

# PHYSICAL EXAMINATION (PE)

## Chronic Kidney Disease in Children (CKiD)

### SECTION A: GENERAL INFORMATION

A1. PARTICIPANT ID: AFFIX ID LABEL OR ENTER NUMBER IF ID LABEL IS NOT AVAILABLE

|\_| - |\_|\_| - |\_|\_|\_|

A2. CKiD VISIT #:

\_\_\_ \_ \_

A3. FORM VERSION:

0 3 / 0 1 / 1 8

A4. DATE OF VISIT:

\_\_\_ \_\_\_ / \_\_\_ \_\_\_ / \_\_\_ \_\_\_ \_\_\_ \_\_\_  
M M D D Y Y Y Y

A5. EXAMINER'S INITIALS:

\_\_\_ \_\_\_

A6. Is this study visit an irregular (accelerated) visit?

Yes..... 1  
No..... 2

A7. Is this a V1a or V1b study visit?

Yes..... 1  
No..... 2 (Skip to B1)

A8. Has consent form been signed by young adult participant, parent or legal guardian?

Yes..... 1  
No..... 2 (STOP\*)

**\*WRITTEN CONSENT MUST BE OBTAINED before performing any study related procedures or tasks.**

A9. Date parent, legal guardian or young adult participant signed consent form:

\_\_\_ \_\_\_ / \_\_\_ \_\_\_ / \_\_\_ \_\_\_ \_\_\_ \_\_\_  
M M D D Y Y Y Y

A10. Is documented assent required at your institution?

Yes..... 1  
No..... 2 (Skip to A12)  
N/A..... -1 (Skip to A12)

A11. Date of child assent:

\_\_\_ \_\_\_ / \_\_\_ \_\_\_ / \_\_\_ \_\_\_ \_\_\_ \_\_\_  
M M D D Y Y Y Y

A12. Has consent for genetic testing been obtained?

Yes..... 1  
No..... 2

A13. Has consent to store biological specimen(s) been obtained?

Yes..... 1  
No..... 2

**SECTIONS B – G can be completed by a Nurse or other Health Care Provider with CKiD Training**

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## SECTION B: VITAL SIGNS

- B1. a. Temperature: \_\_\_\_\_ . \_\_\_\_\_  
1 = °C Typical range: **36.1 – 38.3**  
2 = °F Typical range: **94.5 – 100.6**
- b. How was the temperature measured? **(Please circle the type of measurement.)**  
Oral..... 1  
Axillary..... 2  
Tympanic..... 3

**DO NOT CALCULATE HEART RATE. ONLY ENTER NUMBER OF BEATS PER MINUTE**

- B2. Pulse Measurement  
a. Number of Heart Beats per minute: \_\_\_\_\_
- B3. Local Clinical Blood Pressure (i.e. Dinamap): \_\_\_\_\_ / \_\_\_\_\_
- B4. Respiratory Rate  
a. Respirations per minute: \_\_\_\_\_

## SECTION C: WEIGHT

- C1. Child Weight **(If weight is measured in pounds (lbs), please convert to kilograms (kg).)**  
1 lb = (1/2.2) kg **Example: 150 lbs = 150/2.2 = 68.18 = 68.2 kg**
- a. First Measurement: \_\_\_\_\_ . \_\_\_\_\_ **(kg)**
- b. Second Measurement: \_\_\_\_\_ . \_\_\_\_\_ **(kg)**
- i. Do the first and second measurements differ by more than 0.2 Kg?  
Yes..... 1  
No..... 2 **(Complete Specimen Collection Form)**
- ii. Third Measurement: \_\_\_\_\_ . \_\_\_\_\_ **(kg)**

## SECTION D: HEIGHT, WAIST CIRCUMFERENCE and HIP CIRCUMFERENCE

- D1. Child Length/Height
- a. Device used to obtain length/height **(Please circle the device used.)**  
Measuring table with firm block and moveable footboard.... 1  
Wall mounted stadiometer..... 2
- b. First Measurement: \_\_\_\_\_ . \_\_\_\_\_ (cm)
- c. Second Measurement: \_\_\_\_\_ . \_\_\_\_\_ (cm)
- i. Do the first and second measurements differ by more than 0.3 cm?  
Yes..... 1  
No..... 2 **(Skip to D3)**
- ii. Third Measurement: \_\_\_\_\_ . \_\_\_\_\_ (cm)

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### Deleted – Leg Length (Anterior Superior Iliac Spine to medial malleolus) questions

D2 Is the participant less than 12 months old and/or unable to stand?

Yes..... 1 **(Skip to D5)**

No..... 2

D3. Child Waist Circumference

a. First Measurement: \_\_\_\_\_ . \_\_\_\_ (cm)

b. Second Measurement: \_\_\_\_\_ . \_\_\_\_ (cm)

i. Do the first and second measurements differ by more than 0.1 cm?

Yes..... 1

No..... 2 **(Skip to D4)**

ii. Third Measurement: \_\_\_\_\_ . \_\_\_\_ (cm)

D4. Child Hip Circumference

a. First Measurement: \_\_\_\_\_ . \_\_\_\_ (cm)

b. Second Measurement: \_\_\_\_\_ . \_\_\_\_ (cm)

i. Do the first and second measurements differ by more than 0.1 cm?

Yes..... 1

No..... 2 **(Skip to D5)**

ii. Third Measurement: \_\_\_\_\_ . \_\_\_\_ (cm)

D5. Parental Height

a. Was the biological mother's height taken at a previous study visit?

Yes..... 1 **(Skip to sub-question e)**

No..... 2

Don't know..... -8

b. Is the biological mother present during the study visit?

Yes..... 1

No ..... 3 **(Skip to sub-question e)**

c. Mother's First Measurement: \_\_\_\_\_ . \_\_\_\_ (cm)

d. Mother's Second Measurement: \_\_\_\_\_ . \_\_\_\_ (cm)

i. Do the first and second measurements differ by more than 0.3 cm?

Yes..... 1

No..... 2 **(Skip to sub-question e)**

ii. Mother's Third Measurement: \_\_\_\_\_ . \_\_\_\_ (cm)

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- e. Was the biological father's height taken at a previous study visit?  
Yes..... 1 **(Skip to E1)**  
No ..... 2  
Don't know..... -8
- f. Is the biological father present during the study visit?  
Yes..... 1  
No ..... 3 **(Skip to E1)**
- g. Father's First Measurement: \_\_\_\_ \_\_\_\_ . \_\_\_\_ (cm)
- h. Father's Second Measurement: \_\_\_\_ \_\_\_\_ . \_\_\_\_ (cm)
- i. Do the first and second measurements differ by more than 0.3 cm?  
Yes..... 1  
No..... 2 **(Skip to E1)**
- ii. Father's Third Measurement: \_\_\_\_ \_\_\_\_ . \_\_\_\_ (cm)

### SECTION E: BLOOD PRESSURE USING MABIS-MEDIC-KIT ANEROID

Some young children who are less than 5 years old may be irritable during the study visit. Therefore, it may be difficult to measure blood pressure while the child is awake. In such cases, blood pressure readings should be performed while the child is sleeping. It is important to accurately document if the participant is awake or sleeping. Please answer E1 appropriately.

E1. Is/Was the blood pressure measurements obtained while the participant is awake?

- Yes..... 1  
No, participant was/is sleeping..... 2

#### Mid Arm Circumference

- a. First Measurement: \_\_\_\_ \_\_\_\_ . \_\_\_\_ (cm)
- b. Second Measurement: \_\_\_\_ \_\_\_\_ . \_\_\_\_ (cm)
- i. Do the first and second measurements differ by more than 0.2 cm?  
Yes..... 1  
No..... 2 **(Skip to E2)**
- ii. Third Measurement: \_\_\_\_ \_\_\_\_ . \_\_\_\_ (cm)

**USE THE MID-ARM CIRCUMFERENCE MEASUREMENTS TO SELECT THE APPROPRIATE BP CUFF.**

E2. a. Cuff size used **(Please circle the cuff size used.)**

- Infant (9.0 to 14.0 cm)..... 1  
Child (>14.0 to 21.0 cm)..... 2  
Adult (>21.0 cm to 29.0 cm) ..... 3  
Large Adult (>29.0 cm to 40.0 cm) ..... 4  
Thigh (>40.0 to 52.0cm) ..... 5

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- The cuff tubing should be attached to the Mabis Medic-Kit Aneroid sphygmomanometer.
- While palpating the radial pulse (at the wrist), observe sphygmomanometer and inflate the cuff rapidly to 60 mmHg and then slowly inflate in increments of 10 mmHg until the pulse is no longer felt.
- If the pulse is still felt, the cuff pressure should be increased until the pulse disappears. Either the first or the second of these procedures will identify the Observed Pulse Obliteration Pressure.

b. Observed Pulse Obliteration Value    \_\_\_ \_\_\_ \_\_\_

**ADD 30 mm Hg TO THE OBSERVED PULSE OBLITERATION VALUE TO CALCULATE THE PEAK INFLATION LEVEL**

c. Peak Inflation Pressure:            \_\_\_ \_\_\_ \_\_\_

d. First Blood Pressure Reading:    \_\_\_ \_\_\_ \_\_\_ / \_\_\_ \_\_\_ \_\_\_     1) K4     2) K5

**USE PARTICIPANT'S RIGHT ARM TO TAKE BP MEASUREMENT.**

**If right arm cannot be used (i.e., casting), then use left arm.**

**WAIT AT LEAST 30 SECONDS BETWEEN MEASUREMENTS.**

**AFTER FIRST AND SECOND BLOOD PRESSURE READING, RAISE CHILD'S ARM FOR 15 SECONDS  
(MAKE SURE THE CHILD IS NOT SUPPORTING THE ARM AT ALL.)**

In some patients, the disappearance of sound, i.e. the fifth Korotkoff sound (K5), never occurs and beats can be heard during the entire deflation period. In these circumstances, the fourth Korotkoff sound (K4) should be used to determine the diastolic blood pressure. The fourth Korotkoff sound at the point during deflation where the quality of the sound changes dramatically (e.g. the quality of the beats become muffled.)

e. Second Blood Pressure Reading:    \_\_\_ \_\_\_ \_\_\_ / \_\_\_ \_\_\_ \_\_\_     1) K4     2) K5

f. Third Blood Pressure Reading:    \_\_\_ \_\_\_ \_\_\_ / \_\_\_ \_\_\_ \_\_\_     1) K4     2) K5

g. Initials of Blood Pressure Reader:    \_\_\_ \_\_\_ \_\_\_

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### SECTION F: HEAD CIRCUMFERENCE

- F1. Is the child less than 3 years old?  
Yes..... 1  
No..... 2 **(Skip to G1)**
- F2. Head Circumference  
a. First Measurement: \_\_\_\_ \_\_\_\_ \_\_\_\_ (cm)  
b. Second Measurement: \_\_\_\_ \_\_\_\_ \_\_\_\_ (cm)  
i. Do the first and second measurements differ by more than .3 cm?  
Yes..... 1  
No..... 2 **(Skip to G1)**  
ii. Third Measurement: \_\_\_\_ \_\_\_\_ \_\_\_\_ (cm)

### SECTION G: EDEMA

- G1. Edema..... \_\_\_\_  
(Enter highest code. Code 0=none, 1=facial, 2=pretibial, 3=above knee, 4=presacral, 5=ascites, 6=anasarca)
- G2. Is this a Visit 1b study visit or is the participant less than 12 months old?  
Yes..... 1 **(Skip to Section I)**  
No..... 2

**SECTION H should be completed by a Pediatrician, Nurse Practitioner, or Physician Assistant**

### SECTION H: TANNER STAGING

- H1. a. Was the participant's previous CKiD tanner assessment "Adult (stage 5)"?  
Yes..... 1 **(Skip to Section I)**  
No..... 2  
b. What is the participant's gender?  
Male..... 1 **(Skip to H4)**  
Female..... 2

### USE THE ASSESSMENT OF PUBERTAL STAGE LAMINATED CARD AND PICTURES TO ANSWER THE FOLLOWING QUESTIONS

- H2. If female participant, what is the developmental stage of her pubic hair?  
Pre-pubertal..... 1  
Sparse growth of slightly pigmented hair..... 2  
Darker, coarser, beginning to curl and spread over the symphysis..... 3  
Hair has adult characteristics but not adult distribution..... 4  
Adult..... 5

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- H3. If female participant, what is the developmental stage of her breasts?
- (Stage 1) Pre-pubertal..... 1 **(Skip to I1)**
- (Stage 2) Budding..... 2 **(Skip to I1)**
- (Stage 3) Small adult breasts..... 3 **(Skip to I1)**
- (Stage 4) Areola and papilla form secondary mound..... 4 **(Skip to I1)**
- (Stage 5) Adult breasts..... 5 **(Skip to I1)**
- H4. If male participant, what is the developmental stage of his testes and scrotum?
- Pre-pubertal..... 1
- Enlargement of testes, scrotal reddening..... 2
- Increasing length more than width of penis, further scrotal enlargement 3
- Further penile enlargement, darkening of scrotal skin..... 4
- Adult..... 5
- H5. If male participant, what is the developmental stage of his pubic hair?
- Pre-pubertal..... 1
- Sparse growth of slightly pigmented hair..... 2
- Darker, coarser, beginning to curl and spread over the symphysis..... 3
- Hair has adult characteristics but not adult distribution..... 4
- Adult..... 5

**USE THE ORCHIDOMETER (THE GREEN BEADS) PROVIDED BY CKiD.**

- H6. If male participant, what is the testicular size per the orchidometer?
- Bead 1, 2 or 3..... 1
- Bead 4..... 2
- Bead 5..... 3
- Bead 6..... 4
- Bead 8..... 5
- Bead 10..... 6
- Bead 12..... 7
- Bead 15..... 8
- Bead 20..... 9
- Bead 25..... 10

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## SECTION I: PROBLEMS

11. Were there any sections of the physical exam form that were difficult to complete or not completed (i.e., participant was irritable and/or crying during blood pressure measurement and therefore, unable to obtain 1 of the 3 blood pressure measurements)?
- Yes..... 1 **(Complete I2 on page 8)**  
No..... 2 **(END HERE)**

12. Please indicate the section of the physical exam form that was difficult to obtain data or not completed. Please circle yes or no to each section.

	Yes	No	
a. <b>Section B:</b> Vital Signs.....	1	2	<b>(skip to b)</b>
i. Please specify:_____			
b. <b>Section C:</b> Weight.....	1	2	<b>(skip to c)</b>
i. Please specify:_____			
c. <b>Section D:</b> Height.....	1	2	<b>(skip to d)</b>
i. Please specify:_____			
d. <b>Section D:</b> Waist Circumference .....	1	2	<b>(skip to e)</b>
i. Please specify:_____			
e. <b>Section D:</b> Hip Circumference.....	1	2	<b>(skip to f)</b>
i. Please specify:_____			
f. <b>Section E:</b> Blood Pressure Measure using Mabis Medic Kit.....	1	2	<b>(skip to g)</b>
i. Please specify:_____			
g. <b>Section F:</b> Head Circumference for children less than 3 years old	1	2	N/A
i. Please specify:_____			<b>(skip to h) (skip to h)</b>
h. <b>Section G:</b> Edema.....	1	2	<b>(skip to i)</b>
i. Please specify:_____			
i. <b>Section H:</b> Tanner Staging.....	1	2	<b>(END HERE)</b>
i. Please specify:_____			