

2013

# Nutrition Surveillance Profiles



Viet Nam

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## OVERVIEW

Annually, a nutrition surveillance is conducted by the National Institute of Nutrition (NIN) and Preventive Medical Centres of 63 provinces/cities nationwide and the Nutrition Centre in Ho Chi Minh City in the period from July to September. The nutrition surveillance aims at collecting and evaluating the trend of the maternal and child nutritional status, core indicators of infant and young child feeding practices (IYCF), the implementation of target programs such as prevention of vitamin A deficiency, the use of iodized salt, and accessing to IYCF information. Information provided by the surveillance system is used to monitor and evaluate the implementation of Vietnam nutrition program within the National Nutrition Strategy for each decade, and to provide information for annual provincial nutrition planning.

## TARGET POPULATION AND METHODOLOGY

### 1. Sample size and sampling strategy

This is a cross-sectional survey using two-stage cluster sampling method:

Stage 1 – selecting clusters: NIN randomly selects 30 clusters (commune/ward) for each province/city using the probability proportionate to size method (PPS). For Ha Noi and Ho Chi Minh Cities we first stratify by urban and rural areas, then select 30 clusters are randomly selected for each area using the PPS method.

Stage 2 – selecting villages: From each commune/ward selected in the stage 1, three 3 villages are randomly selected (using lottery or the table of random number).

Stage 3 – selecting participants: The provincial surveillance team or nutrition specialist randomly select 17 children under 5 years of age from each village using the door to door method (in case without complete list of the children in the village) or using excel (in case with complete list of the village's children). Ensure that the number of sampled children in each village follow the ratios: 2 children 0-5 months, 5 children 6-23 months, and 10 children 24-59 months. The number of surveyed children is:

- Each cluster: 17 children x 3 villages = 51 children
- Each province: 30 clusters x 51 children = 1530 children
- In Ha Noi and Ho Chi Minh City: 2 areas x 1530 children = 3060 children
- Nationwide: 1950 clusters x 51 children = 99450 children

### 2. Surveillance content

As described earlier, the NIN surveillance collects basic information related to maternal and child nutritional status based on anthropometric measurement, core indicators of coverage rate of services to prevent micronutrient deficiency, and core indicators of IYCF practices. The criteria are used based on WHO reference standards on definitions and data collection method in order to maximize the consistency of the criteria among different years, as well as the value in using and comparing data when needed (see the indicator definition section). A structured questionnaire is developed including necessary information along with guidance materials for interviewers and supervisors.

### 3. Field data collection

Members of the nutrition surveillance system include: technical group (Department of Nutrition Surveillance and Policy, NIN), supervisors (Provincial, National and Regional), surveillance specialists, field leaders, interviewers, and data entry group (Department of Nutrition Surveillance and Policy, NIN). Interviewers are provincial staffs, normally from provincial preventive medical centres. Repeated technical trainings are conducted for interviewers by the national level before the field work. Data collection process for each cluster consists the following stages:

#### 3.1. Preparation before field work

The preparation process starts immediately after the training for field leaders and interviewers. In addition, all previous steps such as cluster selection, village selection, and respondent selection must be completed already.

The steps include: unifying surveillance plan among levels, preparing necessary documents and administrative procedures, and conducting conferences to prepare for the implementation (if possible).

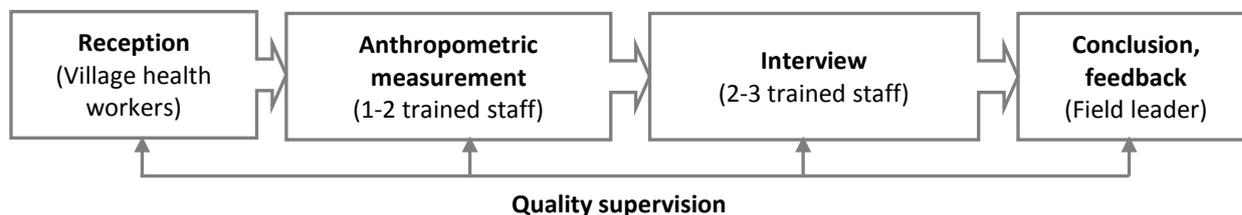
Before going to the field, it is needed to directly contact with the district and commune to make sure about their readiness. Besides, each member needs to prepare him/herself about physical and mental health, family work and work handover before the field trip.

#### 3.2. Implementation in the field

Provincial surveillance team collaborates with the commune in following activities: preparing places, inviting and making appointment with respondents, mobilizing support from local staffs on reception, calling respondents, directing, translating, and other supports during the survey process.

#### 3.3. Data collection

The field data collection is conducted with four following steps:



Note: Staff = Staff of provincial surveillance team

#### 3.4. Complete data in each cluster

Steps should be taken after the end of the data collection include:

- Reviewing the situation and recording cases that could not be measured;
- Checking scale and meter;
- Gathering, checking, packing, and arranging data forms by cluster, village and mother code;
- Informing some results based on the initial findings of local child nutritional status and thanks for being helped.

### 4. Data management, analysis and results

Data are entered and checked using Epidata software at national level. After that, data are managed using MS Access software: creating and defining indicators follow the questionnaire. All data are analysed using Stata 12 (Stata Inc., TX, USA). Results will be integrated into a general reporting template developed on MS Excel to generate nationwide report and reports by ecological region, province, and urban/rural area. Depending on each year, Nutrition profile is printed or uploaded to the website. In addition, the trend over time of some indicators are also developed in this Nutrition profile.

## 5. Definition of core indicators

Height-for-age Z scores (HAZ), weight-for-age Z scores (WAZ) and weight-for-height Z scores (WHZ) are calculated based on World Health Organization (WHO) reference standards for child anthropometry<sup>1</sup>. The criteria on infant and young child feeding practices are based on the most recent IYCF indicators based World Health Organization guidance<sup>2</sup>.

Indicators	Definition
<b><i>Anthropometry</i></b>	
Stunting	Height-for-age Z score <-2SD
Underweight	Weight-for-age Z score<-2SD
Wasting	Weight-for-height Z score<-2SD
<b><i>Infant and young child feeding indicators (IYCF)</i></b>	
Early initiation of breastfeeding	Proportion of children born in the last 24 months who were breastfed within 1 hour of birth
Exclusive breastfeeding (EBF) under 6 months	Proportion of infants 0-5.9 months of age who are fed exclusively with breast milk
Predominant breastfeeding under 6 months	Proportion of infants 0-5.9 months of age who are predominantly breastfed. Predominant BF might include certain liquids, other than non-human milk or food-based fluids.
Continued breastfeeding at 1 year	Proportion of children 12-15.9 months of age who are fed breast milk
Continued breastfeeding at 2 years	Proportion of children 20-23.9 months of age who are fed breast milk
Minimum dietary diversity	Proportion of children 6-23.9 months of age who receive foods from 4 or more food groups
Minimum meal frequency	Proportion of breastfed and non-breastfed children 6-23.9 months of age who receive solid, semi-solid or soft foods the minimum number of times or more
Minimum acceptable diet	Proportion of children 6-23.9 months of age who receive a minimum acceptable diet (apart from breast milk)
Consumption of iron-rich or iron-fortified foods	Proportion of children 6-23.9 months of age who receive an iron-rich food or iron-fortified food that is especially designed for infants and young children, or that is fortified in the home
Age-appropriate breastfeeding	Proportion of children 0-23.9 months of age who are appropriately breastfed
No bottle feeding	Proportion of children 0-23.9 months of age who a not fed with a bottle
<b><i>Maternal indicators</i></b>	
Chronic energy deficiency (CED)	Proportion of mothers who have BMI<18,5kg/m <sup>2</sup>
Iron tablet supplementation during last 6 months	Proportion of women who reported taking iron supplements in the last 6 months
Iron tablet supplementation during pregnancy	Proportion of women who reported starting taking iron supplements during first, second or third trimester of pregnancy
Vitamin A use postpartum	Proportion of women who reported taking vitamin A during post-partum period
<b><i>Accessing to IYCF information</i></b>	
Direct contact with health staffs	Proportion of women who reported receiving information from communal health center staffs, village health worker/nutrition volunteer, women union during last 3 months
Information from mass-media	Proportion of women who reported receiving information from the mass-media such as TV, radio/loudspeaker, newspapers/magazines, posters, flipcharts, internet... during last 3 months
Topics of nutritional counseling	Topics on IYCF which were counseled during the last 3 months

<sup>1</sup> WHO Multicentre Growth Reference Study Group. WHO Child Growth Standards: Length/height-for-age, weight-for-age, weight-for-length, weight-for-height and body mass index-for-age: Methods and development. Geneva: World Health Organization; 2006.

<sup>2</sup> Daelmans B, Dewey K, Arimond M. New and updated indicators for assessing infant and young child feeding. Food Nutr Bull. 2009;30:S256-62.