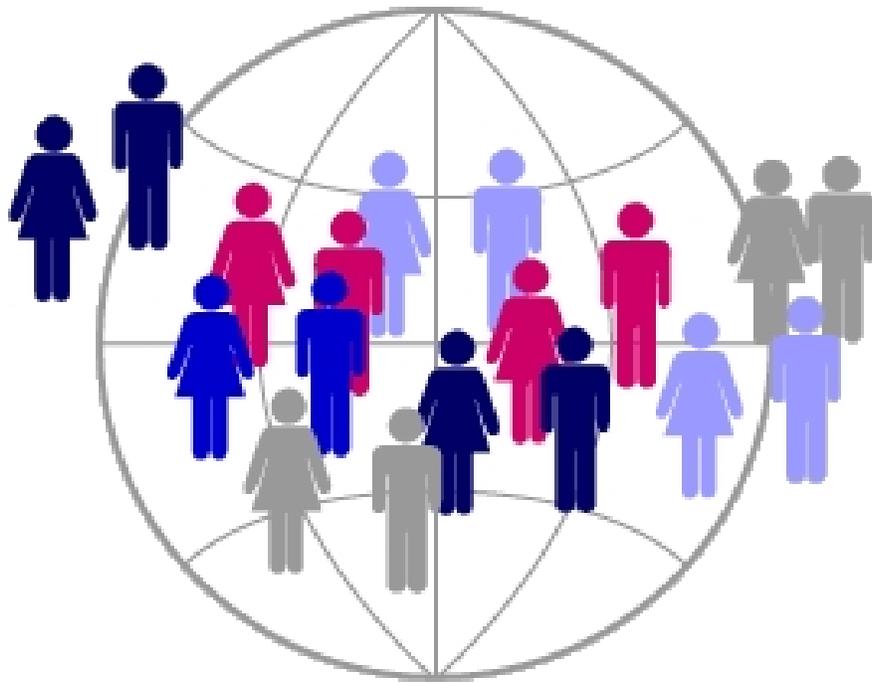


GUIDELINES FOR IMPLEMENTING A NATIONAL
STRATEGY TO DETERMINE THE MAGNITUDE AND
DISTRIBUTION OF CHILDREN OUTSIDE OF FAMILY CARE



USAID Center of Excellence on Children in Adversity

PL109-95 U.S. Government Assistance
to Highly Vulnerable Children

ACKNOWLEDGEMENTS

The development of these guidelines was a collaborative effort, which developed out of an expert measurement workshop on children outside of family care organized by the Center of Excellence on Children in Adversity in early 2013.

The guidelines and tools were prepared by Dr. Lindsay Stark, Beth Rubenstein, Katherine Muldoon and Dr. Les Roberts at Columbia University.

Special thanks to Dr. Richard Rinehart, Senior Monitoring and Evaluation Advisor, who oversaw the process on behalf of the Center of Excellence on Children in Adversity. Dr. Neil Boothby, U.S. Government Special Advisor and Senior Coordinator to the USAID Administrator on Children in Adversity, and John Williamson, Senior Technical Advisor for DCOF, also served as key advisors. Thanks also to our PEPFAR colleagues for their support to this project.

Significant contributions were also provided by statisticians, David Whitford and Monroe Sirkin. Claudia Cappa (UNICEF), Florence Martin and Severine Chevrel (Better Care Network), Sebastien Marot (Friends International), John Williamson and Martin Hayes (USAID's Displaced Children and Orphans Fund), Louise Meincke (Consortium for Street Children), David Dolson (Canada Statistics), Amy Symens Smith (U.S. Census), Matthew Lamb (ICAP), Maggie Brown (consultant, UNICEF-Mozambique), Thoa Bui (Holt International), Margaret Eberle (University of British Columbia), Kim Hopper (Columbia University) and Joanna Wakia (Retrak) also provided important insights.

Finally, thanks to Joy Fishel and Tom Pullum at MEASURE DHS for their overall support and oversight in the development of these guidelines.

Suggested citation:

Stark, L., Rubenstein, B.L., Muldoon, K. and Roberts, L. (2014). Guidelines for implementing a national strategy to determine the magnitude and distribution of children outside of family care. Washington, DC: Center for Excellence on Children in Adversity.

FORWARD

This document represents an important milestone in moving towards evidence-based policies and programs for children outside of family care. While significant effort has been made to incorporate input from a range of experts and stakeholders, this is a draft document that has yet to be piloted. We expect that these guidelines will be revised based on field learning. Validation measures will be built into the initial pilots to assess the strength of the proposed methods, and recommendations for future enumerations will be adjusted accordingly.

Our hope is to provide national and international actors with a foundation for monitoring children outside of family care in order to leverage the support needed to help strengthen families and reduce the numbers of children living outside of family care. As with any new methodology, there will be unanticipated challenges, but we see these as opportunities to improve our tools and approach for the future. We want to inspire a productive dialogue amongst all of us working on behalf of children in adversity

Over time, these guidelines will become more standardized and detailed implementation manuals can be developed. At the same time, we hope they will continue to leave room for adaptation at the national level in order to be able to fit into, and build upon, existing measurement and monitoring initiatives. Best practices for children outside of family care will continue to evolve based on research and experience. We hope that these guidelines represent one step in the direction of more informed action to assist these children.

We look forward to learning together.

-Dr. Lindsay Stark
March 2014

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	ii
FORWARD	iii
LIST OF APPENDICES	v
1. INTRODUCTION	1
1.1 Background	1
1.2 Purpose	2
1.3 Surveillance	3
1.4 Defining the Population	3
1.5 Sentinel Surveillance Sites	4
1.6 Producing a National Scorecard	5
1.7 Overview of Guidelines	6
2. ENUMERATING CHILDREN IN RESIDENTIAL CARE FACILITIES	8
2.1 Justification for Enumeration	8
2.2 Objectives	9
2.3 Design and Methodology	9
2.4 Data Collection Procedures	11
2.5 Data Management	13
2.6 Statistical Analyses	14
2.7 Limitations	14
2.8 Ethical Considerations	15
3. ENUMERATING CHILDREN ON THE STREET	18
3.1 Justification for Enumeration	18
3.2 Objectives	19
3.3 Design and Methodology	20
3.4 Data Collection Procedures	22
3.5 Data Management	30
3.6 Statistical Analyses	30
3.7 Limitations	34
3.8 Ethical Considerations	36
4. RETROSPECTIVE COHORT	38
4.1 Identifying a Cohort of Children	38
4.2 Assessing Children Presently in School	39
4.3 Characterizing Family Status	39
4.4 Analysis and Extrapolation	40
5. USING SENTINEL SURVEILLANCE SITES TO REACH A NATIONAL ESTIMATE	43
6. CONCLUSIONS	45
7. REFERENCES	46

LIST OF APPENDICES

Appendix 1: Facility list data collection tool	49
Appendix 2: Facility characteristics	50
Appendix 3: Daytime record review data collection tool option 1.....	52
Appendix 4: Daytime record review data collection tool option 1 completed.....	53
Appendix 5: Daytime record review data collection tool option 2.....	54
Appendix 6: Nighttime bed count data collection tool option 1.....	55
Appendix 7: Nighttime bed count data collection tool option 2.....	56
Appendix 8: Nighttime bed count data collection tool option 2 completed.....	57
Appendix 9a: Consent form for directors of residential care facilities.....	58
Appendix 9b: Consent form for informants at residential care facilities.....	60
Appendix 10: Shelter list data collection tool.....	61
Appendix 11a: Consent form for directors of shelters in rural areas.....	62
Appendix 11b: Consent form for informants at shelters in rural areas.....	64
Appendix 12: Street and shelter count data collection tool.....	65
Appendix 13: Street and shelter survey for rural areas.....	66
Appendix 14: Consent form for children in the rural street and shelter survey.....	70
Appendix 15: Consent form for social networking survey.....	71
Appendix 16: Social networking survey.....	73
Appendix 17a: Consent form for directors of shelters in urban areas.....	80
Appendix 17b: Consent form for informants at shelters in urban areas.....	82
Appendix 18: Plant capture data collection tool.....	83

1. INTRODUCTION

1.1 Background

Millions of children throughout the world are failing to meet their development potential as a result of poverty, abuse, neglect and other adversities. These children face significant threats to survival as well as profound life cycle risks that have an impact on human, social, and economic development (USAID 2012). Figure 1 below, from the Adverse Childhood Experiences Study, highlights influences throughout the lifespan of adverse childhood experiences on social, emotional, and physical wellbeing (Felitti et al 1998).

Research has shown that, beyond physical care, one of the most significant threats to children’s wellbeing is the absence of love and attention that comes from a permanently engaged parent or caregiver (Williamson and Greenberg 2010). Children who are outside of family care often experience a higher prevalence of violence, abuse, neglect, exploitation, lack of stimulation, poor health, and inadequate nutrition – all contributing to negative long-term outcomes. Evidence suggests, for example, that for every three months that a young child resides in a residential care facility, they lose one month of development compared to their peers who live with their families (van Ijzendoorn, Lujik, and Juffer 2008). Similarly, a longitudinal study by the Bucharest Early Intervention Project found that young children residing in residential care facilities experienced irreversible developmental delays compared with those shifted to foster care situations (Smyke et al. 2009).

Beyond residential care facility settings, children outside of family care are known to engage in or be forced into risky activities, exposing them to sexual abuse, hazardous child domestic work, early marriage, trafficking into sex work and other dangerous situations (Pinheiro 2006). In addition to crippling children’s potential and limiting their future opportunities, these dangers are also compromising future youth/adult opportunities and resiliency, and restricting national economic, political and social growth.

Figure 1. The influence of adverse childhood experiences throughout life



There is universal agreement that optimal support for children’s health, nutrition, and cognitive and social development comes from a caring and protective family. The Convention on the Rights of the Child (United Nations General Assembly 1989) and The Guidelines for the Alternative Care of Children (United Nations General Assembly 2010) affirm that the family has primary responsibility to protect and care for a child, and that governments have the responsibility to protect, preserve, and support the child-family relationship. The design and delivery of national and local childcare systems should be designed to enable families to look after their own children, to prevent harmful child-family separation whenever possible and to ensure that children have access to positive care alternatives when necessary (Williamson and Greenberg 2010).

1.2 Purpose

Preventing and responding to the needs of children outside of family care presents many challenges. Yet without an accurate understanding of the magnitude and distribution of this population, success towards meeting these challenges cannot be measured. In the absence of national surveillance systems, it is impossible for countries to carry out critical programming and policy activities, such as:

- Effective advocacy for a population that is known to be extremely vulnerable
- Planning and implementing family strengthening, reunification and alternative care programs
- Evaluating the cumulative impact of strategies to reduce the number of children living outside of family care

Objective 2 of the [U.S. Government Action Plan on Children in Adversity](#) (APCA) emphasizes the reduction of numbers of children outside of family care by enabling families to care for their children and promote protective and permanent family care (USAID 2012). It also states that these reductions will be measured at the national-level, and that the U.S. Government, in collaboration with other actors, will support capacity development of governments and local organizations in priority countries to measure them.

These guidelines were prepared to support the APCA’s Objective 2. They are intended to help national actors enumerate children outside of family care and monitor trends in this population over time. The approach described is meant to be a discrete, repeatable, manageable and feasible (from a cost perspective) mechanism to quantify the problem at the national level so that reduction targets can be set and solutions proposed and funded to achieve those targets

Note that these guidelines do not focus on children outside of family care residing in households (e.g. domestic workers in third party homes). Note also that these guidelines do not purport to assess the degree of vulnerability of this population, which has already been well established (NGO Working Group on Children Without Parental Care 2013; Better Care Network 2009). Finally, these guidelines are not a substitute for a complete government welfare surveillance system whose purpose is to identify all children outside of family care to provide direct services that address safety and wellbeing concerns. Simultaneous efforts to build up other components of sophisticated surveillance systems will be supported through other initiatives.

1.3 Surveillance

Comprehensive surveillance systems for children outside of family care do three things:

1. Identify children outside of family care in real-time;
2. Link them to opportunities for placement in nurturing families; and
3. Measure and monitor trends of their numbers nationally to document progress towards reduction goals.

The measuring and monitoring of trends of the number of children outside of family care is one component of a comprehensive surveillance system, and is the focus of this report. Such monitoring is not a one-time activity and is not sufficient as a stand-alone program. Ministries of Social Welfare and National Bureaus of Statistics should build measurement systems that will perform activities in a routine, standard manner. The cornerstone of surveillance systems is consistency of methods, populations and tools. Consistency is essential in order to provide reliable information, which, over time, will enable a country to monitor trends and track progress towards the goal of reducing the number of children outside of family care.

1.4 Defining the Population

An expert measurement workshop on children outside of family care was held in Washington DC from February 7-8, 2013, during which the following case definition for ‘children outside of family care’ was drafted:

‘Children living without at least one parent and without an adult, kin or otherwise, who is fulfilling parental roles and is permanently engaged in the child’s lifelong wellbeing.’ (Muldoon, Stark, and Rinehart 2013)¹

While some of the children encompassed in this broad definition are assumed to be accessible (e.g. children in state-run residential care facilities), other sub-groups are likely hidden or hard-to-reach. These sub-populations may be composed of individuals who engage in behaviors that are sometimes illegal or stigmatizing (e.g. sex work), or they may be under the control of others (e.g. labor camps). As a result, these sub-populations may be especially difficult to access without risking the safety of the child or the person collecting information on them.

Given these complexities, it is recommended that governments use *proxy definitions* to measure vulnerable sub-populations of children outside of family care. A proxy definition uses a socio-demographic characteristic of a group, such as places associated with risk behavior or places where children outside of family care are often found.

These guidelines center on two proxy sub-groups of children outside of family care, which are place-based:

¹ Discussions on the proposed definition are ongoing, as there are concerns that this definition does not fully align with international standards on children’s care, as defined by the Guidelines for the Alternative Care of Children (United Nations 2010). The proposed definition is not intended to serve as a legal standard for children outside of family care.

1. Children in residential care facilities; and
2. Children on the street

These proxies have been selected because they are present in most countries, and because they tend to represent groups that are comparably accessible with limited safety risks to the child or the enumerator.

This is not to presume that these will be the only sub-groups of interest to a government. It is recommended that stakeholders from relevant government ministries prioritize sub-groups of children outside of family care to determine whether additional surveillance activities and approaches for enumeration will be needed in addition to the activities outlined here (e.g. children associated with armed groups or children in labor camps).

Of note - a proxy definition is almost always imperfect. A proxy definition is only useful if there is evidence that a high proportion of individuals in the group are part of the larger population of interest. When using data from proxy groups to describe the overall situation of children outside of family care, it is important to be clear about why a proxy group has been adopted and document any local data that demonstrate that the proxy group does define a population with extreme vulnerability. To a certain extent, a few of the methods described in these guidelines will provide some data regarding the inclusiveness of the proxy groups vis-à-vis the broader definition (see Section 3.3 for a description of the capture-recapture approach via the constructed social network and Section 4 for a description of the retrospective cohort method). The other methods described in these guidelines do not extend beyond the proxy groups. Estimates should be interpreted accordingly.

1.5 Sentinel Surveillance Sites

Drawing from widely accepted surveillance strategies for HIV, these guidelines recommend routine monitoring of children outside of family care through the use of sentinel surveillance sites. In the field of HIV, instead of implementing a population-based surveillance process in which all new cases are identified from a nationally representative sample, countries have relied on sentinel surveillance, which involves monitoring the disease within a select number of facilities, or *sentinel sites*. Sentinel surveillance requires fewer resources than population-based surveillance, and has been shown to be an efficient and effective approach for monitoring trends over time (UNAIDS 2010).

While HIV sentinel surveillance uses antenatal clinics as the initial unit of measurement, in the case of enumerating children outside of family care, clearly defined geographic areas (e.g. districts, villages or cities) are recommended. Selecting a geographic area with clearly identified boundaries that are well understood by the general population is useful in attaining valid and reliable figures.

Selected sentinel surveillance sites should ideally be able to provide a composite national picture of the situation of children outside of family care. To do so entails obtaining information from:

- Different geographic locations, including areas with known high concentrations of children outside of family care;
- Areas with different sociocultural and economic contexts;
- Areas with different population densities and sizes; and

- Urban and rural areas.

National actors will be well-positioned to select appropriately diverse sites in accordance with their detailed quantitative and qualitative knowledge of their country.

The number of sites selected will depend largely on the human and financial resources available. Initially, it is recommended that a country enumerate the number of children living outside of family care in a minimum of four sentinel sites. It is preferable to start with a small number of urban sites where large numbers of children outside of family care are known to live. As financial and human resources permit, additional sites can be added, leading to enhanced geographic coverage, and including both urban and rural areas.

When resources are limited, it is recommended that new sentinel sites be added over time, but that only four sites are surveilled at any given time. For example, if data were collected from sentinel sites A, B, C and D in year one, data in year two might be collected from sentinel sites A, B, E and F. Year three might see data collection in sentinel sites A, C, E and G, and so on. This combination of repeated data collection with the addition of new sentinel sites allows for trend analysis, and also provides more opportunities for geographic representation. Finally, this approach is intended to help prevent against false reductions that might be an unintended consequence of having data collected from specific areas (i.e. if programming is targeted to respond to children outside of family care in sentinel sites, but not in areas where sentinel data were not collected).

At the end of these guidelines (see Section 5), we have included information for how to use sentinel site results to reach a national estimate.

It is possible that in some small countries, governments may choose to survey the entire country instead of using sentinel surveillance sites. This decision is at the discretion of the national actors, and should be determined according to the human and financial resources available to support the activity.

1.6 Producing a National Scorecard

It is recommended that sentinel site results, national estimates and other information relevant to the status of children outside of family care be compiled into a national scorecard that can provide an ‘at a glance’ picture of the state of this population of vulnerable children. Such a scorecard is envisioned to be a valuable tool for advocacy efforts and decision-making at the policy level.

The mock scorecard depicted in Figure 2 on the next page presents results from Country X, which is imagined to have conducted the surveillance activities recommended in these guidelines over a 5-year period. Tallies and trend information on children in residential care facilities and children on the streets are presented, and disaggregated by age and sex. If Country X developed separate modules to measure other sub-populations of children outside of family care (e.g. girls in brothels or children in armed groups), these findings should also be displayed as part of the scorecard.

Two additional categories of information on children outside of family care are also included here. First, for countries where Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS) data are available, the scorecard displays relevant data on children who are living in households, but who are not living with one or both biological parents. Other

household studies, such as International Labor Organization (ILO) modules on domestic servants may also be relevant and contain findings that warrant inclusion.

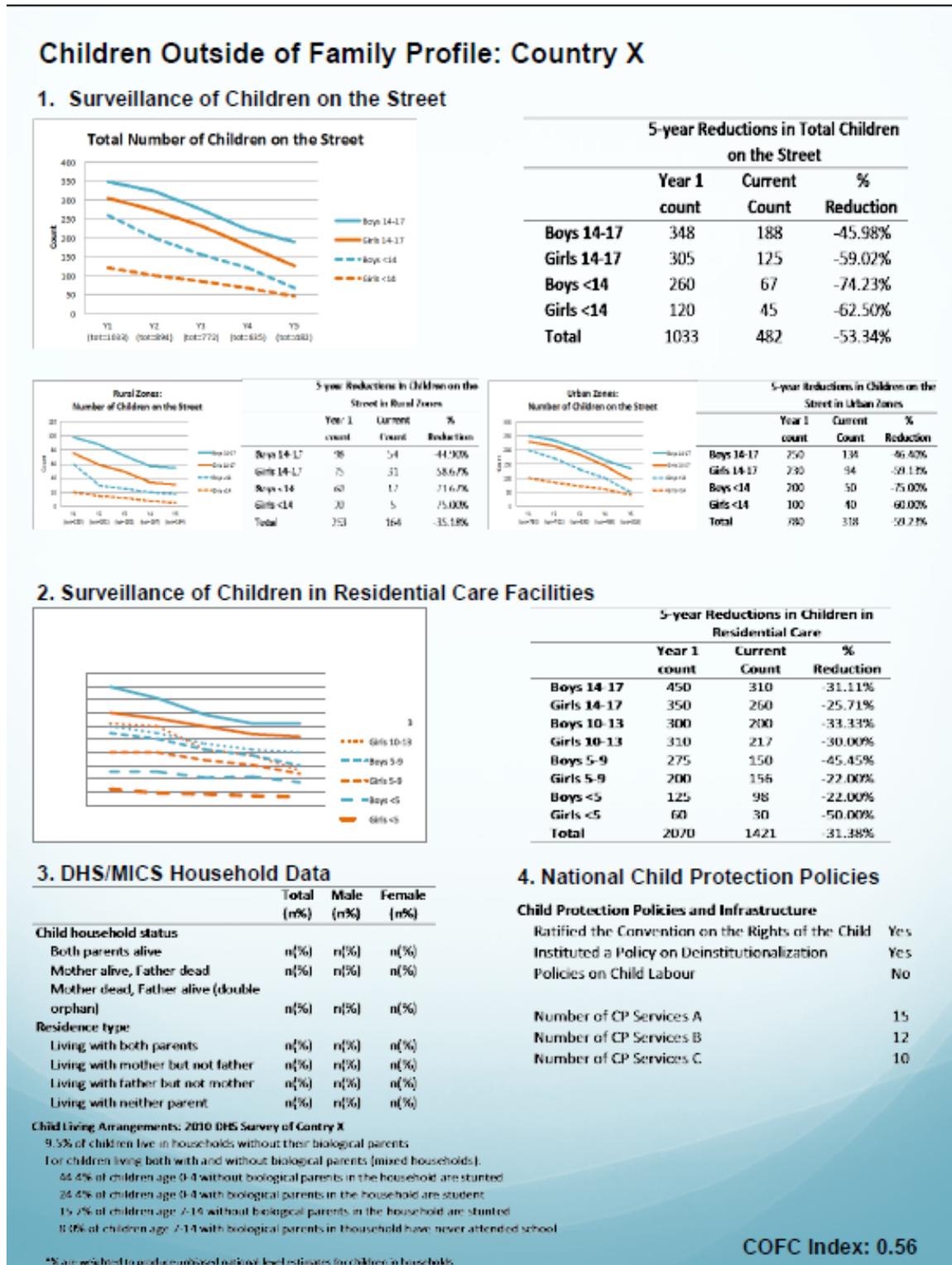
Finally, a section detailing relevant national policies may be useful to include in order to determine how national policies align with current trends and desired outcomes for children outside of family care.

1.7 Overview of Guidelines

The following sections detail protocols for enumerating children outside of family care. Section 2 outlines an approach for enumerating children in residential care facilities, such as orphanages. Section 3 presents two separate strategies for enumerating children outside of family care who are found on the street, depending on the size of the population in the sentinel surveillance site, as well the risks associated with the collection of identifying information. Both Sections 2 and 3 are structured in the same way, with case definition details, proposed methodologies, information on sampling frames, data collection procedures, limitations and ethical considerations. Section 4 offers a Cohort Reconstruction approach that is meant to complement the protocols proposed in Sections 2 and 3. This approach recognizes that there are many other categories of children living outside of family care not covered by these protocols, and outlines an alternative process that is meant to crudely estimate the relative magnitude of various categories of children living outside of family care, by tracing cohorts of children to see where they have gone over time. Finally, Section 5 offers guidance on how findings from sentinel surveillance sites can be extrapolated to generalize to the national level.

Included in these guidelines are samples of consent forms and data collection tools to use to enumerate children outside of family care. They are templates that each government should adapt to their local context. Each form is described in more detail in the appropriate sections below.

Figure 2: Example of a National Scorecard



2. ENUMERATING CHILDREN IN RESIDENTIAL CARE FACILITIES

The general objective of this section is to offer guidelines for governments to conduct a complete enumeration of all children living in residential care facilities in select sentinel surveillance areas. This population can serve as a proxy of children outside of family care in residential care facilities. The proposed enumeration strategy involves a multi-stage approach to sampling, which enables comprehensive capture both at the level of the facility and the child. Data collection procedures are explained for government registries, key informant interviews, daytime record review and nighttime bed counts. Limitations and ethical concerns are also discussed.

2.1 Justification for Enumeration

Children living in residential care facilities represent one of the major groups of children living outside of family care. According to UNICEF, there are an estimated 2.2 million children in residential care facilities care globally and the true number is likely higher. These figures are concerning given the scientific evidence showing that children in residential care facilities are at increased risk for poor health and delays in physical, intellectual, social and emotional development, compared to children living in family care (Browne 2009; Smyke 2009; van Ijzendoorn 2008).

Accurate, routinely collected data on the rate of children in residential care facilities is critical for national governments and local child welfare authorities to compare the situation of children in residential care facilities across countries and geographical regions to monitor trends in this population over time, especially as some governments move towards policies favoring deinstitutionalization. Such data has the potential to support advocacy efforts to improve the systems and services for children living outside of family care, and ultimately contribute to the prevention of adverse outcomes for these children (Better Care Network 2009).

Existing estimates of the number of children in residential care facilities have been limited by lack of specificity and consistency in case definitions, incomplete sampling frames and restricted site access, and unchecked validity and reliability. Some facilities and countries may have incentives to not report the true number children in residential care through official channels. Furthermore, most previous counts of children in residential care facilities in low- and middle-income countries (LMICs) have been single, isolated exercises. These guidelines are designed to develop longitudinal data collection systems that will improve the quality of evidence available on this topic and allow for monitoring trends over time.

The focus of this protocol is to offer guidelines for enumerating children living in residential care facilities. Residential care facilities can encompass a wide range of care settings including orphanages, infant and children's homes, boarding schools, hospitals and correctional and training facilities. Each government will need to adapt the proxy definition of residential care facilities to fit the needs of their country. Not all types of residential care facilities exist in all countries. Also, in some types of facilities such as boarding schools and hospitals, many children living there are not completely outside of family care. When selecting residential care facilities to include in routine surveillance, governments should consider criteria such as access, security, and whether the populations of children found in these residential care facilities are indeed, out of family care.

Governments may also need to adapt the enumeration strategy to most effectively complement other pre-existing systems. For example, in countries with rigorous registration systems for children in residential care, enumeration might be conducted every five years to evaluate the sensitivity of these systems. This type of evaluation would assess the completeness of the government registration system in its efforts to keep up to date records on children in residential care.

2.2 Objectives

a) General Objectives

The general objective of this protocol is to offer guidelines for governments to conduct a complete enumeration of all children living in residential care facilities in select sentinel surveillance areas.

b) Specific Objectives

The specific objectives of the enumeration include the following:

- Estimate the point prevalence of children living in residential care facilities in select sentinel surveillance areas, stratified by age and sex.
- Estimate the number, population and location of residential care facilities in select sentinel surveillance areas.
- Refine methodology for the enumeration of children living in residential care facilities.
- Build the capacity of national governments to conduct routine surveillance of children living in residential care facilities on a national level.
- Identify areas for further research that may improve outcomes of children in residential care facilities.

2.3 Design and Methodology

2.3.1 Population of Interest

A residential care facility is defined as a collective living arrangement where children under 18 years of age are looked after by adults who are paid to undertake this function (Better Care Network 2009). The following inclusion criteria will be used to operationalize this definition throughout the protocol:

1. Residential care facility
 - Offers long-term overnight care to children under 18 years of age, generally in a space designated for this purpose
 - Relies on at least one salaried staff or volunteer to care for these children
2. Child living in a residential care facility
 - Any child under 18 years of age who slept in a residential care facility on the previous night

Countries may need to refine these definitions based on what is appropriate in their context. In particular, governments may focus on capturing certain types of residential care facilities such as orphanages or correctional facilities, depending on strategic priorities and the relative number of children estimated to live in these settings. Note that for the purposes of this enumeration, children sleeping in overnight shelters will be captured as part of the estimate of children on the street (see Section 3).

2.3.2 Sampling Frame

a) Government Registry

As a first step, the project team should gather a list of all residential care facilities in the sentinel surveillance areas that are registered with, or known to, the relevant central government agencies (See Appendix 1: Facility list data collection tool). This list should include the names, addresses and contact information for each facility. If there is reason to suspect that the national registry is incomplete, regional or district government offices should also be approached for the same information. Other enumerations of residential care facilities in Rwanda, Cambodia and Guatemala have successfully used government registries for sampling registered facilities (Holt International 2005; Hope and Homes for Children and Ministry of Gender and Family Promotion 2012).

b) Key Informant Interviews

Next, data collectors should visit any key informants, including staff at the registered facilities, as well as religious institutions, health care facilities or government offices such as social services that may have knowledge of residential care facilities in the sentinel surveillance areas that were not identified in the previous step. In the case where there is no formal government registry, interviews with such informants will be the first step in the sampling process. The goal of key informant interviews is to identify residential care facilities that may be less formal than those on the registry. Names, addresses and contact information for any facilities identified through this process should be recorded.

Lists of all facilities known to each interviewee should be kept to assess the degree to which facilities are repeatedly mentioned. Having all known facilities mentioned repeatedly adds some limited confidence that most major facilities have been identified.

c) Daytime Record Review

Data collectors should visit all known residential care facilities during the day to ask about basic facility characteristics, review attendance records and determine the reported number, age and sex of children sleeping at each facility on the previous night (See Appendix 2: Facility characteristics, Appendix 3: Daytime record review data collection tool option 1, Appendix 4: Daytime record review data collection tool option 1 completed, and Appendix 5: Daytime record review data collection tool option 2). Where records from the previous night are not available, the most current records of resident children can be used as a substitute. The daytime record review should always assess the number of children sleeping at the facility on a mid-week night during the school-term.

In order to minimize double-counting due to migration of children, the record review should happen on the same day for all facilities where possible, and over a short span of a couple days where the single day approach is not possible. Therefore, the record review cannot commence until all facilities meeting the inclusion criteria have been identified (from the government registry and the key informant interviews).

Note that some of the facilities visited may not match the exact inclusion criteria determined at the country level. While Governments may choose to drop certain facilities during the analysis phase, we recommend proceeding with data collection at all identified facilities, regardless of their characteristics. The information obtained may be useful to inform global comparisons and future guidelines.

d) Nighttime Bed Count

The same night of the records review, data collectors should make a second visit to all identified facilities just as the children are going to sleep and perform a bed count of children. We do not recommend informing the facilities of the timing of this visit in advance because this could lead staff to “prepare” by manipulating the number of children in their care. However, the data collectors should explain to the staff and children that they will be returning in the coming month to visit the facility around bedtime. Again, to avoid double counting due to migration of children, the bed count should ideally happen on the same night for all facilities or over a short span of a couple nights where the single night approach is not possible. The nighttime bed count should be conducted on a mid-week night during the school-term, right before the children’s bedtime. The visit should be done late enough in the evening so that all the children are in the facility, but early enough so that children are not already asleep. Every attempt should be made to minimize disruption to the children’s sleep schedule and children should not be woken up for the count.

A child’s age and sex should be provided by the accompanying facility staff person and, when possible, verified by the data collector (See Appendix 6: Nighttime bed count data collection tool option 1 and Appendix 7: Nighttime bed count data collection tool option 2). The variance between the number of children identified by the daytime record review compared to the nighttime bed count will be used to estimate the reliability of the records.

2.4 Data Collection Procedures

2.4.1 Data Collection Tools for Children in Residential Care Facilities

All personnel should be provided with an instruction manual detailing the data collection procedures and informed consent process. Standardized consent forms and data entry forms are suggested for all data collection in the field. Tools can be prepared in English or another lingua franca and then translated to the predominant language(s) spoken in the selected geographic areas. Stakeholder feedback should be sought throughout the development process. Pilot testing should be performed on all tools, and modifications must be made prior to data collection. The appendices include templates of the following tools:

- Facility list data collection tool (Appendix 1)
This tool collects information on the type of facility, address, main contact, etc.
- Facility characteristics (Appendix 2)

This tool provides a series of questions to determine basic facility characteristics that can be compared to the operational case definition for a residential care facility described in 2.3.1.

- Daytime record review data collection tool option 1 (Appendix 3)
This tool uses data from the facilities attendance records. The age and sex of each child sleeping at each facility on the previous night is recorded.
- Daytime record review data collection tool sample option 1 completed (Appendix 4)
This is an example of the data collection tool that has been completed using facility attendance records.
- Daytime record review data collection tool option 2 (Appendix 5)
This is an example of the data collection tool that has been modified to reflect local context.
- Nighttime bed count data collection tool option 1 (Appendix 6)
This tool is used during the nighttime bed count and collects the age and sex for each child who is sleeping at the facility.
- Nighttime bed count data collection tool option 2 (Appendix 7)
This is an example of an alternate format for the data collection tool that amalgamates children by age and sex.
- Nighttime bed count data collection tool option 2 completed (Appendix 8)
This is an example of the data collection tool that has been completed.
- Consent form for directors of residential care facilities (Appendix 9a)
- Consent form for informants at residential care facilities (Appendix 9b)

When records are not available, age and sex of children should be obtained from facility staff. In the case of the nighttime bed count, sex should be assessed by physical appearance when possible, and information on a child's age should be provided by the accompanying facility staff.

2.4.2 Interviewers/Enumerators

The census should employ a team of data collectors to visit the identified facilities. The team should participate in a formal training to become familiarized with the methods, tools and general code of conduct for working with vulnerable children. Special attention should be paid to the importance of confidentiality and data security procedures for identifiable information. The training should also include practice sessions, which will be observed and evaluated by supervisors for quality control purposes. Data collectors should be given a training manual detailing all procedures.

Data collectors should speak the predominant language(s) of the sentinel surveillance areas and undergo a background check to ensure they are fit to work with children. Ideally, data collectors should be people who are already trusted by the community (e.g., NGO workers). Law enforcement officials are not appropriate to work as data collectors since staff and children are unlikely to feel comfortable providing them with potentially sensitive information. Other conflicts of interest should be considered and avoided.

All data collection should be done in male-female pairs, both for safety purposes as well as cultural appropriateness. The male data collector should conduct the nighttime bed count in the boys' sleeping quarters, and the female data collector should conduct the nighttime bed count in the girls' sleeping quarters. As a further safety precaution, transportation should also be provided. In addition, each data collector should be given a cell phone and phone credit with emergency

contact numbers. A senior staff member should be on call during all data collection periods, including the nighttime bed count.

Data collectors should be given an ID card or formal letter issued by the government authorizing them for this work.

2.4.3 Consent Process

Written consent to participate in the activity should be requested from the facility director or most senior staff member on duty at the time of the first data collection visit), as well as staff informants who facilitate follow-up visits (See Appendix 9a: Consent form for directors of residential care facilities & Appendix 9b: Consent form for informants at residential care facilities). In the case whereby a staff member cannot read the consent form, a data collector should read the form aloud to the person. The person must be given time to ask questions to the data collector. If the staff member affirms that s/he will participate in the activity, s/he should then provide his or her signature or thumbprint on the consent form.

The decision to participate must be voluntary and there cannot be any consequences for choosing not to participate. The potential risks and indirect benefits of participation to the individual and the facility must be explained. No identifiable information about the children living in residential care facilities should ever be recorded. Identifiable information includes names, photos and birthdates. Identifiable information about the residential care facilities (facility name and location) should be treated as confidential and reported only in aggregate, de-identified form.

2.5 Data Management

2.5.1 Data Entry

Two suggested methods for data collection include mobile phone-based data entry systems or hard copy paper forms. All hard copy paper forms should be sent to a central office where they can be double entered into an Excel database by trained staff. This double entry method allows for verification of accuracy and correction of errors.

2.5.2 Data Storage

The Excel database should only be accessible to investigators and data analysts who are directly engaged in the surveillance activity. The database should be saved on password-protected computers belonging to the investigators and data analysts. Future teams conducting follow-up surveillance should be able to request access to the Excel database in order to maintain longitudinal consistency across data collection waves, provided they adhere to current and future protocols surrounding data confidentiality.

Stakeholders who are not represented on the project should not have access to the original data and should only see the aggregated summary reports. This is meant to protect individual facilities from any targeted consequences, such as forced closure of the facility.

Signed hard copy consent forms should be stored in locked filed cabinets in the office of one of the investigators and will not be linked to the data. Only the investigators should have access to the file cabinet containing the signed consent forms.

2.6 Statistical Analyses

As an interim analysis, the number of children obtained from the daytime record review should be compared to the number of children obtained from the nighttime bed count. Where the difference between the daytime and nighttime counts is less than or equal to 10% of the larger count, the average of the two numbers should be used. Where differences greater than 10% are detected, the project team must formulate a plan to reconcile these differences. For example, if the daytime record review numbers are more than 10% greater than the nighttime bed count numbers, data collectors may return to conduct a second nighttime bed count at that facility. Interviews with facility staff to understand differences across counts may also provide helpful insights. Where differences between the two counts remain greater than 10%, even after follow-up visits and staff interviews, nighttime measures should be used for analysis. All differences (average and range) should be reported for transparency.

After reconciliation of differences is complete, the primary analysis should be to calculate the total baseline population and estimated variance of children living in residential care facilities in the selected geographic areas. In addition, to standardize findings for comparison across settings, the ratio of the number of children living in residential care facilities per 100,000 children in the total population should be calculated for each geographic area. Data on the number of children in the total population can be obtained or extrapolated from pre-existing national census data. See Section 5 on “Using sentinel site results to reach a national estimate” for a more detailed explanation of how to extrapolate these findings to a national level.

Statistics can also be stratified according to child age, sex and location with attention towards any disparities. For the age stratification, it is recommended to stratify by following age categories: 0-4, 5-9, 10-13 and 14-17.

A secondary analysis can be performed to determine basic characteristics of the residential care facilities, including total number of facilities, geographic distribution and average number of children per facility. The intention should be to eventually use all data as part of longitudinal analyses to detect trends over time.

The project team should produce a comprehensive report of findings for dissemination to stakeholders. Charts, tables and diagrams are recommended to display information (see Figure 2 for an example of a National Score Card).

While it is outside the scope of these guidelines to assess the quality of residential care facilities, some countries may choose to build this into their enumeration process. See the Better Care Network’s “Manual for the Measurement of Indicators for Children in Formal Care” (2009), the “Guidelines for the Alternative Care of Children” (United Nations 2010) and the “Moving Forward” handbook (Cantwell 2012) for further tools and guidance on assessing the quality of residential care facilities.

2.7 Limitations

This protocol is limited by multiple methodological challenges. First, there is a possibility that the sampling frame of all residential care facilities will be incomplete. Some residential care facilities may operate in secrecy due to government policies surrounding deinstitutionalization or failure to meet other standards. Governments may also provide incomplete information due to limitations in registration systems or as part of a deliberate attempt to demonstrate progress towards deinstitutionalization. These issues would lead to an underestimate of the population size.

Residential care facilities may also try to falsely inflate the number of children in their care if this number is tied to government subsidies or other funding. Although we have tried to protect against this by not specifying the day of the count, we cannot fully eliminate the risk of inflation, which would lead to an overestimate of the population size.

A second possibility is that the proxy definition of a child living in a residential care facility lacks specificity. For example, a hospital or boarding school may meet the stated inclusion criteria for a residential care facility, but some or all of the children living on the premises may not be outside of family care. Our current tool does not distinguish between children living together in a facility in terms of frequency of contact with parents (e.g. a permanently hospitalized child whose parents visit every week, compared to a newborn abandoned in the maternity ward at birth) or length of residence (e.g. a student at boarding school who goes home to her family during holidays, compared to a student whose parents died and has not left campus in three years). Because detailed screening at the level of the individual child is time-consuming and ethically complex, some children who are not outside of family care may be counted erroneously. These issues would lead to an overestimate of the population size.

A third possibility is that implementation challenges may cause data collection to extend over a period of time. In this situation, children who move from one residential care facility to another may be counted twice, leading to an overestimate of the population size. Also, if the residential care facility attendance records are not current, the comparison to the nighttime bed count will be incongruous.

Fourth, both the daytime record review and the nighttime bed count will generate de facto population counts, meaning that they will only capture children who are present on the day that data collection takes place. This number may vary according to an agricultural season or day of the week, and therefore may not be equal to the usual number of children living in residential care facilities.

At the level of child characteristics, measurement of child age will be necessarily crude. First, the age of many children living in residential care facilities may not be known by the facility staff due to the child's history and/or poor record-keeping at the facility. Physical assessment of child age is also unreliable due to the human error and a high prevalence of stunting amongst this population. As an extremely rudimentary method of verifying reported ages, during the nighttime bed count, data collectors should rate their confidence in the ages provided by the facility staff and record this rating on the Nighttime bed count data entry tool (Appendices 6-8). Physical assessment of child sex is expected to be more reliable than age, but verification by the data collectors may also be compromised due to inadequate lighting during the nighttime bed count. It is recommended that data collectors collaborate with facility staff to verify age and sex, improving the reliability of the assessment and mitigating this bias.

2.8 Ethical Considerations

2.8.1 Inclusion of Minors

Children under 18 years of age are a vulnerable population and children living in residential care facilities often contend with additional vulnerability due to lack of guardianship, poverty, stigma and other factors. This protocol has therefore been carefully designed so that children living in residential care facilities are not interviewed as part of the data collection procedures. Every effort should be made not to awaken sleeping children for the purposes of the nighttime bed count. Furthermore, no identifiable information about the children living in residential care facilities should ever be recorded. Identifiable information includes names, photos and birthdates.

While data collectors will not actively reach out to children as part of the planned study activities, country-specific protocols will need to be established in the case whereby a data collector is approached by a child requesting help or claiming exploitation or abuse. Such protocols should include detailed information about local social service referrals and mandated follow-up on the part of the data collector. All data collectors must receive training on these protocols and instructions on how to proceed safely, legally and ethically if such a situation arises should be codified in the data collector training manual.

Ethical review and approval should be obtained through national mechanisms wherever possible.

2.8.2 Risks and Benefits to Participants

This activity involves no more than minimal risk of harm to participating residential care facilities and the children who reside in them. It is recommended that governments use the findings in aggregate form and avoid penalizing any individual participant or facility due to information from the surveillance activity. However, the risk that confidentiality of information may be breached and an individual participant or facility may be penalized for lack of compliance with regulations surrounding registration, deinstitutionalization or other policies cannot be fully eliminated. Facility staff may also risk negative consequences from their employer as a result of participation (if, for example, discrepancies between the daytime records review and night time bed count are revealed). Violations of confidentiality will compromise the integrity of the surveillance activity and may lead participants to omit or falsify data.

Surveillance does not offer any direct benefits or compensation for the participants. There are several potential indirect benefits. These might include a better understanding of the magnitude, trends and basic characteristics of children living in residential care facilities. Data can support advocacy to improve the systems and services for children outside of family care, and ultimately contribute to the prevention of adverse outcomes.

All potential risks indirect benefits should be explained to participating residential care facilities as part of the consent process.

Data collectors should not interact with the children living in residential care facilities and therefore the children are not considered participants.

2.8.3 Safety of Data Collectors

The risks of working and traveling past dark for the nighttime bed count may pose minimal risk to data collectors in some settings. Recommended precautions to protect the safety of the data

collectors include provision of a cell phone, transportation and an emergency contact number. Data collectors should always work in male-female pairs. Risks associated with the job should be explained to all candidates during recruitment. Candidates who are not comfortable with the requirements should be given the opportunity to recuse themselves from consideration.

3. ENUMERATING CHILDREN ON THE STREET

The general objective of this section is to offer guidelines for governments to conduct an enumeration of children living on the street in select sentinel surveillance areas. The specific target population for the surveillance system will be children sleeping on the street and children sleeping in shelters. A multiple measurement approach is recommended with somewhat different techniques being suggested for large urban areas versus smaller cities, towns and rural areas, or depending on concerns regarding the collection of identifiable information. Due to the ethical issues associated with seeking informed consent from children younger than 14 years of age, interview-based techniques will only be used with children 14 to 17 years of age. The recommended techniques are designed to create a reproducible but potentially incomplete measure of these categories of children outside of family care, with a primary objective of being able to determine trends over time. Limitations and ethical concerns of the proposed approach are discussed.

3.1 Justification for Enumeration

The data points currently available provide strong support for the inclusion of children living on the street as part of broader surveillance of children outside of family care. The global number of children who live and work on the streets is unknown, but anecdotal evidence suggests that the scope of the problem is staggering and according to one estimate, approximately 5-10% of children living and working on the street may be outside of family care (Verma 2013). Furthermore, even when compared to other categories of children outside of family care, children living on the street are a particularly vulnerable group. In order to survive, children living on the street often rely on dangerous labor and become dependent on adults who may be exploitive or abusive. Children living on the street may also be susceptible to substance abuse, gang membership or commercial sex work (Nada and Suliman 2010). Their food security is often precarious and the vast majority do not attend school (Verma 2013). Scientific evidence about the impact of living on the street is limited, but some studies suggest that street children experience more common illnesses and have unique risks, such as drug abuse, compared to children living in family care (Anarfi 1997; Ayaya 2001).

Given the heightened vulnerabilities of this population, many national and local governments are feeling a moral and political imperative to create an environment in which fewer children end up living on the street. NGO and government programs have sprung-up across the globe to support children whose parents have HIV, who have been abandoned, who are orphaned, or who have dropped out of school. Almost all of these programs report on the number of children they serve or the kinds of activities or facilities that are involved (Street Kids International 2013; Horizons for Homeless Children 2013). However, the reports do not include any indication of how these programs affect the overall number of present or future children living on the street in the society.

To make improvements in child welfare, it is necessary for governments and relevant authorities to have a strong national monitoring system for this population. An accurate baseline count of the number of children living on the street will allow governments to determine the magnitude and basic characteristics of the problem and formulate policies and interventions to address it. Decreasing numbers of children living on the street may serve as an indicator of the success of these policies and interventions. Furthermore, enumeration can be the foundation for more detailed follow-up studies exploring the public health consequences of children living on the street.

The majority of existing studies have focused on identifying the demographic profile of children living on the street; their health problems including prevalence of disease; and describing the type and intensity of abuse they face (Mathur, Rathore, and Mathur 2009; Kissin et al. 2007; Singh et al. 2008; Hatloy and Huser 2005; Anarfi 1997). Despite the importance of enumerating children living on the street, few prior studies have attempted to do so (Hatloy and Huser 2005; Gurgel et al. 2004). Frequent mobility and isolation from social services are special challenges associated with identifying and accessing this population. In addition, due to the unique vulnerabilities of children living on the street, extra sensitivity to ethical concerns is necessary when engaging in surveillance activities. While the current literature does offer several helpful ideas for overcoming some of these obstacles, the methods used remain limited by many of the same challenges as the enumeration of children living in residential care facilities, including lack of specificity and consistency in case definitions, incomplete sampling frames, unchecked measurement validity and reliability, and an absence of longitudinal data to assess time-trends.

Finally, it is necessary for governments to remember that children living on the street are a heterogeneous group. This protocol uses a proxy definition restricted to children sleeping on the street or children sleeping in shelters, but this proxy definition may not fully capture the broad spectrum of children who live on the street within each setting. Also, some methods included in this protocol may be better suited for enumerating highly visible children living on the street (e.g. boys who sleep under bridges), while missing other “invisible” children (e.g. girls who sleep in shops). In order to detect and minimize such biases, this protocol advocates for the use of a combination of methods where possible. However, if a government is concerned about missing a certain category of children known to be living on the street in their country (e.g. children who sleep on moving trains), they should try to supplement these guidelines for their context.

3.2 Objectives

a) General Objectives

The general objective of this protocol is to offer guidelines for governments to conduct an enumeration of all children living on the street in select sentinel surveillance areas.

b) Specific Objectives

The specific objectives of the enumeration of children on the street include the following:

- Estimate the point prevalence of children living on the street in select sentinel surveillance areas, stratified by age and gender.
- Advance the methodology for the enumeration of children living on the street.
- Build the capacity of national governments to conduct routine surveillance of children living on the street on a national level.
- Identify areas for further research that may improve outcomes of children living on the street.

3.3 Design and Methodology

3.3.1 Population of Interest

According to definitions developed by the US Centers for Disease Control and Prevention (Hillis et al. 2011), a child living on the street is defined as any child less than 18 years of age who is found on the street without parents and who meets at least one of the following criteria:

- Did not attend school regularly;
- Lives out of family care;
- Lives full or part-time on the street;
- Self-identifies as a street youth or street child.

Due to pragmatic constraints and ethical concerns related to interviewing minors (see Section 3.7), this definition will only be operationalized for children 14 to 17 years of age who are interviewed and provide identifying information on other children on the street who live in towns and rural areas. For all children under 14 years of age and children living in large urban areas or places where it is not appropriate to collect identifying information, inclusion will be determined based on whether or not a given child is seen or recorded sleeping on the street or sleeping in a shelter during the designated enumeration period (proxy definition). Further details about these children will not be collected.

3.3.2 Construction of a sampling frame

This enumeration is designed as a complete count of all children living on the street in the sentinel surveillance areas. A multiple measurement approach is recommended, with somewhat different techniques being suggested for large urban areas versus smaller cities, towns and rural areas.

In all settings, a process should be undertaken to construct a list of all known nighttime shelters for children (See Appendix 10: Shelter list data collection tool).² Names, addresses and contact information for any facilities identified through this process should be recorded. Key informants, including local officials, NGO staff, local and religious leaders will be interviewed until saturation is reached and the interviews tend to produce no new information. Through this process, key informants will also be asked where street children tend to congregate in the daytime and where they sleep at night. A list and map of all nighttime shelters will be constructed, as will a map showing the areas reported as frequented by street children during the day and night. Equipped with this information, slightly different procedures will be undertaken depending on the total population size (i.e., towns and rural areas versus large cities) and the feasibility of collecting identifiable information:

² The operational definition of a shelter should be defined at the country level, based on average duration of child stay and other contextually appropriate factors. Facilities meeting these criteria that were sampled during the enumeration of children in residential care facilities should be revisited as part of the enumeration of children on the street. Governments should be careful to remove such shelters from the estimation of children in residential care facilities to avoid double-counting of children.

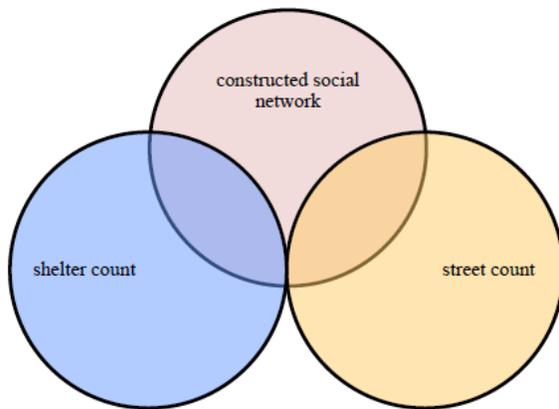
a) Sampling frame for towns and rural areas (population <500,000) where the collection of identifiable information for 14-17 year-old children is deemed safe

In towns and rural areas where the collection of identifiable information for 14-17 year-old children is deemed safe, three discrete activities will be undertaken:

1. A count of all children in nighttime shelters on one specific night (“shelter count”);
2. A count of all the children found on the street on that same night (“street count”);
3. Development of a list of social contacts of children living on the street (“constructed social network”).

The list of children identified through the constructed social network will be analyzed in relation to the combined nighttime shelter and street counts. A final estimate will be determined using a capture-recapture methodology, an analytic process that calculates a more robust total estimate by mathematically adjusting for overlap from two independent lists or “captures.” The procedures for data collection and analysis are described in the sections that follow.

Figure 3. Sampling frame for towns and rural areas (population <500,000) where the collection of identifiable information for 14-17 year-old children is deemed safe



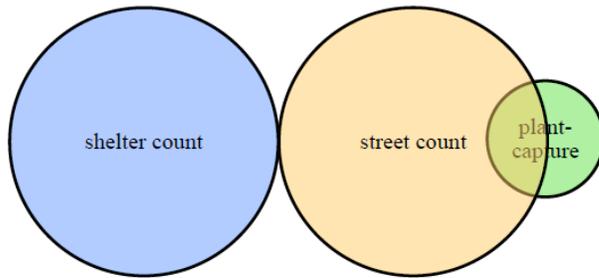
b) Sampling frame for large urban areas (population \geq 500,000) or places where collection of identifiable information is deemed unsafe

In large urban areas or places where collection of identifiable information is deemed unsafe, three discrete measurement tasks will take place in each sentinel surveillance site:

1. A count of all children in nighttime shelters on a specific night (“shelter count”);
2. A count of all the children found on the street that same night (“street count”);
3. As part of the count of children on the street, a known number of identified young adults will be observed to assess the completeness of the street counting process (“plant-capture”).

An adjusted estimate of the street count based on the plant-capture analysis will be combined with the nighttime shelter list to determine a final estimate of children living on the street. The procedures for data collection and analysis are also described in the sections that follow.

Figure 4. Sampling frame for large urban areas (population $\geq 500,000$) or places where collection of identifiable information is deemed unsafe



3.4 Data Collection Procedures

3.4.1 Towns and rural areas (population $< 500,000$) where the collection of identifiable information for 14-17 year-old children is deemed safe

a) Nighttime Shelter Count

A team of trained workers should be assembled in order to visit all of the shelters in the sentinel surveillance area during a short (e.g. three hour) period on the same night. It is suggested that the selected time period for enumeration begin after the doors of the facilities are closed or after most children will have typically arrived (e.g. after 9pm). The visit should be done late enough in the evening so that all the children are in the shelter, but early enough so that children are not already asleep. Every attempt should be made to minimize disruption to the children's sleep schedule and children should not be woken up for the count. We do not recommend informing the shelter of the visit in advance because this could lead staff to "prepare" by manipulating the number of children in their care.

In each shelter, enumerators should:

1. Acquire informed consent from the shelter director prior to the visit (See Appendix 11a: Consent form for directors of shelters in rural areas).
2. Acquire informed consent from the staff member or members on duty at the time of the nighttime visit (See Appendix 11b: Consent form for informants at shelters in rural areas).
3. Ask a shelter staff person known to the community to make an announcement explaining the purpose of the visit to the children in the shelter.
4. Acquire a count by age and sex of all children sleeping in the shelter that night. This count can be achieved by reviewing shelter records (where such records exist) by working with a staff person from the shelter to register each child upon arrival (especially where registration is part of regular procedures), or, if necessary, approaching each individual child and asking them to provide their age (See Appendix 12: Street and shelter count data collection tool).

5. Acquire identifying information about all children 14 to 17 years of age sleeping in the shelter that night. Identifying information may include first name, last name, nickname, place of residence and origin, parental names, income generating activities, school attendance or other identifiable characteristics about the child (See Appendix 13: Street and shelter survey for rural areas). This information will be used during estimation to identify children also named in the constructed social network, described in more detail below. After the matching process has been completed, all identifying information will be deleted (see Section 3.5, Data Management for further details). Shelter staff may be able to provide sufficient identifying information about the children in their care, or, if this is not feasible, children should be interviewed directly. Only children 14-17 will be interviewed and each child that is interviewed must provide informed consent (See Appendix 14: Consent form for children in the rural street and shelter survey).
6. Systematically select a sub-sample of 14 to 17 years olds for follow-up interviewing on a different day in order to develop a listing of members of those children's social networks. Only children who meet the CDC criteria for a street child, as determined in Appendix 13, are eligible to be selected for this follow-up. Selected children should be given a transportation voucher³ and instructions on when and where to report in the following days.

The night count process should be completed by a specific hour (e.g. 11pm) to avoid double counting children who will later be identified in the street count process. Enumerators should notify the team coordinator by phone when the enumeration process at their shelter(s) is completed.

All children under 14 who are counted in a shelter and on the street at night will be considered children living on the street and outside of family care. No additional screening criteria or case definitions will be applied to these children.

b) Nighttime Street Count

In preparation for the count of children sleeping on the street, the enumeration team will establish referral options for children who are encountered and wish to be safely sheltered for the night. This should be done in consultation with key informants.

The enumeration of children sleeping on the street will take place at a set nighttime interval (e.g. between 2am and 4am) at an hour that will minimize the chance for children enumerated in shelters to leave and also be enumerated through the street count. The nighttime street count must take place on the same night as the nighttime shelter count. Each selected sentinel surveillance site should be divided into discrete geographic sub-units. It is recommended that a team of two enumerators should be assigned to each sub-unit.

During the nighttime street count, the enumerators should walk through the sub-unit during the set time interval, approach and count all children whom they see. An attempt should be made to visit all areas in the surveillance area where children might be found at night over this short enumeration window.

³ If it is anticipated that providing remuneration to children may provide unintended harm (e.g., by privileging one group of vulnerable children and inciting jealousy), alternative incentive plans should be agreed at the country level. See Hatloy & Huser 2005 (p. 33-6) for a more in-depth discussion of the challenges around distributing incentives.

When an apparent child on the street is found:

1. Children should be asked their age, and if they would like to be transferred to a shelter for the night. Each child should be remunerated for participating in the count and it is recommended that a nutritional supplement such as Plumpynut be offered.³
2. For children under 14 years, only age and sex of the child should be recorded (See Appendix 12: Street and shelter count data collection tool).
3. For children 14 to 17 years of age who are sleeping on the street that night, the enumerator will collect information on age and sex, but must seek informed consent to speak with them further, given that the interviews for 14-17 year-olds require providing identifying information (See Appendix 14: Consent form for children in the rural street and shelter survey).
4. For children 14 to 17 years who consent to being interviewed, enumerators should ask questions to determine whether or not they meet the CDC case definition criteria (i.e., does not attend school regularly; lives outside of family care; lives full or part-time on the street; self-identifies as a street youth or street child). Supplemental questions to help understand the characteristics of this target population may also be included. The identifying information collected during the interviews should include the child's first name, last name, nickname, place of residence and origin, parental names, income generating activities, school attendance status or other identifying characteristics (See Appendix 13: Street and shelter survey for rural areas). This information will be used during the analysis phase to identify children also named in the constructed social network.
5. Interviewers should systematically select a sub-sample of 14 to 17 years-olds who met the CDC case definition criteria, as determined in Appendix 13. Ideally, this sub-sample should constitute about 20% of the 14 to 17 year old sample from the shelter and street counts. (i.e. every fifth child meeting eligibility criteria, including age, consent and CDC definition). The sub-sample will be asked to participate in a follow-up interview on a different day to develop a listing of members of their social networks. Children who agree to this follow-up interview should be given a transportation voucher with an identifying code and instructions on when and where to report in the following days.

c) Constructed Social Network

The purpose of social network sampling is to draw an independent sample of children living on the street who may not be captured by the shelter or street counts. The proportion of children identified by the constructed social network who were also captured by the shelter and street counts will help governments assess the completeness of the shelter and street counts. The final estimate (total number of children living on the street in the select sentinel surveillance area) can be revised accordingly. See Section 3.5.3, Data Analysis for further details.

The social network sample should draw from two different sources:

1. A sub-sample of 14 to 17 year olds enumerated through the shelter count and the street count will be invited to participate in social network interviews. This sub-sample should be systematically selected during the street and shelter count and should constitute about 20% of the eligible 14 to 17 year olds from both counts.

2. A similar number of 14 to 17 year-olds identified by daytime visits to areas with street children using time-location sampling.

Time-location sampling (TLS) takes advantage of the fact that hard-to-reach populations tend to congregate in certain areas at identifiable and specific days and times. TLS is a probabilistic method used to recruit members of a target population at specific times in set venues. The sampling framework consists of venue-day-time units (VDT) – also known as time-location units - which represent the potential universe of venues, days and times where the population congregates. For example, a VDT unit could be a defined period of three hours on a Wednesday in a specific venue.

The fieldwork team should identify a range of time-location units to locate the members of the target population through interviews and key informants, service providers, and members of the target population. Then, the team should visit the venues and prepare a list of VDT units, which are considered potentially eligible on the basis of checking the number of people present.

Children approached using time-location sampling should be asked their age, and if 14 to 17 years, should be invited to participate in an interview about themselves and other children living on the street that they know. Children who agree to participate are given a voucher and invited to a nearby location where the interview will be conducted.

All interviews should be conducted at a pre-determined well-known location, such as a religious meeting place (e.g., church, wat, mosque, temple) or NGO office. As negotiated with the national government, children who participate in this interview process may be offered a modest remuneration such as a meal and money to cover their missed work costs.

Each child who shows up to the interview location with a voucher must provide informed consent to proceed with the social network interview (See Appendix 15: Consent form for social networking survey). Even if the child has already given informed consent during the original street or shelter count, the process should be repeated with regards to social network sampling. Once informed consent has been obtained, children will be asked to answer a short set of identifying questions about themselves, as well as about approximately eight of their self-reported peers between the ages of 14 to 17 years, who sleep within the sentinel surveillance area, or who meet the other CDC-developed case criteria for children living on the street (see Section 3.3.1). The identifying questions will gather information such as a child's first name, last name, nickname, place of residence and origin, parental names, income generating activities, school attendance status or other identifiable characteristics (the same questions that children 14-17 are asked during the street and shelter count) (See Appendix 16: Social networking survey). Children's social network lists may include other children who are being interviewed directly. Such overlap will be addressed during analysis.

3.4.2 Large urban areas (population $\geq 500,000$) or places where collection of identifiable information is deemed unsafe

In large urban areas, several major challenges arise in the enumeration of children living on the street. To make enumeration in large urban settings more manageable, the surveillance area should always comprise 500,000 people or less, even if this area is situated within a bigger city (e.g. four contiguous neighborhoods in south Nairobi). Furthermore, given the logistical barriers of conducting social network analysis in a large urban area, governments should make a few additional adaptations to data collection procedures.

In this type of setting, the main adaptation to the measurement approach is that only the child's age and sex will be collected, and the social network sampling and capture-recapture analysis will be eliminated. Children's social networks in large urban areas likely extend well beyond the surveillance area, making social network sampling impractical. Removing capture-recapture analysis also negates the need to collect identifying information about children. A variation on the street count (plant-capture) is suggested in lieu of social network sampling. Specific procedures are described below.

The same adaptations can also be applied to places where the collection of identifiable information is thought to put children at increased risk (of arrest, harassment, etc.). The safety of children is paramount and this principle should always guide the selection of the enumeration methodology.

a) Nighttime Shelter Count

Enumeration of children sleeping in shelters should be the same as described in 3.4.1, except that steps 3 and 4 can be eliminated (collection of identifying information and selection for the social network interviews). In other words, the shelter count will be limited to acquiring a count by age and sex of all children sleeping in the shelter that night (See Appendix 12: Street and shelter count data collection tool). Enumerators must acquire informed consent from the shelter director prior to data collection, as well as from staff on-duty at the time of the nighttime count (See Appendix 17a: Consent form for directors of shelters in urban areas and Appendix 17b: Consent form for informants at shelters in urban areas).

b) Nighttime Street Count

Again, enumeration of children sleeping on the street should be the same as described in 3.4.1, but without the collection of identifying information and selection for the social network interviews (See Appendix 12: Street and shelter count data collection tool). In addition, for large urban areas, a small number of children should be observed during the nighttime street count to assess the completeness of the count. The procedure is known as plant-capture and described in detail in the following section ("c. Plant-capture for street count").

c) Plant-capture for Street Count

The plant-capture is a supplement to the street count and does not constitute a separate activity. In the traditional plant-capture method, plants are project staff or volunteers who act as a member of the target population (i.e. homeless adults) and are sometimes referred to as decoys. The method assumes that the plants have the same capture probability as other members of the target population.

Since children cannot be deployed as plants for safety and ethical reasons, governments will have to adapt the traditional approach for their context. One option is to hire adults over 18 who may give the appearance of younger teens. On the same night of the street count, these young adults should be assigned in pairs to different geographic sub-units within the surveillance area during the same time interval as enumeration. The role of the plants is to discretely situate themselves in or near an area where children living on the street are known to congregate during the designated time interval for enumeration. In order to minimize bias, the primary enumerators should not

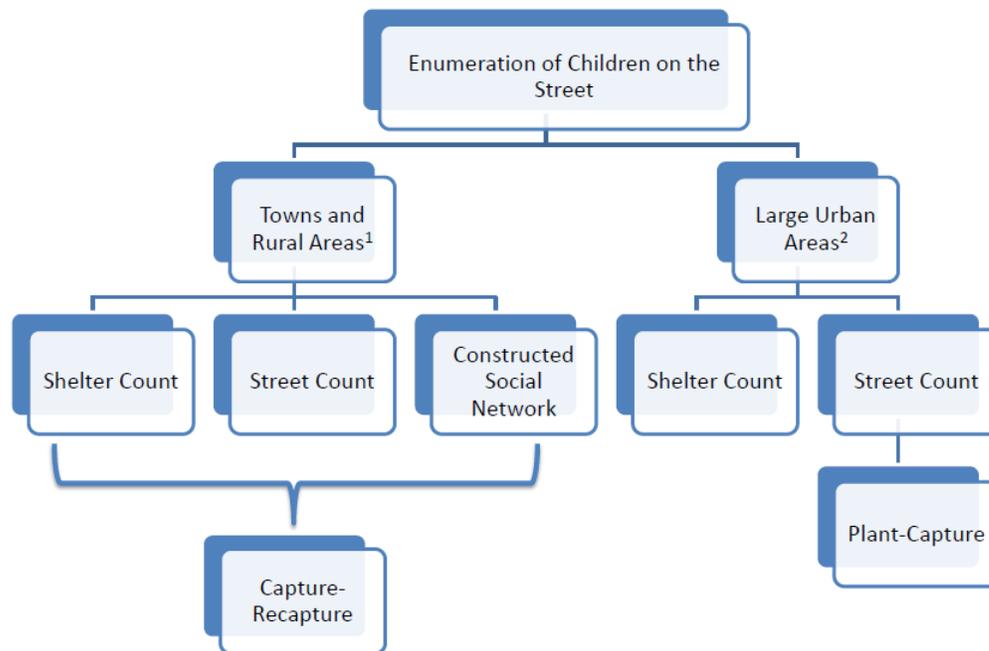
know the identity of the plants and training for the plants should be separate from training for the primary enumerators. Plants should dress and act in a manner that is indistinguishable from children who are living on the street. Pairs should remain close together throughout the enumeration period.

At the end of the enumeration period, the plant pair should report whether the primary enumerators assigned to their area approached and enumerated them. Each pair should be recorded as one unit (either one “missed person” or one “identified person”). (See Appendix 18: Plant capture data collection tool).⁴

Incorporating this additional component to the street count provides the necessary information needed to calculate the probability that each child sleeping on the street is enumerated (capture-probability). If all plants record that they were enumerated, then the street count will be able to report high capture-probability, and therefore high accuracy and near complete case ascertainment. If, however, there is low capture-probability and many plants were not counted, this information will allow us to adjust the final estimate to reflect this variability. See Section 3.5.3, Data Analysis for further details.

Figure 5. Summary flow chart of data collection procedures

⁴ In countries where young adult plants are not expected to be able to blend into their surroundings, several adaptations can be considered. For instance, pairs of adult “plant-enumerators” could discretely follow one child in a designated geographic sub-unit and record whether the primary enumerators assigned to that area approached and enumerated “their” street child. The presence of plant-enumerators does have the potential to create distrust or fear amongst children living on the street, and therefore this variation should only be implemented with caution. Another plant-capture variation is to give a designated sample of children living on the street tokens prior to the enumeration period. If enumerated, children with tokens would be instructed to give their tokens to the enumerator in return for some sort of incentive. In order to avoid unduly incentivizing children with tokens to make themselves visible during the count, children with tokens who are not enumerated could receive the same incentive by reporting to a designated meeting place the next day.



1. Towns and rural areas where the collection of identifiable information for 14-17 year-old children is deemed safe
2. Large urban areas or places where collection of identifiable information is deemed unsafe

3.4.3 Tools

All personnel should be provided with an instruction manual detailing the data collection procedures and informed consent process. Two suggested methods for data collection include mobile phone-based data entry systems or hard copy paper forms. Tools can be prepared in English or another lingua franca and then translated to the predominant language(s) spoken in the selected geographic areas. Stakeholder feedback should be sought throughout the development process. Pilot testing should be performed on all tools and modifications must be made prior to data collection. See appendices for templates that include:

- Consent form for directors of shelters in rural areas (Appendix 11a)
- Consent form for informants at shelters in rural areas (Appendix 11b)
- Street and shelter count data collection tool (Appendix 12)
- Street and shelter survey for rural areas (Appendix 13)
- Consent form for children in the rural street and shelter survey (Appendix 14)
- Consent form for social networking survey (Appendix 15)
- Social networking survey (Appendix 16)
- Consent form for director of shelters in urban areas (Appendix 17a)
- Consent form for informants at shelters in urban areas (Appendix 17b)
- Plant-capture data collection tool (Appendix 18)

3.4.4 Interviewers/Enumerators

The enumeration process should employ a team of data collectors. The size of this team will depend upon the number and travel requirements needed to reach all shelters and, in the case of the street count, geographic subunits, within the designated time intervals. The team should participate in a formal training to become familiarized with the methods and tools. Special attention should be paid to the importance of confidentiality and data security procedures for identifiable information. Training should also aim to provide data collectors with an understanding of street culture and for this reason, it is preferable to select data collectors with previous street outreach experience. The training should include practice sessions, which will be observed and evaluated by supervisors for quality control purposes. Interviewers should be given a training manual detailing all procedures. Training for plants should be separate from training for the primary enumerators.

Data collectors should speak the predominant language(s) of the sentinel surveillance areas and undergo a background check to ensure they are fit to work with children. Ideally, data collectors should be people who are already trusted by the community (e.g., NGO workers). Law enforcement officials are not appropriate to work as data collectors since staff and children are unlikely to feel comfortable providing them with potentially sensitive information. Other conflicts of interest should be considered and avoided.

All data collection should be done in male-female pairs, both for safety purposes as well as cultural appropriateness. For the shelter count, the male data collector should conduct the nighttime bed count in the boys' sleeping quarters and the female data collector should conduct the nighttime bed count in the girls' sleeping quarters. As a further safety precaution, transportation should also be provided. In addition, each data collector should be given a cell phone and phone credit with emergency contact numbers. A senior staff member should be on call during all data collection periods, including at night.

Data collectors should be given an ID card or formal letter issued by the government authorizing them for this work.

3.4.5 Consent Process

Due to concerns about the ability of children under 14 years old to provide informed consent, these children will not be interviewed and no identifying information about these children will be collected. For the towns and rural areas (population <500,000) where identifiable information is collected, informed consent should be initially requested from shelter directors prior to data collection (Appendix 11a: Consent form for directors of shelters in rural areas). At the time of the nighttime count, consent should be requested from shelter staff on-duty, as well as all 14 to 17 year olds encountered during the nighttime shelter counts and nighttime street counts (Appendix 11b: Consent form for informants at shelters in rural areas and Appendix 14: Consent form for children in the rural street and shelter survey), and daytime street recruitment for the social network sample (Appendix 15: Consent form for social networking survey).

For the large urban areas (population \geq 500,000) and places where identifiable information is not collected, consent is only needed from the shelter directors and staff (Appendix 17a: Consent form for director of shelters in urban areas and Appendix 17b: Consent form for informants at shelters in urban areas). No child in these settings should be interviewed, and no identifying information about these children should be collected.

In the case where a person cannot read the consent form, a data collector should read the form aloud to the person. The person must be given time to ask questions to the data collector. If the person affirms that he or she will participate in the activity, s/he should then indicate agreement according to the protocol established by the government (signature, mark or oral consent).

The decision to participate should be voluntary and specific procedures need to be coordinated with the host government to ensure that all children who participate are able to provide informed consent. The potential risks and indirect benefits of participation to the individual and the shelter must be explained. Identifiable information should be treated as confidential and reported only in aggregate, de-identified form.

3.5 Data Management

3.5.1 Data Entry

Two suggested methods for data collection include mobile phone-based data entry systems or hard copy paper forms. All hard copy paper forms should be sent to a central office to be double entered into an Excel database by trained staff. This double entry method allows for verification of accuracy and correction of errors. Once verification of the database is complete and any errors are corrected, all hard copy paper forms should be subsequently destroyed.

3.5.2 Data Storage

The Excel database should only be accessible to investigators and data analysts who are directly engaged in the surveillance activity. The database should be saved on password-protected computers belonging to the investigators and data analysts.

All individual child data should be de-identified after the matching is complete (capture-recapture). Future teams conducting follow-up surveillance should be able to request access to the de-identified Excel database in order to maintain longitudinal consistency across data collection waves, provided they adhere to current and future protocols surrounding data confidentiality. Stakeholders who are not represented on the project should not have access to the original data and should only see the aggregated summary reports.

Signed hard copy consent forms should be stored in locked filed cabinets in the office of one of the investigators and will not be linked to the data. Only the investigators should have access to the file cabinet containing the signed consent forms.

3.6 Statistical Analyses

The primary analysis for all sentinel surveillance areas should be to calculate the total baseline population and estimated variance of children living on the street. In addition, in order to standardize findings for comparison across settings, the ratio of the number of children living on the street per 100,000 children in the total population of the sentinel site should be calculated for each geographic area. Data on the number of children in the total population can be obtained or

extrapolated from pre-existing national census data. See the Section 5 on “Using sentinel site results to reach a national estimate” for a more detailed explanation of how to extrapolate these findings to a national level.

Statistics can also be stratified according to child age, sex and location with attention towards any disparities. For the age stratification, it is recommended to stratify by the following age categories: 0-4, 5-9, 10-13 and 14-17.

The project team should produce a comprehensive report of findings for dissemination to stakeholders. Charts, tables and diagrams are recommended to display information (see Figure 2 Example of a National Score Card).

Specific analysis techniques will vary according to the measurement approach used, with important differences for towns and rural areas compared to large urban areas.

3.6.1 Towns and rural areas (population <500,000) where the collection of identifiable information for 14-17 year-old children is deemed safe

a) Capture-Recapture for 14-17 year-olds

After the data collection process, there will be a total of three lists of names and other identifying information for 14 to 17 year-old children living on the street:

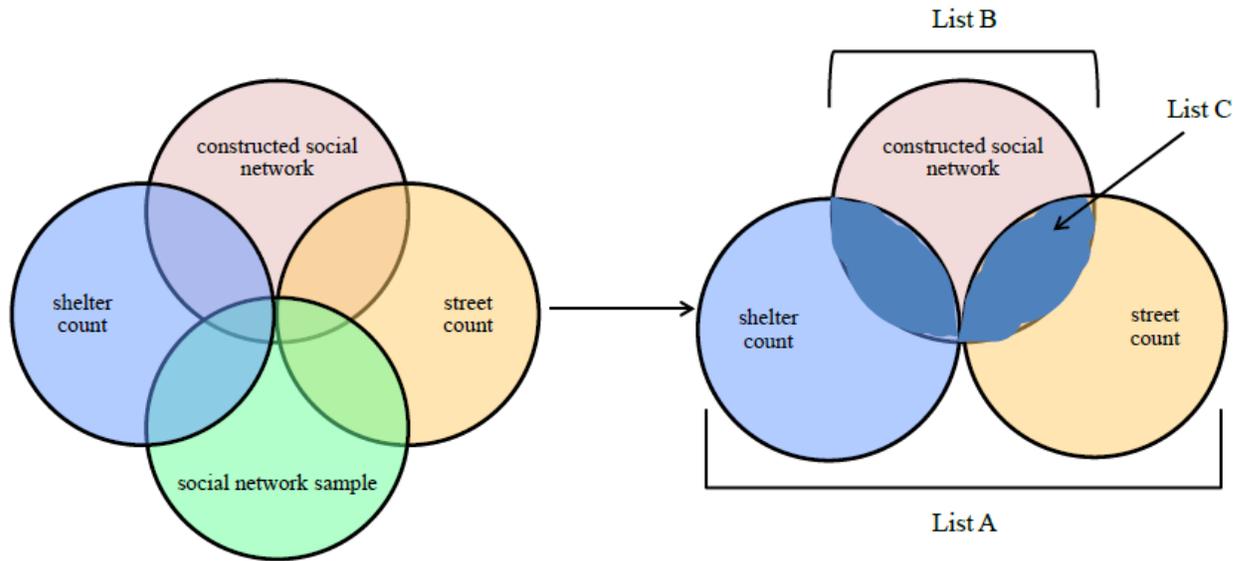
1. List A: Shelter count + street count
2. List B: Constructed social network (i.e., children named by contacts from the social network sample)
3. List C: Overlap between List A and List B

The purpose of capture-recapture analysis is to calculate a more robust total estimate which combines multiple independent lists or “captures”, and mathematically adjusts for overlap between the lists. For example, List A (shelter count + street count) may systematically miss certain groups of “invisible” children living on the street (e.g. girls sleeping in shops). List B (constructed social network) may do a better job of capturing these groups who are out of direct sight. Therefore, both lists are needed in tandem to come up with a more robust estimate.

The success of capture-recapture depends on two assumptions:

1. Independence of lists: The social network sample (i.e. those children interviewed and asked to list their peers) is an intermediary step to create List B. The social network sample, itself, is not used in the capture-recapture analysis because it is not independent from List A (as nearly half of the children in the social network sample are taken directly from List A). See Section 3.7, Limitations, for further discussion of the independence assumption for capture-recapture analysis.
2. Knowing the exact number of children who appear on both lists: Overlap is determined by matching on the individual identifying information that was collected. Note that for List B (constructed social network), children who were mentioned more than once (duplicates) should be removed so that the total reflects the number of unique children mentioned.

Figure 6. Capture-recapture schematic for 14 to 17 year old children in towns and rural areas where the collection of identifiable information is deemed safe



Overlap between List A and List B should be determined based on the identifying information that was collected. The exact criteria for overlap is at the discretion of the national actors, but this criteria (e.g., the minimum number of characteristics required for a match) should be set in advance.

Once the number of children appearing on all three lists has been tallied, the following formula should be used to calculate the final estimate (total number of children living on the street) (UNAIDS 2010):

$$\tilde{N}_{14-17} = \frac{(List A) * (List B)}{(List C)}$$

For example, let us say that amongst the 14 to 17 year olds, there are 50 children counted sleeping in shelters, 100 children counted sleeping on the street and 200 unique children identified through the constructed social network. Matching determines that there are 60 children in the social network sample who were also counted in shelters or on the street.

- List A = 50 + 100 = 150
- List B = 200
- List C = 60

$$\tilde{N}_{14-17} = \frac{(150 * 200)}{60} = 500$$

This would lead to an estimate of 500 14 to 17 year old children living on the street in the surveillance area.

b) Number of Children under 14 years

For children under 14, the only two direct data points that have been gathered are the total number of children under 14 sleeping in shelters and the total number of children under 14 sleeping on the street. These numbers are likely to miss the “invisible” children that were detected by the constructed social network for older children.

Therefore, governments can assume that, in a given surveillance area, the proportion of “invisible” children under 14 years living on the street is the same as the proportion of “invisible” 14-17 year old children. The ratio of the total number of 14-17 year old children living on the street divided by the number of 14-17 year old children from the shelter count and the street count (List A) serves as the multiplier for this calculation. Thus, results from the following equation can be extrapolated:

$$\tilde{N}_{<14} = \left(\frac{\tilde{N}_{14-17}}{List A_{14-17}} \right) * (shelter count_{<14} + street count_{<14})$$

For example, let us say that data collectors count 120 children under 14 sleeping in shelters and 80 children under 14 sleeping on the street in same surveillance area as the preceding example with the 14-17 year old children. Applying the proportion of “invisible” 14-17 year old children from the preceding example:

$$\tilde{N}_{<14} = \left(\frac{500}{150} \right) * (120 + 80) = 667$$

This leads to an estimate of 667 children under 14 living on the street in the surveillance area.

b) Total Number of Children Living On the Street

Finally, to get a combined estimate of the total number of children under 18 years old who are living on the street in the surveillance area, add the estimated number of 14 to 17 year old children living on the street and the estimated number of children under 14 living on the street.

$$\tilde{N}_{<18} = 500 + 667 = 1,167$$

3.6.2 Large urban areas (population $\geq 500,000$) or places where collection of identifiable information is deemed unsafe

a) Plant-Capture

The plant-capture method provides data that can evaluate the completeness of the sampling frame and estimate the capture probability, which is the average chance that a child living on the street in a given geographic sub-unit was counted by an enumerator (Laska and Meisner 1993).

Two formulas will be used to produce the plant-capture adjusted estimate for the number of children sleeping on the street (Martin et al. 1993):

1. Capture Probability ($p_{capture}$)

The capture probability is the probability that each child sleeping on the street is enumerated.

$$p_{capture} = \frac{\# \text{ of observed plants}}{\# \text{ of known plants}}$$

2. Adjusted Street Child Count (\tilde{N}_{street})

The adjusted street child count is the number of children sleeping on the street adjusted by the plant-capture probability.

$$\tilde{N}_{street} = (\# \text{ of known plants} + 1) * \left(\frac{\text{street count}}{\# \text{ of observed plants} + 1} \right)$$

For example, let us say the study team deploys 20 plant pairs over the two-hour period. Upon return, 15 plant pairs report that they were approached by primary enumerators. The primary enumerators record 200 street children over the two-hour period. The following information is used to calculate the number of children sleeping on the street, adjusted by the plant-capture probability:

- # of known plant pairs = 20
- # of observed plant pairs = 15
- street count = 200

$$p_{capture} = \frac{15}{20} = 0.75$$

$$\tilde{N}_{street} = (20 + 1) * \frac{200}{(15 + 1)} = 262.5$$

In this instance (which was based on plugging the numbers from the example into the same formulas provided above), 200 street children were counted, and the probability of capturing each street child was 75%. Accounting for the capture probability, it is estimated that there are actually 263 children sleeping on the street in the area enumerated. The capture-probability increased the street count estimate by 63 children.

b) Total Number of Children Living on the Street

The estimated number of children sleeping on the street adjusted using plant-capture methods (\tilde{N}_{street}) should be added to the total number of children enumerated during the nighttime shelter count to yield the total estimated number of children living on the street in the surveillance area.

$$\begin{aligned} \text{Total \# of children living on the street} = \\ \# \text{ of children sleeping on the street } (\tilde{N}_{street} \text{ from plant-capture}) + \\ \# \text{ of children sleeping in shelters} \end{aligned}$$

3.7 Limitations

There are several limitations that will likely apply across all methods described. First, the sampling frame for the shelter and street counts may be incomplete due to the mapping process. Some shelters may deliberately operate under the radar to avoid government regulations and some children may sleep in hidden spots that are unknown to key informants or too dangerous to access at night. An incomplete sampling frame would lead to an underestimate of the total population size.

Shelters may also try to falsely inflate the number of children in their care if this number is tied to government subsidies or other funding. Although we have tried to protect against this by not specifying the day of the count, we cannot fully eliminate the risk of inflation, which would lead to an overestimate of the population size.

Second, children may move between locations during the data collection interval. Although the data collection intervals should be short and scheduled for a time when children are likely to be asleep and therefore not moving, the possibilities that some children may change locations or that some street count enumerators might cross their surveillance area boundaries cannot be fully eliminated. Such movement may cause double counting of children and would lead to an overestimate of the total population size. The presence of the plants should serve as a limited quality control measure against double counting because the plants should be able to report if they were double-counted. Plants that were double-counted should only be counted once when calculating the capture-probability and the adjusted street child count.

Third, due to ethical and pragmatic concerns, the CDC case definition of children living on the street will only be applied to a small sub-sample of children (14 to 17 year olds sleeping or working on the street in towns or rural areas where identifiable information can be safely collected). The rest of the children will be counted on the basis that they meet one of the proxy definitions of children living on the street (e.g. that they were seen sleeping in a shelter or on the street). An unknown number of these children meeting the proxy definition may not be truly outside of family care. Including these children in the count would lead to an overestimate of the total population size.

Other limitations depend on the methods employed for the different settings and age groups. For the towns and rural areas where identifiable information is collected, the two lists used for the capture-recapture approach may not be fully independent. Having two fully independent lists is one of the principle assumptions of capture-recapture, even though, in reality, such lists are often correlated (Ball, Spierer, and Spierer 2000). Specifically, in this case, the social network sample (List B) may be biased by the fact that half of the informants are drawn from the original shelter and street counts (List A). If these informants are more likely to name peers who also sleep in shelters and on the street, these children may be overrepresented in the social network sample. Such collinearity would underestimate the total population size. Also, the estimate for the number of children under 14 years in these settings assumes that the proportion of “invisible” children is the same for children under 14 and 14-17 year olds. This assumption cannot be validated and there are plausible reasons why there may be real differences amongst children living on the street according to age (e.g. younger children may be less likely to engage in commercial sex work and therefore have less access to brothels or other hidden sleeping locations where clients may congregate).

For the large urban areas or places where identifiable information is not collected, underestimation is also a concern, as plant-capture does not catch “invisible” children to the same extent as the social network/capture-recapture process. For example, whereby the capture-recapture process is intended to identify children living on the street who cannot be seen during

the shelter and street counts, but who may have some non-zero probability of being identified through social networks (e.g. girls sleeping in shops), there is no analogue in the plant-capture approach. Even in the towns and rural areas, capture-recapture is only being applied to 14 to 17 year olds, so there is no mechanism for identifying “invisible” children in the younger age groups.

The extent to which the data collectors are experienced outreach workers may also influence the quality of the data that is obtained, especially with regards to the street count. An understanding of street culture and relationships with children will likely result in more comprehensive counts, compared to data collectors who lack these skills and experiences.

At the level of child characteristics, many children living on the street may not know their birthdates, so self-reported age is a crude measure. As an extremely rudimentary method of verifying self-reported ages, data collectors should rate their confidence in the ages provided by children and record this rating on the data entry form. However, given the high prevalence of stunting in this population, this verification will be quite limited. The reported ages of social network contacts are hypothesized to be more unreliable, and since these children will not have any contact with data collectors, even rudimentary physical verification is impossible.

Despite these numerous limitations, even if the final estimate of the number of children living on the street is not perfect or complete, the results will still likely be comparable over a period of a few years, if the same methods are applied systematically and thus allow for the measurement of trends over time.

3.8 Ethical Considerations

3.8.1 Inclusion of Minors

Children under 18 years of age are a vulnerable population, and children living on the street often contend with additional vulnerability due to lack of guardianship, poverty, stigma and other factors. This protocol has therefore been designed to minimize direct contact with children.

Interviews and identifying information should only be requested from children between the ages of 14-17 in towns and rural areas where this is deemed safe from an ethical perspective. The age category is based on scientific research demonstrating that by age 14, children have developed reasoning abilities similar to those of adults. Therefore, children 14 and older have the ability to provide informed consent for themselves (Meade and Slesnick 2002). Identifying information is only needed to match children found on each independent list for the capture-recapture analysis. Once the matching process has been completed, all identifying information should be deleted.

No identifying information will be collected from children living in large urban areas or places where collection of identifying information is deemed high risk; thus, consent is not required in these settings. Children identified through the street count will be approached and only asked their sex and age and if they would like to go to a shelter for the night. For the shelter count, child age will be obtained from shelter staff whenever possible.

Country-specific protocols will need to be established in the case whereby a data collector is approached by a child requesting help or claiming exploitation or abuse. Such protocols should include detailed information about local social service referrals and mandated follow-up on the part of the data collector. All data collectors must receive training on these protocols and

instructions on how to proceed safely, legally and ethically if such a situation arises should be codified in the data collector training manual.

Ethical review and approval should be obtained through national mechanisms wherever possible.

3.8.2 Risks and Benefits to Participants

This activity involves no more than minimal risk of harm to participants. Governments should use the findings in aggregate form and avoid penalizing any participant due to information from the surveillance activity. However, the risk that confidentiality of information may be breached and a child's identity could be revealed cannot be fully eliminated. Programs intended to improve the situation of children living on the street should be introduced at a population level and not targeted at individual children or surveillance areas revealed by enumeration.

Surveillance does not offer any direct benefits for the participants, but all children sleeping on the street who are approached should be offered a nutritional supplement such as Plumpynut, as well as the option of referral and transportation to a shelter for the night. Plumpynut and the shelter referral will be offered regardless of whether or not a child agrees to participate in the enumeration. As negotiated with the national government, children who participate in a social network interview may be offered a modest remuneration such as a meal and money to cover their transportation and missed work costs. Again, if it is anticipated that providing remuneration to children may provide unintended harm (e.g., by privileging one group of vulnerable children and inciting jealousy), alternative incentive plans should be agreed at the country level.

There are several potential indirect benefits to participation. These might include a better understanding of the magnitude, trends and basic characteristics of children living on the street. Data can support advocacy to improve the systems and services for children outside of family care, and ultimately contribute to the prevention of adverse outcomes.

All potential risks and indirect benefits should be explained to participants as part of the consent process.

3.8.3. Safety of Data Collectors

The risks of working and traveling past dark for the shelter count and the street count will vary by location. Safety should be taken into consideration throughout planning and implementation. The enumeration team must decide, for example, if enumerators will enter abandoned buildings, shantytowns, underpasses or other isolated areas that may be known to have criminal activity. These decisions must be used consistently each year. Enumerators, including plants, should be instructed to leave an area if they ever feel unsafe. Any threatening activity should be reported to the enumeration coordinator for immediate dissemination to rest of the team.

Precautions to protect the safety of the data collectors should include provision of a cell phone, transportation and an emergency contact number. All data collection after dark should be done by male-female pairs. Risks associated with the job should be explained to all candidates during recruitment. Candidates who are not comfortable with the requirements should be given the opportunity to recuse themselves from consideration.

4. RETROSPECTIVE COHORT

While these protocols are focused on children living on the street and in residential care facilities, there are clearly many other categories of children outside of family care not covered by these protocols. For example, governments may feel that children working on commercial farms, working in brothels, herding animals for the pay of strangers, or children who have been trafficked out of the country are a greater priority. It is beyond the mandate of this document to develop methods for every possible category of children outside of family care. That said, we outline here an alternative process that could crudely estimate the relative magnitude of various categories of children outside of family care by retrospectively identifying a cohort of children to see where they have gone over time.

Cohort Reconstruction is the process of identifying a group of people with some common characteristics at some point in the past to see how their paths have evolved. This is usually done because either the outcome of interest takes a long time to unfold or because the cases of interest cannot now be identified and interviewed. This process is most common in the field of cancer epidemiology because it allows lifetime exposures to be assessed (Ferrence 1988). Sometimes the cohort consists of very rare cases of some situation, which is suspected to later induce some adverse effects years later (Yoo et al. 1991). Yet, this process can also be used to investigate people who are hidden or invisible to researchers. Potterat et al. (2004) identified a cohort of commercial sex workers who had been working in the community of Colorado Springs between 1967 and 1999 (Potterat et al. 2004). Using Federal Social Security and death registry data, investigators found that 111 of these roughly 2000 women were dead, 21 of them being murdered. Thus, the death certificate data suggested that they were 18 times more likely to be murdered than the general population. What the retrospective study revealed that could not have been seen otherwise, is that an additional 32 were missing, very likely dead, and the bodies never identified. This suggests that many and maybe most murders of sex workers in this area go undetected or unrecorded.

Investigators studying child soldiers have interviewed village leaders or teachers to determine which children they had known years before later became child soldiers (Kohrt et al. 2008). While we cannot identify an example of this method explicitly being used to characterize children outside of family care, we believe it is well suited to this issue. In order to characterize the fraction and nature of children in all categories of being outside of family care in the sentinel surveillance site catchment area, we suggest the steps described in this section to be undertaken.

4.1 Identifying a Cohort of Children

For reasons described elsewhere, studying children currently 14 to 17 years old has both ethical advantages and advantages of relevance. Studying older individuals about their childhood experiences may reflect social factors that no longer exist. Two common mechanisms to identify a cohort of present 14 to 17 year olds is via birth records and school registrations.

In settings where all births are registered, or where nearly complete records of births exist through village leaders, hospitals, or midwives, it may be possible to construct a list of individuals born 14 to 17 years earlier. Lists should be constructed with the child's name, the names of either or both parents, village or district or address, the date of the birth and the location of the birth. If complete birth records exist across the sentinel surveillance area, selecting a sample of villages or areas where children are likely to be in one specific school of school district may be appropriate. A list

of at least 1,000 children should be developed. Based on the following assumptions, for example, a sample of 1,050 would be required:

- We want to detect an outcome that affects 2% of all children across the sentinel site population;
- We will only be able to track down two thirds of children;
- We want to be able to detect this outcome in at least 1% of the sample 95% of the time one takes a sample (Centers for Disease Control and Prevention 2011).

In some settings, school registration records may be an easier means to identify a cohort of children at a point in the past that should be 14 to 17 years old at present. In this case, identifying a cohort should be done by exploring their first year of school attendance. In most settings, the first year of primary school occurs between the ages of 5 to 7 years.

School registration records have several advantages over birth records. First, they are more recent, and thus involve a shorter path to follow to their present circumstances (i.e. typically ~9 years instead of ~15). Secondly, the name they use in school is likely to be the name they use at present. Finally, a majority of children in many settings may still be in school, and thus easy to follow-up.

When compared to birth certificates, the disadvantage to using school records is that many of the poorest or orphaned children, most at risk of becoming children outside of family care, may never attend school and thus would not be detected at present. Again, lists should be constructed with the child's name, the names of either or both parents, village or district or address, the date of the birth or at least year of birth.

4.2 Assessing Children Presently in School

The easiest way to follow-up with the status of most children is by exploring their present school status. Because most children will be in a school class with other children of the same age, teachers or school administrators should be approached with the cohort list to assess if each specific child is presently in school. Teachers should be asked if a specific child is living with their family, and if the teacher believes yes, that child should be considered inside family care. While not ideal and potentially open to mis-categorization by the teachers, if a child is attending school and the teacher perceives them to be well cared for, the child likely has some sort of proxy for family care (even though some such living situations may not meet legal standards for family care). Moreover, the list of children to follow-up must be dramatically reduced for the pragmatic reason of reducing the follow-up workload. If public school ends for most children at age 15 or 16, confirmation of family living status should be attempted with the last teacher the child had before the end of school. It is expected that most children will be confirmed through the school system as still in family care, requiring only a small portion of the cohort list to require further follow-up.

4.3 Characterizing Family Status

For those children who are no longer in school, tracking them individually will be required to assess whether or not they are presently within family care. This should be attempted by:

1. Speaking to the last teacher they had about what happened to the child and where they went. This may require then following up that lead by visiting the child's new school or going to their home.
2. Asking children in their earlier school cohort if they know where that child is at present. Again, following up that information will likely require a visit to the child's home or new location.
3. Visiting the village, district or address last known for the child and asking local leaders if they know where the child now resides and if they are with their family.
4. Exploring medical records where appropriate to see if a more recent address or status information is available, and then following-up at their homes.
5. Exploring death registries where appropriate.
6. Exploring government databases such as worker registrations or drivers licenses for the parent, or national exam registries for the child. This would then ideally lead to further options of follow-up.
7. If done in conjunction with, but before an assessment of street children, in the one-on-one interviews with 14-17 year olds, those children not able to be traced can be asked about with present children known to be outside of family care.

Again, for pragmatic reasons, having a village chief or nurse report that the child is still living with their family should be accepted as fact in most settings and considered equivalent to family care. It is likely that in the worst of settings, many children will not be able to be traced, either because of difficulties with name pronunciation and spelling, or migration in and out of the surveillance area. Yet, neither of those processes that would block child tracing would likely skew the detected fractions that evolved to be in the different categories of children outside of family care, and thus this process can add some perspective not gained with the focused protocols for enumerating children in residential care facilities or children on the street. Because of the labor-intensive nature of this protocol, governments and their partners are encouraged to undertake this Cohort Reconstruction process only where they feel categories of children outside of family care other than in residential care facilities or on the street are a major problem.

4.4 Analysis and Extrapolation

The total number of children detected at the cohort entry point (e.g. entering primary school, birth records) is the denominator of the cohort analysis (N). In each phase of the analysis, children are placed in or out of each category of interest (e.g. dead, living with family, living on the street outside of family care). Because this is an interactive process where children may be discovered to fall into a category from school records, from teacher interviews, from local leaders, from the child's family, the number of children in each category needs to be summed between the different rounds of follow-up. It is important that reports of a child falling into a category (e.g. living on street) do not get inadvertently counted twice.

Because this is an exploration of a fixed cohort, there is not statistical analysis to be presented or done. The sum of all children identified (number) should be reported, as should be the denominator (N). Each report should also be presented as a percentage. Below is an example scenario.

A team visits an area in September 2014 and is interested in children 14 – 17 years of age. In that area, children normally begin school at 6 years of age, and it is believed that virtually all children enroll in the free primary school. Thus, the team collects a list of the names and birthdates of children who enrolled in 2003, 2004, 2005 and 2006. Their list contains 2000 names.

Of the 2000 children, 1,750 are still enrolled in the same school district or others nearby, and assumed to be in family care. The team also learns that school records show that 10 children died.

Of the 240 remaining children, the team speaks with the last teachers that each child studied under. The team learns that an additional 10 of those children died. One hundred fifty of those 240 children “moved away”. There are clear stories from the teachers about exactly where 100 of these children moved and why, but the teachers do not know anything about the other 50. An additional 50 are known to have dropped out of school. Ten of the child dropouts are known to be living on the street without families, and one teacher says she sees them on a regular basis. Another 30 children are definitely not with their families, have jobs and are living on nearby industrial farms. Thus, 10 of the dropouts are unaccounted for. The other 30 students, the teachers and their past fellow students do not know where they are.

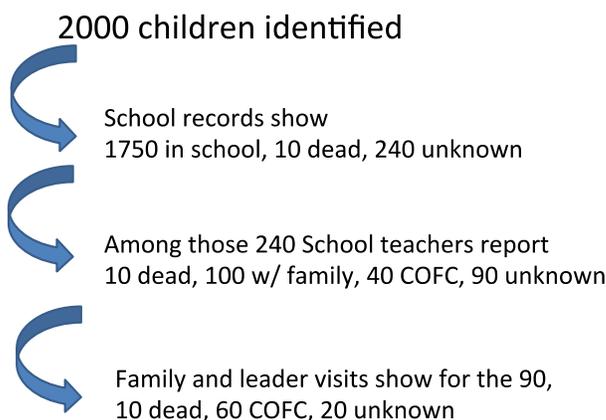
Thus, there are still 50 “unknown story” move away children, 10 dropouts, and 30 other students who may have ended up in the categories of interest. Of these remaining 90 students, the team goes to visit their last known addresses and the local leaders in the areas where they last lived. The team finds an additional 10 are dead. The team also finds that for a variety of reasons, 10 are living on the street, 30 more are working on industrial farms, 20 (all girls) are believed to be working in brothels, and for the final 20 information cannot be obtained.

The number dead = 10 reported from school records + 10 reported from teachers + 10 reported during local leaders and family visits = 30 total dead, or $30/2000$ total = 1.5% dead.

10 reported by teachers and 10 reported during local leader and family visits = 20 living on the street, or $20 / 2000$ total = 1% living on the streets.

Likewise, $30 + 30 = 60$ children (3%) work and live on the industrial farm. 20 (1%) are working in brothels. This process is summarized in Figure 7 below.

Figure 7. Example of Cohort study analysis



Thus, this example would be reported as:

“Of 2000 children in the cohort entering school from 2003-2007, information is unknown on 20 (1%), 100 (5%) are reported to be outside of family care, and 30 (1.5%) are dead. While focusing on children living outside of family care, 60 (3%) are working on industrial farms, 20 (1%) are living on the street, and 20 (1%) are believed to be working in brothels. This estimate is a likely minimum.”

Of note in this analysis is that confidence intervals cannot be calculated, as these are passive reports, often from a teacher who knew the student years before. Thus, a grave potential for under-reporting exists. That said, in this scenario, the cohort method could find children who left their families and school to work on industrial farms, which was not detectable or considered in the other methods. This method has no pre-existing lens for considering or focusing on one category of children living outside of family care over another, and as such, has the ability to capture the magnitude of a wide variety of social threats to children.

5. USING SENTINEL SURVEILLANCE SITES TO REACH A NATIONAL ESTIMATE

To undertake a complete national census of children living in residential care facilities and on the street would be a time and resource intensive process. The methods presented in these guidelines are intended to be applied in smaller, localized sentinel sites. Findings from sentinel surveillance sites can be used to generalize to the larger population. This activity is known as *extrapolation* or *synthetic estimation*. A range of extrapolation procedures exist, and governments should consider the best process for generalizing findings to the national level.

For children living in residential care facilities, as a preliminary step to determining a national estimate, it may be useful to determine the proportion of total residential care facilities found through the surveillance process and compare these findings with the original government registry. Using this information, it should be possible to conclude that the surveillance activities found X more residential care facilities than were formally recorded by the government in those sentinel sites. Based on these findings, a national estimate of Y can be assumed (X multiplied by the national government's total nationwide count).

In addition, as discussed in Section 2.6 and Section 3.6, findings from the sentinel surveillance sites can be standardized by calculating the number of children living in residential care facilities or children living on the street per 100,000 children in the total population of the sentinel surveillance areas. Assuming sentinel surveillance sites have been selected to be generally representative of the country, data on the number of children in the total population can be simply extrapolated from pre-existing national census data by applying the same percentage (or rate) to all areas.

For example, imagine Country X is interested in producing a national estimate of children living on the street so that family reunification efforts can be strengthened. If sentinel site findings suggest that one-twentieth of the population of children in sentinel sites are living on the street, and census data shows that there are 55,500 children in Country X, one could extrapolate that 2,775 children are living on the street across the country (one-twentieth of 55,500). The main limitation of this approach, of course, is that it assumes an equal distribution of children living on the street throughout the country, with no regional differences.

If sentinel sites were selected in geographic areas with unusually high numbers of residential care facilities or children living on the street, this could bias the results and falsely inflate the national estimates. If a government was interested in developing an estimate of the population size of children on the street for urban areas, for example, a government would have to consider whether the sentinel sites were thought to be representative of this broader population. To extrapolate in this type of situation, a government would:

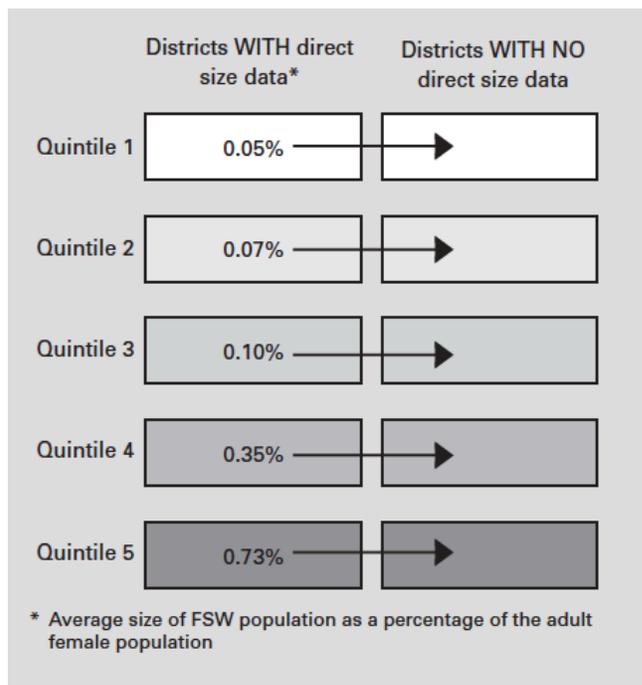
- Map the country, breaking it down into smaller areas and combining areas with similar characteristics (in the case of our example, all urban areas);
- Collect data in some of the small areas (sentinel site data from urban areas);
- Use an extrapolation procedure with your data to create a national estimate of children on the street in urban areas.

One of the better examples of a more complex extrapolation procedure is detailed in UNAIDS guidelines for Estimating Population Size (2010). This example describes the process of a complex extrapolation of the number of sex workers in Indonesia. In examining existing data, a percentage of Indonesia’s 440 districts had data estimating the size of the sex worker population. As a first step toward a national extrapolation, a national survey of village leaders was conducted in villages in each of the 440 districts. The survey had one primary question: “*Are there sex work spots in your village?*”

The research team then calculated the percentage of villages per district whose leaders responded ‘yes’ to this question. Next, all 440 districts were ranked and distributed into quintiles based on percentage of villages with sex work spots. Essentially, districts with the highest proportion of villages with sex work spots were assigned to the highest quintile (quintile five), while districts with the lowest proportion of villages with sex work spots were assigned to the lowest quintile (quintile one).

Researchers used the data from districts where data on the population size of sex workers did exist to come up with an average percentage of the adult female population that are female sex workers. These data were then aggregated to come up with an average size of sex worker population for each of the five quintiles. These averages ranged from 0.05 percent of the adult female population in quintile one to 0.73 percent in quintile five (see Figure 8).

Figure 8: Indonesia’s Quintile Extrapolation of Female Sex Workers



*From UNAIDS, 2010

Finally, these averages were applied to the districts without data in the matching quintile group. Table 1 shows how this calculation was done for four districts, based on the known size of the districts’ adult female population and ranking by quintile.

Table 1: Estimated Population Size for Four Districts

District	Adult female pop. size (a)	Quintile (b)	% from quintile (c)	Estimated # of sex workers in district (a) X (c)
District A	250,456	2	0.07	175
District B	1,329,875	5	0.73	9708
District C	546,982	2	0.07	383
District D	356,968	3	0.10	357

*From UNAIDS, 2010

It is envisaged that a similar process of extrapolation could be adapted for children living on the street, children in residential care facilities and other categories of children outside of family care that a country may choose to monitor.

6. CONCLUSIONS

These guidelines have been developed for governments who are committed to helping keep children in supportive family care settings and reducing the number of children living outside of family care. Monitoring the magnitude and distribution of children living outside of family care is an important component of a surveillance program, and a key step in assessing whether a nation is meeting its stated goals. Other complementary components of a surveillance system include real-time case identification, triggers for immediate response and strategies to support families to better care for their children, thereby reducing vulnerability to falling outside of family care. While these guidelines propose a strategy for one important piece of a surveillance system, governments are encouraged to think through strategies for these other components as well.

In support of Objective 2 of the [U.S. Government Action Plan on Children in Adversity](#), these guidelines are intended to contribute to the larger goal of creating evidence-based policies and programs built upon improved research capacities and enhanced methodologies that strengthen families, prevent unnecessary family separation, and ensure appropriate alternative care for children.

7. REFERENCES

- Anarfi, J.K. 1997. "Vulnerability to Sexually Transmitted Disease: Street Children in Accra." *Health Transition Review* 7: 281–306.
- Ayaya, S.O., and F.O. Esamai. 2001. "Health Problems of Street Children in Eldoret, Kenya." *East Africa Medical Journal* 78 (12): 624–9.
- Ball, P., H.F. Spierer, and L. Spierer. 2000. "Making the Case: Investigating Large Scale Human Rights Violations Using Information Systems and Data Analysis." Washington, DC.
- Better Care Network. 2009. "Manual for the Measurement of Indicators for Children in Formal Care." New York City. <www.unicef.org/protection/Formal_Care20Guide20FINAL.pdf>.
- Browne, K. 2009. "The Risk of Harm to Young Children in Institutional Care." London, UK. <www.crin.org/docs/The_Risk_of_Harm.pdf>.
- Cantwell, N., J. Davidson, S. Elsley, I. Milligan, and N. Quinn. 2012. "Moving Forward: Implementing the 'Guidelines for the Alternative Care of Children.'" UK: Centre for Excellence for Looked After Children in Scotland. <[www.unicef.org/ceecis/UN_Handbook_\(English\)_FINAL_22_02_13.pdf](http://www.unicef.org/ceecis/UN_Handbook_(English)_FINAL_22_02_13.pdf)>.
- Centers for Disease Control and Prevention. 2011. "CDC - Epi Info™."
- Felitti V.J., R.F. Anda, D. Nordenberg, D.F. Williamson, A.M. Spitz, V. Edwards, M.P. Koss, et al. 1998. "The relationship of adult health status to childhood abuse and household dysfunction." *American Journal of Preventive Medicine* 14:245-258.
- Ferrence, R.G. 1988. "Sex Differences in Cigarette Smoking in Canada, 1900-1978: a Reconstructed Cohort Study." *Canadian Journal of Public Health* 79 (3): 160–5.
- Gurgel, R.Q., J.D. da Fonseca, D. Neyra-Castaneda, G.V. Gill, and L.E. Cuevas. 2004. "Capture-Recapture to Estimate the Number of Street Children in a City in Brazil." *Archives of Disease in Childhood* 89 (3): 222–224.
- Hatloy, A., and A. Huser. 2005. "Identification of Street Children: Characteristics of Street Children in Bamako and Accra." FAFO: Research Program on Trafficking and Child Labour. <<http://www.fafono/pub/rapp/474/474.pdf>>.
- Hillis, S.D., L. Zapata, C.L. Robbins, D.M. Kissin, H. Skipalska, R. Yorick, E. Finnerty, P.A. March-banks, and D.J Jamieson. 2011. "HIV Seroprevalence Among Orphaned and Homeless Youth : No Place Like Home." *AIDS* 25: 1–6.
- Holt International. 2005. "Cambodia Orphanage Survey." USAID. <http://pdf.usaid.gov/pdf_docs/PNADI624.pdf>.
- Hope and Homes for Children, and Ministry of Gender and Family Promotion. 2012. "National Survey of Institutions for Children in Rwanda."

http://www.crin.org/docs/NATIONAL%20SURVEY%20OF%20INSTITUTIONS%20FOR%20CHILDREN%20IN%20RWANDA_FINAL.pdf>.

Horizons for Homeless Children. 2013. "Organizational Website."

<http://www.horizonsforhomelesschildren.org/understanding-homelessness/our-impact>>.
(retrieved on: July 14, 2013)

Kissin, D.M., L. Zapata, R. Yorick, E.N. Vinogradova, G.V. Volkova, E. Cherkassova, A. Lynch, et al. 2007. "HIV Seroprevalence in Street Youth , St Petersburg , Russia." *AIDS* 21 (17): 2333–2340.

Kohrt, B.A., M.J.D. Jordans, W.A. Tol, R.A. Speckman, S.M. Maharjan, C.M. Worthman, and I.H. Komproe. 2008. "Comparison of Mental Health Between Former Child Soldiers and Children Never Conscripted by Armed Groups in Nepal." *Journal of the American Medical Association* 300 (6): 691–702.

Laska, E., and M. Meisner. 1993. "A Plant-Capture Method for Estimating the Size of a Population from a Single Sample." *Biometrics* 49: 209–220.

Martin, E., E. Laska, K. Hopper, M. Meisner, and J. Wanderling. 1993. "Issues in the Use of a Plant-Capture Method for Estimating the Size of the Street Swelling Population." Census Bureau, Nathan S. Kline Institute. < <http://www.census.gov/srd/papers/pdf/sm9704.pdf>>.

Mathur, M., P. Rathore, and M. Mathur. 2009. "Child Abuse & Neglect Incidence, Type and Intensity of Abuse in Street Children in India." *Child Abuse & Neglect* 33: 907–913.

Meade, M.A., and N. Slesnick. 2002. "Ethical Considerations for Research and Treatment with Runaway and Homeless Adolescents." *The Journal of Psychology* 136 (4): 449–63.

Muldoon, K.A., L. Stark, and R. Rinehart. 2013. "Expert Measurement Workshop: U.S . Government Action Plan on Children in Adversity Children Outside of Family Care." Washington DC.

Nada, K.H., and E.A. Suliman. 2010. "Violence, Abuse, Alcohol and Drug Use, and Sexual Behaviors in Street Children of Greater Cairo and Alexandria, Egypt." *AIDS* 24 (suppl. 2): s39–s44.

NGO Working Group on Children Without Parental Care. 2013. "Identifying Basic Characteristics of Formal Alternative Care Settings for Children: A Discussion Paper." Geneva. < http://www.fice-inter.net/wp-content/uploads/2013/04/Formal_care_settings_characteristics_March_2013_final.pdf>.

Pinheiro, P.S. 2006. "World Report on Violence Against Children." UNICEF. <<http://www.unicef.org/violencestudy/reports.html>>.

Potterat, J.J., D.D. Brewer, S.Q. Muth, R.B. Rothenberg, D.E. Woodhouse, J.B. Muth, H.K. Stites, and S. Brody. 2004. "Mortality in a Long-Term Open Cohort of Prostitute Women." *American Journal of Epidemiology* 159 (8): 778–785.

- Singh, D., N. Sareen, A. Ojha, and D. Sareen. 2008. "Street Children of Udaipur : Demographic Profile and Future Prospects." *Studies of Tribes and Tribals* 6 (2): 135–139.
- Smyke, A.T., C.H. Zeanah, N.A. Fox, and C.A. Nelson. 2009. "A New Model of Foster Care for Young Children: The Bucharest Early Intervention Project." *Child and Adolescent Psychiatric Clinics of North America* 18 (3): 721–34.
- Street Kids International. 2013. "Annual Report 2012-2013: Street Kids International." <<http://streetkids.org/images/PDFs/AnnualReport-Web.pdf>>.
- UNAIDS. 2010. "Guidelines on Estimating the Size of Populations Most at Risk to HIV." Geneva. <http://www.who.int/hiv/pub/surveillance/estimating_populations_HIV_risk/en>.
- United Nations General Assembly. 1989. "The Convention on the Rights of the Child." A/RES/44/25. <<http://www.bettercarenetwork.org/docs/resources/treaties/uncrc.asp>>.
- United Nations General Assembly. 2010. "Guidelines for the Alternative Care of Children." A/RES/64/142. <www.bettercarenetwork.org/docs/Guidelines-English.pdf>.
- USAID. 2012. "US Government Action Plan on Children in Adversity." Washington, DC. <http://pdf.usaid.gov/pdf_docs/PDACU700.pdf>.
- van Ijzendoorn, M., M. Luijk, and F. Juffer. 2008. "IQ of Children Growing Up in Children's Homes: A Meta-Analysis on IQ Delays in Orphanages." *Merrill-Palmer Quarterly* 54 (3).
- Verma, V. 2013. "Sampling Elusive Populations of Labouring Children."
- Williamson, J., and A. Greenberg. 2010. "Families Not Orphanages." <<http://www.crin.org/docs/Families%20Not%20Orphanages.pdf>>.
- Yoo, K.Y., M. Heon-Kim, M.S. Lee, B.J. Park, Y.O. Ahn, H.S. Lee, C.Y. Kim, and T.S. Park. 1991. "A Reconstructed Cohort Study on the Hepatitis B Virus Infection as a Risk Factor of Liver Cancer in Korea." *Journal of Korean Medical Science* 6 (4) (December): 319–24.

Appendix 1: Facility list data collection tool

1. Sentinel Site: _____
2. Facility Name: _____
3. Facility Code: _____
4. Date: _____
5. Type of Facility:
 - Orphange
 - Infant/Childrens home
 - Boarding School
 - Hospital
 - Correctional/Training Facility
 - Other _____
6. Street Address: _____
- Town/City: _____
- Province: _____

7. Ph#: _____
8. Other Contact Information:

9. Main contact person: _____
10. Government Registered:
 - Yes No Don't know

11. Consent to participate:
 - Yes No

12. Referred by: _____
13. Enumerator code: _____

Notes

Appendix 2: Facility characteristics¹

Background information

(to be completed by the data collector prior to discussion with the respondent)

Enumerator code _____

Sentinel site _____

Facility code _____

Referred by _____

Date DD / MM / YYYY _____

Consent

Before we begin, I'd like to introduce myself and explain my reason for this visit.
(proceed to consent form)

Consent given?

1. YES	2. NO
--------	-------

(If consent is not given, do not proceed with interview.)

Questions

I would like to start by asking you some basic questions about this facility:

- 1.) What is the name of this facility? _____
- 2.) What is the facility's address?
Street _____
Town/City _____
Province _____
- 3.) What is the phone number for the facility? _____
- 4.) Can you provide any other contact information if we need to reach you (e.g., other phone numbers, email address)?

¹ The information provided in questions 7 – 12 should be used during analysis to determine whether a given facility meets the operational definition of a residential care facility provided in the Guidelines (see Section 2.3.1). Inclusion and exclusion criteria should be determined at country level and this form can be modified as needed to accommodate additional elements that may help to establish contextually appropriate cut-offs.

5.) Who is the main contact person at this facility?

6.) Is this facility registered with the government?

1. YES	2. NO
--------	-------

7.) Which of the following best describes this facility?

<input type="checkbox"/>	Orphanage
<input type="checkbox"/>	Infant/Children's Home
<input type="checkbox"/>	Boarding school
<input type="checkbox"/>	Hospital
<input type="checkbox"/>	Correctional/Training facility
<input type="checkbox"/>	Other _____

8.) What is the primary use of this space?

<input type="checkbox"/>	For children to live
<input type="checkbox"/>	To care for the sick
<input type="checkbox"/>	Religious institution
<input type="checkbox"/>	Family home
<input type="checkbox"/>	Other _____

9.) How many paid staff work here?

10.) How many volunteer staff work here?

11.) How many children currently live here?

12.) Out of the children currently living here, what percentage of them have lived here more than half of the time for:

- | | |
|---|---------|
| A. The past 1 year or longer | _____ % |
| B. The past 6 months or longer, up to 1 year | _____ % |
| C. The past 1 month or longer, up to 5 months | _____ % |
| D. The past 7 nights or longer, up to 30 nights | _____ % |
| E. The past 6 nights or less | _____ % |

The categories above are mutually exclusive, meaning that each child should only in be counted in one category. In other words, a child who has been at the facility for most of the past year should only be counted in Group "A."

[If Question 12 is administered currently, all percentages in Groups A – E should sum to 100%.]

Closing

Thank you for this information. Now, we would like to review some of your records to get more information about the number of characteristics of the children who stay here.

Appendix 4: Daytime record review data collection tool option 1 complete

Sentinel Site: Gisenyi
 Facility Name: ABC Orphanage
 Facility Code: 1234
 Date: 14apr13
 Enumerator Code: 001

Unique ID	Sex	Age (years)	Year of Birth	Notes
1	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Unsure	14	1999	
2	<input type="checkbox"/> Male <input checked="" type="checkbox"/> Female <input type="checkbox"/> Unsure	5	2008	
3	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Unsure	DK	DK	Age not recorded, check with staff
4	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Unsure	11	2002	
5	<input type="checkbox"/> Male <input checked="" type="checkbox"/> Female <input type="checkbox"/> Unsure	8	2005	
6	<input type="checkbox"/> Male <input checked="" type="checkbox"/> Female <input type="checkbox"/> Unsure	3	2010	
7	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Unsure	14	1999	
8	<input type="checkbox"/> Male <input checked="" type="checkbox"/> Female <input type="checkbox"/> Unsure	17	1996	
9	<input type="checkbox"/> Male <input checked="" type="checkbox"/> Female <input checked="" type="checkbox"/> Unsure	7	2006	Sex not recorded, check with staff
10	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Unsure	7	2006	
11	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Unsure	8	2005	
12	<input type="checkbox"/> Male <input checked="" type="checkbox"/> Female <input type="checkbox"/> Unsure	3	2010	
13	<input type="checkbox"/> Male <input checked="" type="checkbox"/> Female <input type="checkbox"/> Unsure	5	2008	
14	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Unsure	13	2000	
15	<input type="checkbox"/> Male <input checked="" type="checkbox"/> Female <input type="checkbox"/> Unsure	14	1999	
16	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Unsure	DK	DK	Age not recorded, check with staff
17	<input type="checkbox"/> Male <input checked="" type="checkbox"/> Female <input type="checkbox"/> Unsure	1	2012	

Appendix 7: Nighttime bed count data collection tool option 2

Sentinel Site: _____

Facility Name: _____

Facility Code: _____

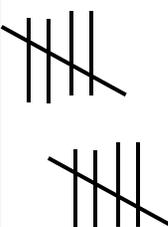
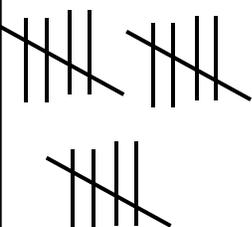
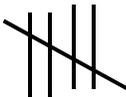
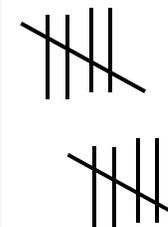
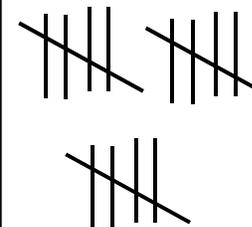
Date: _____

Enumerator Code: _____

	<5 years	5-9 years	10-13 years	14-17 years	Grand Total
Male					
Total:					
Female					
Total:					

Appendix 8: Nighttime bed count data collection tool option 2 complete

Sentinel Site: Gisenyi
 Facility Name: ABC Orphanage
 Facility Code: 1234
 Date: 14apr13
 Enumerator Code: 001

	<5 years	5-9 years	10-13 years	14-17 years	Grand Total
Male					
Total:	10	15	5	5	35
Female					
Total:	10	15	5	5	35

Appendix 9a: Consent form for directors of residential care facilities

Introduction: Hello, my name is _____. I am one of the interviewers of a survey being done with the government. We are conducting several surveys in [Country X] to count the number of children who live in residential care facilities. The goal of this count is to enable the national government to conduct routine surveillance of children living in residential care facilities and to see how they can improve services to ensure children are safe.

The focus of our visit here is to count the number of children below the age of 18 years who live in your care. Are there children below the age of 18 years who reside in this facility?

- Yes
- No (not eligible to participate)

Our activities will take place in two parts, neither of which requires that we speak with any of the children who live here. The first part of this study is a **Daytime Record Review**. We would like to request access to your records so we can record how many children currently live here and how many children slept here last (if you have this information). We also would like to record their age and sex. We will not record any identifying information (like names or birth dates) of the children, and we will not need copies these records.

The second part of this study is a **Nighttime Bed Count**. Members from our team will come back to your facility at some point later this month, once all the children are in bed and count how many children are sleeping here. We will not approach or talk to any of the children; however, we will request the help of your staff to help us assess the age of each child.

Risks and Benefits: There should be no risk to you or your facility if you agree to have your facility participate. Participation will not be used for determining your eligibility for any government programs, and there will be no monetary compensation for participating in this activity. We hope that the results of these activities will help us learn more children living in residential care facilities.

Questions & Concerns: Is there anything you would like to know about this activity?

If you have questions at any point, you can contact [X Person] at the address and phone number below with any problems or questions you may have.

Informed Consent:

Will you allow us access to your attendance records and to conduct a Daytime Record Review?

- Yes
- No

Will you allow us to conduct a Nighttime bed count and help us collect the names of and circumstances of each resident?

Yes

No

(If the answer is “no” to either of these questions, thank the director/ Participants for their time and end. Note the refusal to participate in the Facility List Data Collection Tool.)

Facility Name: _____

Participants's name: _____ Participants's ID #: _____

Signature or initials of respondent: _____

Date: _____

Signature of study team obtaining consent _____

Date: _____

Appendix 9b: Consent form for informants at residential care facilities

Introduction: Hello, my name is _____. I am one of the interviewers of a survey being done with the government. We are conducting several surveys in [Country X] to count the number of children who live in residential care facilities. The goal of this count is to enable the national government to conduct routine surveillance of children living in residential care facilities and to see how they can improve services to ensure children are safe.

The focus of our visit here is to count the number of children below the age of 18 years who live in your care.

Specifically, we are here to count the children sleeping here tonight. We will not approach or talk to any of the children; however, we are requesting your help us assess the age of each child. We have already spoken with the director of this facility and received permission to conduct this activity.

Risks and Benefits: There should be no risk to you or your facility if you agree to participate. Participation will not be used for determining your eligibility for any government programs, and there will be no monetary compensation for participating in this activity. We hope that the results of these activities will help us learn more children living in residential care facilities.

Questions & Concerns: Is there anything you would like to know about this activity?

If you have questions at any point, you can contact [X Person] at the address and phone number below with any problems or questions you may have.

Informed Consent:

Will you allow us to conduct a Nighttime bed count and help us collect the names and basic characteristics of each resident? Yes

No

(If the answer is “no”, thank the informant for their time and end. Note the refusal to participate in the Facility List Data Collection Tool.)

Facility Name: _____

Participants's name: _____ Participants's ID #: _____

Signature or initials of respondent: _____

Date: _____

Signature of study team obtaining consent _____

Date: _____

Appendix 10: Shelter list data collection tool

1. Sentinel Site: _____
2. Shelter Name: _____
3. Shelter Code: _____
4. Date: _____
5. Type of Facility:
 - Street Child Shelter
 - Church
 - NGO
 - Other _____
6. Street Address: _____
Town/City: _____
Province: _____
7. Ph#: _____
8. Other Contact Information:

9. Main contact person: _____
10. Government Registered:
 - Yes No Don't know
11. Consent to participate:
 - Yes No
12. Referred by: _____
13. Enumerator Code: _____

Notes

Appendix 11a: Consent form for directors of shelters in rural areas where the collection of identifiable information for 14-17 year-old children is deemed safe

Introduction: Hello, my name is _____. I am one of the interviewers of a survey being done with the government. We are conducting several surveys in [Country X] to count the number of children who live on the street or who stay in shelters. The goal of this count is to enable the national government to conduct routine surveillance of children who live on the street or who stay in shelters and to see how services can be improved to ensure children are safe.

The focus of our visit is to count the number of children below the age of 18 years who sleep in the shelter. Are there children below the age of 18 years who stay in this facility?

- Yes
 No (not eligible to participate)

If you agree, members from our team will come back to your facility at some point later this month to count all the children who will be sleeping here that night.

We will request the help of your staff to help us assess the age of each child. For children under 14 years, we will only record their sex and their age. For children 14-17 years, we will ask them a few identifying questions with their consent including: first name, last name, place of residence, place of origin, nick name, etc.

Risks and Benefits: There should be no risk to you or your facility if you agree to have your facility participate. Participation will not be used for determining your eligibility for any government programs, and there will be no monetary compensation for participating in this activity. All children in your facility during our nighttime count will receive [Plumpynut or some nutritional supplement]. We hope that the results of these activities will help us learn more about children staying in shelters.

Questions & Concerns: Is there anything you would like to know about this activity?

If you have questions at any point, you can contact [X Person] at the address and phone number below with any problems or questions you may have.

Informed Consent:

Will you allow us to conduct a Nighttime head count and help us collect the age and sex of each child, and some identifying information of children 14-17 years?

- Yes
 No

(If the answer is “no”, thank the director/ Participants for their time and end. Note the refusal to participate in the Facility List Data Collection Tool.)

Facility Name: _____

Participant's name: _____ Participant's ID #: _____

Signature or initials of respondent: _____

Date: _____

Signature of study team obtaining consent _____

Date: _____

Appendix 11b: Consent form for informants at shelters in rural areas where the collection of identifiable information for 14-17 year-old children is deemed safe

Introduction: Hello, my name is _____. I am one of the interviewers of a survey being done with the government. We are conducting several surveys in [Country X] to count the number of children who live on the street or who stay in shelters. The goal of this count is to enable the national government to conduct routine surveillance of children who live on the street or who stay in shelters and to see how services can be improved to ensure children are safe.

The focus of our visit is to count the number of children below the age of 18 years who are sleeping in this shelter tonight.

We will request your help to assess the sex and age of each child. For children under 14 years, we will only record their sex and their age. For children 14-17 years, we will ask them a few identifying questions with their consent including: first name, last name, place of residence, place of origin, nick name, etc. We have already spoken with the director of this facility and received permission to conduct this activity.

Risks and Benefits: There should be no risk to you or your facility if you agree to participate. Participation will not be used for determining your eligibility for any government programs, and there will be no monetary compensation for participating in this activity. All children in your facility during our nighttime count will receive [Plumpynut or some nutritional supplement]. We hope that the results of these activities will help us learn more about children staying in shelters.

Questions & Concerns: Is there anything you would like to know about this activity?

If you have questions at any point, you can contact [X Person] at the address and phone number below with any problems or questions you may have.

Informed Consent:

Will you allow us to conduct a Nighttime head count and help us collect the age and sex of each child, and some identifying information of children 14-17 years?

Yes

No

(If the answer is “no”, thank the participant for their time and end. Note the refusal to participate in the Facility List Data Collection Tool.)

Facility Name: _____

Participant's name: _____ Participant's ID #: _____

Signature or initials of respondent:

Date:

Signature of study team obtaining consent

Date:

2.4 Interviewers confidence in reported age

1. High	2. Medium	3. Low
---------	-----------	--------

AGE2
[Note: This should be assessed by the interviewer. It is not a question for the child.]

SECTION 3 – CDC Criteria

3.1 Do you go to school on most days?

1. YES	2. NO
--------	-------

SCHOOL1
If no, skip 3.2

3.2 Where do you go to school?

--

SCHOOL2

3.3 Do you live with your parents?

1. YES	2. NO
--------	-------

PARENT
If yes, skip 3.4

3.4 Do you live with another biological adult relative?

1. YES	2. NO
--------	-------

RELAT
(i.e., grandparent, aunt, uncle, adult cousin, adult sibling, other adult relative)

3.5 Do you live on the street (always or sometimes)?

1. YES	2. NO
--------	-------

STREET
For children found on the street during the night-time count, the answer to this question is automatically “yes” and therefore the question doesn’t need to be asked.

3.6 Do you think of yourself as a street child?

1. YES	2. NO
--------	-------

SELF_IDENT

Answers to the questions above will determine whether or not a child is eligible to be invited to participate in the network sampling activity. In order to be eligible, a child must answer “no” to questions 3.1, 3.3, or 3.4 or “yes” to questions 3.5 or 3.6.

3.7 Is the child eligible to participate in network sampling?

1. YES	2. NO
--------	-------

ELIGIBLE
[Note: This should be assessed by the interviewer. It is not a question for the child.]

SECTION 4 – Identifying information

4.1 Where are you from originally?

--

ORIG
Probe: Where were you born?

4.2 What is your mother’s name?

--

MOM

4.3 What is your father’s name?

--

DAD

4.4 Where do you live now?

Probe: Try to get a specific location for where the child normally sleeps (e.g., under the bridge near the market, rather than simply “on the street”)

LIVE

4.5 What do you do to make money?

JOB1

4.6 In what part of town do you work?

JOB2

4.7 Do you earn money on a daily basis?

1. YES	2. NO
--------	-------

JOB3

4.8 If we asked other children on the street who knew you to describe you, what do you think they would say about you?

Probe: We are talking about specific, identifiable characteristics such as “the kid with one leg” or “the kid who is good at braiding hair.”

(Note to interviewers: We do not want general traits that can’t be validated like “Jose is kind and funny”.)

OTHER

SECTION 5 – Invitation for Network Sampling

Approximately 20% (1 in 5) of eligible children interviewed through the shelter and street night counts will be invited to participate in network sampling at a follow-up time.

A child is eligible to participate in network sampling only if the answer to Question 3.7 was “yes.”

If this child is selected for the network sampling, please administer the following consent script and check the ‘yes’ box to indicate that initial verbal consent has been obtained (full consent will be administered again if/when the child shows up for the network sampling interview).

Consent Script for Network Sampling:

We would like to invite you back to [X location at X time] to ask you a few additional questions about yourself and your friends on the street who sleep in the same area. You do not have to answer any questions you feel uncomfortable with, and you can stop at any time. If you decide to participate in this second interview, we will give you [Plumpynut or some nutritional supplement] and a small compensation [as determined by the country team]. This interview should not take more than 15 minutes

If you are interested in this, we will give you transportation token with a code on it that you can use to travel to the [X location]. Please keep this token with you; you will need to present it to the interviewers at [X location].

Do you have any questions?

Do you agree to participate in this second interview?

1. YES	2. NO
--------	-------

If yes:

Token Number:

--

Conclusion

Thank you for taking the time to speak with me today. I have asked all of my questions.. As I mentioned before, the information you have shared with us today will be used to find out how many children are on the street and to help the national government see how services can be improved to make sure children are safe. Do you have any other questions that you would like to ask me today before we say goodbye?

As a small thank you for spending time with me today, I have some [*Plumpynut or some nutritional supplement*] for participating in this interview.

[For children found on the street]: As I mentioned when we first met, I can offer you a safe place to sleep tonight at [X Shelter].

Would you like to go to the shelter for the night?

1. YES	2. NO
--------	-------

(Follow the protocols established in the guidelines Section 3.4.1 to transport children to a shelter)

Appendix 14: Consent form for 14-17 year old children in the street and shelter survey in rural areas where the collection of identifiable information is deemed safe

Introduction: Hello, my name is _____. I am one of the interviewers of a survey being done with the government. We are conducting several surveys in [Country X] to count the number of children who live on the street or who stay in shelters. The goal of this count is to find out how many children are on the street and if this number changes from year to year. We are collecting this information to help the national government see how services can be improved to make sure children are safe.

We are here tonight to count how many children below the age of 18 years are sleeping in the shelter or on the street. We will ask all children their age and sex, but we want to ask a few more questions to children age 14-17 years. Are you between the ages of 14-17 years?

- Yes No (not eligible to participate)

With your consent, we would like to ask you a few questions.

Risks and Benefits: There should be no risk to you if you agree to answer these questions. Agreeing to this interview will not affect your access to services, and we are not providing any money to those who want to answer the questions. We would like to offer you [Plumpynut or some nutritional supplement], regardless of whether you participate or not. We hope that the results of these activities will help us learn more about children staying in shelters and sleeping on the street.

Questions & Concerns: Is there anything you would like to know about this activity?

If you have questions at any point, you can contact [X Person] at the address and phone number below with any problems or questions you may have.

Informed Consent: Would you like to participate in an interview and provide information about yourself?

- Yes No

(If the answer is “no”, thank the child for their time and end. Note the refusal to participate in the Rural Shelter Count Data Collection Tool or the Rural Street Count Data Collection Tool .)

Participant’s name: _____ Participant’s ID #: _____

Signature of study team obtaining consent _____

Date: _____

Appendix 15: Consent form for social networking survey

Directions: This consent form is to be administered to children 14-17 years who were enumerated during the rural street or shelter count, or through time location sampling. Only children who were invited to participate in social network sampling will complete this consent and proceed to the interview.

Introduction [for those previously identified through shelters and street counts]: Hello, again. Thank you for agreeing to come and speak with me again. Just to remind you, my name is _____, and I am one of the interviewers of a survey being done with the government. We are conducting several surveys in [Country X] to count the number of children who live on the street or who stay in shelters. As I explained to you before, the goal of this count is to find out how many children are on the street and if this number changes from year to year. We are collecting this information to help the national government see how services can be improved to make sure children are safe.

Introduction [for those identified through time location sample]: Hello. My name is _____, and I am one of the interviewers of a survey being done with the government. We are conducting several surveys in [Country X] to count the number of children who live on the street or who stay in shelters. The goal of this count is to find out how many children are on the street and if this number changes from year to year. We are collecting this information to help the national government see how services can be improved to make sure children are safe.

We invited you here today because we want to ask you a few questions about yourself and other people you know like you who stay on the street or in shelters. The information you provide about yourself and your friends will help us know the number of children 14-17 who live in this area and may need help.

Just to verify, are you between the ages of 14-17 years?

- Yes No (not eligible to participate)

With your consent, we would like to ask you a few identifying questions about yourself and your friends.

Risks and Benefits: There should be no risk to you if you agree to answer these questions about yourself or your friends. Agreeing to this interview will not affect your access to services. We can give you [Plumpynut or some nutritional supplement] regardless of whether you decide to participate or not. We hope that the results of these activities will help us learn more about children on the street or in shelters. This should not take more than [X] minutes

Questions & Concerns: Is there anything you would like to know about this activity? If you have questions at any point, you can contact [X Person] at the address and phone number below with any problems or questions you may have.

Informed Consent: Would you like to participate in this interview and provide information about yourself and some of your friends?

Yes No

(If the answer is “no”, thank the child for their time and end. Note the refusal to participate in the Network Sampling Data Entry Tool)

Signature of study team obtaining consent

Date:

Appendix 16: Social networking survey

SURVEY TOOL FOR THE SURVEILLANCE OF CHILDREN OUTSIDE OF FAMILY CARE¹ NETWORK SAMPLING FOR 14-17 YEAR OLDS IN TOWNS AND RURAL AREAS (population <500,000) where the collection of identifiable information is deemed safe	Unique ID
---	------------------

Interview date.....

D	D	M	M	Y	Y	Y	Y
---	---	---	---	---	---	---	---

DATE

Where was child located when invited for network sampling?

1. Night street	2. Night shelter	3. Time-location
-----------------	------------------	------------------

LOCAT

Token Number (code).....

--	--

TN

Unique ID

--	--

ID

This unique ID can be referenced from the street and shelter interviews

Entered by (code).....

--	--

EC

Checked by (code).....

--	--

CC

SECTION 1 - Informed Consent

Hello, my name is _____. We have been visiting the streets and shelters in this area to talk to children on the street. We invited you here today because we want to ask you a set of questions about yourself and then ask you the same questions about your friends on the street between the ages of 14-17 years who sleep in the same area. We won't share any of the information you tell us. We are using this information to come up with the total number of children on the streets. You do not have to answer any questions you feel uncomfortable with and can stop at any time. *Administer 'Appendix 15: Consent form for children 14-17 years old interviewed for social network sampling.'*

SECTION 2 – Basic Information

[For children interviewed during the shelter or night count on the street] I know you may have answered some of these questions before during an interview with our team. I hope it is ok if I ask some of these questions again. We want to make sure that we got the answers right when we spoke with you before.

[For children who have not been interviewed previously] I would like to start by asking you some basic questions about yourself.

¹ Please note that this survey tool has been drafted to give countries a general idea of the kind of tool needed for data collection. However, many of the terms here have not been fully operationalized. Research teams should contextualize a tool to fit the national context.

2.1 What is your name?

Given name	Surname
------------	---------

NAME

2.2 Is there another name or nickname that people often call you? What is it?

Nickname

NICK

2.3 How old are you? (in completed years)

--	--

AGE1
[If child doesn't know age, probe using significant social events.]

2.4 Interviewer's confidence in reported age

1. High	2. Medium	3. Low
---------	-----------	--------

AGE2
[Note: This should be assessed by the interviewer. It is not a question for the child.]

SECTION 3 – CDC Criteria

3.1 Do you go to school on most days?

1. YES	2. NO
--------	-------

SCHOOL1
If no, skip 3.2

3.2 Where do you go to school?

--

SCHOOL2

3.3 Do you live with your parents?

1. YES	2. NO
--------	-------

PARENT
If yes, skip 3.4

3.4 Do you live with another biological adult relative?

1. YES	2. NO
--------	-------

RELAT
(i.e., grandparent, aunt, uncle, adult cousin, adult sibling, other adult relative)

3.5 Do you live on the street (always or sometimes)?

1. YES	2. NO
--------	-------

STREET
For children found on the street during the night-time count, the answer to this question is automatically "yes" and therefore the question doesn't need to be asked.

3.6 Do you think of yourself as a street child?

1. YES	2. NO
--------	-------

SELF_IDENT

In order to proceed with the survey, a child must answer "no" to questions 3.1, 3.3, or 3.4 or "yes" to questions 3.5 or 3.6. Children who do not meet this inclusion criteria are not eligible to continue with the remaining questions. In these cases, please skip directly to "Conclusion."

SECTION 4 – Identifying information

Enter Don't Know (DK) if the child does not know the information. Enter Not Applicable (NA) if the information doesn't apply (e.g., the child doesn't do anything to make money).

4.1 Where are you from originally?
Probe: Where were you born?

ORIG

4.2 What is your mother's name?

MOM

4.3 What is your father's name?

DAD

4.4 Where do you live now?
Probe: Try to get a specific location for where the child normally sleeps (e.g., under the bridge near the market, rather than simply "on the street")

LIVE

4.5 What do you do to make money?

JOB1

4.6 In what part of town do you work?

JOB2

4.7 Do you earn money on a daily basis?

1. YES

2. NO

JOB3

4.8 If we asked other children on the street who knew you to describe you, what do you think they would say about you?
Probe: We are talking about specific, identifiable characteristics such as "the kid with one leg" or "the kid who is good at braiding hair."

OTHER

(Note to interviewers: We do not want general traits that can't be validated like "Jose is kind and funny".)

SECTION 5 – Network sampling

5.1 Can you please tell me the names of about eight of your friends or children you know who live on the street in [sentinel surveillance area Y]. When I say 'live on the street', I mean children who: do not attend school regularly; live out of family care; live full or part-time on the street; or self-identify as a street youth or street child [Ref: Section 3 CDC Criteria]

Please only give me names of other children like you who are 14 to 17 years old.

Given name	Surname	FRIEND1
------------	---------	----------------

Given name	Surname	FRIEND2
------------	---------	----------------

Given name	Surname	FRIEND3
------------	---------	----------------

Given name	Surname	FRIEND4
------------	---------	----------------

Given name	Surname	FRIEND5
------------	---------	----------------

Given name	Surname	FRIEND6
------------	---------	----------------

Given name	Surname	FRIEND7
------------	---------	----------------

Given name	Surname	FRIEND8
------------	---------	----------------

Given name	Surname	FRIEND9
------------	---------	----------------

Given name	Surname	FRIEND10
------------	---------	-----------------

Now I'd like to ask you to share some personal details about each of the children you named. Please answer these questions to the best of your knowledge. If you don't know the answers to some of the questions, that is ok, and you can just tell me "I don't know".

Instructions: First, ask all the questions in the left hand column as they relate to Friend 1. Then, repeat all the same questions for Friend 2, Friend 3, Friend 4, etc. Enter Don't Know (DK) if the child does not know the information. Enter Not Applicable (NA) if the information doesn't apply (e.g., the child doesn't do anything to make money).

	Friend 1	Friend 2	Friend 3	Friend 4	Friend 5
5.2 How old is [name of friend]?					
5.3 Is [name of friend] a boy or a girl?					
5.4 Does [name of friend] have a nickname that other kids call him or her? What is it?					
5.5 Where is [name of friend] from originally?					
5.6 What is [name of friend's] mother's name?					
5.7 What is [name of friend's] father's name?					
5.8 Where does [name of friend] live now? <i>(try to get a specific location for where the child sleeps)</i>					
5.9 If [name of friend] goes to school, which school does s/he attend?					
5.10 What does [name of friend] do to make money?					
5.11 In what part of town does [name of friend] work?					
5.12 Is there anything else that most people would use to describe [name of friend]?					

See next page for Friends 6 through 10.

Friends 6 through 10

	Friend 6	Friend 7	Friend 8	Friend 9	Friend 10
5.2 How old is [name of friend]?					
5.3 Is [name of friend] a boy or a girl?					
5.4 Does [name of friend] have a nickname that other kids call him or her? What is it?					
5.5 Where is [name of friend] from originally?					
5.6 What is [name of friend's] mother's name?					
5.7 What is [name of friend's] father's name?					
5.8 Where does [name of friend] live now? <i>(try to get a specific location for where the child sleeps)</i>					
5.9 If [name of friend] goes to school, which school does s/he attend?					
5.10 What does [name of friend] do to make money?					
5.11 In what part of town does [name of friend] work?					
5.12 Is there anything else that most people would use to describe [name of friend]?					

Conclusion

Thank you for taking the time to speak with me today. I have asked all of my questions.. As I mentioned before, the information you have shared with us today will be used to find out how many children are on the street. Do you have any other questions that you would like to ask me today before we say goodbye?

As a small thank you for spending time with me today, I have some [*Plumpynut or some nutritional supplement*] and a small compensation [*as determined by the country team*] to give you for participating in this interview.

Appendix 17a: Consent form for directors of shelters in urban areas or places where collection of identifiable information is deemed unsafe

Introduction: Hello, my name is _____. I am one of the interviewers of a survey being done with the government. We are conducting several surveys in [Country X] to count the number of children who live on the street or who stay in shelters. The goal of this count is to enable the national government to conduct routine surveillance of children who live on the street or who stay in shelters and to see how they can improve services to ensure children are safe.

The focus of our visit here is to count the number of children below the age of 18 years who sleep in the shelter overnight. Are there children below the age of 18 years who stay in this facility?

- Yes
- No (not eligible to participate)

If you agree, members from our team will come back to your facility at some point later this month to count all the children who will be sleeping here that night. For each child who comes into your shelter, we will record their age and sex. No identifying information will be collected on any child.

Risks and Benefits: There should be no risk to you or your facility if you agree to have your shelter participate. Participation will not be used for determining your eligibility for any government programs, and there will be no monetary compensation for participating in this activity. All children in your facility during our nighttime count will receive [Plumpynut or some nutritional supplement]. We hope that the results of these activities will help us learn more children staying in shelters.

Questions & Concerns: Is there anything you would like to know about this activity?

If you have questions at any point, you can contact [X Person] at the address and phone number below with any problems or questions you may have.

Informed Consent:

Will you allow us to conduct a Nighttime head count?

- Yes
- No

(If the answer is “no”, thank the director/ Participants for their time and end. Note the refusal to participate in the Facility List Data Collection Tool.)

Facility Name: _____

Participant's name: _____ Participant's ID #: _____

Signature or initials of respondent: _____

Date: _____

Signature of study team obtaining consent _____

Date: _____

Appendix 17b: Consent form for informants at shelters in urban areas or places where collection of identifiable information is deemed unsafe

Introduction: Hello, my name is _____. I am one of the interviewers of a survey being done with the government. We are conducting several surveys in [Country X] to count the number of children who live on the street or who stay in shelters. The goal of this count is to enable the national government to conduct routine surveillance of children who live on the street or who stay in shelters and to see how they can improve services to ensure children are safe.

The focus of our visit here is to count the number of children below the age of 18 years who are sleeping in the shelter tonight. For each child who comes into your shelter, we will record their age and sex. No identifying information will be collected on any child. We have already spoken with the director of this facility and received permission to conduct this activity.

Risks and Benefits: There should be no risk to you or your facility if you agree to participate. Participation will not be used for determining your eligibility for any government programs, and there will be no monetary compensation for participating in this activity. All children in your facility during our nighttime count will receive [Plumpynut or some nutritional supplement]. We hope that the results of these activities will help us learn more children staying in shelters.

Questions & Concerns: Is there anything you would like to know about this activity?

If you have questions at any point, you can contact [X Person] at the address and phone number below with any problems or questions you may have.

Informed Consent:

Will you allow us to conduct a Nighttime head count? Yes

No

(If the answer is “no”, thank the participant for their time and end. Note the refusal to participate in the Facility List Data Collection Tool.)

Facility Name: _____

Participant’s name: _____ Participant’s ID #: _____

Signature or initials of respondent: _____

Date: _____

Signature of study team obtaining consent _____

Date: _____

Appendix 18: Plant-capture data collection tool

Sentinel Site: _____
Street Area: _____
Street Code: _____
Date: _____
Plant Code: _____
Time of arrival: _____
Time of departure: _____

Did an enumeration team visit the site where you were staying?

- Yes No

If yes, approximate time of arrival _____

Was at least one of the people in your pair interviewed by the enumerators?

- Yes No

Additional Questions

How many street children were at your designated site when the enumeration team arrived: _____

How many of them were interviewed: _____

Notes: