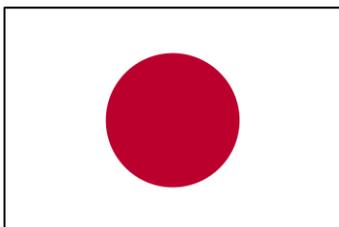




# INDICATOR COLLECTION AND CALCULATION MANUAL: DATA MANAGEMENT AND USE IN EARLY CHILDHOOD CARE AND DEVELOPMENT

Prepared for the Seychelles Institute for  
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## Introduction

The Child Health and Nutrition Indicator Collection Manual outlines methods of collecting and analyzing data for twelve child health and nutrition indicators identified as public health priorities in Seychelles. The processes outlined in this document were developed in consultation with stakeholders throughout the Ministry of Health (MOH) and the early childhood community in Seychelles. Two of the indicators were not collected during the pilot phase of the project, but may be collected in the future. The Child Health and Nutrition Indicators Dictionary accompanies the package.

### Data Collection Approaches

Data for the twelve indicators in the package will be collected through various methods. The goal of the project was to leverage existing data sources within the MOH and other government bodies in Seychelles to calculate indicators. Some indicators will rely on a nutrition survey that is slated for implementation in the near future. Items will be built into the survey to maximize its value. Calculation for other indicators will tap into data sets gathered in surveys done previously. Other indicators will rely on data gathered at health clinics as part of regular patient care.

### A Note on Data Disaggregation

The ability to disaggregate data, or separate it into component parts, can be tremendously valuable. For example, disaggregated data could show that anaemia is particularly high among women and children from a certain geographic location, suggesting the need for more interventions targeted to that area. Data collection processes in this manual are designed to allow for disaggregation of data by variables such as neighborhood of residence, health center, school, age group, and sex (where applicable).

### A Note on Sample Bias

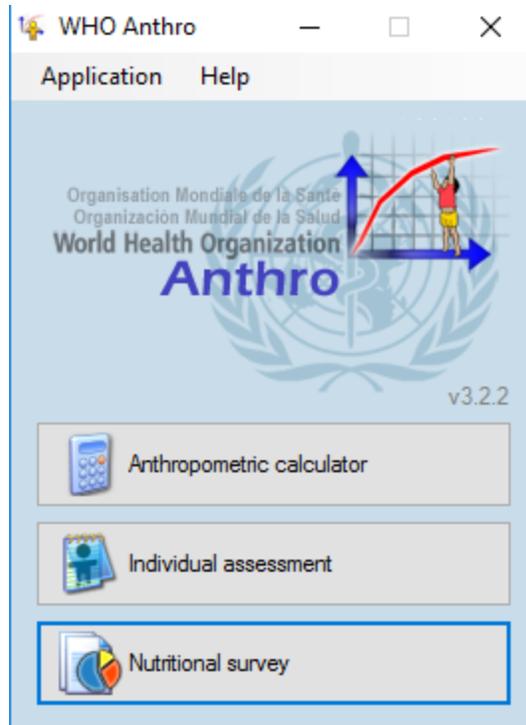
The samples used to calculate some indicators mean that some of the findings will be somewhat biased, meaning that they will not fully represent the country's population as a whole. If data are not collected through a census (covering every person in the country) or through a survey of a representative sample, then there will inevitably be some selection bias in the sample population. Indicators which may be subject to sample bias include: anemia among young children (while preprimary enrollment is high, it is not universal); anemia among pregnant women (most but not all women seek antenatal care); and gestational diabetes (most but not all pregnant women are screened for diabetes). In many countries, individuals from lower socio-economic backgrounds are less likely to receive health services. These individuals are also more likely to have health deficits, which can lead to underestimating on some indicators. The indicators will still be

valuable, as they will give a picture of the prevalence of certain conditions among the population sampled.

### Overview of WHO Anthro software

WHO Anthro is proposed as the analytical software for several indicators. Here is a brief description of the software:

- free, open source software provided by the WHO
- easy to download to a PC, can also download to a mobile device
- import Excel sheets of anthropometric data, and it will produce an analysis of the data
- it automatically uses the WHO Child Growth Standards as the reference population
- easy to use with your existing Excel files—you need only tell it which variables are located in which columns
- you can add additional variables
- you can show where an individual's measurements are on the WHO Child Growth Charts by percentile and Z score
- it automatically disaggregates by age group in months, gender, and cluster (which could be coded to a health clinic or geographical area)



## Indicator Collection and Analysis

Prevalence of haemoglobin <11 g/dL in pregnant women (anaemia among pregnant women)

**Site and method of raw data collection:** Patient files and lab test results at health centers. All women are screened for anaemia at their first prenatal appointment, and the data are included in the patient files.

**Does this require collecting additional data than what is already routinely collected?** No. All necessary data are collected (from lab results stored) in patient files and a staff member will have to pull the data from the files.

**Site of data input:** health centers

**Software for input:** Excel.

**Site of data analysis:** MOH Epidemiology & Statistics

**Software for analysis:** Excel or other statistical package as determined by Epi & Stats

**Collection frequency:** The collection frequency will depend on the numbers necessary to capture a representative sample of Seychellois pregnant women. For now, universal data will be

gathered from all health centers to establish proper data collection and entry procedures. In the future, an analysis conducted every 3-5 years should be sufficient.

### Prevalence of haemoglobin <11 g/dL in young children (anemia among young children)

**Site and method of raw data collection:** All children in crèches will be screened for anaemia through a finger prick assessment. The screening has not yet begun, but it is anticipated that the screening will be conducted with the Masimo Rainbow 4D DC Pronto 7—Direct Connect Spot Check—Reusable Sensor. The screening is noninvasive, and children identified as at risk will be referred for a blood test which will yield a hemoglobin value. The MOH Early Childhood Care and Education “My Profile for Crèche Enrollment” form captures this information.

**Does this require collecting additional data than what is already routinely collected?** No. [Screening is set to begin in late 2017 or early 2018, at which point all necessary data will be available.]

**Site of data input:** health centers

**Software for input:** Excel

**Site of data analysis:** Epi & Stats

**Software for analysis:** Excel or other statistical package as determined by Epi & Stats

**Collection frequency:** The collection frequency will depend on the numbers necessary to capture a representative sample of Seychellois children. For now, universal data will be gathered from all health centers to establish proper data collection and entry procedures. In the future, an analysis conducted every 3-5 years should be sufficient.

### Prevalence of infants born <2500 g (low birthweight)

**Site and method of raw data collection:** Seychelles Hospital maintains a paper-based Register of Cases, which includes the baby’s birthweight and other information about the birth and the mother. The information from the Register is regularly entered into an Excel sheet. The Registers from Baie Ste Anne Praslin Hospital and Logan La Digue Hospital will be entered into Excel sometime in the near future and can be included in the analysis. Staff from Epi & Stats have expressed their readiness to undertake this analysis, and have remarked that analysis examining the relationships between a number of variables is possible based on the wealth of information provided in the Registers.

**Does this require collecting additional data than what is already routinely collected?** No.

**Site of data input:** Maternity nurse manager or other maternity staff input Register information into Excel.

**Software for input:** Excel.

**Site of data analysis:** MOH Epidemiology and Statistics

**Software for analysis:** Excel, SPSS, or other as determined by Epi & Stats

**Collection frequency:** 3-5 years

**Note:** The analysis should be only livebirths. The Register of Cases dataset includes stillbirths, but these should be excluded from the low birthweight analysis.

### Prevalence of low height-for-age in children under five years of age (stunting)

**Site and method of raw data collection:** Nurses administer questionnaires to parents at well-child visits at health centers. The Nutrition Data Form (2016) currently in use has items on the child's age and height, from which the stunting rate can be calculated.

**Does this require collecting additional data than what is already routinely collected?** No.

**Site of data input:** Nutritionist team currently enters data from Nutrition Data Forms into Excel.

**Software for input:** Excel

**Site of data analysis:** Nutritionist team

**Software for analysis:** WHO Anthro. The software can produce statistical summary reports from uploaded Excel sheets. The summary report includes statistics on stunting.

**Collection frequency:** According to WHO guidelines, this can be every 3-5 years. However, given that the data are already being continuously gathered and entered into Excel, it should not be difficult to do a regular analysis.

**Note:** The Nutrition Data Form only covers children up to 4 years old.

### Prevalence of low weight-for-height in children under five years of age (wasting)

**Site and method of raw data collection:** Nurses administer questionnaires to parents at well-child visits at health centers. The Nutrition Data Form (2016) currently in use has items on the child's age and height, from which the wasting rate can be calculated.

**Does this require collecting additional data than what is already routinely collected?** No

**Site of data input:** Nutritionist team currently enters data from Nutrition Data Forms into Excel

**Software for input:** Excel

**Site of data analysis:** Nutritionist team

**Software for analysis:** WHO Anthro. The software can produce statistical summary reports from uploaded Excel sheets. The summary report includes statistics on wasting.

**Collection frequency:** According to WHO guidelines, this can be every 3-5 years. However, given that the data are being continuously gathered and entered into Excel, it should not be difficult to do a regular analysis.

### Prevalence of high weight-for-height in children under five years of age (overweight in young children)

**Site and method of raw data collection:** Nurses administer questionnaires to parents at well-child visits at health centers. The Nutrition Data Form (2016) currently in use has items on child's weight and height, from which the overweight rate can be calculated.

**Does this require collecting additional data than what is already routinely collected?** No

**Site of data input:** Nutritionist team currently enters data from Nutrition Data Forms into Excel.

**Software for input:** Excel

**Site of data analysis:** Nutritionist team

**Software for analysis:** WHO Anthro. The software can produce statistical summary reports from uploaded Excel sheets. The summary report includes statistics on overweight.

**Collection frequency:** According to WHO guidelines, this can be every 3-5 years. However, given that the data are being continuously gathered and entered into Excel, it should not be difficult to do a regular analysis using WHO Anthro.

### Prevalence of exclusive breastfeeding in infants aged six months or less (exclusive breastfeeding)

**Site and method of raw data collection:** Nurses administer questionnaires to parents at well-child visits at health centers. The Nutrition Data Form (2016) currently in use has an item on "Feeding Mode: Exclusive Breastfeeding, Partial Breastfeeding, Formula Feeding, Cow's Milk." Data from the child's 6 month visit can be used to calculate the exclusive breastfeeding rate.

**Does this require collecting additional data than what is already routinely collected?** No

**Site of data input:** Nutrition Unit currently enters data from Nutrition Data Forms into Excel. Additional coding would make calculating the exclusive breastfeeding rate simple.

For 6 month visit: code non-exclusive breastfeeding as 0, code exclusive breastfeeding as 1. Simply calculate the average of the 0s and 1s for the sample, and you have the exclusive breastfeeding rate.

**Software for input:** Excel

**Site of data analysis:** Nutrition Unit

**Software for analysis:** Excel

**Collection frequency:** According to WHO guidelines, this can be every 3-5 years. However, given that the data are being continuously gathered and entered into Excel, it should not be difficult to do a regular analysis.

### Proportion of children who are breastfeeding at 1 year (continued breastfeeding)

**Site and method of raw data collection:** nurses administer questionnaire to parents at well-child visits at health centers. The Nutrition Data Form (2016) currently in use has an item on “Feeding Mode: Exclusive Breastfeeding, Partial Breastfeeding, Formula Feeding, Cow’s Milk.” Data from the child’s 12 month visit can be used to calculate the continued breastfeeding rate.

**Does this require collecting additional data than what is already routinely collected?** No

**Site of data input:** Nutrition Unit currently enters data from Nutrition Data Forms into Excel. Additional coding would make calculating the exclusive breastfeeding rate simple.

For 12 month visit: code response of no partial breastfeeding as 0, code response of partial breastfeeding as 1. Simply calculate the average of the 0s and 1s for the sample, and you have the continued breastfeeding rate.

**Software for input:** Excel

**Site of data analysis:** Nutrition Unit

**Software for analysis:** Excel

**Collection frequency:** According to WHO guidelines, this can be every 3-5 years. However, given that the data are being continuously gathered and entered into Excel, it should not be difficult to do a regular analysis.

### Proportion of pregnant women with gestational diabetes mellitus (gestational diabetes)

**Site and method of raw data collection:** Patient files and glucose test results at health centers. All high risk cases are tested at the point of entry i.e. at booking of first prenatal care appointment. All other women with normal risk are screened for gestational diabetes at 24-28 weeks, and the results are included in their patient files.

**Does this require collecting additional data than what is already routinely collected?** No. . All necessary data are collected (from lab results stored) in patient files and a staff member will have to pull the data from the files.

**Site of data input:** health centers

**Software for input:** Excel.

**Site of data analysis:** MOH Epidemiology & Statistics

**Software for analysis:** Excel or other statistical package as determined by Epi & Stats

### Proportion of children 6-23 months who receive a minimum acceptable diet (minimum acceptable diet)

**Site and method of raw data collection:** The Nutrition Unit and IECD are developing a study to gauge the nutritional status for children in Seychelles in the First Thousand Days of life. The study includes a survey, set to be administered in fall 2017. As part of survey, mothers will be asked about their children's diet.

**Does this require collecting additional data than what is already routinely collected?** Yes. Adding these data into the survey is an efficient way to leverage a planned project to yield more nutrition data.

**Site of data input:** Survey data collectors

**Software for input:** Excel

**Site of data analysis:** Nutrition Unit & IECD

**Software for analysis:** Excel or other statistical package

**Collection frequency:** According to WHO guidelines, this can be every 3-5 years.

### Proportion of women aged 15-49 years old with low body mass index (underweight in women of childbearing age) [This indicator was not calculated for the pilot project, but may be collected in the future.]

**Site and method of raw data collection:** The Seychelles Heart Survey (2013) gathered data on weight and height. The survey covers ages 25 and up. A data analyst could use the dataset to identify the proportion of women age 25-49 who are overweight or obese. It is not clear how data could be obtained for the 18-25 age group.

**Does this require collecting additional data than what is already routinely collected?** Possibly for 18-25 age group.

**Site of data input:** dataset already exists

**Software for input:** survey datasets already exist

**Site of data analysis:** MoH Epidemiology & Statistics

**Software for analysis:** SPSS or other statistical package

**Collection frequency:** 3-5 years

Proportion of women age 18-49 with high and very high body mass index (overweight and obesity in women of childbearing age) [This indicator was not calculated for the pilot project, but may be collected in the future.]

**Site and method of raw data collection:** The Seychelles Heart Survey (2013) gathered data on weight and height. The survey covers ages 25 and up. A data analyst could use the dataset to identify the proportion of women age 25-49 who are overweight or obese. It is not clear how data could be obtained for the 18-25 age group.

**Does this require collecting additional data than what is already routinely collected?**

Possibly for 18-25 age group

**Site of data input:** datasets already exist

**Software for input:** datasets already exist

**Site of data analysis:** MoH Epidemiology & Statistics

**Software for analysis:** SPSS or other statistical package

**Collection frequency:** 3-5 years

## Annex

### Forms for Data Collection

Below are forms currently in use that capture child health and nutrition data.

#### Nutrition Data Form (2016), partial view of form

HEALTH CENTRE: \_\_\_\_\_ MONTH: \_\_\_\_\_

**NUTRITION DATA FORM FOR 0-4 YEAR OLD CHILDREN**

DATA IS TO BE RECORDED AT 6 WEEKS, 3 MONTHS, 4 MONTHS, 5 MONTHS, 6 MONTHS, 12 MONTHS, 24 MONTHS, 36 MONTHS & 48 MONTHS

DATE OF ASSESSMENT			NAME OF CHILD	CURRENT AGE OF THE CHILD	SEX	DATE OF BIRTH			LENGTH/ HEIGHT (cm) UP TO 1 DECIMAL PLACE  NB: Exclude for 3, 4 & 5 months.	WEIGHT (kg) UP TO 1 DECIMAL PLACE	MID UPPER ARM CIRCUMFERENCE (cm) (FROM 6 MONTHS TO 4 YEARS)	HEAD CIRCUMFERENCE (cm) (UP TO 2 YEARS)	FEEDING MODE (UP TO 2 YRS) E = Exclusive Breastfeeding (Breast Milk Only) PB = Partial Breastfeeding F = Formula Feeding C = Cow's Milk	MOTHER'S WORK STATUS U = Unemployed G = Government P = Private sector S = Self-employed N = not staying with mother	DISTRICT
DATE	MONTH	YEAR				DATE	MONTH	YEAR							

This form as is could be used as a raw data source for several indicators:

- Prevalence of exclusive breastfeeding in infants aged six months or less (exclusive breastfeeding)
- Proportion of children who are breastfeeding at 1 year (continued breastfeeding)
- Prevalence of low height-for-age in children under five years of age (stunting)
- Prevalence of low weight-for-height in children under five years of age (wasting)
- Prevalence of high weight-for-height in children under five years of age (overweight in young children)

**MoH Health Care Agency My Profile for Crèche Enrollment, cover page and pages 2 and 3. Card will be revised but will contain similar information.**



# Ministry of Health Health Care Agency

Early Childhood Care and Education  
My Profile for Crèche Enrolment

Child's Name



January 2016 3.5 ~ 4 years

# SCHOOL HEALTH PROGRAMME

## CONFIDENTIAL

**Note:** The early childhood profile summarizes the child's developmental attainments and the general health status prior to crèche or preschool enrollment. The purpose of administering this profile is to gather evidence of the child's strengths and needs which will be shared with the school management in order to provide relevant support and services to facilitate learning and development.

sex?

### 1.0. My Personal Details:

My name:	Age:	D.O.B:
My NIN:	My religion:	
My address:	My district:	
I live with my: Mother <input type="checkbox"/> Father <input type="checkbox"/> Guardian <input type="checkbox"/> Children's Home <input type="checkbox"/>		

My School:

### 2.0. My Parents / Guardian Details:

Mother's name	Address / Tel No.	Age:
Father's name	Address / Tel No.	Age:
Guardian's name	Address / Tel No.	Age:

My Guardian is my (state relationship of guardian to child e.g. Grandmother)

Remarks:

**3.0. My Health Details:**

My birth history	Normal <input type="checkbox"/> Premature <input type="checkbox"/> Others <input type="checkbox"/>	
My current medical status	<input type="checkbox"/> Known medical condition (please state)..... <input type="checkbox"/> My current medication ..... <input type="checkbox"/> Allergies (please state)..... <input type="checkbox"/> Special diet (please state)..... <input type="checkbox"/> Food dislikes ..... <input type="checkbox"/> Others (please state) .....	
My vaccination status	<input type="checkbox"/> I have completed all childhood vaccination <input type="checkbox"/> I have not completed all childhood vaccination <input type="checkbox"/> I have not taken any vaccination at all	
Remarks:		
<b>4.0. Summary of my body functions and observations</b>		
My physical assessment	<input type="checkbox"/> Normal <input type="checkbox"/> Not Normal	Remarks:
My hearing test	<input type="checkbox"/> Normal <input type="checkbox"/> Refer	Remarks:
My vision test	<input type="checkbox"/> Normal <input type="checkbox"/> Refer	Remarks:
My hemoglobin	<input type="checkbox"/> Normal <input type="checkbox"/> Not Normal	Remarks:
My weight is	kg	Remarks:
My height is	meters	Remarks:

This form as is could be used as a raw data source for:

- Prevalence of hemoglobin <11 g/dL in young children (anemia among young children)

**Sample questionnaire for Proportion of children 6-23 months who receive a minimum acceptable diet (minimum acceptable diet).** This questionnaire is not currently in use in Seychelles, but could be adapted for use in the nutrition survey. This comes from the WHO document: [Indicators for Assessing Infant and Young Child Feeding Practices, Part 2, Measurement.](#)

*Calculation of 6 food group score:*

The 6 foods groups used for calculation of the dietary diversity component of the indicator for non-breastfed children are:

1. grains, roots and tubers
2. legumes and nuts
3. flesh foods (meat, fish, poultry and liver/organ meats)
4. eggs
5. vitamin-A rich fruits and vegetables
6. other fruits and vegetables

Construct the 6 food group score as follows:

Begin with a score of 0.

For each of the 6 food groups, add a point if any food in the group was consumed.

Food group 1	Add 1 point if:	IYCF Q10G=1 OR Q12A=1 OR Q12C=1
Food group 2	Add 1 point if:	IYCF Q12K=1
Food group 3	Add 1 point if:	IYCF Q12G=1 OR Q12H=1 OR Q12J=1
Food group 4	Add 1 point if:	IYCF Q12I=1
Food group 5	Add 1 point if:	IYCF Q12B=1 OR Q12D=1 OR Q12E=1 OR Q12Q=1
Food group 6	Add 1 point if:	IYCF Q12F=1

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES			QUESTIONS AND CODING CATEGORIES	
10	Next I would like to ask you about some liquids that <b>(NAME)</b> may have had yesterday during the day or at night. Did <b>(NAME)</b> have any <b>(ITEM FROM LIST)</b> ? <i>READ THE LIST OF LIQUIDS STARTING WITH 'PLAIN WATER'.</i>		YES	NO	DK	11 How many times yesterday during the day or at night did <b>(NAME)</b> consume any <b>(ITEM FROM LIST)</b> ? <i>READ QUESTION 11 FOR ITEMS B, C, AND F IF CHILD CONSUMED THE ITEM. RECORD '98' FOR DON'T KNOW.</i>
A	Plain water?	A .....	1	2	8	
B	Infant formula such as [insert local examples]?	B .....	1	2	8	B. TIMES  __ __
C	Milk such as tinned, powdered, or fresh animal milk?	C .....	1	2	8	C. TIMES  __ __
D	Juice or juice drinks?	D .....	1	2	8	
E	Clear broth?	E .....	1	2	8	
F	Yogurt?	F .....	1	2	8	F. TIMES  __ __
G	Thin porridge?	G .....	1	2	8	
H	Any other liquids such as [list other water-based liquids available in the local setting]?	H .....	1	2	8	
I	Any other liquids?	I .....	1	2	8	

12	<p>Please describe everything that <b>(NAME)</b> ate yesterday during the day or night, whether at home or outside the home.</p> <p>a) Think about when <b>(NAME)</b> first woke up yesterday. Did <b>(NAME)</b> eat anything at that time? <i>IF YES: Please tell me everything <b>(NAME)</b> ate at that time. PROBE: Anything else? UNTIL RESPONDENT SAYS NOTHING ELSE. IF NO, CONTINUE TO QUESTION b).</i></p> <p>b) What did <b>(NAME)</b> do after that? Did <b>(NAME)</b> eat anything at that time? <i>IF YES: Please tell me everything <b>(NAME)</b> ate at that time. PROBE: Anything else? UNTIL RESPONDENT SAYS NOTHING ELSE. REPEAT QUESTION b) ABOVE UNTIL RESPONDENT SAYS THE CHILD WENT TO SLEEP UNTIL THE NEXT DAY. IF RESPONDENT MENTIONS MIXED DISHES LIKE A PORRIDGE, SAUCE OR STEW, PROBE:</i></p> <p>c) What ingredients were in that <b>(MIXED DISH)</b>? <i>PROBE: Anything else? UNTIL RESPONDENT SAYS NOTHING ELSE. AS THE RESPONDENT RECALLS FOODS, UNDERLINE THE CORRESPONDING FOOD AND CIRCLE '1' IN THE COLUMN NEXT TO THE FOOD GROUP. IF THE FOOD IS NOT LISTED IN ANY OF THE FOOD GROUPS BELOW, WRITE THE FOOD IN THE BOX LABELED 'OTHER FOODS'. IF FOODS ARE USED IN SMALL AMOUNTS FOR SEASONING OR AS A CONDIMENT, INCLUDE THEM UNDER THE CONDIMENTS FOOD GROUP. ONCE THE RESPONDENT FINISHES RECALLING FOODS EATEN, READ EACH FOOD GROUP WHERE '1' WAS NOT CIRCLED, ASK THE FOLLOWING QUESTION AND CIRCLE '1' IF RESPONDENT SAYS YES, '2' IF NO AND '8' IF DON'T KNOW:</i></p> <p>Yesterday during the day or night, did <b>(NAME)</b> drink/eat any <b>(FOOD GROUP ITEMS)</b>?</p>
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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES			
			YES	NO	DK
A	Porridge, bread, rice, noodles, or other foods made from grains	A .....	1	2	8
B	Pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside	B .....	1	2	8
C	White potatoes, white yams, manioc, cassava, or any other foods made from roots	C .....	1	2	8
D	Any dark green leafy vegetables	D .....	1	2	8
E	Ripe mangoes, ripe papayas, or (insert other local vitamin A-rich fruits)	E .....	1	2	8
F	Any other fruits or vegetables	F .....	1	2	8
G	Liver, kidney, heart, or other organ meats	G .....	1	2	8
H	Any meat, such as beef, pork, lamb, goat, chicken, or duck	H .....	1	2	8
I	Eggs	I .....	1	2	8
J	Fresh or dried fish, shellfish, or seafood	J .....	1	2	8
K	Any foods made from beans, peas, lentils, nuts, or seeds	K .....	1	2	8
L	Cheese, yogurt, or other milk products	L .....	1	2	8
M	Any oil, fats, or butter, or foods made with any of these	M .....	1	2	8
N	Any sugary foods such as chocolates, sweets, candies, pastries, cakes, or biscuits	N .....	1	2	8
O	Condiments for flavor, such as chilies, spices, herbs, or fish powder	O .....	1	2	8
P	Grubs, snails, or insects	P .....	1	2	8
Q	Foods made with red palm oil, red palm nut, or red palm nut pulp sauce	Q .....	1	2	8
Check categories A–Q		IF ALL 'NO': → GO TO 13 IF AT LEAST ONE 'YES' OR ALL 'DK': → GO TO 14			

	<p><b>OTHER FOODS:</b> PLEASE WRITE DOWN OTHER FOODS IN THIS BOX THAT RESPONDENT MENTIONED BUT ARE NOT IN THE LIST BELOW:</p>
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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
13	Did ( <b>NAME</b> ) eat any solid, semi-solid, or soft foods yesterday during the day or at night? <i>IF 'YES' PROBE: What kind of solid, semi-solid, or soft foods did (<b>NAME</b>) eat?</i>	YES ..... 1 <i>GO BACK TO Q12 AND RECORD FOODS EATEN. THEN CONTINUE WITH Q14</i> NO ..... 2 DON'T KNOW ..... 8	 → GO TO 15 → GO TO 15
14	How many times did ( <b>NAME</b> ) eat solid, semi-solid, or soft foods other than liquids yesterday during the day or at night?	NUMBER OF TIMES .....  __ __  DON'T KNOW ..... 98	
15	Did ( <b>NAME</b> ) drink anything from a bottle with a nipple yesterday during the day or night?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	



Excel sheets to collect data necessary to calculate anemia among pregnant women, anemia among preschool children, and gestational diabetes have been created as part of this project. The instructions on how to fill out these Excel sheets are included below. The instructions include the variables to be collected and the proper way to enter data.

The Nutrition Unit has an existing Excel sheet that can be used to calculate stunting, wasting, overweight in young children, exclusive breastfeeding, and continued breastfeeding. Datasets with the information necessary to calculate low birthweight, minimum acceptable diet, overweight and obesity in women of reproductive age, and underweight in women of reproductive age already exist. For this reason, separate Excel sheets were not created for those indicators.

### **Anemia among Pregnant Women Data Entry Sheet Instructions**

#### **General Instructions:**

- The definition of “pregnant women” for the purposes of this indicator is all women who receive the first anemia screening of pregnancy at an antenatal clinic visit. This could include all cases of women who receive 1<sup>st</sup> trimester screening. For women who do not attend their first antenatal visit until the second trimester, the anemia screening conducted at their first visit should be included. In sum: all data from the *first anemia test of pregnancy* (whether conducted in first or second trimester) should be included. Results from any subsequent anemia testing in pregnant women should *not* be included.
- Individual antenatal records can be used as the source of the data. Using individual records (rather than tallies of the numbers of anemia diagnoses) is necessary to tag each entry with the patient’s neighborhood.
- A designated staff person should fill out the data entry sheet on a scheduled basis, preferably at the end of every work week. Each health center should have its own data entry sheet and designated staff person(s) to work on it.
- The sheet should be saved after every data entry session. A backup file should be saved externally at the same time, e.g. on an internal server, or a file sharing service such as Dropbox or Box. (These are free services that you can download. Simply Google “Dropbox” or “Box.” If saving on a server or file sharing service is not possible, attaching the document to an email and sending the email to yourself every week can be one way to ensure that the file cannot be lost.
- For consistency, a new sheet can be started with data gathered at health centers on the first day of the month, at the beginning of a three month period.
- The Excel sheet should be sent to Epidemiology and Statistics every three months at the end of a three month period.

- A new Excel sheet can be started at the beginning of the next three month period.

### **Instructions by column:**

*If you receive an error message while conducting data entry, please re-read these instructions and attempt to enter the data in the format described below. The Excel sheet has been designed to try to reduce data entry error and ensure that data are entered in a consistent format that will allow for easy analysis.*

- NIN column. Enter the full NIN. Do not enter the woman's name anywhere in the data entry sheet to preserve privacy.
- Weeks gestation at test date column. Enter the number of gestational weeks in the pregnancy at the time when the anemia testing at conducted. Enter a whole number. For example, only enter 8 or 9, rather than 8.5.
- DOB (date of birth) column. Enter the woman's date of birth in the following format: DD/MM/YYYY. For example, a woman born on 6 December, 1995, would be entered as 06/12/1995.
- Date of anemia testing column. Enter the date that the blood test for anemia was conducted at the health center. Enter the date in the DD/MM/YYYY format.
- Parity column. Select the parity from the dropdown menu, which gives options from 0-10. If the number is more than 10, use 10.
- Neighborhood of residence column. Select the neighborhood where the woman resides from the dropdown menu.
- Health center column. Select the health center that the woman attends from the dropdown menu.
- Hemoglobin value from lab test in g/dL column. Enter the hemoglobin value in g/dL as reported by the lab. There is no need to type g/dL in the column as it is assumed that all values will be entered in those units.
- Anemia status column. Select 0 from the dropdown menu if the lab blood test did not identify the woman as having anemia as defined by current clinical guidelines in used in Seychelles. Select 1 from the dropdown menu if the lab blood test identified the woman as having anemia as defined by current clinical guidelines used in Seychelles.

## **Anemia among Preschool Children Data Entry Sheet Instructions**

### **General instructions:**

- The data for every child entering crèche for whom a hemoglobin screening is conducted should be entered into the data entry sheet.
- The data entry form should be distributed for use at every health center.
- The individual child records can be used as the source of the data.

- In all cases, columns A through H should be completed. For children who are not referred for further anemia testing, completing additional columns is not necessary. Please leave blank the items on date of lab screening, lab screening hemoglobin value, and anemia status.
- A designated staff person should fill out the data entry sheet on a scheduled basis. Data entry should be completed shortly after a round of hemoglobin screenings and the subsequent lab tests is conducted for children in a certain crèche or area.
- The sheet should be saved after every data entry session. A backup file should be saved externally at the same time, e.g. on an internal server, or a file sharing service such as Dropbox or Box. (These are free services that you can download. Simply Google “Dropbox” or “Box.” If saving on a server or file sharing service is not possible, attaching the document to an email and sending the email to yourself every week can be one way to ensure that the file cannot be lost.
- The Excel sheet should be sent to Epidemiology and Statistics every three months at the end of a three month period.
- A new Excel sheet can be started at the beginning of the next three month period.

**Instructions by column:**

*If you receive an error message while conducting data entry, please re-read these instructions and attempt to enter the data in the format described below. The Excel sheet has been designed to try to reduce data entry error and ensure that data are entered in a consistent format that will allow for easy analysis.*

- NIN column. Enter the full NIN. Do not enter the child’s name anywhere in the data entry sheet to preserve privacy.
- Sex column. Select female or male from the dropdown column.
- DOB (date of birth) column. Enter the child’s date of birth in the following format: DD/MM/YYYY. For example, a child born on 6 December, 2015 should be entered as 06/12/2015.
- Neighborhood of residence column. Select the neighborhood where the child resides from the dropdown menu.
- School column. Select the school that the child currently attends from the dropdown menu.
- Date of school screening column. Enter the date that the child took the hemoglobin screening test at school in the DD/MM/YYYY format.
- Hemoglobin value at school screening in g/dL. This should be entered as the value is displayed on the test instrument screen. There is no need to type g/dL in the column as it is assumed that all values will be entered in those units. [This column may be revised based on the parameters of the test that is chosen. Some screening tests may give a hemoglobin value, while others may only indicate that further testing is necessary.]

- Recommended for further testing column. If the child is not recommended for further testing, select 0 from the dropdown menu. If the child is recommended for further testing, select 1 from the dropdown menu.
- Date of blood draw for lab test column. Enter the date of the blood draw for lab test in the DD/MM/YYYY format.
- Hemoglobin value from lab test in g/dL column. Enter the hemoglobin value in g/dL as reported by the lab. There is no need to type g/dL in the column as it is assumed that all values will be entered in those units.
- Anemia status column. Select 0 from the dropdown menu if the lab blood test did not identify the child as having anemia as defined by current clinical guidelines in used in Seychelles. Select 1 from the dropdown menu if the lab blood test identified the child as having anemia as defined by current clinical guidelines used in Seychelles.

### **Gestational Diabetes among Pregnant Women Data Entry Sheet Instructions**

#### **General instructions:**

- The definition of “pregnant women” for the purposes of this indicator is all women who receive the gestational diabetes testing at 24-28 weeks gestation. Any subsequent or followup testing to monitor for gestational diabetes should *not* be counted—so that each woman is only counted once.
- Individual antenatal records can be used as the source of the data. Using individual records (rather than tallies of the numbers of anemia diagnoses) is necessary to tag each entry with the patient’s neighborhood.
- A designated staff person should fill out the data entry sheet on a scheduled basis, preferably at the end of every work week. Each health center or “point of care” location should have its own data entry sheet and designated staff person(s) to work on it.
- The sheet should be saved after every data entry session. A backup file should be saved externally at the same time, e.g. on an internal server, or a file sharing service such as Dropbox or Box. (These are free services that you can download. Simply Google “Dropbox” or “Box.” If saving on a server or file sharing service is not possible, attaching the document to an email and sending the email to yourself every week can be one way to ensure that the file cannot be lost.
- For consistency and ease, a new sheet can be started with data gathered at health centers on the first day of the month, at the beginning of a three month period.
- The Excel sheet should be sent to Epidemiology and Statistics every three months at the end of a three month period.

- A new Excel sheet can be started at the beginning of the next three month period.

**Instructions by column:**

*If you receive an error message while conducting data entry, please re-read these instructions and attempt to enter the data in the format described below. The Excel sheet has been designed to try to reduce data entry error and ensure that data are entered in a consistent format that will allow for easy analysis.*

- NIN column. Enter the full NIN. Do not enter the woman's name anywhere in the data entry sheet to preserve privacy.
- Weeks gestation at test date column. Enter the number of gestational weeks in the pregnancy at the time when the anemia testing at conducted. Enter a whole number. For example, only enter 24 or 25, rather than 24.5.
- DOB (date of birth) column. Enter the woman's date of birth in the following format: DD/MM/YYYY. For example, a woman born on 6 December, 1995, would be entered as 06/12/1995.
- Date of gestational diabetes testing column. Enter the date that testing was conducted at the health center. Enter the date in the DD/MM/YYYY format.
- Neighborhood of residence column. Select the neighborhood where the woman resides from the dropdown menu.
- Health center column. Select the health center that the woman attends from the dropdown menu.
- Test administered column. Select from the dropdown the type of test that was administered, either Glucose Challenge Test (GCT) or Glucose Load Test (GLT).
- Gestational diabetes status column. Select 0 from the dropdown menu if the tests did not identify the woman as having gestational diabetes as defined by current clinical guidelines in used in Seychelles. Select 1 from the dropdown menu if the tests identified the woman as having gestational diabetes as defined by current clinical guidelines used in Seychelles.