13, enter the lower number of visits.
- Q. 14 IN WHAT TYPE OF FACILITY WAS PRENATAL CARE PRIMARILY DELIVERED: If multiple sources of care were used, indicate the primary source of care (i.e., where the majority of visits occurred). If 'Other' is checked, be sure to specify what the facility is, using generally agreed upon terms. Do not use local terms, acronyms, or abbreviations.
  - **OB/GYN clinic** A clinic that provides obstetrical and gynecologic related, pregnancy, and preventive care to women.
  - Adult HIV specialty clinic A clinic associated with an inpatient facility, for the treatment of HIV/AIDS in adults.
  - **HMO clinic** A free-standing clinic run by a Health Maintenance Organization that is connected to an inpatient facility run by the same organization.
  - Private physician's office (OB/GYN, midwife) An office where a physician, midwife or nurse practitioner provides obstetric and gynecologic related, pregnancy, and preventive care to women.
  - Correctional facility A facility that provides diagnosis and/or treatment of disease in a prison, jail, or other correctional facility, clinic or infirmary.
  - ACTG site The AIDS Clinical Trials Group (ACTG) is an organization that was formed to conduct AIDS research that is funded by the federal government. Many universities and teaching hospitals across the country have an ACTG site associated with them.
  - Other A known facility that is not able to be categorized into one of the categories
  - **Not Documented** The type of facility is not documented in any of the source records.
- Q. 15 WAS THE MOTHER SCREENED FOR ANY OF THE FOLLOWING DURING PREGNANCY: (Reference: Red Book 2000- American Academy of Pediatrics) Use test done prior to birth but closest to delivery date or at admission for labor and delivery.
  - Group B Strep (GBS) Group B streptococci. A major cause of perinatal bacterial infections and systemic and focal infections in infants. Invasive disease categorized into early onset (1st week of life) and late-onset (usually at 3-4 weeks of life). Colonization late in pregnant women and newborns ranges from 5% to 35%. Intrapartum chemoprophylaxis is IV Penicillin G. Two types of prevention strategies may be used: screening all pregnant women at 35 to 37 weeks for vaginal & rectal GBS

- colonization, offering intrapartum chemoprophylaxis to those identified as GBS carriers OR
- risk factor based strategy prophylaxis given to women with intrapartum risk factors: gestation < 37 weeks, ≥ 18 hours since rupture of membrane, temperature 38° C or greater.
- Hepatitis B (Hepatitis B surface antigen, HBsAg) Detects acutely or chronically infected persons. Prenatal HbsAg screening of all pregnant women is recommended. Babies of mothers who are HbsAg (+) must have HBIG & HBV vaccine within 12 hours of birth to prevent perinatal HBV infection. Be sure the test result is for the surface antigen rather than the antibody (anti-HBs), core antigen (HbcAg) or antibody (anti-HBc); or Hepatitis B e antigen (HbeAg) or antibody (anti-HBe). This test is usually done at the initial prenatal visit or at the time of labor & delivery for high risk women and women whose status is unknown.
- Rubella Screening usually done at the initial prenatal visit. If 'negative' the mother should be immunized.
- Syphilis All pregnant women should receive serologic screening for syphilis early in pregnancy with a nontreponemal test (e.g., VDRL and RPR). In addition, screening is recommended in the third trimester for those in high risk prevalence areas or for women at high risk. Nontreponemal antibody tests are used for screening purposes and presumptive diagnosis: VDRL (venereal disease research laboratory); RPR (rapid plasma reagin test; STS serologic test for syphilis, syphilis screening test); ART (automated reagin test). The nontreponemal antibody test should be confirmed with a treponemal antibody test (e.g., FTA-ABS, MHA-TP). If a pregnant woman has a reactive nontreponemal test and a persistently negative treponemal test, a false positive test is inferred. For more information about syphilis see Q. 16.
- Q. 16 DURING THIS PREGNANCY OR AT THE TIME OF LABOR AND DELIVERY WAS THE MOTHER DIAGNOSED WITH ANY OF THE FOLLOWING CONDITIONS: For this question, "diagnosed" refers to newly diagnosed, had a recurrence of, or had chronic infection with any of the following conditions. Screening for syphilis, gonorrhea, and chlamydia is done during prenatal care. Generally a diagnosis of an STD will show up in a number of places in the chart including progress notes, prenatal clinic visit summary sheet (which should include summary of lab tests for various sexually transmitted diseases), lab results section, or in Sexually Transmitted Disease Summary sheets (typical of public health clinics). Diagnoses may be presumptive or definitive depending on various signs, symptoms and lab tests. If a diagnosis is made either presumptively or definitively, note the answer as 'Yes'. Specific criteria for answering 'Yes' to this question are outlined below:
  - Bacterial vaginosis Clinician diagnosis of bacterial vaginosis. Sometimes abbreviated BV.
  - **Chlamydia** (*Chlamydia trachomatis*) Record positive test for chlamydia (either a positive culture, positive EIA, or detection of chlamydial antigen or nucleic acid).

Name of lab tests - Chlamydia cell culture (TRIC Agent Culture); direct fluorescent antibody (DFA) tests; enzyme immunoassay (EIA) tests; nucleic hybridization (DNA probe) tests, PCR and LCR.

Genital Herpes - Active (herpes genitalis) - Record as a 'Yes' if the woman has <u>primary</u> <u>herpes</u> (first episode of herpes) or recurrence of herpes during pregnancy or at labor and delivery.

Name of lab tests - herpes virus culture; herpes cytology (herpetic inclusion bodies, cytology, inclusion body stain, Tzanck smear, Giemsa stain viral study); rapid diagnostic tests- direct immunofluorescent AB or EIA; HSV Ag; or polymerase chain reaction (PCR).

- **Gonorrhea** (*Neisseria gonorrhea*) Record if culture positive.
  - **Name of lab tests** *Neisseria gonorrhea* culture (GC Culture, Gonorrhea Culture); Thayer-Martin medium; chocolate agar; detection of nucleic acid.
- **Group B Strep** Group B streptococci. A major cause of perinatal bacterial infections and systemic and focal infections in infants. Invasive disease categorized into early onset

(1<sup>st</sup> week of life) and late-onset (usually at 3-4 weeks of life). Colonization late in pregnant women and newborns ranges from 5% to 35%. Intrapartum chemoprophylaxis is IV Penicillin G. Two types of prevention strategies may be used:

- screening all pregnant women at 35 to 37 weeks for vaginal & rectal GBS colonization, offering intrapartum chemoprophylaxis to those identified as GBS carriers OR
- risk factor based strategy in which prophylaxis is given to women with intrapartum risk factors: gestation < 37 weeks, ≥ 18 hours since rupture of membrane, temperature 38° C or greater.
- Hepatitis B (Hepatitis B surface antigen, HbsAg) Detects acutely or chronically infected persons. Prenatal HbsAg screening of all pregnant women is recommended. Babies of mothers who are HbsAg (+) must have HBIG & HBV vaccine within 12 hours of birth to prevent perinatal HBV infection. Be sure the test result is for the surface antigen rather than the antibody (anti-HBs), core antigen (HbcAg) or antibody (anti-HBc); or Hepatitis B e antigen (HbeAg) or antibody (anti-HBe). Usually done at the initial prenatal visit or at the time of labor & delivery for high risk women and women whose status is unknown.
- Hepatitis C Tests do not distinguish between acute, chronic, or resolved infection.
   Diagnosis by antibody assays involves initial screening EIA. Repeatedly positive results are confirmed by a recombinant immunoblot assay (RIBA). Highly sensitive PCR assays for detection of HCV RNA are also available.

Name of lab test - EIA (Enzyme immunoassay) screen, confirmed by recombinant immunoblot assay (RIBA).

- **Pelvic inflammatory disease** (PID) Look for documentation of a clinical diagnosis of PID. A note stating 'rule out PID' does not indicate the woman had PID.
- Syphilis (Treponema pallidum) All pregnant woman should receive serologic screened for syphilis early in pregnancy with a nontreponemal test (e.g., VDRL, RPR, STS, and ART) and preferably again at delivery. In addition, screening is recommended in the third trimester for those in high risk prevalence areas or those at high risk. Nontreponemal antibody tests are used for screening. Any reactive nontreponemal test must be confirmed by a specific treponemal test (FTA-ABS and MHA-TP) to exclude false positive results which can be caused by a viral infection (e.g., infectious mononucleosis, hepatitis, varicella and measles), lymphoma, TB, malaria, endocarditis, connective tissue disease, pregnancy or abuse of injection drugs. If a pregnant woman has a reactive nontreponemal test and a persistently negative treponemal test, a false positive test is inferred. A positive FTA-ABS or MHA-TP usually remain reactive for life, even after successful therapy. Also, look for evidence of treatment for syphilis - receipt of penicillin (bicillin) 2.4 million units is the standard treatment for syphilis in the mother. Check whether the child was diagnosed with or treated for congenital syphilis with penicillin for 10 days. A physician diagnosis will be clearly documented in the infant's birth chart. Also check the congenital syphilis registry to confirm congenital syphilis, with consideration for confidentiality and security of an individual's HIV/AIDS status.

Name of lab tests - Presumptive diagnosis: nontreponemal tests (for screening purposes) VDRL (venereal disease research laboratory); RPR (rapid plasma reagin test, serologic test for syphilis, STS, syphilis screening test, ART-automated reagin test). Definitive diagnosis: treponemal tests (for diagnostic purposes) Darkfield examination (Darkfield microscopy, syphilis; *Treponema Pallidum* Darkfield examination); FTA-ABS (Fluorescent Treponemal Antibody Absorbed Test, Fluorescent Treponemal Antibody Adsorption); MHA-TP (Microhemagglutination assay for Antibody to *Treponema Pallidum*; Microhemagglutination, *Treponema Pallidum*.

• **Trichomonas** (*Trichomonas vaginalis*) - Record clinician diagnosis of trichomonas. Trichomonas is diagnosed by finding trichomonas on a wet mount.

**Name of lab tests** - Trichomonas preparation (Hanging Drop Mount for Trichomonas, *Trichomonas vaginalis* wet preparation; Trich Prep; wet preparation for *Trichomonas vaginalis*.)

- **Q. 17 MOTHER'S REPRODUCTIVE HISTORY:** To specify 'Not Documented' use 'ND'. An obstetrical history should be documented at the first prenatal visit in the progress notes section, or the prenatal care flow sheet. The obstetrical history should list the outcome of all of the woman's past pregnancies.
  - **Number of previous pregnancies:** This number should include all pregnancies, regardless of outcome (including abortions, miscarriages, etc) <u>up to but EXCLUDING the pregnancy that is being abstracted.</u>
  - **Number of previous live births:** Note that <u>parity</u> refers to the number of viable pregnancies, that is, the number of pregnancies carried to 20 weeks. Parity excludes miscarriages and elective abortions but includes stillbirths. <u>Parity cannot be used for this answer.</u> The number of live births should be the total of preterm and term births (excluding abortions, miscarriages, and stillbirths).
  - **Number of previous miscarriages:** A miscarriage is an abortion which occurs naturally and may also be referred to as a 'spontaneous abortion' (SAB). A spontaneous abortion is a fetal death that occurs before 20 weeks (a stillbirth is a fetal death that occurs at or after 20 weeks). Record the number of miscarriages.
  - **Number of previous induced abortions:** An 'induced' abortion is brought on purposely and may also be known as an 'artificial' or 'therapeutic' abortion (TAB), or referred to as a 'termination of pregnancy' (TOP). In cases where the woman has had an abortion, the chart may abbreviate this as 'A' or 'Ab' or 'TAB' or 'TOP' followed by a number designating the number of abortions prior to this pregnancy. Record the number of induced abortions.
  - The medical record does not always differentiate spontaneous from elective abortions. In those cases the only data available is 'total'. Number of total abortions: spontaneous abortion + elective abortion = total. The total number of abortions is usually noted at intake at the time of the first prenatal care visit in the obstetrical history. If the provider documented parity as a four-digit number, the third digit (number of pregnancies ending in abortion) can be used to answer this question. Remember: Record the number of previous induced abortions (above) AND the number of previous miscarriages (above) OR (if the chart does not break these two categories out) the total number of abortions, but not both.

\*Note on  $G_P_A$  abbreviations In the Medical Record: This information is often written in the following format:  $G_P_A$ , as in  $G_5P_3$  or it may be written as  $G_5P_3A_1$ . The 'G' (gravida) refers to the total number of pregnancies (including current pregnancy), the 'P' (para) to the number of live births (at least 20 weeks gestation) and the 'A' to the number of induced and spontaneous abortions. Information on gravida status is usually noted at intake at the time of the first prenatal care visit. Also note that 'multigravida' refers to a woman who has been pregnant more than once, 'primigravida' refers to a woman who is pregnant for the first time (by definition, has no prior pregnancies), and a 'grand multiparous' woman refers to a woman who has had more than 5 pregnancies.

**G** = gravida, the number of pregnancies including the current pregnancy **P** = parity, the number of pregnancies > 20 weeks gestation (excludes miscarriages and 1<sup>st</sup> trimester abortions)

A = Abortion, the number of abortions (both spontaneous and induced abortions)

**For example**, a woman who is  $G_5 P_3 A_1$  has been pregnant 5 times (including the current pregnancy), 3 of those pregnancies were carried to at least 20 weeks gestation, and she had 1 spontaneous or induced abortion.

Parity may also be documented as a four digit number. The first digit represents the number of pregnancies delivered at full-term (at least 37 weeks gestation). The second digit represents the number of pregnancies delivered pre-term (20-37 weeks). The third digit represents the number of abortions including spontaneous or therapeutic abortions; and the last digit represents the number of living children the woman currently has.

### P = parity may be documented as a 4 digit number

- 1<sup>st</sup> digit = term pregnancies (>37 weeks)
- 2<sup>nd</sup> digit = preterm pregnancies (20-37 weeks)
- 3<sup>rd</sup> digit = abortions (includes both spontaneous and induced abortions)
- 4<sup>th</sup> digit = living children

**For example**, a woman's record may read  $G_5$   $P_{2113}$ . This woman has delivered 2 infants who were full-term, delivered one infant pre-term, had one abortion and has 3 living children. This patient is currently pregnant (total number of pregnancies=5) and she has had four previous pregnancies.

If you are using G\_P\_ notation to complete Q.17, remember that you will have to subtract the current pregnancy from the gravida (G) notation.

This format is not always followed exactly as described here. When possible, it will be useful to ask clinic nurses what their standard notation is.

Q. 18 COMPLETE THE CHART BELOW FOR ALL SIBLINGS: If possible record the dates of birth of live born siblings. This information is not always available on prenatal care charts or labor and delivery records. This question is included because of limitations in the current HARS software which allow only for the linking of one child with the mother's HARS case report.

### III. Substance Use

**Questions 19-22** 

This section on substance abuse provides information on whether substance abuse occurred during the mother's pregnancy, types of substances used, and information on toxicology screenings for the mother and infant.

Hierarchy of records for response gold standard (Q. 19, 20 & 22): If conflicting information is found for any of these questions, refer to this list to determine which response to include unless abstractor is positive of the correct response.

- 1. Prenatal Care
- 2. Maternal HIV Clinic
- 3. Labor and Delivery
- 4. Pediatric Birth
- 5. Pediatric non-HIV
- 6. Pediatric HIV
- 7. Health Department

**Hierarchy of records for response gold standard (Q. 21):** If conflicting information is found for this question, refer to this list to determine which response to include unless abstractor is positive of the correct response.

- 1. Pediatric Birth
- 2. Pediatric non-HIV
- 3. Pediatric HIV
- 4. Health Department
- Q. 19 WAS SUBSTANCE USE DURING PREGNANCY NOTED IN THE MEDICAL OR SOCIAL WORK RECORDS: This information can be found in the progress notes, social worker notes, and in the lab results summary section, or in the summary sheet listing all prenatal care visits, lab results, gestational ages, etc.
- Q. 19a IF YES, INDICATE WHICH SUBSTANCES WERE USED DURING THE PREGNANCY: The drugs listed here are in alphabetical order. Heroin is a semisynthetic narcotic and opiate and

should be listed as heroin, opiate, or opioid on the urine toxicology lab results sheet. Marijuana may be listed on the urine toxicology results as cannabis, a cannabinoid, THC or simply marijuana. Methadone is a totally synthetic narcotic and should be listed as methadone. Any methadone use, whether legal or illegal, should be included as 'Yes' to this question. If 'Other', be sure to indicate the name of the drug(s) used. If any drugs are used, be sure to complete **Q. 19b**.

- Q. 19b IF ANY SUBSTANCES USED, WERE ANY OF THE DRUGS INJECTED: If any drug(s) used were injected, mark 'Yes' and write the name of the drug in the space provided.
- Q. 20 WAS A TOXICOLOGY SCREEN DONE ON THE MOTHER DURING PREGNANCY OR AT DELIVERY: The toxicology testing must have been completed during pregnancy, not before pregnancy. Toxicology screens are usually done using urine or serum and are usually listed as 'positive' if there is evidence of the drug in the urine or blood serum. Marijuana may be listed on the toxicology results as cannabis, as a cannabinoid, THC or simply marijuana. Heroin is a semisynthetic narcotic and opiate and should be listed as heroin or opiate on the toxicology lab results sheet. If screening for 'Other' drug was done, be sure to indicate what the drug was in the space provided.
- Q. 21 WAS A TOXICOLOGY SCREEN DONE ON THE INFANT AT BIRTH: Most toxicology screens on infants are done using urine. A positive screen at birth indicates illicit maternal drug use before delivery. This information should be clearly noted in the infant's birth chart. Please specify all drugs identified on screening, including methadone. If screening for 'Other' drug was done, be sure to indicate what the drug was in the space provided.
- Q. 22 WAS MOTHER REFERRED FOR SUBSTANCE ABUSE TREATMENT DURING OR AFTER THIS PREGNANCY: This question asks about whether the mother was referred for substance abuse treatment both <u>during</u> and <u>after</u> this pregnancy. This information is usually found in the prenatal care records or in the hospital medical records in the physician, nurses, or social workers notes.

### IV. Mother's HIV Testing

Questions 23-30

This section provides information on the mother's HIV testing history and diagnosis of HIV. This includes when the mother was diagnosed, results of HIV screening during pregnancy and labor/delivery, dates of first and subsequent HIV tests, CD4 counts and viral loads during pregnancy, and information on the most advanced serostatus of the mother during pregnancy.

**Hierarchy of records for response gold standard:** If conflicting information is found for any of the mother's HIV testing questions, refer to this list to determine which response to include unless abstractor is positive of the correct response.

- 1. Maternal HIV Clinic
- 2. Prenatal Care
- 3. Labor and Delivery
- 4. Pediatric Birth
- 5. Pediatric non-HIV
- 6. Pediatric HIV
- 7. Health Department
- Q. 23 THE MOTHER WAS DIAGNOSED AS BEING HIV POSITIVE: This question is asking for the same information as on HARS even though the wording is different (HARS asks about the timing of mother's HIV diagnosis). Although we can determine this by comparing date of test and date of infant's birth, this field is included both to make analysis easier and to serve as a check.
  - Mother refused testing: only code 'refused' if refusal is documented in the maternal or infant's chart.

- Before this pregnancy: includes early pregnancy if subject was tested before pregnancy
  was diagnosed.
- **During this pregnancy:** any time after pregnancy was diagnosed.
- At time of delivery: if tested when she was admitted for labor and delivery and ≤ 5 days after delivery.
- **Before child's birth:** the mother was known to be HIV positive before child's birth but the exact timing of the positive test is unknown.
- After child's birth: if first test is conducted 6 or more days after the child's birth (see Delivery/postpartum category above).
- **HIV-infected, unknown when diagnosed:** the mother was known to be HIV infected but the timing of her diagnosis is unknown.

This question seeks to document the HIV status of the mother and, if HIV infected, the timing of her HIV diagnosis relative to this child's birth. 'Refused HIV testing' should be checked if the mother's refusal is documented in the chart. If the biologic mother has been tested for HIV and found to be uninfected at or after the child's birth then perinatal transmission is not the presumed mode of exposure to HIV infection. If mother-to-infant transmission through breastfeeding is considered as the only mode of transmission, note that on the front page of the Enhanced Surveillance Form and alert the state or local NIR Coordinator and CDC.

- Q. 24 DATE OF MOTHER'S FIRST POSITIVE CONFIRMATORY TEST: (Western Blot or IFA) This should be the day the blood was drawn (rather than the day the patient was counseled). If all or part of date is unknown, ' '(blank) should be coded in appropriate field. If there is a physician diagnosis that states, 'HIV+ for 4 years', for example, then code month and day as 'XX', and subtract 4 from the year of the note in the chart to determine year of testing. If the mother has only been tested once and it occurred during this pregnancy, the same date should be used for this question as in Q.25a. Likewise, if the mother has only been tested once and it was at time of labor and delivery, the date should be recorded in Q.26a.
- Q. 25 MOTHER'S HIV SCREENING DURING PREGNANCY TABLE: Women who have already been tested and reported may be retested in pregnancy.
  - Results Enter the results of the rapid or EIA test (Positive; Negative; Indeterminate; Results not found; Not tested; Not tested, known to be infected; Refused; Unknown). If there is an indication in the chart that the test was ordered and done, but no results can be found in the chart indicate that by putting 'Results not found' in the space provided. Record as 'Unknown' if there is not indication of HIV testing or results in any of the records abstracted.
  - **Test** Enter the type of test performed (Rapid, EIA, Not documented).
  - Date Note the date the blood was drawn.
- **Q.25b SECOND SCREENING:** If the mother had a negative or indeterminate result for the first screening or refused testing the first time it was offered, provide a response for the second screening.
- **Q.25c THIRD SCREENING:** If the mother had a negative or indeterminate result for the first and second screening or refused testing the first and second time it was offered, provide a response for the third screening.
- Q. 26 MOTHER'S HIV SCREENING AT TIME OF LABOR AND DELIVERY TABLE:

An **expedited HIV** test is a standard EIA test performed with rapid turnaround time.

- Results Enter the results of rapid, expedited EIA, or EIA test (Positive; Negative; Indeterminate; Results not found; Not tested; Not tested, known to be infected; Refused; Unknown). If there is an indication in the chart that the test was ordered and done, but no results can be found in the chart indicate that by putting 'Results not found' in the space provided.
- Test Enter the type of test performed (Rapid, Expedited EIA, EIA, Not documented).

- Date and time results received at labor and deliver Note the date and time the laboratory results were received at labor and delivery. This information is important to knowing if the test results were received in time to initiate antiretroviral medication. This date and time can also be compared to the date and time of initiation of neonatal antiretroviral medications to determine timeliness for prevention of HIV infection. Write time in military hours, e.g. 9:15 p.m. is 21:15--It is easy to calculate by adding 12 to each hour after 12 noon (1:00 p.m. is 13:00, etc...). Midnight is 00:00. Minutes after midnight are coded as 00:01 etc... (i.e., fifteen minutes after midnight is 00:15).
- Q.26b SECOND SCREENING: If the mother had a rapid test, refused testing, or results not found, negative or indeterminate for her first screening at labor and delivery, provide a response for the second screening only if it was not a confirmatory test. If second screening was a confirmatory test, skip to Q.26c.
- Q.26c CONFIRMATORY TEST: If the mother had a rapid test, refused testing, or results not found, negative or indeterminate for the first and/or second screening, provide a response for the confirmatory test. Response is not needed if the mother's first screening was a confirmatory test.
- Q. 27 WERE CD4 COUNTS OBTAINED DURING PREGNANCY: CD4 counts should be noted in number of cells/mL. CD4% is the part of the absolute lymphocyte count that is CD4 cells and equals CD4/(CD4+CD8). In AIDS, the CD4 (T4) cells are severely reduced, and the CD4/CD8 or T4/T8 ratio is <1. Note the date of the CD4 tests.
  - If the mother received CD4 testing during pregnancy, be sure to indicate 'Yes' <u>and</u> complete the chart provided in **Q. 27a**.
- Q. 27a IF YES, LIST BELOW: The purpose of this question is to have an idea of the stage of HIV disease of the mother at the time of pregnancy. If no CD4 counts or percentages are available during pregnancy, CD4 counts and percentages within 6 months before pregnancy would be useful to record. If more than three are recorded in the records, prioritize those CD4 counts and percentages closest to delivery. Additional CD4 counts can be recorded in the comments section at the end of the form. Note: Fields for entry of CD4 count alternate with those for CD4 percent.
   Date Blood Drawn: This is the date the blood was drawn.
- Q. 28 DID MOTHER HAVE VIRAL QUANTIFICATION TESTS PERFORMED DURING PREGNANCY: Viral load testing has become the standard of care for monitoring response to therapy in HIV-infected patients. For more information on guidelines for reporting of viral load lab test results see: Centers for Disease Control and Prevention. Guidelines for laboratory test result reporting of human immunodeficiency virus type 1 ribonucleic acid determination: recommendations from a CDC working group. MMWR 2001;50(No. RR-20). These guidelines are available at

If the mother received viral load testing during pregnancy, be sure to indicate 'Yes' <u>and</u> complete the chart provided in **Q. 28a**.

- Q. 28a IF YES, LIST BELOW: Remember to enter the viral load test results into HARS. If no viral loads are available during pregnancy, viral loads within 6 months before pregnancy would be useful to record. If more than three are recorded in the records, prioritize those viral loads <u>closest to delivery</u>.
  - Results in copies/mL and Results in logs: Viral load results must be reported as either copies/mL or log 10. Results for copies/mL must be reported according to the reportable range. The range for each type of test is included in the reference table below. If results are below the lower limit of detection, report it as 'below IId' (lower limit of detection); if results are above the upper limit of detection, report it as 'above uld' (upper limit of detection).
  - Date Blood Drawn: This is the date the blood was drawn.

http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5020a1.htm.

The following reference table will help you complete the chart in Q. 28a.

Company	Assay Type	Reportable Range (copies/mL) #
Roche	RT-PCR	S*: 400 - 750,000
		US*: 50 - 75,000
Bayer	bDNA	75 - 500,000
bioMerieux	NASBA	50 - 1,000,000
Primagen	NASBA	500 - 50,000,000

<sup>\*</sup>S = standard, US = ultrasensitive

### Q. 29 WHAT WAS MOTHER'S MOST ADVANCED HIV CLASSIFICATION DURING PREGNANCY:

Indicate the highest level in the HIV/AIDS case definition hierarchy: (in descending order) 1) AIDS with an indicator condition (OI), 2) AIDS based on CD4 criteria only (i.e., CD4 cells <200 or CD4% ≤14%), 3) HIV (not AIDS), 4) Not Documented, or 5) Record not available. For example, an opportunistic infection in the ninth month would supersede a CD4 <200 at any point. For women who were diagnosed after their child's birth, mark 'Not documented'. If during record abstraction for this project, you find information (i.e., lab data or OI information) that would change the mother's classification from that currently in HARS, indicate the new classification here and be sure to update HARS. This question should be consistent with the information in **Q. 28a** above.

# Q. 30 WAS MOTHER'S HIV STATUS NOTED IN HER PRENATAL CARE MEDICAL RECORDS:

Mark 'Yes, Positive' if there is explicit reference to her positive HIV status in the chart (including receipt of ARV). For the majority of women tested before or during pregnancy, the answer here is 'Yes, Positive'. For some patients the HIV test date may not be documented at all. The chart will indicate, however, she was known to be HIV-infected during her pregnancy – in such cases, check 'Yes, Positive'.

Mark 'Yes, Negative' if there is explicit reference to her negative HIV status in the chart. This must be evident by the presence of a negative test result.

If the progress notes in the prenatal records state that this is a woman at risk for HIV infection but that her HIV infection status is unknown, the answer to this question would be 'No'.

Situations where a woman may have been tested before delivery, but appears not to be known to be HIV-infected by medical staff include: being tested so late in pregnancy that results are not available before delivery, failure of physicians to inquire about HIV status, failure to be offered a test during prenatal care, and failure of patient to disclose. In these instances, the response would be 'No'.

For women who have not received any prenatal care, mark 'No prenatal care'.

# V. Antiretroviral Agents in Pregnancy

**Questions 31-35** 

This section provides information on the types of antiretroviral therapies provided to the mother during her pregnancy and labor/delivery as well as CD4 counts and viral loads after pregnancy.

**Hierarchy of records for response gold standard (Q. 31 and 31a):** If conflicting information is found for any of the antiretroviral agents in pregnancy questions, refer to this list to determine which response to include unless abstractor is positive of the correct response.

- 1. Maternal HIV Clinic
- 2. Prenatal Care
- 3. Labor and Delivery
- 4. Pediatric Birth
- 5. Pediatric non-HIV
- 6. Pediatric HIV
- 7. Health Department

**Hierarchy of records for response gold standard (Q. 33 and 33a):** If conflicting information is found for any of the antiretroviral agents at labor and delivery questions, refer to this list to determine which response to include unless abstractor is positive of the correct response.

- 1. Labor and Delivery
- 2. Pediatric Birth
- 3. Maternal HIV Clinic
- 4. Pediatric non-HIV
- 5. Pediatric HIV
- 6. Health Department

Hierarchy of records for response gold standard (Q. 34 – 35b): If conflicting information is found for any of the maternal HIV care after delivery questions, refer to this list to determine which response to include unless abstractor is positive of the correct response.

- 1. Maternal HIV Clinic
- 2. Health Department

### Q. 31 WAS MOTHER PRESCRIBED ANY ANTIRETROVIRAL MEDICATION DURING THIS

**PREGNANCY:** 'During this pregnancy' refers to the time up to, but not including, labor and delivery. If the mother was previously taking, began taking or restarted antiretroviral medications after interruption during the 1<sup>st</sup> trimester, answer this question as 'Yes'. If the specific drugs she received are unknown, complete the grid and write 'Unknown" in the 'Drug Name' column. **Antiretroviral Drug List:** There is a reference list of antiretroviral drugs included at the end of the data abstraction form. In this list, the drugs are organized by drug category, NNRTI, NRTI, Protease Inhibitors, and Other, and within each category the drugs are listed in alphabetical order. As new drugs become available the drug list in the database will be updated. Call the Enhanced Perinatal Surveillance Coordinator at CDC to report drugs that are not included in the list.

- **Drug Name** Using the antiretroviral drug list, note all antiretrovirals either used or refused during the pregnancy. COMBIVIR is a combination of ZDV (AZT) and 3TC. If combivir is discontinued during pregnancy but either ZDV (AZT) or 3TC (lamivudine) is continued, code Combivir as stopped and indicate that ZDV or 3TC was begun (as a single drug) and the date this change was made. If the woman received drug therapy as part of <u>ACTG 316</u>, receipt of <u>NEVIRAPINE</u> should not be indicated on the antiretroviral drug chart since it is not known whether the mother received the drug or the placebo. If the specific drugs she received or refused are unknown, complete the grid and write 'Unknown' in the 'Drug Name' column. Also, be sure to enter the receipt of ZDV or other ARV during pregnancy in HARS.
- Was Drug Refused If any antiretroviral drug was refused, write the name of the drug in the grid and check 'Yes' in the column labeled 'Was Drug Refused'. Do not assume that a woman who did not receive antiretroviral drugs refused the drugs they may not have

been offered. Only code 'refused' if refusal is documented. Our goal is to sort out women who were not prescribed drugs and those who were not prescribed drugs because they refused it.

- **Date Drug Started** Enter 'XX' for unknown values (i.e., 03/XX/2005). In the case of a woman having interrupted antiretroviral medications due to pregnancy, the column 'Date Started' refers to the date when the mother <u>initially started</u> the antiretroviral drugs.
- Gestational Age Started Enter week of gestation antiretrovirals were started. Round down to the nearest completed week of gestation, i.e., if medical chart indicates 37 4/7 weeks, round to 37 weeks. In the case of a woman having interrupted antiretroviral medications due to pregnancy, the column 'Gestational Age Started' refers to the gestational age when the mother initially started the antiretroviral drugs. If the week is unknown then indicate '99' for Unknown.
- **Drug Stopped** If the drug was stopped (discontinued) **prior to** the birth of the infant but administered sometime **during the pregnancy**, indicate 'Yes', the drug was stopped.
- **Date Stopped** Enter date (MM/DD/YYYY) the antiretrovirals were stopped if completely discontinued. If date is not documented then indicate 'ND'.
- **Drug Stop Code** To answer this question, use the 'S' codes found at the end of the abstraction form. Up to two codes are allowed as reasons why a drug may be stopped. If there are more than two reasons why a drug is stopped, indicate the two most important reasons. Code the reasons as they are written in the physician's notes. Do not attempt to provide reasons if they are not clearly documented in the chart. **If a woman interrupts use only temporarily, for example while she is in the first 3 months of pregnancy and then restarts, do not code as stopped.**

### Q. 31a IF NO ARV WAS PRESCRIBED IN PREGNANCY, INDICATE REASON:

- No prenatal care The mother did not receive any prenatal care during her pregnancy.
- **HIV status of mother unknown** The physician may not have known the HIV status of mother because she refused testing or the physician did not offer testing. Sometimes the mother is not identified as being HIV positive until after delivery.
- Mother known to be HIV negative during pregnancy If the mother tested HIV negative during pregnancy (with no further testing to indicate HIV seroconversion), she would not receive ARV for prevention of perinatal transmission. There must be evidence of a negative test during pregnancy in the chart; do not use patient report.
- Mother Refused Mother refused ARV during pregnancy.
- Other If 'Other' is indicated, be sure to specify why ARV was not prescribed.
- **Not Documented** Indicate 'Not Documented' if the woman was not prescribed ARV but the reason why is not known.

# Q. 32 WAS MOTHER'S HIV STATUS NOTED IN HER LABOR/DELIVERY MEDICAL RECORDS: This information may be found in the history or progress notes, or on a lab report.

Mark 'Yes, Positive' if there is indication of a positive Western Blot, a positive ELISA, a positive PCR for HIV, a positive HIV culture, or an HIV viral load result > 0. Or, medication records may indicate the mother is receiving AZT.

Mark 'Yes, Negative' if there is indication of a negative test during pregnancy or at labor and delivery.

Q. 33 DID MOTHER RECEIVE ANTIRETROVIRALS <u>DURING LABOR AND DELIVERY</u>: The labor and delivery period is also termed the <u>intrapartum</u> period and refers to the time from which the woman was admitted to the hospital for labor to the time of delivery. If, 'Yes', complete the grid for all drugs received during labor and delivery. If the specific drugs she received are unknown, complete the grid and write 'Unknown' in the 'Drug Name' column.

Antiretroviral Drug List: There is a reference list of antiretroviral drugs included at the end of the data abstraction form. In this list, the drugs are organized by drug category, NNRTI, NRTI, Protease Inhibitors, and Other, and within each category the drugs are listed in alphabetical order.

As new drugs become available the drug list in the database will be updated. Call the Enhanced Perinatal Surveillance Coordinator at CDC to report drugs not included in the list.



- **Drug Name** Using the antiretroviral drug list, note all antiretroviral medications either used or refused during labor and delivery. If the specific drugs she received or refused are unknown, complete the grid and write 'Unknown" in the 'Drug Name' column. Also, be sure to enter receipt of ZDV or other ARV at labor and delivery in HARS.
- Was Drug Refused If any antiretroviral drug was refused, write the name of the drug in
  the grid and check 'Yes' in the column labeled 'Was Drug Refused'. Do not assume that
  a woman who did not receive antiretroviral drugs refused the drugs -- they may not have
  been offered. Only code 'refused' if refusal is documented. Our goal is to sort out women
  who did not receive drugs because it was not offered to them, and those who did not
  receive it because they refused it.
- Date Received/Time Received Enter the date and time the antiretroviral medications were begun. Enter ''(blank) for unknown values (i.e., 03/ /2005 or .....)). Write time in military hours, e.g. 9:15 p.m. is 21:15--It is easy to calculate by adding 12 to each hour after 12 noon (1:00 p.m. is 13:00, etc...). Midnight is 00:00. Minutes after midnight are coded as 00:01 etc... (i.e., fifteen minutes after midnight is 00:15).
- Type if Administration The medication record, nurses notes, physician's progress notes, and copies of physician's orders should document the administration of antiretroviral medications if they were given. The physician's orders will generally have the nurse's initials next to the orders as indicating that they carried out the order. Zidovudine (AZT, ZDV) would usually be administered intravenously (IV). Some hospitals may not have an adequate stock of IV on hand and may give it orally rather than do nothing. 'PO' is the standard medical abbreviation for orally. If it is noted in the chart that the drug was given, but the route was not documented, check 'Rcvd, route not documented'.

### Q. 33a IF NO ARV WAS RECEIVED DURING LABOR & DELIVERY, INDICATE REASON:

- Precipitous delivery/STAT c-section In some cases an eminent delivery of an infant may preclude prescription and/or administration of ARV.
- Prescribed but not administered There are instances where a physician has ordered
  the medication, but the mother never received it. Possible reasons would include not
  having the specific ARV in the hospital pharmacy. If the ARV was prescribed but not
  administered because the women delivered prior to administration, check the previous
  box for 'Precipitous delivery/STAT c-section'.
- HIV status of mother unknown The physician may not have known the HIV status of mother either because she refused testing or the physician did not offer testing.
   Sometimes the mother is not identified as being HIV positive until after delivery.
- Birth not in hospital If the birth occurred outside a hospital, in all likelihood ARV would not have been administered.
- Mother tested HIV negative during pregnancy Some women may become HIV positive during pregnancy. The mother may have tested HIV negative at some point during pregnancy and was never retested and determined to be HIV positive. In this case she may not have been prescribed ARV during labor and delivery because she was believed to be HIV negative. There must be evidence of a negative test during pregnancy or at labor and delivery in the chart; do not use patient report.
- Mother Refused Mother refused ARV at labor and delivery.
- Other If 'Other' is indicated, be sure to specify why ARV was not prescribed.
- **Not Documented** Indicate 'Not Documented' if the woman was not prescribed ARV but the reason why is not known.
- Q. 34 WAS MOTHER REFERRED FOR HIV CARE AFTER DELIVERY: If the mother receives CD4 or viral load testing (Q. 35a and 35b) this information can be used as a marker that the mother received care after delivery. This question refers to the time after the mother's discharge from the hospital following delivery of the infant. This information is usually found in the mother's chart. If not, indicate 'Not Documented'.

- Q. 35 INDICATE FIRST VIRAL LOAD AND/OR CD4 AFTER DISCHARGE FROM THE HOSPITAL:

  This question is most relevant for those project areas that have laboratory reporting of CD4 counts and viral loads. If the mother receives CD4 or viral load testing this information can be used as a marker that the mother has received care after delivery.
- Q. 35a INDICATE FIRST CD4 RESULT AFTER DISCHARGE: Indicate the first CD4 count and percentage following the mother's discharge from the hospital after delivery of the infant. This information will most likely be found in the mother's clinic chart. For more information on collection of CD4 counts and percent, see Q. 27a. If there is no indication of a subsequent CD4 result, mark 'Not Done'.
- Q. 35b INDICATE FIRST VIRAL LOAD AFTER DISCHARGE: For more information about viral load testing and how to complete the chart see Q. 28a. If there is no indication of a subsequent viral load result, mark 'Not Done'.

# **VI. Birth History**

**Questions 36-42** 

This section provides information on the birth history of the infant, including the type of birth, dates of labor/delivery, infant's gestational age, mode of delivery, and infant birthweight.

**Hierarchy of records for response gold standard:** If conflicting information is found for any of the birth history questions, refer to this list to determine which response to include unless abstractor is positive of the correct response.

- 1. Labor and Delivery
- 2. Pediatric Birth
- 3. Birth Certificate
- 4. Pediatric non-HIV
- 5. Pediatric HIV
- 6. Health Department

Almost all of the information in this section is routinely available on the labor and delivery summary record, a standard part of the chart (the form itself may vary from hospital to hospital but contains much of the same information).

**Q. 36 TYPE OF BIRTH:** Multiple births are entered into HARS as separate records. If there were multiple births (e.g. twins), each infant should have a separate Enhanced Surveillance Form completed and have a unique Stateno number in HARS.

**Note:** If the birth is a multiple birth (twins, triplets) you will need to complete a separate data abstraction form for each infant. (The mother's information does not need to be completed on the second form except for noting all variables in the Basic Demographics section.) Be sure abstraction forms for multiple births are submitted for data entry and stored together.

- Q. 37 BIRTH INFORMATION: This information may be listed in the labor and delivery record or in a dictated/transcribed labor and delivery summary by the physician. Write time in military hours, e.g. 9:15 p.m. is 21:15--It is easy to calculate by adding 12 to each hour after 12 noon (1:00 p.m. is 13:00, etc...). Midnight is 00:00. Minutes after midnight are coded as 00:01 etc... (i.e., fifteen minutes after midnight is 00:15).
  - Admission to L/D Time of admission should be available on the face sheet (likely stamped on this sheet). If possible, record the time of admission to Labor and Delivery (L&D), rather than to hospital. A short time between admission and delivery ('precipitous delivery') may be a reason for not receiving IV ZDV. You should make sure that the date and time of admission to L&D is for the admission associated with delivery. The woman may have been admitted on another date and/or time for false labor or some other reason

- and sent home, then readmitted for delivery.
- Onset of labor This should be easily found on the labor and delivery summary sheet. The onset of labor is defined as the time when contractions are 3-5 minutes apart. Note the date as well as the time --both are necessary to calculate the duration of ruptured membranes, and duration of labor. In an 'elective cesarean section', there will not be onset contractions, because by definition, an elective cesarean occurs prior to onset of labor. In this case, write 'none' in the space provided.
- Rupture of membranes This should be easily found on the labor and delivery summary sheet. Note the date as well as the time -- both are necessary to calculate the duration of ruptured membranes and duration of labor. Rupture of membranes refers to the time when the amniotic sac is either purposely broken or ruptures on its own. When a physician/health care provider ruptures the membranes this is referred to as artificial rupture of membranes--often abbreviated as <u>AROM</u>. When membranes rupture on their own, spontaneously, this is referred to as spontaneous rupture of membranes, or <u>SROM</u>; or <u>PROM</u> which refers to premature rupture of membranes. In the case of cesarean section, the rupture of membranes may be almost concurrent with time of delivery.
- **Delivery** This should be easily found on the labor and delivery summary sheet. Note the date as well as the time -- both are necessary to calculate the duration of ruptured membranes and duration of labor. If the time of delivery is unknown because of a home or out-of-hospital delivery, enter '.....'. <u>Verify that the delivery date is the same as the date of birth noted on the first page of the abstraction form.</u> If there is an inconsistency, you will have to verify the correct date of birth and update HARS if necessary.
- Q. 38 GESTATIONAL AGE AT TIME OF DELIVERY: This age should be recorded in weeks. Round the number down to the nearest whole digit (i.e., 38 6/7 would be 38 weeks).
- Q. 39 MODE OF DELIVERY: This information should be noted in the delivery summary sheet, nurse's notes, anesthesiologist's notes, or physician's progress notes. Often there is a standard check off list of procedures that may have been performed in the course of labor and delivery. The mode of delivery is usually noted there. If the delivery was C-section, complete Q. 39a.
- Q. 39a IF C-SECTION DELIVERY: Elective cesarean section refers to a cesarean section that occurs before rupture of membranes and before the onset of labor. However, if a Cesarean Section was planned but then performed ahead of schedule due to unexpected circumstances, it will still be coded as 'Elective.' Non-elective (or emergent) C-sections are usually done because the fetus has shown signs of distress during labor, whereas elective C-sections are planned, because of previous C-section, breech position, HIV prevention, etc and usually occur before the onset of labor. C-sections that are done in the middle of the night are usually not elective--review chart for clarification if summary sheet indicates 'elective'. Whether a C-section was elective or emergent may not be noted in the delivery summary sheet, but the dictated discharge summary will make this clear. The reason(s) for a C-section are given in the labor and delivery medical record. Notes in the child's records are acceptable even if no birth records are available. Check the appropriate response. If not documented, check 'Not specified'.

### Q. 40 INSTRUMENTATION USED:

- None if there was not indication that an instrument was used.
- Forceps forceps are applied to the head of the infant to assist in delivering the infant.
- Vacuum a vacuum is applied to the head of the infant to assist in delivering the infant.
- Forceps and vacuum- combination of the two methods
- **Not specified** if the type of delivery is not available, note 'Not specified'.
- Q. 41 CHILD'S BIRTH WEIGHT: This is usually listed on the delivery summary sheet. It will often already be listed in grams but sometimes will only be in pounds. Record weight in lbs/oz or grams (One kilogram is 1000 grams). The EPS software converts pounds/ounces to grams.
- Q. 42 WAS MOTHER'S HIV STATUS NOTED ON THE EXPOSED CHILD'S BIRTH RECORD:

# VII. Pediatric History

### Questions 43-51

This last section provides information on antiretroviral therapies and prophylaxis for the infant, results of infant antibody or DNA/RNA screening(s), current infant HIV infection status, breastfeeding information, types of infant birth defects (if any), and cause(s) of death if the infant is deceased.

Hierarchy of records for response gold standard (Q.43 – 45): If conflicting information is found for any of the pediatric ARV and testing history questions, refer to this list to determine which response to include unless abstractor is positive of the correct response.

- 1. Pediatric Birth
- 2. Pediatric HIV
- 3. Pediatric non-HIV
- 4. Health Department

Hierarchy of records for response gold standard (Q.46 – 48): If conflicting information is found for any of the pediatric infections status and PCP questions, refer to this list to determine which response to include unless abstractor is positive of the correct response.

- 1. Pediatric HIV
- 2. Pediatric non-HIV
- 3. Health Department

**Hierarchy of records for response gold standard (Q.49):** If conflicting information is found for any of the breastfeeding question, refer to this list to determine which response to include unless abstractor is positive of the correct response.

- 1. Pediatric non-HIV
- 2. Pediatric HIV
- 3. Pediatric Birth
- 4. Health Department

**Hierarchy of records for response gold standard (Q.50 and 50a):** If conflicting information is found for any of the birth defects questions, refer to this list to determine which response to include unless abstractor is positive of the correct response.

- 1. Pediatric non-HIV
- 2. Pediatric HIV
- 3. Pediatric Birth
- 4. Birth Certificate
- Health Department

Pediatric Laboratory Data (for HARS): Be sure to complete the standard pediatric HIV/AIDS case report form under section VII including all HIV diagnostic tests (type, results and date of test). Begin with the earliest test. Also collect additional CD4 results and enter CD4 data into HARS, specifically including the first, most recent, and closest to current diagnostic status. Collect all available viral load data and enter into HARS. Include the type of test, viral copies per mL, and date of test. Results of number of viral copies per milliliter of plasma and date of test can be collected for each of the three commercially available assays: 1) branched DNA (bDNA) 2) nucleic acid sequence-based amplification (NASBA) 3) quantitative RNA PCR. There is also an 'other viral load assay' option in HARS for any new viral load tests developed and licensed in the future.

You will be reviewing the pediatric chart at 6 months, 12 months, and 18 months (and at 6 month intervals thereafter if the child's infection status is still undetermined). When reviewing the pediatric chart, be sure to abstract all data needed for HARS updates (e.g., new HIV diagnostic tests, CD4 counts, treatment,

prophylaxis, AIDS-defining conditions, vital status, birth defects, etc). You will need to complete a new EPS form documenting the updates. On the additional EPS form you should complete the demographics section for both the mother and the infant and then only those portions of the form that need to be newly completed (Q.43 - Q.51) or updated. The updated infant's CD4 counts and viral load test results should be entered directly into HARS.

Q. 43 WAS CHILD PRESCRIBED ANY ANTIRETROVIRALS FOR PERINATAL HIV PREVENTION DURING THE FIRST SIX WEEKS OF LIFE: The first six weeks of life are referred to as the neonatal period. Do not include here any antiretroviral medications received after the first six weeks of life. If the answer to this question is 'Yes', complete the grid. If the specific drugs the child was prescribed are unknown, complete the grid and write 'Unknown' in the 'Drug Used' column.

Antiretroviral Drug List: There is a reference list of antiretroviral drugs included at the end of the data abstraction form. In this list, the drugs are organized by drug category, NNRTI, NRTI, Protease Inhibitors, and Other, and within each category the drugs are listed in alphabetical order. As new drugs become available the drug list in the database will be updated. Call the Enhanced Perinatal Surveillance Coordinator at CDC to report the drugs not included in the list.

- **Drug Name** Using the antiretroviral drug list, note all antiretrovirals either used or refused during the first six weeks of life. If the specific drugs the child was prescribed or the mother refused are unknown, complete the grid and write 'Unknown' in the 'Drug Name' column. Also, be sure to complete the date neonatal ZDV or other ARV started in HARS.
- Was Drug Refused If any antiretroviral drug was refused, write the name of the drug in the grid and check 'Yes' in the column labeled 'Was Drug Refused'. Do not assume that a mother refused medications for a child if the child did not receive antiretroviral drugs -they may not have been offered. Only code 'refused' if refusal is documented. Our goal is to sort out children who did not receive drugs because it was not offered to them, and those who did not receive it because mothers refused it.
- Date Drug Started and Time Started The PHS recommendations state that the neonatal component of the ACTG protocol 076 consisting of 6 weeks of neonatal prophylactic ZDV therapy should begin within 8-12 hours of birth. Therefore, to monitor implementation and impact, we collect the date and time of day the child was first started on antiretrovirals for prophylaxis. If the child was prescribed an antiretroviral drug, record the date and time of day the child was started on the drug used as prophylaxis during the first 6 weeks of life. Enter 'XX' for unknown values (i.e., 03/XX/2005 or XX:XX).
- Regimen Completed If the child completed the prescribed regimen of antiretroviral drugs, check 'Yes', if not, check 'No'. If the regimen was not completed, enter the Stop Date and the Drug Stop Code. Zidovudine is generally prescribed for 6 weeks.
- **Stop Date** If the drug was stopped (discontinued) prior to completion of regimen, indicate 'Yes', the drug was stopped.
- **Drug Stop Code** To answer this question, use the 'S' codes found at the end of the data abstraction form. Up to two codes are allowed as reasons why a drug may be stopped. If there are more than two reasons why a drug is stopped, indicate the two most important reasons. Code the reasons as they are written in the physician's notes. Do not attempt to provide reasons if they are not clearly documented in the chart.

### Q. 43a IF NO ARV WAS PRESCRIBED IN FIRST SIX WEEKS OF LIFE, INDICATE REASON:

- HIV status of mother unknown The physician may not have known the HIV status of mother either because she refused testing or the physician did not offer testing.
   Sometimes the mother is not identified as being HIV positive until after delivery.
- Mother known to be HIV negative during pregnancy If the mother tested HIV
  negative during pregnancy (with no further testing to indicate HIV seroconversion), she
  would not receive ARV for prevention of perinatal transmission. There must be evidence
  of a negative test during pregnancy or at labor and delivery in the chart; do not use patient
  report.

- Mother Refused Mother refused ARV for infant during first six weeks of life.
- Other If 'Other' is indicated, be sure to specify why ARV was not prescribed.
- **Not Documented** Indicate 'Not Documented' if the infant was not prescribed ARV but the reason why is not known.

### Q. 44 INFANT'S HIV ANTIBODY TESTING TABLE:

**Rapid tests** are tests done at the bedside or locally rather than being sent out, which ensures rapid 'turnaround' of results. <u>ELISA and Western Blot are not rapid tests.</u> An **expedited HIV** test is a standard EIA test performed with rapid turnaround time.

- Results Enter the results of rapid, expedited EIA, or EIA testing (Positive; Negative; Indeterminate; Results not found; Not tested; Refused; Unknown). If there is an indication in the chart that the test was ordered and done, but no results can be found in the chart indicate that by putting 'Results not found' in the space provided.
- Test Enter the type of test performed (Rapid, Expedited EIA, EIA, Not Documented).
- Date blood drawn Note the date the blood was drawn.

### Q. 45 RESULTS OF DNA/RNA SCREENING TABLE:

- Results Enter the results of DNA or RNA testing (Positive; Negative; Indeterminate; Results not found; Not tested; Refused; Unknown). If there is an indication in the chart that the test was ordered and done, but no results can be found in the chart indicate that by putting 'Results not found' in the space provided.
- Test Enter the type of test performed (DNA, RNA). The most commonly used DNA PCR test is Amplicor/COBAS HIV-1 DNA test. The most commonly used RNA PCR test is Procliex RNA test.
- Date blood drawn Note the date the blood was drawn.
- Q. 46 WHAT IS THE CHILD'S CURRENT HIV STATUS: This question is especially important for those project sites that are not currently sending CDC a HARS record on all HIV-exposed children. See MMWR 1999;48(No.RR-13):29-31 for the pediatric case definitions of HIV infection and AIDS. This publication is available at: <a href="http://www.cdc.gov/mmwr/preview/mmwrhtml/rr4813a2.htm">http://www.cdc.gov/mmwr/preview/mmwrhtml/rr4813a2.htm</a>
- Q. 47 IF CHILD'S HIV STATUS IS INDETERMINATE, INDICATE WHY: This question is included on the pediatric HARS software (although is not found on the pediatric case report form). It is found immediately after the question about diagnostic status of the child (variable name is 'followup'). The codes used for this question are the similar to those found in HARS.
- Q. 48 WAS PCP PROPHYLAXIS RECEIVED IN THE FIRST YEAR OF LIFE: Examples of drugs used for PCP prophylaxis include: Trimethoprim/sulfamethoxazole (TMP/SMX, bactrim, septra) Pentamidine, and Dapsone. TMP/SMX (bactrim, septra) can be used to treat infections other than HIV but is usually used for a shorter period of time. For example, TMP/SMX is usually used for 10 days to treat otitis media and would NOT be recorded as 'Yes' in this field. Include as PCP prophylaxis if it is clearly noted as such in the chart or given for a period of 2 weeks or longer. If there is nothing in the chart that indicates the use of any of these drugs or that refers to the prophylactic treatment of PCP, then check 'No'. 'Not Documented' is used if treatment information in the chart is unclear or not documented.

This question refers only to the child's first year of life. If the child received or is receiving PCP prophylaxis, enter the month, day and year the child was started on therapy to prevent the occurrence of Pneumocystis carinii pneumonia (PCP). If the year and month are present without a designated day, 'XX' should be entered for the day followed by the documented year and month. Information about PCP prophylaxis is also contained in HARS but refers to PCP prophylaxis started at any age not just within the 1<sup>st</sup> year of life.

Please refer to appendix K2 in the surveillance guidelines [MMWR 1995;44(RR-4):1-11] for the revised guidelines for prophylaxis against PCP for children.

- Q. 49 WAS CHILD BREASTFED (HARS): If child was breastfed at any time, check 'Yes' and complete the duration in days or weeks. If duration is not known, check 'Not Documented.' This information will usually be found in the nurse's notes in the delivery chart, in the daily summary notes, or in the pediatric chart of routine visits. If the child was fed the mother's expressed breast milk, this question should be answered 'Yes'. Avoidance of breastfeeding to prevent postpartum transmission of HIV has been recommended for HIV-infected mothers in the U.S. If there is suspicion that the child's only exposure to HIV was through breast milk, note that on the front page of the Enhanced Surveillance Form and alert the state or local NIR Coordinator and CDC.
- Q. 50 WERE ANY BIRTH DEFECTS NOTED IN THE FIRST YEAR OF LIFE: The goal of collecting birth defect information on children born to HIV-infected mothers is to systematically assess, on a population basis, any potential short term adverse outcomes of zidovudine or other antiretroviral exposure in utero. Data collected will be used to evaluate changes in incidence or other unusual patterns of serious birth defects among children exposed to zidovudine in utero compared to those who were not exposed and to that of the general population. Approximately 3%-4% of all babies will have serious birth defects (i.e., neural tube defects, congenital heart defects, esophageal atresia, cleft lip/palate, etc). The methods and definitions used to code these defects have been developed by the CDC Division of Birth Defects and Developmental Disabilities, National Center for Environment Health and are currently used in the Metropolitan Atlanta Congenital Defects Program, an active surveillance system for birth defects in the Atlanta metropolitan area.

The Division of Birth Defects and Developmental Disabilities, NCEH, CDC, developed specific 6-digit codes based on the 1979 British Pediatric Association Classification of Diseases and the World Health Organization's 1979 International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM). Five fields of codes can be entered in HARS. These 6-digit codes are explained and are indexed in *Appendix A*. The 6 digit code is based on a 3 or 5 digit ICD-9 code. The ICD-9 code, which may be available in the child's medical record, can be used on the HARS form and software in place of the 6-digit code. If defects exist, list them all on the HARS case report form and enter into the comment section of HARS. Call the Enhanced Perinatal Surveillance Coordinator for assistance with coding.

To look for possible birth defects, review newborn and hospital records including the face sheet, history and physical, discharge summary, operative, laboratory, x-ray, cardiac catheterization, autopsy reports, physicians', nurses', social, and psychological services' notes, and consultations. In addition, birth defect (i.e. congenital anomalies) information is also collected on the standard U.S. birth certificate. Hospital records should be reviewed to determine if a reportable defect is present. Each reportable condition is coded separately according to the 6 digit code. These codes are based on ICD-9 codes but provide more specific diagnostic information. If reportable birth defects are diagnosed, check 'Yes' and abstract all diagnoses onto the EPS Date Abstraction Form and the HARS case report form. Also include discrepant diagnoses and those mentioned once in the chart that have not been specifically ruled out by an expert or lab test. If the infant is diagnosed with a syndrome, record the name and code of the syndrome as well as the individual defects. If there is a question as to whether a diagnosis is a birth defect and should be reported please call the Enhanced Perinatal Surveillance Coordinator. For reference, you may request the full copy of the Metropolitan Atlanta Congenital Defects Program Procedure Manual from the EPS Coordinator.

Another source of information would be a HARS match with the local birth defects surveillance registry.

Q. 51 IF CHILD DECEASED, FROM DEATH CERTIFICATE, LIST: <u>Legibly print</u> the causes of death in the appropriate space provided exactly as it appears on the death certificate. If the ICD-9 or ICD-10 code is included on the death certificate that you review you should include those on the abstraction form. If codes do not appear on the death certificate, the causes of death will be assigned an ICD-9 or ICD-10 code at CDC. <u>Do not, however, code these causes of death yourself.</u>

**Note:** The last listed cause of death in part 1 of the death certificate is usually the underlying cause of death.

Last Updated on January 8th, 2009

