CKiD Chronic Kidney Disease in Children Cohort Study SECTION A: GENERAL INFORMATION

A1. PARTICIPANT ID: AFFIX ID LABEL OR EN			NTER NUMBER IF ID LABEL IS NOT AVAILABLE		
			- _ - _		
A2.	CKiD VISIT #:				
A3.	FORM VERSI	ON:	<u>1</u> <u>0</u> / <u>0</u> <u>1</u> / <u>1</u> <u>2a</u>		
A4.	A4. SPECIMEN COLLECTION DATE:		$\frac{1}{M} \frac{1}{M} \frac{1}{D} \frac{1}{D} \frac{1}{Y} \frac{1}{Y} \frac{1}{Y} \frac{1}{Y}$		
A5.	A5. FORM COMPLETED BY (INITIALS):				
The	e following san	nples should be collect	ed.		
Sai	mples:	Shipped to	Shipped:		
Sei	rum	CBL	IMMEDIATELY		
Serum CBL		CBL	Batched (Ship in Jan, Apr, Jul or Oct)		
loh	exol Blood	CBL	IMMEDIATELY		

If consent is obtained for biological samples, collect the following:

CBL

Urine

Samples: Shipped to: Shipped:

Serum (Biological) NIDDK Biosample Repository Batched (Ship in Jan, Apr, Jul or Oct)

(Silip ili Jan, Apr, Jui or Oct)

IMMEDIATELY

Plasma (Biological) NIDDK Biosample Repository Batched

(Ship in Jan, Apr, Jul or Oct)

Urine (Biological) NIDDK Biosample Repository Batched

(Ship in Jan, Apr, Jul or Oct)

Nail Clippings (Biological) NIDDK Biosample Repository IMMEDIATELY

Hair (Biological) NIDDK Biosample Repository IMMEDIATELY

BATCHED SAMPLES SHOULD BE SHIPPED QUARTERLY (Jan, Apr, July or Oct)

OR MORE OFTEN IF DESIRED BY THE SITE COORDINATOR!

Samples should NOT be stored for more than one year. For specific questions, contact your CCC prior to shipment.



SECTION B: PREGNANCY TEST AND FIRST MORNING URINE COLLECTION

Is participant a female of child-bearing potential?

B1.

	- 1	9	
		s	•
_		•	PARTICIPANTS OF CHILD-BEARING POTENTIAL ONLY. ALL WITHIN 72 HOURS BEFORE GFR TESTING DATE.
B2.	a.	Urine pregnancy test date:	
	b.	Urine pregnancy results: Positive	1 (END; COMPLETE TRANSITIONAL (TRS01) FORM)
		Nogativo	2

FIRST MORNING URINE COLLECTION

Obtain urine collected at home in the specimen container that was shipped to the family before the visit. IF URINE WAS NOT collected at home, collect FRESH urine into a specimen container provided by central biochemistry laboratory (containers were shipped in batches to each site).

(Refer to MOP Section 11 and/or CBL flowchart for additional information and directions)

Pour at least1 mL of urine into the CBL transport tube.

Check that all information is correct on the urine collection tube and follow packaging instructions and ship to CBL.

Reasons Code List : 1= Not required 3 = Participant Refused 5 = Inadvertently Destroyed 7=Insufficient Volume 2 = Difficult Urine Collection 4 = Collection Contamination 6 = Oversight

Sample Type (Required Volume):		(a) Sample Obtained:		(b) If No, specify reason *SEE CODE LIST ABOVE	(c) Additional Requirements:
		<u>Yes</u>	<u>No</u>	SEE CODE LIST ABOVE	
B3.	Urine Creatinine, Urine Protein, Urine Albumin (CBL)	1 (skip to c→)	2		i. Is this a first morning urine sample? Yes1 No2
	(1.0 mL-10 mL)	(5/4)		(skip to C1)	ii. Time of Collection: : 1 = am, 2 = pm

SECTION C: PRE-IOHEXOL INFUSION BLOOD DRAW

Encourage fluids throughout the visit.

Place two IV lines (18-22 gauge polyethylene catheters) using two separate vascular access sites ---OR---

Place one butterfly and one IV line (18-22 gauge polyethylene catheter) using two separate vascular access sites; use tape to stabilize butterfly for iohexol infusion

--OR---

Use butterfly for pre-iohexol and individual blood draw sticks; use tape to stabilize butterfly for Iohexol infusion

Complete Pre-Iohexol Infusion blood draw according to MOP instructions/flowchart below. NOTE: If patient has had a local CBC drawn within the past 30 days, those CBC results may be used instead of drawing another CBC and blood draw amounts on pre-iohexol infusion blood draw can be decreased by 1 ml.

For Initial Blood Draw with <u>Syringe</u>, <u>Vacutainer</u> OR <u>Butterfly</u> Method: Select the Type of Consent Obtained (options 1 through 2) That Pertains to the CKiD Participant:

If participant consented to BIOLOGICAL samples:

Collect 15-16 mL if participant is < 30 kg OR 21-22 mL if participant is $\ge 30 \text{ kg}$.

If < 30 kg, immediately transfer (using 18 gauge needle) or draw:

- 9.5 mL into (2) Tiger-Top SSTs for CBL & NIDDK BR
- 3 mL into (1) PST for NIDDK Biosample Repository
- 1 mL in lavender-top tube for local CBC (tube not provided in CBL kit)
- 1.5 mL in appropriate tube (not provided) for local Renal Panel
- 1 mL of additional blood in SST for CBL (if initial sample is GROSSLY HEMOLYZED)

If ≥ 30 kg, immediately transfer (using 18 gauge needle) or draw:

- 13.5 mL into (2) Tiger-Top SSTs for CBL & NIDDK BR
- 5 mL into (2) PST for NIDDK Biosample Repository
- 1 mL in lavender-top tube for local CBC (tube not provided in CBL kit)
- 1.5 mL in appropriate tube (not provided) for local Renal Panel
- 1 mL of additional blood in SST for CBL (if initial sample is GROSSLY HEMOLYZED)

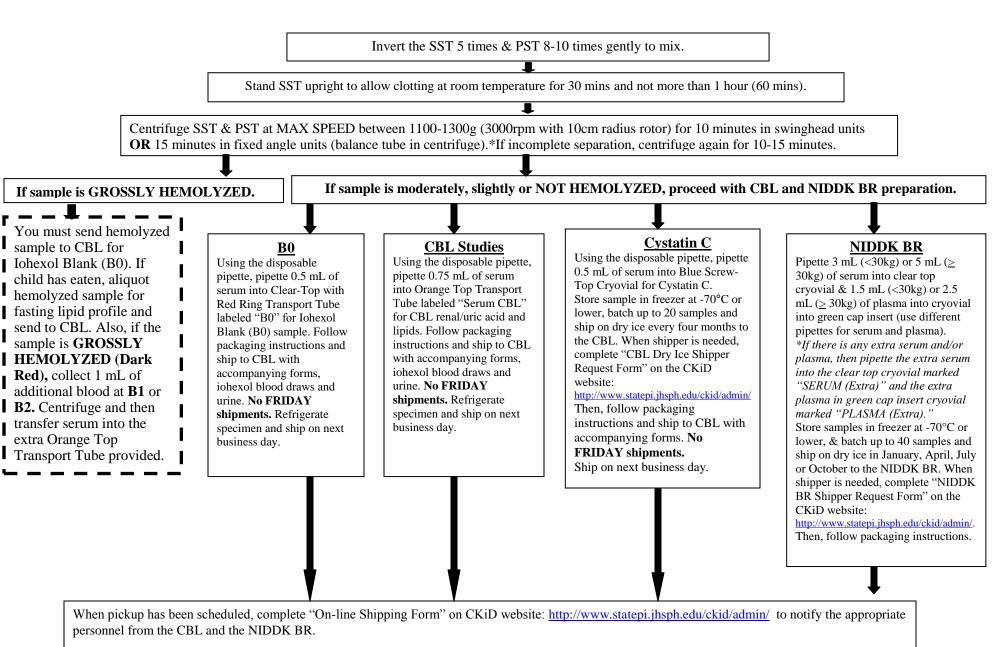
2 If participant did NOT consent to BIOLOGICAL samples:

Collect 6-7 mL from all participants (regardless of weight) as specified below.

Immediately transfer (using 18 gauge needle) or draw:

- 3.5 mL into (2) Tiger-Top SSTs for CBL
- 1 mL in lavender-top tube for local CBC (tube not provided in CBL kit)
- 1.5 mL in appropriate tube (not provided) for local Renal Panel
- 1 mL of additional blood in SST for CBL (if initial sample is GROSSLY HEMOLYZED)

PROCESSING OF PRE-IOHEXOL INFUSION BLOOD FOR CBL & NIDDK BR



C1	ACTUAL	TIME OF	PRE-IOHEXOL	INFUSION B	DRAW
\circ .	/ (O O/ (L			. 11 11 001011 0	

1 = AM	2 DM
I = AIVI	2 = PIVI

PROMPT: IF SUSPECTED BLOOD DRAW ADVERSE EVENT (i.e., infection), complete ADVERSE EVENT (ADVR) Form

Reasons Code List*: 1= Not required		3 = Participant Refused	5 = Inadvertently Destroyed	
	2 = Difficult Blood Draw	4 = Red Blood Cell Contamination	6 = Oversight	

Z – Difficult blood braw			vv	+ = 11ca blood	d Cell Contamination 0 = Oversight
(Re	Sample Type equired Volume in Top Color Tube Type):	(a) Sample Obta	ined:	(b) If No, specify reason *SEE CODE LIST ABOVE	(c) Additional Requirements:
C2.	Renal/Uric Acid Chemistries (2.0 mL in Tiger Top SST)	1 (skip to c→)	2	(skip to C3)	Indicate the appearance of the serum after centrifuging. Grossly (Dark Red)
C3.	Cystatin C (1.0 mL in Tiger Top SST)	1 (skip to c→)	2	(skip to C4a)	Date Frozen: /
C4a	Local CBC (1.0 mL in Lavender Top tube)	1 (skip to C4b)	2	(skip to C4b)	N/A
C4b	Local Renal Panel (1.5 mL in Local SST)	1 (skip to C5)	2	(skip to C5)	N/A
C5.	Serum for Fasting Lipid Panel (0.5 mL in Tiger Top SST)	1 (skip to c→)	2	(skip to C6)	Did the child fast after midnight? Yes1 No2*

^{*}If the child did not fast, the lipid results will be invalid and therefore will not be reported on the Nephron Lipid Report.

Sites can obtain results for lab values that have been identified as "KEY VARIABLES". To obtain results, go the CKiD Nephron Website: https://statepiaps.jhsph.edu/nephron/groups/aspproc/, click on "Report Menu" and choose the appropriate lab report (i.e., Selected Renal Panel Lab Variables Report.)

C6.	Did the participant consent to have biological samples (i.e., serum, plasma and urine samples) stored at the NIDDK Biosample
	Repository?

Yes......

Reasons Code List*: 1= Not required 3 = Participant Refused 5 = Inadvertently Destroyed

2 = Difficult Blood Draw 4 = Red Blood Cell Contamination 6 = Oversight

	Sample Type (Required Volume in Top Color Tube Type):		ined:	(b) If No, specify reason *SEE CODE LIST ABOVE	(c) Additional Requirements:
		<u>Yes</u>	<u>No</u>	SEE CODE LIST ABOVE	
C7.	Serum for NIDDK Biosample Repository (**6.0 mL or **10.0 mL of blood in Tiger Top SST)	1 (skip to c→)	2	 (skip to C8)	Date Frozen: / /
C8.	Plasma for NIDDK Biosample Repository (***3.0 mL of blood in one Green Top or ***5.0 mL in two Green Top PSTs)	1 (skip to c→)	2	(skip to D1)	Date Frozen: //

^{**} Collect 6.0 mL of whole blood for children < 30 kg and 10.0 mL for children \ge 30 kg

^{***} Collect 3.0 mL of whole blood for children < 30 kg and 5.0 mL for children ≥ 30 kg

SECTION D: URINE COLLECTION AND PROCESSING FOR REPOSITORY

Collect FRESH urine into an initial urine collection cup or hat (provided by the site).

Pour 15-60 mL (preferably 60 mL) of FRESH urine into 90 mL urine collection cup with 4 protease inhibitor tablets. Do not fill the urine past the 60 mL mark on the collection cup. One protease inhibitor tablet should be used for 10-15 mL of urine (see Table A). For example if 30 mL of urine is collected, ONLY 2 PI tablets are needed. (Like all unused supplies, unused protease inhibitor tablets should be returned to the CBL.)

TABLE A:
of Protease
Urine Volume
10 - 15 mL
16 - 30 mL
2
31 - 45 mL
46 - 60 mL
4

TABLE A:
of Protease
Inhibitor Tablets
2
31 - 45 mL
4

Invert the urine cup gently 5 - 10 times.

The PROTEASE INHIBITOR TABLET(s) MUST BE **COMPLETELY** DISSOLVED in the urine.

Once the protease inhibitor tablet(s) are completely dissolved, pour urine into up to six (6) 10 mL urine centrifuge tubes. (**For each tube:** remove yellow top cap, pour urine into tube and SCREW cap back onto tube.) Place no more than 10 mL in each tube.

OR –
 Sites may also substitute with tubes normally used to centrifuge urine at site.

Centrifuge urine tube(s) at MAX SPEED between 1100-1300g (3000rpm with 10cm radius rotor) for 10 mins (swinghead units) – OR – 15 mins (fixed angle units).

Decant (pour off) the supernates (liquid reaction) into up to seven (7) 10 mL urine cryovials. Pour no more than 9 mL of urine into each 10 mL cryovial to allow for expansion.

Check that all information is correct on the urine cryovials, promptly freeze and store sample(s) at -70°C or lower. Batch samples and ship at least quarterly (include maximum of 36 cryovials per shipper). When shipper(s) is needed, complete "NIDDK Shipper Request Form" on CKiD website: http://www.statepi.jhsph.edu/ckid/admin/. Then, follow packaging instructions.

When pickup has been scheduled, complete "Online Shipping Form" on CKiD website to notify Heather Higgins, Sandra Ke and KIDMAC that sample(s) have been shipped to NIDDK BR.

Reasons Code List*: 1= Not required 2 = Difficult Urine 3 = Participant 4 = Collection 5 = Inadvertently 6 = Oversight

Collection Refused Contamination Destroyed

	Sample Type (Required Volume in Top Color Tube Type):	(a) Sam Obtair <u>Yes</u>		(b) If No, specify reason *SEE CODE LIST ABOVE	(c) Additional Requirements:
D1.	Urine for NIDDK Biosample Repository (15.0 - 60.0 mL of urine in specimen container and transferred into collection cup with protease inhibitors)	1 (skip to c→)	2	(skip to E2)	i. Was supernate decanted into urine transport cryovials? Yes1 No2

SECTION E: OPTIONAL LOCAL LAB TEST (IF CLINICALLY INDICATED)

Check with the PI at your clinical site to determine whether or not it is **CLINICALLY INDICATED** to obtain urine for local lab. These are instances when the PI needs results immediately and/or the participant needs additional local labs performed (i.e., local Urine Creatinine and Urine Protein).

and	d Urine Protein).
E2.	Was a urine protein to creatinine ratio assay performed at the clinical site's local laboratory?
	Yes
	SECTION F: INFUSION SYRINGE WEIGHT
F1.	SCALE MUST FIRST BE ZEROED BEFORE WEIGHING. REMOVE ALUMINUM FOIL PRIOR TO WEIGHING THE SYRINGE. THE <u>SAME</u> SCALE MUST BE USED TO WEIGH THE SYRINGE <u>PRE AND POST</u> IOHEXOL INFUSION.
	a. Syringe Weight Pre-Iohexol Infusion : (g)
	b. Syringe Weight Post-Iohexol Infusion :(g) (Post-Infusion Weight should be at least 6.0g less than Pre-Infusion Weight. If Post-Infusion Weight is not at least 6g less, please confirm.)
<u>PR</u>	E AND POST SYRINGE WEIGHT MUST BE OBTAINED IN ORDER TO CALCULATE CHILD'S GFR.
	SECTION G: IOHEXOL – Refer to Instructions for Iohexol Infusion and GFR Blood Draws Flow Chart on Page 12
	BEFORE INFUSING 5 mL OF IOHEXOL, SET TIMER = 0. SIMULTANEOUSLY START TIMER AND BEGIN IOHEXOL INFUSION COMPLETE INFUSION BETWEEN 1 TO 2 MINS
>	LEAVE TIMER RUNNING THROUGHOUT IOHEXOL INFUSION AND SUBSEQUENT BLOOD DRAWS
3 1.	IOHEXOL INFUSION
	a. INFUSION START TIME: : 1 = AM 2 = PM

- DO NOT DRAW BLOOD FROM THE IV SITE WHERE IOHEXOL WAS INFUSED. ANOTHER IV SITE MUST BE USED.
- WASTE 1 mL OF BLOOD IF DRAWING FROM A SALINE/HEPARIN LOCK.
- > COLLECT 1 mL OF BLOOD FOR EACH IOHEXOL BLOOD DRAW IN THE PROVIDED SST.
- EXACTLY AT 120 & 300 MINUTES AFTER IOHEXOL INFUSION. FOR EXAMPLE, IF BLOOD IS DRAWN AT 133 MINS INSTEAD OF 120 MINS, DOCUMENT BLOOD DRAWN @ 133 MINS.
- > TIME SHOULD BE RECORDED IMMEDIATELY AFTER EACH BLOOD SAMPLE IS OBTAINED (i.e., B1, B2).

POST VITALS SHOULD BE TAKEN 10 MINUTES AFTER INFUSION USING LOCAL BLOOD PRESSURE MEASUREMENT (i.e. DINAMAP)

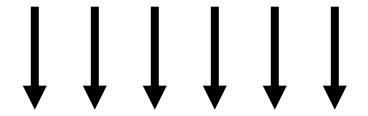
- If rash develops after lohexol Infusion, consider it a reaction to lohexol and notify PI immediately. Consider administration of 1 mg/kg Benadryl IV (maximum dose: 50 mg Benadryl IV).
- In the rare event that systolic BP decreases more than 25 mm Hg, diastolic BP decreases more than 20 mmHg, or pulse increases more than 20 beats per min, notify PI immediately to evaluate reaction and complete the Adverse Event (ADVR) Form. Consider the possibility of an anaphylactic reaction to lohexol. Consider administration of 1 mg/kg Benadryl IV (maximum dose: 50 mg Benadryl IV). Draw up to 0.1 mL 1:1000 Epinephrine for SQ injection and 2 mg/kg Solumedrol IV for administration as ordered by physician.

	(i) Post Vitals:	
G2a.	Post- infusion blood pressure:	/
b.	Post-infusion temperature:	1 = °C Typical range: 36.1 – 38.3 2 = °F Typical range: 94.5 – 100.6
C.	Post-infusion number of heart beats per minute:	
d.	Post-infusion respirations per minute:	

INVERT TUBE 5-10 TIMES AFTER EACH BLOOD DRAW LET SST TUBE STAND 30 MINUTES (BUT NO LONGER THAN 1 HOUR) CENTRIFUGE AT MAX SPEED BETWEEN 1100-1300g (3000rpm with 10cm radius rotor) for 10 MINUTES IN SWING HEAD OR 15 MINUTES IN FIXED ANGLE (BALANCE TUBES IN CENTRIFUGE)

	ALL TIMES should be documented from the initial infusion time	ACTUAL HOURS/ MINUTES on TIMER		(ii) ONLY if Timer malfunctions, record Clock Time using the same clock used for G1a	(iii) Difficult Blood Draw: Yes No		(iv) Blood Drawn via Venipuncture Yes No		(v) Blood Volume Collected (1 mL):	(vi) Centrifuged at Clinical Site: Yes No	
G3a.	B1 2 hrs (120 min):	hr	mins	: 1 = AM 2 = PM	1 (Skip to b)	2	1	2	mL	1 (Skip to G4a)	2 (Skip to G4a)
b.	B1 2 nd attempt:	hr	mins	: 1 = AM 2 = PM	1	2	1	2	mL	1	2
G4a.	B2 5 hrs (300 min):	hr	mins	: 1 = AM 2 = PM	1 (Skip to b)	2	1	2	mL	1 (Skip to H2)	2 (Skip to H2)
b.	B2 2 nd attempt:	hr	mins	: 1 = AM 2 = PM	1	2	1	2	mL	1	2

IF FAMILY CONSENTED TO THE COLLECTION OF HAIR AND NAIL SAMPLES, BUT THE SAMPLES WERE NOT COLLECTED AT VISIT 1B, THEN PROCEED TO SECTION H (SEE QUESTIONS ON PAGE 13).





Instructions for Iohexol Infusion and GFR Blood Draws

Place two IV lines (18-22 gauge polyethylene catheters) using two separate vascular access sites ---OR---

Place one butterfly and one IV line (18-22 gauge polyethylene catheter) using two separate vascular access sites; use tape to stabilize butterfly for iohexol infusion

--OR---

Use butterfly for pre-iohexol and individual blood draw sticks; use tape to stabilize butterfly for Iohexol infusion

Complete pre-iohexol infusion blood draw according to instructions

Start timer and infuse iohexol over 1-2 minutes

If infusion site for iohexol IV or butterfly infiltrates, study MUST BE DISCONTINUED Must wait at least 48 hours to repeat study, and repeat visit should occur within 3 months of initial

Flush with 10 mL normal saline to ensure infusion of all of the iohexol; IOHEXOL IV OR BUTTERFLY MAY NOW BE REMOVED

10 minutes post-infusion CHECK POST-INFUSION VITALS DO NOT DRAW BLOOD AT 10 MINUTES

Obtain post-infusion weight of syringe on the same scale as prior to infusion. Record weight on the Specimen Collection Form prior to shipment to the CCC

Draw 1 ml of blood into SST at 120 mins (B1), and 300 mins (B2).

*For IV ONLY: Discard initial 1 mL blood waste at each blood draw

*For IV ONLY: Flush after each blood draw with at least 3 mL normal saline

*Record the time each blood draw is completed

If rash develops, consider it a reaction to iohexol and **notify PI immediately**. Consider administering 1mg/kg Benadryl IV (maximum dose 50mg).

If systolic BP decreases > 25 mm Hg, diastolic BP decreases > 20 mm Hg or pulse increases > 20 beats per min, consider this an anaphylactic reaction to iohexol and **notify PI immediately**; consider administering 1 mg/kg Benadryl IV (maximum dose 50 mg) and draw up to 0.1 mL 1:1000 Epinephrine for SQ injection and 2 mg/kg Solumedrol IV if necessary.

COMPLETE ADVERSE EVENT FORM and send to CCC for data entry

If blood draw is difficult with poor volume delivery, repeat draw 5 minutes later; record time on Specimen Collection Form and tube. If blood draw is impossible, repeat with new venipuncture.

Following each blood draw: gently invert tube 5-10 times

Stand SST upright at room temp for 30 minutes, but no longer than 1 hour

Centrifuge at MAX SPEED between 1100-1300 g for 10 minutes in swinghead or 15 minutes in fixed angle*

Transfer serum into the cryovial labeled "Iohexol Serum."

Following packaging and shipping instructions; send urine, blood and copies of completed shipping form(s) & confirmation of written consent to CBL

Physician should be immediately available (in person or by phone) during Iohexol Infusion Encourage fluids throughout the visit.

*1100-1300 g = 3000 rpm with 10 cm radius rotor



SECTION H:

H2.	Were nail clippings and hair samples previously c	collected and shipped at V1b?	
	Yes	1 (END)	
	No		
H3.	Did the participant consent to have biological sam	nples (i.e., nail clippings and hair samples) stored at NIDDK E	Biosample Repository?
	Yes	1	
	No	2 (END)	
	NAIL	CLIPPING COLLECTION	
	 discoloration causing pain or discomfort. If the the participant's toenails instead. FINGERNAI CRYOVIAL (collect one or the other). STAINLESS STEEL NAIL CLIPPERS MUST Esteel nail clippers (see Figure A) for younger of the participant of the participant	collect fingernail clippings if the participant has acrylic nails, a participant cannot provide fingernail clippings, the Study Collection of the Stud	oordinator may clip HE SAME atric size) stainless
	Both sizes are included in the CKiD starter pace. Clean the blades of the nail clippers with Sani prior to use (provided by the CBL).	•	
	Whenever possible, the Study Coordinator shows the stud	ould clip all (10) fingernails, removing e Figure C). Be prepared to collect flyaway nails.	SaniZide
	 (To use nail clippers, see Figures A – D). Reference Carefully place the nail clippings into the cryon spray the clipper with SaniZide Plus and wiped 	er to CKiD MOP Section 12 for further details. vial (see Figure D). After using the nail clipper,	WHEN COME STATES AND S
Figu	ure A	Figure B	Figure C

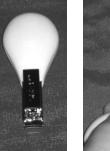










Figure D

Provide 10 nail clippings that are at least 1 mm tall

H4.	Do	Does the participant have acrylic nails?						
		Yes	1 (Skip to H6)					
		No	2					
H5.	We	ere 10 fingernail clippings collected?						
		Yes	1 (Skip to I1)					
		No	2					
	a.	How many fingernail clippings were collected?						
	b.	Specify reason "10" fingernail clippings were not collected	d.					
		Nails not long enough	1 (Skip to H6)					
		Participant Refused	-7 (Skip to H6)					
		Other	2					
		i. Specify:						
		<u>-</u>						
H6.	We	Were 10 toenail clippings collected?						
		Yes	1 (Skip to I1)					
		No	2					
	a.	How many toenail clippings were collected?						
	b.	——————————————————————————————————————	(e.g., Nail fungus or discoloration causing pain or					
		Nail fungus or discoloration	1 (Skip to I1)					
		Nails not long enough	2 (Skip to I1)					
		Participant Refused	-7 (Skip to I1)					
		Other	3					
		i. Specify:						
		. ,						

SECTION I: HAIR SAMPLE COLLECTION

- STAINLESS STEEL SCISSORS MUST BE USED TO COLLECT HAIR SAMPLE. The scissors are included in the CKiD starter package.
- DO NOT collect hair sample if the participant has colored, or chemically altered hair
- Clean blades of stainless steel scissors with SaniZide Plus prior to use.
- Use powder-free gloves.
- Refer to CKiD MOP Section 12 for further details.
 - Lift up the top layer of hair from the **occipital** region of the scalp (see Figure A). Isolate a small thatch of hair (at least 20 fibers) from this region (see Figure B).
 - Place the label with the participant's KID ID # tightly around all 20 strands of hair located at the distal end (furthest from the scalp) (see Figure C).
 - > Cut the hair sample off the participant's head as close to the scalp as possible (see Figure D).
 - > Place cut thatch of hair inside aluminum foil (4 X 4) and fold the top of the foil to completely enclose the hair sample.
 - Place the aluminum foil inside a Ziplock bag (4 X 4) with the gel desiccant pellets in it and seal.
 - > Store sample at room temperature in a dark place prior to shipment.
 - After using the scissors, spray scissors with SaniZide Plus and wipe with clean cloth.

Figure A



Occipital Region of Scalp

Figure B



Place the KID ID label tightly around all 20 strands.

Figure C



Figure D



Cut the hair sample off the participant's head as close to the scalp as possible.

l1.	Does	Does the participant have permed, dyed, colored, or chemically altered hair?					
		Yes	1 (END)				
		No	2				
l2.	Was	the Study Coordinator able to cut at least 20 fibers of hair from	the occipital region?				
		Yes	1 (END)				
		No	2				
	a.	Specify reason "20" hair fibers were not collected:					
		Hair not long enough	1 (END)				
		Participant Refused	-7 (END)				
		Other	2				
		i. Specify:					
		Participant Refused Other	-7 (END) 2				