

Lung Function Instrument

|  |  |
| --- | --- |
| Event Category: | Time-Based |
| Event: | 60M |
| Administration: | N/A |
| Instrument Target: | Child |
| Instrument Respondent: | Primary Caregiver |
| Domain: | Physical Measures |
| Document Category: | Physical Measures |
| Method: | Data Collector Administered |
| Mode (for this instrument\*): | In-Person, CAI |
| OMB Approved Modes: | In-Person, CAI |
| Estimated Administration Time: | 12 minutes |
| Multiple Child/Sibling Consideration: | Per Child |
| Special Considerations: | N/A |
| Version: | 1.0 |
| MDES Release: | 4.0 |

​\*This instrument is OMB-approved for multi-mode administration but this version of the instrument is designed for administration in this/these mode(s) only.

This page intentionally left blank.

Lung Function Instrument

TABLE OF CONTENTS

[GENERAL PROGRAMMER INSTRUCTIONS: 1](#_Toc371670881)

[LUNG FUNCTION INSTRUMENT 3](#_Toc371670882)

This page intentionally left blank.

Lung Function Instrument

GENERAL PROGRAMMER INSTRUCTIONS:

WHEN PROGRAMMING INSTRUMENTS, VALIDATE FIELD LENGTHS AND TYPES AGAINST THE MDES TO ENSURE DATA COLLECTION RESPONSES DO NOT EXCEED THOSE OF THE MDES. SOME GENERAL ITEM LIMITS USED ARE AS FOLLOWS:

|  |  |  |  |
| --- | --- | --- | --- |
| **DATA ELEMENT FIELDS** | **MAXIMUM CHARACTERS PERMITTED** | **DATA TYPE** | **PROGRAMMER INSTRUCTIONS** |
| ADDRESS AND EMAIL FIELDS | 100 | CHARACTER |  |
| UNIT AND PHONE FIELDS | 10 | CHARACTER |  |
| \_OTH AND COMMENT FIELDS | 255 | CHARACTER | * Limit text to 255 characters |
| FIRST NAME AND LAST NAME | 30 | CHARACTER | * Limit text to 30 characters |
| ALL ID FIELDS | 36 | CHARACTER |  |
| ZIP CODE | 5 | NUMERIC |  |
| ZIP CODE LAST FOUR | 4 | NUMERIC |  |
| CITY | 50 | CHARACTER |  |
| DOB AND ALL OTHER DATE FIELDS (E.G., DT, DATE, ETC.) | 10 | NUMERIC  CHARACTER | * DISPLAY AS MM/DD/YYYY * STORE AS YYYY-MM-DD * HARD EDITS:   MM MUST EQUAL 01 TO 12  DD MUST EQUAL 01 TO 31  YYYY MUST BE BETWEEN 1900 AND CURRENT YEAR. |
| TIME VARIABLES | TWO-DIGIT HOUR AND TWO-DIGIT MINUTE, AM/PM DESIGNATION | NUMERIC | * HARD EDITS:   HOURS MUST BE BETWEEN 00 AND 12;  MINUTES MUST BE BETWEEN 00 AND 59 |

**Instrument Guidelines for Participant and Respondent IDs:**

PRENATALLY, THE **P\_ID** IN THE MDES HEADER IS THAT OF THE PARTICIPANT (E.G. THE NON-PREGNANT WOMAN, PREGNANT WOMAN, OR THE FATHER).

POSTNATALLY, A RESPONDENT ID WILL BE USED IN ADDITION TO THE PARTICIPANT ID BECAUSE SOMEBODY OTHER THAN THE PARTICIPANT MAY BE COMPLETING THE INTERVIEW. FOR EXAMPLE, THE PARTICIPANT MAY BE THE CHILD AND THE RESPONDENT MAY BE THE MOTHER, FATHER, OR ANOTHER CAREGIVER. THEREFORE, MDES VERSION 2.2 AND ALL FUTURE VERSIONS CONTAIN A **R\_P\_ID** (RESPONDENT PARTICIPANT ID) HEADER FIELD FOR EACH POST-BIRTH INSTRUMENT. THIS WILL ALLOW ROCs TO INDICATE WHETHER THE RESPONDENT IS SOMEBODY OTHER THAN THE PARTICIPANT ABOUT WHOM THE QUESTIONS ARE BEING ASKED.

**A REMINDER:**

ALL RESPONDENTS MUST BE CONSENTED AND HAVE RECORDS IN THE PERSON, PARTICIPANT, PARTICIPANT\_CONSENT AND LINK\_PERSON\_PARTICIPANT TABLES, WHICH CAN BE PRELOADED INTO EACH INSTRUMENT. ADDITIONALLY, IN POST-BIRTH QUESTIONNAIRES WHERE THERE IS THE ABILITY TO LOOP THROUGH A SET OF QUESTIONS FOR MULTIPLE CHILDREN, IT IS IMPORTANT TO CAPTURE AND STORE THE CORRECT CHILD **P\_ID** ALONG WITH THE LOOP INFORMATION. IN THE MDES VARIABLE LABEL/DEFINITION COLUMN, THIS IS INDICATED AS FOLLOWS: **EXTERNAL IDENTIFIER: PARTICIPANT ID FOR CHILD DETAIL.**

LUNG FUNCTION INSTRUMENT

**(TIME\_STAMP\_LFI\_ST).**

|  |
| --- |
| PROGRAMMER INSTRUCTIONS |
| * INSERT DATE/TIME STAMP * PRELOAD PARTICIPANT ID (**P\_ID**) FOR CHILD AND RESPONDENT ID (**R\_P\_ID**) FOR ADULT CAREGIVER. * PRELOAD FIRST NAME OF CHILD (**C\_FNAME**) FROM **INSTRUMENT\_ID** = XX (PARTICIPANT VERIFICATION, SCHEDULING, & TRACING QUESTIONNAIRE) * IF **C\_FNAME** ≠ -1 OR -2, DISPLAY APPROPRIATE NAME IN “C\_FNAME” THROUGHOUT THE INSTRUMENT. * OTHERWISE, IF **C\_FNAME** = -1 OR -2, DISPLAY “the child” IN APPROPRIATE FIELDS THROUGHOUT THE INSTRUMENT. |

**LFI01000/(LF\_INTRO).**

|  |
| --- |
| DATA COLLECTOR INSTRUCTIONS |
| * EXPLAIN THE LUNG FUNCTION PROTOCOL TO THE ADULT CAREGIVER. * IF THE ADULT CAREGIVER REFUSES, SELECT REFUSED. * OTHERWISE, SELECT CONTINUE. |

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| CONTINUE | 1 | LF\_PAIN |
| REFUSED | -1 |  |

**LFI02000/(LF\_REF\_REASON).** I am sorry that you have chosen not to participate in this activity.  Can you please tell me why?

|  |
| --- |
| DATA COLLECTOR INSTRUCTIONS |
| * SELECT ALL THAT APPLY. |

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| CONCERN ABOUT DISCOMFORT | 1 |  |
| CHILD SICK | 2 |  |
| CHILD TIRED/UNHAPPY | 3 |  |
| OTHER | -5 |  |
| NONE GIVEN | -7 |  |
| REFUSED | -1 |  |
| DON'T KNOW | -2 |  |

|  |
| --- |
| SOURCE |
| National Children’s Study, Vanguard Phase (Child Anthropometry) |

|  |
| --- |
| PROGRAMMER INSTRUCTIONS |
| * IF **LF\_REF\_REASON** = ANY COMBINATION OF RESPONSE CODES 1 - 3, GO TO **LFI06000.** * IF **LF\_REF\_REASON** = -5, OR ANY COMBINATION OF RESPONSE CODES 1 -3 AND -5, GO TO **LF\_REF\_REASON\_OTH.** * IF **LF\_REF\_REASON** = -7, -1 OR -2, DO NOT ALLOW SELECTION OF ADDITIONAL RESPONSE CODES AND GO TO **LFI06000** |

**LFI03000/(LF\_REF\_REASON\_OTH).** ​SPECIFY:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| SOURCE |
| National Children’s Study, Vanguard Phase (Child Anthropometry) |

**LFI06000.** ​That’s fine.  Thank you for your time.

|  |
| --- |
| PROGRAMMER INSTRUCTIONS |
| * GO TO **TIME\_STAMP\_LFI\_ET**. |

**LFI07100/(LF\_PAIN).** ​Is {C\_FNAME/the child} currently experiencing any chest or abdominal pain?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| YES | 1 | LF\_END |
| NO | 2 |  |
| REFUSED | -1 | LF\_END |
| DON'T KNOW | -2 | LF\_END |

|  |
| --- |
| SOURCE |
| Miller MR, Crapo R, Hankinson J, Brusasco V, Burgos F, Casaburi R, Coates A, Enright P, van der Grinten CP, Gustafsson P, Jensen R, Johnson DC, MacIntyre N, McKay R, Navajas D, Pedersen OF, Pellegrino R, Viegi G, Wanger J. American Thoracic Society/European Respiratory Society (ATS/ERS) Task Force: General Considerations for Lung Function Testing. Eur Respir J; 26 (1): 153-161, 2005. (modified) |

**LFI07200/(LF\_ORAL).** Is {C\_FNAME/the child} experiencing any oral or facial pain that might be aggravated by a mouthpiece?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| YES | 1 | LF\_END |
| NO | 2 |  |
| REFUSED | -1 | LF\_END |
| DON'T KNOW | -2 | LF\_END |

|  |
| --- |
| SOURCE |
| Miller MR, Crapo R, Hankinson J, Brusasco V, Burgos F, Casaburi R, Coates A, Enright P, van der Grinten CP, Gustafsson P, Jensen R, Johnson DC, MacIntyre N, McKay R, Navajas D, Pedersen OF, Pellegrino R, Viegi G, Wanger J. American Thoracic Society/European Respiratory Society (ATS/ERS) Task Force: General Considerations for Lung Function Testing. Eur Respir J; 26 (1): 153-161, 2005. (modified) |

**LFI10000/(LF\_BRONCHO).** Within the past hour, has {C\_FNAME/the child} used a bronchodilator, such as an inhaler?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| YES | 1 | LF\_END |
| NO | 2 |  |
| REFUSED | -1 | LF\_END |
| DON'T KNOW | -2 | LF\_END |

|  |
| --- |
| SOURCE |
| National Institute of Occupational Safety and Health (NIOSH). Spirometry Training Guide. December 1, 2003. (modified) |

**LFI11000/(LF\_MEAL).** ​Has {C\_FNAME/the child} eaten a large meal within the past hour?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| YES | 1 | LF\_END |
| NO | 2 |  |
| REFUSED | -1 | LF\_END |
| DON'T KNOW | -2 | LF\_END |

|  |
| --- |
| SOURCE |
| National Institute of Occupational Safety and Health (NIOSH). Spirometry Training Guide. December 1, 2003.  (modified) |

**LFI12000/(LF\_ILLNESS).** Within the past three days, has {C\_FNAME/the child} recovered from an illness that lasted less than three weeks?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| YES | 1 | LF\_END |
| NO | 2 |  |
| REFUSED | -1 | LF\_END |
| DON'T KNOW | -2 | LF\_END |

|  |
| --- |
| SOURCE |
| National Institute of Occupational Safety and Health (NIOSH). Spirometry Training Guide. December 1, 2003. (modified) |

**LFI13000/(LF\_INFECTION).** Within the past three weeks, has {C\_FNAME/the child} had an ear infection or severe respiratory illness?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| YES | 1 | LF\_END |
| NO | 2 |  |
| REFUSED | -1 | LF\_END |
| DON'T KNOW | -2 | LF\_END |

|  |
| --- |
| SOURCE |
| National Institute of Occupational Safety and Health (NIOSH). Spirometry Training Guide. December 1, 2003. (modified) |

**LFI14000/(LF\_SURGERY).** Has {C\_FNAME/the child} had eye, ear, chest, or abdominal surgery in the past six weeks?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| YES | 1 | LF\_END |
| NO | 2 |  |
| REFUSED | -1 | LF\_END |
| DON'T KNOW | -2 | LF\_END |

|  |
| --- |
| SOURCE |
| National Institute of Occupational Safety and Health (NIOSH). Spirometry Training Guide. December 1, 2003.  (modified) |

**LFI15000/(LF\_EQUIP\_ID).** RECORD EQUIPMENT ID

|\_\_\_|\_\_\_||\_\_\_|\_\_\_||\_\_\_|\_\_\_||\_\_\_|\_\_\_||\_\_\_|\_\_\_|

EQUIPMENT SERIAL NUMBER

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| COULD NOT OBTAIN | -2 |  |

|  |
| --- |
| SOURCE |
| New |

**LFI16000/(LF\_CONDITIONS).** Does {C\_FNAME/the child} have any known obstructive conditions, such as sleep apnea, asthma, or cystic fibrosis?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| YES | 1 |  |
| NO | 2 | LF\_FEV\_10\_1 |
| REFUSED | -1 | LF\_FEV\_10\_1 |
| DON'T KNOW | -2 | LF\_FEV\_10\_1 |

|  |
| --- |
| SOURCE |
| National Institute of Occupational Safety and Health (NIOSH). Spirometry Training Guide. December 1, 2003. (modified) |

**LFI17000/(LF\_CONDITIONS\_OTH).** LUNG CONDITION OTHER

SPECIFY: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**LFI19000/(LF\_FEV\_10\_1).** RECORD FORCED EXPIRATORY VOLUME 1.0 (FEV1).

|\_\_\_|\_\_\_|.|\_\_\_|\_\_\_|

LITERS

|  |
| --- |
| DATA COLLECTOR INSTRUCTIONS |
| * OBTAIN FIRST SET OF LUNG FUNCTION MEASUREMENTS. |

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| REFUSED | -1 | LF\_REASON\_NOT\_COLLECT\_1 |
| COULD NOT OBTAIN | -8 | LF\_REASON\_NOT\_COLLECT\_1 |

|  |
| --- |
| SOURCE |
| New |

**LFI19100/(LF\_FEV\_05\_1).** RECORD FORCED EXPIRATORY VOLUME 0.50 (FEV.5).

|\_\_\_|\_\_\_|.|\_\_\_||\_\_\_|

LITERS

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| REFUSED | -1 | LF\_REASON\_NOT\_COLLECT\_1 |
| COULD NOT OBTAIN | -8 | LF\_REASON\_NOT\_COLLECT\_1 |

|  |
| --- |
| SOURCE |
| New |

**LFI19200/(LF\_FEV\_75\_1).** RECORD FORCED EXPIRATORY VOLUME 0.75 (FEV.75).

|\_\_\_|\_\_\_|.|\_\_\_||\_\_\_|

LITERS PER SECOND

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| REFUSED | -1 | LF\_REASON\_NOT\_COLLECT\_1 |
| COULD NOT OBTAIN | -8 | LF\_REASON\_NOT\_COLLECT\_1 |

|  |
| --- |
| SOURCE |
| ​New |

**LFI20100/(LF\_PEF\_1).** RECORD PEAK EXPIRATORY FLOW (PEF).

|\_\_\_|\_\_\_|\_\_\_|

LITERS PER MINUTE

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| REFUSED | -1 | LF\_REASON\_NOT\_COLLECT\_1 |
| COULD NOT OBTAIN | -8 | LF\_REASON\_NOT\_COLLECT\_1 |

|  |
| --- |
| SOURCE |
| New |

**LFI20000/(LF\_COLLECT\_1).** WERE YOU ABLE TO COLLECT ALL OF THE RAW DATA FROM THE PEAK FLOW METER?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| YES | 1 | LF\_ACCEPTABLE\_1 |
| NO | 2 |  |

**LFI21000/(LF\_REASON\_NOT\_COLLECT\_1).**

|  |
| --- |
| DATA COLLECTOR INSTRUCTIONS |
| * ENTER REASON(S) YOU COULD NOT OBTAIN LUNG FUNCTION MEASUREMENT(S). * SELECT ALL THAT APPLY.​ |

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| PARENT/CAREGIVER REFUSAL | 1 |  |
| CHILD REFUSAL | 2 |  |
| COMMUNICATION ISSUES | 3 |  |
| PARENT/CAREGIVER ILL/EMERGENCY | 4 |  |
| CHILD ILL/EMERGENCY | 5 |  |
| NO TIME | 6 |  |
| EQUIPMENT FAILURE | 7 |  |
| SAFETY EXCLUSION | 8 |  |
| PHYSICAL LIMITATION | 9 |  |
| OTHER | -5 |  |
| NONE GIVEN | -7 |  |

|  |
| --- |
| PROGRAMMER INSTRUCTIONS |
| * IF **LF\_REASON\_NOT\_COLLECT\_1** = -5 OR -5 AND ANY COMBINATION OF 1-9, GO TO **LF\_REASON\_NOT\_COLLECT\_1\_OTH**. * OTHERWISE, GO TO **LF\_COMMENTS\_1.** |

**LFI21100/(LF\_REASON\_NOT\_COLLECT\_1\_OTH).** SPECIFY: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| PROGRAMMER INSTRUCTIONS |
| * GO TO **LF\_COMMENTS\_1.** |

**LFI21200/(LF\_ACCEPTABLE\_1).** ​DID THE PARTICIPANT EXERT A FULL EFFORT WITHOUT ERRORS?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| YES | 1 | LF\_COMMENTS\_1 |
| NO | 2 |  |

**LFI22000/(LF\_ACCEPTABLE\_1\_REAS).** WHY DID THE PARTICIPANT NOT EXERT A FULL EFFORT WITHOUT ERRORS?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| NOT FULL EFFORT | 1 |  |
| COUGH IN FIRST SECOND | 2 |  |
| EARLY TERMINATION | 3 |  |
| GLOTTIS CLOSURE OR BREATH HOLDING | 4 |  |
| OBSTRUCTED MOUTHPIECE | 5 |  |
| INCOMPLETE INHALATION | 6 |  |
| HESITATION | 7 |  |
| EXTRA BREATH | 8 |  |
| OTHER | -5 |  |

|  |
| --- |
| PROGRAMMER INSTRUCTIONS |
| * IF **LF\_ACCEPTABLE\_1\_REAS** = -5 OR INCLUDES -5, GO TO **LF\_ACCEPTABLE\_1\_REAS\_OTH.** * OTHERWISE, GO TO **LF\_COMMENTS\_1.** |

**LFI22010/(LF\_ACCEPTABLE\_1\_REAS\_OTH).** SPECIFY: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| SOURCE |
| New |

**LFI22100/(LF\_COMMENTS\_1).** DO YOU HAVE ANY COMMENTS ABOUT THE FIRST LUNG FUNCTION MEASUREMENT?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| YES | 1 |  |
| NO | 2 |  |

|  |
| --- |
| PROGRAMMER INSTRUCTIONS |
| IF **LF\_COMMENTS\_1** = 2, GO TO PROGRAMMER INSTRUCTIONS AFTER **LF\_COMMENTS\_1\_OTH.** |

**LFI23000/(LF\_COMMENTS\_1\_OTH).** LUNG FUNCTION COLLECTION COMMENTS

SPECIFY:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| PROGRAMMER INSTRUCTIONS |
| * IF **LF\_REASON\_NOT\_COLLECT\_1** = ANY COMBINATION INCLUDING 1, 2, 4, 5, 6, 8, OR 9, GO TO **LFI74000.** |

**LFI25000/(LF\_FEV\_10\_2).** RECORD FEV1 MEASUREMENT 2.

|\_\_\_|\_\_\_|. |\_\_\_|\_\_\_|

LITERS

|  |
| --- |
| DATA COLLECTOR INSTRUCTIONS |
| * OBTAIN SECOND SET OF LUNG FUNCTION MEASUREMENTS.​ |

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| REFUSED | -1 | LF\_REASON\_NOT\_COLLECT\_2 |
| COULD NOT OBTAIN | -8 | LF\_REASON\_NOT\_COLLECT\_2 |

|  |
| --- |
| SOURCE |
| New |

**LFI25100/(LF\_FEV\_05\_2).** RECORD FEV.5 MEASUREMENT 2.

|\_\_\_|\_\_\_|.|\_\_\_||\_\_\_|

LITERS

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| REFUSED | -1 | LF\_REASON\_NOT\_COLLECT\_2 |
| COULD NOT OBTAIN | -8 | LF\_REASON\_NOT\_COLLECT\_2 |

|  |
| --- |
| SOURCE |
| ​New |

**LFI25200/(LF\_FEV\_75\_2).** ​

RECORD FEV.75 MEASUREMENT 2.

|\_\_\_|\_\_\_|.|\_\_\_||\_\_\_|

LITERS PER SECOND

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| REFUSED | -1 | LF\_REASON\_NOT\_COLLECT\_2 |
| COULD NOT OBTAIN | -8 | LF\_REASON\_NOT\_COLLECT\_2 |

|  |
| --- |
| SOURCE |
| New |

**LFI25300/(LF\_PEF\_2).** RECORD PEF MEASUREMENT 2.

|\_\_\_|\_\_\_|\_\_\_|

LITERS PER MINUTE

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| REFUSED | -1 | LF\_REASON\_NOT\_COLLECT\_2 |
| COULD NOT OBTAIN | -8 | LF\_REASON\_NOT\_COLLECT\_2 |

|  |
| --- |
| SOURCE |
| New |

**LFI26000/(LF\_COLLECT\_2).** WERE YOU ABLE TO COLLECT ALL OF THE RAW DATA FROM THE PEAK FLOW METER?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| YES | 1 | LF\_ACCEPTABLE\_2 |
| NO | 2 |  |

**LFI27000/(LF\_REASON\_NOT\_COLLECT\_2).**

|  |
| --- |
| DATA COLLECTOR INSTRUCTIONS |
| * ENTER REASON(S) YOU COULD NOT OBTAIN LUNG FUNCTION MEASUREMENT(S). * SELECT ALL THAT APPLY.   ​ |

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| PARENT/CAREGIVER REFUSAL | 1 |  |
| CHILD REFUSAL | 2 |  |
| COMMUNICATION ISSUES | 3 |  |
| PARENT/CAREGIVER ILL/EMERGENCY | 4 |  |
| CHILD ILL/EMERGENCY | 5 |  |
| NO TIME | 6 |  |
| EQUIPMENT FAILURE | 7 |  |
| SAFETY EXCLUSION | 8 |  |
| PHYSICAL LIMITATION | 9 |  |
| OTHER | -5 |  |
| NONE GIVEN | -7 |  |

|  |
| --- |
| SOURCE |
| New |

|  |
| --- |
| PROGRAMMER INSTRUCTIONS |
| * IF **LF\_REASON\_NOT\_COLLECT\_2** =-5 OR INCLUDES -5, GO TO **LF\_REASON\_NOT\_COLLECT\_2\_OTH.** * OTHERWISE, GO TO **LF\_COMMENTS\_2.** |

**LFI27100/(LF\_REASON\_NOT\_COLLECT\_2\_OTH).** SPECIFY:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| PROGRAMMER INSTRUCTIONS |
| * GO TO **LF\_COMMENTS\_2**. |

**LFI27200/(LF\_ACCEPTABLE\_2).** ​DID THE PARTICIPANT EXERT A FULL EFFORT WITHOUT ERRORS?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| YES | 1 | LF\_COMMENTS\_2 |
| NO | 2 |  |

**LFI28000/(LF\_ACCEPTABLE\_2\_NO\_REAS).** WHY DID THE PARTICIPANT NOT EXERT A FULL EFFORT WITHOUT ERRORS?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| NOT FULL EFFORT | 1 |  |
| COUGH IN FIRST SECOND | 2 |  |
| EARLY TERMINATION | 3 |  |
| GLOTTIS CLOSURE OR BREATH HOLDING | 4 |  |
| OBSTRUCTED MOUTHPIECE | 5 |  |
| INCOMPLETE INHALATION | 6 |  |
| HESITATION | 7 |  |
| EXTRA BREATH | 8 |  |
| OTHER | -5 |  |

|  |
| --- |
| PROGRAMMER INSTRUCTIONS |
| * IF **LF\_ACCEPTABLE\_2\_REAS**= -5 OR INCLUDES -5, GO TO **LF\_ACCEPTABLE\_2\_REAS\_OTH.** * OTHERWISE, GO TO**LF\_COMMENTS\_2.** |

**LFI28010/(LF\_ACCEPTABLE\_2\_REAS\_OTH).** SPECIFY: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| SOURCE |
| ​New |

**LFI28100/(LF\_COMMENTS\_2).** DO YOU HAVE ANY COMMENTS ABOUT THE SECOND LUNG FUNCTION MEASUREMENT?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| YES | 1 |  |
| NO | 2 |  |

|  |
| --- |
| PROGRAMMER INSTRUCTIONS |
| * IF **LF\_COMMENTS\_2** = 2, GO TO PROGRAMMER INSTRUCTIONS AFTER **LF\_COMMENTS\_2\_OTH.** |

**LFI29000/(LF\_COMMENTS\_2\_OTH).** LUNG FUNCTION COLLECTION COMMENTS

SPECIFY: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| PROGRAMMER INSTRUCTIONS |
| * IF **LF\_REASON\_NOT\_COLLECT\_2** = ANY COMBINATION INCLUDING 1, 2, 4, 5, 6, 8, OR 9, GO TO **LFI74000** |

**LFI31000/(LF\_FEV\_10\_3).** RECORD FEV1 MEASUREMENT 3.

|\_\_\_|\_\_\_|.|\_\_\_|\_\_\_|

LITERS

|  |
| --- |
| DATA COLLECTOR INSTRUCTIONS |
| * OBTAIN THIRD SET OF LUNG FUNCTION MEASUREMENTS. |

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| REFUSED | -1 |  |
| COULD NOT OBTAIN | -8 |  |

|  |
| --- |
| SOURCE |
| New |

**LFI31100/(LF\_FEV\_05\_3).** ​

RECORD FEV.5 MEASUREMENT 3.

|\_\_\_|\_\_\_|.|\_\_\_||\_\_\_|

LITERS

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| REFUSED | -1 | LF\_REASON\_NOT\_COLLECT\_3 |
| COULD NOT OBTAIN | -8 | LF\_REASON\_NOT\_COLLECT\_3 |

|  |
| --- |
| SOURCE |
| New |

**LFI31200/(LF\_FEV\_75\_3).** ​

RECORD FEV.75 MEASUREMENT 3.

|\_\_\_|\_\_\_|.|\_\_\_||\_\_\_|

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| REFUSED | -1 | LF\_REASON\_NOT\_COLLECT\_3 |
| COULD NOT OBTAIN | -8 | LF\_REASON\_NOT\_COLLECT\_3 |

|  |
| --- |
| SOURCE |
| New |

**LFI31300/(LF\_PEF\_3).** RECORD PEF MEASUREMENT 3.

|\_\_\_||\_\_\_|\_\_\_|

LITERS PER MINUTE

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| REFUSED | -1 | LF\_REASON\_NOT\_COLLECT\_3 |
| COULD NOT OBTAIN | -8 | LF\_REASON\_NOT\_COLLECT\_3 |

|  |
| --- |
| SOURCE |
| New |

**LFI32000/(LF\_COLLECT\_3).** WERE YOU ABLE TO COLLECT ALL OF THE RAW DATA FROM THE PEAK FLOW METER?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| YES | 1 | LF\_ACCEPTABLE\_3 |
| NO | 2 |  |

**LFI33000/(LF\_REASON\_NOT\_COLLECT\_3).**

|  |
| --- |
| DATA COLLECTOR INSTRUCTIONS |
| * ENTER REASON(S) YOU COULD NOT OBTAIN LUNG FUNCTION MEASUREMENT(S). * SELECT ALL THAT APPLY. |

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| PARENT/CAREGIVER REFUSAL | 1 |  |
| CHILD REFUSAL | 2 |  |
| COMMUNICATION ISSUES | 3 |  |
| PARENT/CAREGIVER ILL/EMERGENCY | 4 |  |
| CHILD ILL/EMERGENCY | 5 |  |
| NO TIME | 6 |  |
| EQUIPMENT FAILURE | 7 |  |
| SAFETY EXCLUSION | 8 |  |
| PHYSICAL LIMITATION | 9 |  |
| OTHER | -5 |  |
| NONE GIVEN | -7 |  |

|  |
| --- |
| PROGRAMMER INSTRUCTIONS |
| * IF **LF\_REASON\_NOT\_COLLECT\_3** =-5 OR INCLUDES -5, GO TO **LF\_REASON\_NOT\_COLLECT\_3\_OTH**. * OTHERWISE, GO TO **LF\_COMMENTS\_3.** |

**LFI33100/(LF\_REASON\_NOT\_COLLECT\_3\_OTH).** SPECIFY: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| PROGRAMMER INSTRUCTIONS |
| * GO TO **LF\_COMMENTS\_3.** |

**LFI33200/(LF\_ACCEPTABLE\_3).** ​DID THE PARTICIPANT EXERT A FULL EFFORT WITHOUT ERRORS?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| YES | 1 | LF\_COMMENTS\_3 |
| NO | 2 |  |

**LFI34000/(LF\_ACCEPTABLE\_3\_NO\_REAS).** WHY DID THE PARTICIPANT NOT EXERT A FULL EFFORT WITHOUT ERRORS?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| NOT FULL EFFORT | 1 |  |
| COUGH IN FIRST SECOND | 2 |  |
| EARLY TERMINATION | 3 |  |
| GLOTTIS CLOSURE OR BREATH HOLDING | 4 |  |
| OBSTRUCTED MOUTHPIECE | 5 |  |
| INCOMPLETE INHALATION | 6 |  |
| HESITATION | 7 |  |
| EXTRA BREATH | 8 |  |
| OTHER | -5 |  |

|  |
| --- |
| PROGRAMMER INSTRUCTIONS |
| * IF**LF\_ACCEPTABLE\_3\_NO\_REAS** = -5 OR INCLUDES -5, GO TO**LF\_ACCEPTABLE\_3\_NO\_REAS\_OTH.** * OTHERWISE, GO TO ​**LF\_COMMENTS\_3** |

**LFI34010/(LF\_ACCEPTABLE\_3\_NO\_REAS\_OTH).** SPECIFY: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| SOURCE |
| New |

**LFI34100/(LF\_COMMENTS\_3).** DO YOU HAVE COMMENTS ABOUT THE THIRD LUNG FUNCTION MEASUREMENT?

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| YES | 1 |  |
| NO | 2 | LFI74000 |

**LFI38000/(LF\_COMMENTS\_3\_OTH).** LUNG FUNCTION COLLECTION COMMENTS

SPECIFY: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| SOURCE |
| New |

**LFI74000.** ​Thank you for having {C\_FNAME/the child} complete these lung function measures.

|  |
| --- |
| PROGRAMMER INSTRUCTIONS |
| * GO TO **TIME\_STAMP\_LFI\_ET** |

**LFI75000/(LF\_END).** Thank you for answering these questions.

|  |
| --- |
| DATA COLLECTOR INSTRUCTIONS |
| * ENTER REASON CHILD WAS EXCLUDED FROM LUNG FUNCTION MEASUREMENT(S)   ​ |

|  |  |  |
| --- | --- | --- |
| Label | Code | Go To |
| CHEST OR ABDOMINAL PAIN | 1 |  |
| ORAL OR FACIAL PAIN | 2 |  |
| BRONCHODILATOR USE IN PAST HOUR | 3 |  |
| LARGE MEAL IN PAST HOUR | 4 |  |
| ILLNESS IN PAST THREE DAYS | 5 |  |
| EAR INFECTION OR SEVERE RESPIRATORY ILLNESS IN PAST THREE WEEKS | 6 |  |
| EYE, EAR, CHEST, OR ABDOMINAL SURGERY IN PAST SIX WEEKS | 7 |  |

**(TIME\_STAMP\_LFI\_ET).**

|  |
| --- |
| PROGRAMMER INSTRUCTIONS |
| * INSERT DATE/TIME STAMP |