

ANNEX A: COMPREHENSIVE NOTES ON TABLE I: CHILDREN IN ADVERSITY: A GLOBAL PROFILE

Introduction

Table 1 provides the most comprehensive and up-to-date data currently available to quantify various categories of children in adversity. There is currently no single global method to define and measure “children in adversity,” the target population of Public Law 109-95. Instead, this table includes estimates of children in adversity due to root causes – such as extreme poverty – and estimates of the number of children suffering the consequences of poverty, disaster, conflict, family dissolution, and other factors that threaten their physical and emotional well-being.

Despite the amount of global data that is included in Table 1, huge gaps exist in our ability to estimate the total number of children who are in adversity. In some cases, such as for children who are disabled or children with blood levels above 10 µg/dl, the source(s) on which commonly used estimates were based on data that is not fully representative of all children, whether due to sparse data collection or to survey question that have been interpreted differently across cultures. Also, not reflected in the table are gaps in our ability to collect data on other children who are facing equally adverse situations. For example, there is no current estimate of the global number of children who are in psychological or social distress, or the number of children who face abuse outside of the home in schools, religious institutions, or athletic organizations.

However, although there are gaps and a long way to go in terms of fully comprehensive data on children in adversity, the data is improving for many of the indicators in Table 1. Petrowski et al. (see indicators 8 and 9) state that, while data from 39 countries on residential care is available for the years 2006-2010, there are 99 countries represented in the data from 2011-2017. Forced displacement due to conflict and forced displacement due to disaster are now reported by the same organization (International Displacement Monitoring Centre, although age-disaggregated data on internal displacement is very limited and IDMC is only able to report new displacements in 2016 due to disaster given the scarcity of data on those that remain displaced from disasters in prior years). The UNICEF “Violence in the Lives of Children” report shows that in 2005 there were 39 countries with internationally comparable data on violent discipline, and by 2016 there were 80. The number of national datasets included in the 2016 ILO estimate of children in hazardous work was 105, which is a great improvement over the 75 datasets available in 2012 and 60 in 2008. HIV estimates are continually improving, with the addition of household survey data, case reports and vital registration; improvement in the modeling (see indicators 6 and 7) and country capacity; and the number of countries participating in the UNAIDS HIV estimation workshops increased from 131 in 2003 to 160 in 2016 (Mahy M, et al. “Producing HIV estimates: from global advocacy to country planning and impact measurement”, Global Health Action 2017 vol. 10). Data is also more accessible and centrally available over the past 10 years, particularly through the UNICEF global databases, the UNESCO Institute for Statistics database, and the SDG indicators Global Database.

Comprehensive and reliable data are needed to understand the size of the populations of children in adversity and where they are located – to plan how to best reach these children with resources and services, and to monitor whether interventions are making a difference. U.S. Government agencies, as well as external partners, need good data to monitor the effect of joint efforts on reducing the vulnerability of the children who are the focus of interventions. However, as is evidenced by the remaining gaps in existing data, there are enormous challenges to comprehensively quantifying the spectrum of adversity children can face, including:

1. The definitions used to describe and to count children in adversity vary. Policymakers, programmers, donors, and researchers may focus on similar target groups but can use different definitions to describe the children with whom they work.
2. It is often difficult to find children in adversity and, therefore, to “count” them. The situations that cause children to be vulnerable often reflect their position outside of mainstream society – sometimes they are participating in illegal activities or are actively trying not to be found. For the same reasons that it is difficult for child protection systems and service providers to track down these children, it is difficult to “capture” them in data sets (e.g., trafficked children, children in the worst forms of child labor, and children associated with armed forces or groups). In addition, most population-based surveys generally use a system of data collection that relies on interviewing heads of households, which would preclude data on children in street situations, institutionalized children, other children outside of family care, and likely bias responses to indicators such as sexual abuse of children.
3. There is a great deal of overlap among various types of vulnerable children. Double counting would be a major threat to creating a summary statistic that represents “children in adversity” if the summary statistic required that data be combined from various different data sets, such as those represented in Table 1.

The following are the criteria used to determine inclusion in Table 1:

- The number or percent is from a report supported by documented national household and community surveys or administrative data (Demographic and Health Surveys- DHS, Multiple Indicator Cluster Surveys- MICS, AIDS Indicator Surveys- AIS, income and living standards surveys, education administrative data, and data from United Nations High Commissioner for Refugees-UNHCR).
- The number or percent is from a database supported by an organization with credible reputation (UN Population Division World Population Prospects database; United Nations Children’s Fund- UNICEF Statistical Databases, United Nations Educational, Scientific, and Cultural Organization- UNESCO Institute for Statistics- UIS database; UNHCR Statistical Online

Population Database, and Internal Displacement Monitoring Center-IDMC- Global Internal Displacement Database- GIDD).

- The number or percent comes from a UN agency or World Bank official or official document, and the definition of the indicator is clear in that communication or document (even if the sources and/or methodology for calculation are vague). It is assumed that numbers used in official UN and World Bank documents have already been vetted, and that those agencies stand behind them.
- Numbers or percents given on Web pages were not included unless they were validated by personal communication with the organization giving the statistic, or by one of the inclusion criteria stated above.

Please note that the year(s) given in Table 1 is the year(s) for the data in the original source, and not the year of the document publication. For example, for children in hazardous work, the year given for the global number and percent in the ILO Report “Global Estimates of Child Labor” is 2016, although the report was published in 2017. In addition, the age range that is given for each indicator in Table 1 is the age range captured by the data source. For example, “Children who are stunted” refers to only to the population of children aged 0-4 (0-59 months), and “Women aged 20-24 who were married before age 18” refers only to the 20-24 age group of women that were sampled, and not all females or females under age 18. Thus, the total numbers given in Table 1 are not comparable unless the age group and coverage (regional/global) given for one or more indicators are identical.

Notes on the calculation of numbers and percents given in the Indicators of Table 1:

Many sources of information present estimates of vulnerable children as either percents or absolute numbers, but not both. In these cases, a consultant from Avenir Health was engaged by the USAID Center on Children in Adversity to analyze a selection of publically available statistics related to children and population, and used what was given in the source (either a number or a percent) in combination with population estimates matching the source age, gender (if applicable), and geographic groupings to calculate a percent (if only an absolute number was provided in the source) or number (if only a percent was given). Unless the particular source material presented its own population estimates, the 2015 population estimates of the United Nations Population Division were used.

The Population Division of the United Nations Secretariat estimates in the World Population Prospects (this will be abbreviated as UNPP 2017) the population of every country, as well as regional, developing country, and global totals. Global population estimates had traditionally been released only for five-year cohorts (e.g., 0–4, 5–9, etc.), disaggregated by sex. However, in the latest iteration of the UNPP 2017, the Spectrum model and Beer’s formula had been used to create tables with single age groups that had been interpolated from the 5-year age groups. These single age

groups could then be added together to create age groupings (such as aged 0-17) that do not break down by five-year cohorts. Applicable to the table percent or number calculations are:

Population [female, global excluding China] aged 20-24: 243,796,000

Population [female, global] aged 10-19: 582,880,000

Population [male, global] aged 10-19: 623,166,000

Child population [global] aged 0-17: 2,287,093,000

Child population [less developed regions] aged 0-17: 2,040,425,000

Child population [Central and Eastern Europe- CEE/Commonwealth of Independent States- CIS, Middle East and North Africa- MENA, and High-income countries] aged 0-17: 476,027,000

Child population [female, global] aged 0-17: 1,104,788,000

Child population [male, global] aged 0-17: 1,182,305,000

Child population [global] aged 5-17: 1,567,994,000

Child population [least developed regions] aged 1-14: 354,691,000

Child population [global] aged 0-14: 1,930,532,000

Child population [global] aged 0-4: 673,650,000

Child population [global] aged 0-4: 604,529,000

Here is an example of the calculation of a number from the percent given in a source:

Indicator 3: Children who are stunted. The percent was given in the source (UNICEF. State of the World's Children. 2017). It can be seen in Table 1 that the age group from the source is 0–4, and the coverage of the indicator is global. As no global population aged 0–4 is given in the source, the 2015 global (five-year cohort) population aged 0–4 was taken directly from the World Population Prospects. That population is given above as 673,650,000. Thus, you have: .229 (or 22.9%) * 673,650,000 = 154,265,850 (rounded to 154,300,000).

The population year 2015 was used in all cases to make the absolute levels of the indicators approximately comparable. Please note, initial versions of Table 1 for the PL109-95 Annual Report used a 2005 base year and the last several versions have used a 2010 base year, given that those population base years were closest to the years of the adversity indicator data at the time of the Annual Report publication. As the 2015 base year is the most recent published and is closest to the adversity indicator data years in the current Table 1, it was used in this report. *The reader must therefore interpret the changes in the indicators between Annual Reports with caution, as the source data may not have changed, but the number or percent in the table that is calculated from the source may have changed simply because the reference population has been updated to 2015 and the 2015 estimate is now drawn from the 2017 World Population Prospects.*

Finally, the term “developing countries” is used for simplicity in Table 1 to refer to an aggregate that can be categorized differently by source. For example, the World Population Prospects uses “less

developed regions”, the World Bank can use “low- and middle- income countries”, and UNICEF uses “developing countries” in some publications and a narrower “least developed countries” in the State of the World’s Children. These aggregates do not necessarily contain the same list of countries (and thus the same aggregate population numbers), and therefore in the Annex the exact aggregate used by the source is given so that users may replicate the calculations if they desire.

(1) (a,b) Population

Source: Number for children aged 0-4 [global] and number for children aged 0-17 [global] from United Nations Population Division (UNPP). 2017. Percent calculated by dividing the number for children [global] aged 0-4 and 0–17 (numerator) by the 2015 estimate of the total population [global] from UNPP. 2017 (denominator). *Basis¹:* Modeled estimates using extensive national survey data. *Trends and disparities available* in the 2017 United Nations Department of Economic and Social Affairs report on “World Population Prospects: the 2017 Revision” at: https://esa.un.org/unpd/wpp/publications/Files/WPP2017_KeyFindings.pdf

(2) Children living in extreme poverty (less than \$1.90 per day) (aged 0–17)

Source: Number and percent from World Bank: Newhouse D, Suarez-Becca P, Martin CE, and the Data for Goals Group. 2016. New Estimates of Extreme Poverty for Children. Policy Research Working Paper 7845. *Basis:* Modeled estimates using extensive national survey data. *Trends and disparities available* in the 2016 source report by Newhouse et al. at: <http://documents.worldbank.org/curated/en/402511475417572525/New-estimates-of-extreme-poverty-for-children> ; and the 2016 UNICEF and World Bank report “Ending Extreme Poverty: A Focus on Children” at: https://www.unicef.org/publications/index_92826.html

The World Bank recommends using a per capita household welfare poverty line of \$1.90 per day as the threshold for extreme poverty and estimates the population in developing countries living in extreme poverty using the revised 2011 purchasing power parity (PPP) constant prices that are based on expenditure surveys and extrapolations to countries where expenditure surveys do not exist. Please note that \$1.90 threshold has been updated from the \$1.25 threshold, and the 2011 PPP constant prices updated from the 2005 PPP prices, used in previous versions of Table 1. The Global Micro Database (GMD) was described by Newhouse et al. to apply a standardized set of household characteristics to “the same surveys and welfare measures that are used to produce the poverty estimates published by the World Bank (a sample of 104 surveys from 89 developing countries)”.

In the previous version of Table 1, the following process was used to create the estimate of children in extreme poverty: A number of children living in extreme poverty was cited in UNICEF’s “Child Poverty in the Post-2015 Agenda” paper, as drawn from a 2013 analysis by Olinto et al., which estimated that 47% of the population living in extreme poverty in developing countries are children (Olinto et al. The State of the Poor, Where are the Poor, where is Extreme Poverty Harder to End, and what is the Current Profile of the World’s Poor. *Economic Premise* (World Bank) No. 125. 2013). Olinto et al. cited a figure of 1,210 billion people living in extreme poverty in developing countries

in 2010 (based on PovcalNet estimates at the time), and UNICEF multiplied 1,210 billion by 47% to arrive at a total of 567.8 million children.

Please note, UNICEF now utilizes the same child poverty statistics (and source- Newhouse et al.) that are in this current version of Table 1. They cite figures of 385 million (19.5% of) children living in extreme poverty in their 2016 report “Ending Extreme Poverty: A Focus on Children”.

(3) Children who are stunted² (aged 0–4)

Source: Percent from UNICEF. State of the World’s Children. 2017. Number calculated by multiplying the percent of children that are stunted [global] aged 0-4 by the 2015 estimate of the child population [global] aged 0-4 from UNPP.2017. *Basis:* Extensive national survey data. *Trends and disparities available* in the 2017 UNICEF report on the “state of the World’s Children” at: https://www.unicef.org/publications/index_101992.html

The UNICEF State of the World’s Children 2017 report presents the global percent of children who are stunted among all children aged 0–4, which is a population-weighted average calculated from DHS and MICS surveys (2000–2016). Stunting is a measure of chronic malnutrition and/or inadequate attention and stimulation. As stated in the World Bank. Children and Youth, Notes on Child and Youth Development Volume III (no.1):

“Stimulation is a critical input to maximize the impacts of nutritional interventions. Children who are stunted or otherwise malnourished will benefit from effective nutritional interventions, especially before the age of two, but they cannot catch up to well-nourished children in overall human development (including growth, cognitive, language, social, and motor development) if they do not receive proper stimulation in the early years.”

(4) Children who are disabled³ (aged 0–17)

Source: Percent of total population that is disabled from WHO and World Bank. World Report on Disability. 2011. Percent of children disabled is assumed to be the same as percent of total adult population disabled. Number of children disabled calculated by multiplying the percent of children who are disabled [global] aged 0–17 by the 2015 estimate of the child population [global] aged 0–17 from UNPP.2017. *Basis:* Limited national surveys. *Trends and disparities available* in the 2011 WHO and World Bank source “World Report on Disability” at: http://www.who.int/disabilities/world_report/2011/report.pdf

The percent of the total adult (18 years and older) population disabled that is used to calculate child disability in Table 1 is the average of 15.6% from the WHO World Health survey 2002-2004 and 15.3% from the WHO Global Burden of Disease Study 2000-2004 (2004 Update). The WHO World Health survey percentage is based on a threshold survey score of “40”, or those experiencing significant difficulty in their everyday lives. The WHO Global Burden of Disease percentage is based upon a category of “moderate to severe disability”, severe being a level of disability akin to quadriplegia or blindness. The World Report on Disability states that these percentages should be interpreted with caution because of variations in interpretation of disability across cultures, debate

concerning survey scores thresholds for various levels of disability (significant disability, very significant disability), and a lack of data for some regions and some conditions.

Please note that UNICEF does not include measurement of disabled children in the 2013 State of the World's Children: Children with disabilities report, due to flaws in past measurement of disability and a desire to avoid labeling children with disabilities as a problem. It was decided that a disability statistic, though flawed, be included in Table 1 because it is a serious problem that the large population children with disabilities have not been equally protected and assisted.

A disability module had previously been included in the MICS surveys, and children aged 2-9 were enumerated as disabled if they had at least one reported disability (i.e., cognitive, motor, seizure, vision, hearing, or speech). The disability module has been included in very few surveys since the MICS 3 in 2005-2006. This is due to the difficulties in accurately surveying across cultures on disability (different interpretation of what disability is), different aspects of disability being examined (i.e. impairments, activity limitations, participation restrictions), and reporting bias because it is the head of household that has been interviewed and not the affected child. The Washington Group on Disability Statistics currently has a mandate to assess whether the short set of questions developed by the group⁴ to more accurately assess disability across countries is applicable to children, to evaluate field test data to determine at what age the results are meaningful, to create specific question modules that can survey children directly, and to create tools supporting disability data collection in censuses and national surveys. Despite a great deal of effort by the Washington Group on Disability Statistics, UNICEF, and other partner organizations to field-test a revised module over the past few years, further refinement and field-testing is required to refine the reliability and construct validity in translation of the survey instrument.

It should be noted that the WHO Global Burden of Disease does have an estimated prevalence of moderate to severe disability specifically for children aged 0-14 of 5.1%. In comparison, the prevalence of disability in children reported in MICS surveys is between 14% and 35%, which is likely an overestimate. Because of the present difficulty in accurately measuring disability in children (especially in low-income countries, where prevalence may be higher, but disabled children may die younger), consulted experts on disability recommended to use the current adult prevalence rate reported in the World Disability Survey until better information is available.

(5) Children with blood lead levels above 10 µg/dl (aged 0-4)

Source: Data was formerly on a WHO website

(http://gamapserver.who.int/gho/interactive_charts/phe/lead_exposure/GHO_phe_lead_exposure.html) that is now inactive. However, data was confirmed by the department of Evidence and Policy on Environmental Health at the WHO at the time the website was active, and re-confirmed in 2018 that there is no updated summary data at the global or all developing country level. Number of children with blood lead levels above 10 µg/dl calculated by multiplying the percent of children with blood lead levels above 10 µg/dl [global] aged 0–4 by the 2015 estimate of the child population

[less developed regions] aged 0–4 based on the UNPP. 2015. *Basis*: Limited scientific surveys. *Trends and disparities available (limited information)* in Clune AL, Falk H, and Riederer A. 2011. Mapping Global Environmental Lead Poisoning in Children. *Blacksmith Institute Journal of Health and Pollution* 1(2) at: <http://www.journalhealthpollution.org/doi/full/10.5696/2156-9614.1.2.14?code=bsie-site> ; and in Attina TM, and Transande L. 2013. Economic Costs of Childhood Lead Exposure in Low- and Middle-Income Countries. *Environmental Health Perspectives* 121(9) at: <https://www.ncbi.nlm.nih.gov/pubmed/23797342>.

In January 2012 the CDC lowered the threshold at which a child is deemed to have an elevated blood level to 5 µg/dl, due to new research showing negative impacts on cognitive function, the cardiovascular system, immunological response, and the endocrine system (Centers for Disease Control. “Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention.” 2012). Of particular concern to pregnant women, there is not a minimum threshold below which lead has not been seen to cause harm to neural development. Lead exposure comes primarily from lead paint, in addition to lead added to fuel, contaminated soil, lead solder in food cans, drinking water passed through lead pipes, lead in cosmetics and toys, herbal remedies, incineration of lead waste, and lead batteries, the latter of which comprise 80% of global lead consumption (WHO. *Childhood Lead Poisoning*. 2010). Blood lead levels in developing countries are five to ten times greater than those seen in Western countries, in part due to the export of lead-based chemicals for use in paint and other materials banned in the United States (personal communication from OK International). At lead levels above 10 µg/dl, acute lead toxicity can result in mental retardation, convulsions, coma, and death.

Please note, the geographic representation of the lead indicator is “developing countries” in Table 1. Although the original source cites the figure as global, WHO has communicated that approximately 97% of lead exposure is in developing countries.

(6) (a) Children living with HIV (aged 0–14)

Source: Number from UNICEF Statistical Tables 2017, drawn from the Joint United Nations Programme on HIV/AIDS (UNAIDS) 2017 estimates at <https://data.unicef.org/topic/hivaids/global-regional-trends/#> . Percent calculated by dividing the number of children living with HIV [global] aged 0–14 (numerator) by the estimate of the child population [global] aged 0–14 (denominator) from UNPP. 2017. *Basis*: Modeled estimate using extensive national survey data. *Trends and disparities available* in the source website. Additional sources include the 2017 UNAIDS Data Book at: http://www.unaids.org/sites/default/files/media_asset/20170720_Data_book_2017_en.pdf ; and the 2016 UNICEF 7th Stocktaking Report “For Every Child, End AIDS” at: https://www.unicef.org/publications/index_93427.html

These estimates include all children under age 15 with HIV infection, whether or not they have developed symptoms of AIDS, for the year 2016. These have been produced and compiled by UNAIDS/WHO. The general methodology and tools used to produce the country-specific

estimates have been described in a series of papers in *Sexually Transmitted Infections* 2008; 84 (Suppl 1) “Improved Data, Methods and Tools for the 2007 HIV and AIDS Estimates and Projections,” and in *Sexually Transmitted Infections* 2006; 82 (Suppl 1), and also in the journal *AIDS* (2014; 28) under the title “Updates to the Spectrum Model to Estimate Key HIV Indicators for Adults and Children”. They have been shared with national AIDS programs for review and comments but are not necessarily the official estimates used by national governments.

As previously stated, the number of children living with HIV can vary from previous estimates because of updated model assumptions concerning different modes and timing of vertical transmission, treatment coverage and effectiveness, the survival of young women of childbearing age living with HIV, and survival of children living with HIV. Those cited in Table 1 are from UNICEF statistical databases that are underpinned by UNAIDS estimates released in July of 2017 and represent the latest round of modeling for the AIDS epidemic. Children living with HIV are now broken into four categories for modeling purposes: those infected intrapartum, and those infected 0-6 months, 7-12 months, and 12+ months after birth through breastfeeding. Each category has a different progression pattern to death, with those infected intrapartum dying much more quickly in the absence of ART and cotrimoxazole prophylaxis than those infected at 0-6 months, who in turn die more quickly than those infected 7-12 months. Previously it was assumed that difference in prevalence between pregnant women tested at ANC clinics and prevalence in adults 15-49 did not vary over time, whereas new analysis has shown that this difference does change as the epidemic matures and the HIV population becomes in general older, while the population testing positive at ANC centers does not change much unless age-specific fertility patterns change. A result has been that the prevalence curves projected for the history of the epidemic by country have been flatter at the peak of the epidemic, and therefore prevalence estimates and outcomes related to it, such as HIV in children and orphaning due to HIV, are comparatively lower since the 2014 Spectrum update.

(6) (b,c) Adolescents living with HIV (aged 10–19)

Source: Number from UNICEF Statistical Tables 2017, drawn from UNAIDS 2017 estimates at <https://data.unicef.org/topic/hivaids/global-regional-trends/#> . Percent calculated by dividing the number of adolescents [female, male] living with HIV [global] aged 10-19 (numerator) by the estimate of adolescent [female, male] population [global] aged 10-19 (denominator) from UNPP. 2017. *Basis:* Modeled estimate based upon extensive national survey data. *Trends and disparities available* in the source website. Additional sources include the 2017 UNAIDS Data Book at: http://www.unaids.org/sites/default/files/media_asset/20170720_Data_book_2017_en.pdf ; the 2016 UNAIDS and UNICEF Progress Report “All in to End the Adolescent AIDS Epidemic” at <http://www.unaids.org/en/resources/documents/2016/ALLIN2016ProgressReport> ; and the 2016 UNICEF 7th Stocktaking Report “For Every Child, End AIDS” at: https://www.unicef.org/publications/index_93427.html.

(7) (a) Children who have lost one or both parents due to all causes (aged 0–17)

Source: Number from UNICEF Statistical Tables 2017, drawn from UNAIDS 2017 estimates at <https://data.unicef.org/topic/hivaids/global-regional-trends/#> . Percent calculated by dividing the number of children who have lost one or both parents [global] aged 0–17 (numerator) by the 2015 estimate of the child population [global] aged 0–17 based on UNPP. 2017 (denominator).

Basis: Modeled estimate based upon extensive national survey data. *Trends and disparities available* in the source website and the 2016 UNICEF 7th Stocktaking Report “For Every Child, End AIDS” at: https://www.unicef.org/publications/index_93427.html.

The formula for calculating children who have lost one or both parents due to all causes (total orphans) is:

$$\text{Total orphans (d)} = \text{maternal orphans (a)} + \text{paternal orphans (b)} - \text{double orphans (c)}$$

As in the case of child and adolescent HIV estimates, these have been produced and compiled by UNAIDS/WHO (please see the modeling methodology description utilizing the Spectrum software under 6a “children living with HIV). Please note that the Spectrum program used to generate the orphan estimate was updated in 2014, to account for changes to mortality and to [previously assumed] inhibition of fertility with regard to the expansion and effectiveness of prevention of maternal to child transmission treatment. Therefore, the estimates of children who have lost one or both parents (to all causes and to AIDS) are not comparable to estimates in previous versions of Table 1.

(7) (b) Children who have lost one or both parents due to AIDS (aged 0–17)

Source: Number from UNICEF Statistical Tables 2017, drawn from UNAIDS 2017 estimates at <https://data.unicef.org/topic/hivaids/global-regional-trends/#> . Percent calculated by dividing the number of children who have lost one or both parents due to AIDS [global] aged 0–17 (numerator) by the 2015 estimate of the child population [global] aged 0–17 based on UNPP. 2017 (denominator).

Basis: Modeled estimate based upon limited national survey data. *Trends and disparities available* in the source website and the 2016 UNICEF 7th Stocktaking Report “For Every Child, End AIDS” at: https://www.unicef.org/publications/index_93427.html.

As, in the case of child and adolescent HIV estimates, these have been produced and compiled by UNAIDS/WHO (please see the modeling methodology description utilizing the Spectrum software under indicators 6a “Children living with HIV and 7a “Children who have lost one or both parents due to all causes”).

(8) Children in residential care⁵ (aged 0–17)

Source: Number from [UNICEF affiliated] Petrowski N, Cappa C, Gross P. 2017. Estimating the Number of Children in Formal Alternative Care: Challenges and Results. *Child Abuse and Neglect* 70: 388-398. Percent calculated by dividing the number of children in residential care [global] aged 0–17 (numerator) by the 2015 estimate for the child population [global] aged 0–17 based on UNPP.

2017 (denominator). *Basis*: Modeled estimate from limited administrative data, situation analysis reports, Eurochild national reports on alternative care, government websites and UNICEF Country Office Annual Reports, and the TransMonEE database (CEE and European Union). *Trends and disparities available* in the 2017 source report by Petrowski et al. at: <https://www.sciencedirect.com/science/article/pii/S0145213416302873>.

The estimate of children in residential care derived by Petrowski et al. was based upon data from 140 countries. The ‘rate applied’ estimate was used for Table 1. The ‘rate applied’ estimate was calculated by deriving a weighted average of regional data, and then applying that regional weight to the global child population to obtain a global estimate. The authors state that a minimum threshold of 33% of population coverage of available or the region to “qualify” the region to be eligible for the rate applied method. Also of importance, the modalities of residential care varied by countries, and the study authors allowed countries to determine whether different models of residential care institutions actually qualified as residential care according to the definition from the United Nations. For example, in some cases boarding schools may be considered as residential care, generally if the intent is to provide food and shelter for children who parents are unable to do provide such protection. Therefore, the estimate does involve some subjective interpretation. The authors did screen data points with basic quality checks, which included that the reference year and source of the data were clear. Also, where there were multiple data points for the same year and discrepancies between them, UNICEF country focal points and national program officers served as arbiters. Finally, it is most important to note that the estimate derived by Petrowski et al. is likely to be a significant underestimate of the actual number of children in residential [and foster] care, primarily due to the lack of data on children in non-governmental facilities. The authors state,

“Evidence from some parts of the developing world suggests the presence of many unregistered or unrecorded facilities that further hinder measurement efforts at the country level... In fact, the figures presented here are best understood as giving an *indication* of whether, and how well, a country’s monitoring systems are able to enumerate children in residential and foster care *rather than representing an exact count* of such children.... given the many challenges with accurately counting the number of children in alternative care, any estimates presented here at the global and regional levels are likely to underestimate the actual numbers of children living under these different care arrangements....In some countries, figures on the number of children in residential care may have only included those living in State-run facilities and would therefore be an underestimate since children in privately-run (i.e.,non-State) institutions would not have been included in the reported estimate.”

(9) Children in foster care⁶ (aged 0–17)

Source: Number from [UNICEF affiliated] Petrowski N, Cappa C, Gross P. 2017. Estimating the Number of Children in Formal Alternative Care: Challenges and Results. *Child Abuse and Neglect* 70: 388-398. Percent calculated by dividing the number of children in foster care [global] aged 0–17 (numerator) by the 2015 estimate for the child population [global] aged 0–17 based on UNPP. 2017

(denominator). *Basis*: Modeled estimate from limited administrative data, situation analysis reports, Eurochild national reports on alternative care, government websites and UNICEF Country Office Annual Reports, and the TransMonEE database (CEE and European Union). *Trends and disparities available* in the 2017 source report by Petrowski et al. at: <https://www.sciencedirect.com/science/article/pii/S0145213416302873>

The ‘rate applied’ estimate for children in foster care was the same utilized for residential care, with the exception that there was sufficient data available only for three regions (CEE/CIS, MENA, and Industrialized countries) and therefore no global estimate could be calculated. Regional weights derived from countries in the region with data were applied to the regional child population estimate (therefore applying the regional weight to those countries in the region without data). As in the case of residential care, the respondents providing data on foster care were allowed to interpret the which foster care modalities in their country were applicable according to the United Nations definition. For example, in countries like Ukraine and South Africa, ‘kinship’ care is defined as formal foster care arrangements (with care provided by friends or relatives) that are sanctioned and monitored by statutory bodies. Therefore, as in the case of residential care, the estimate does involve some subjective interpretation, although the same quality checks were utilized.

Please note that there was less availability of data for children in foster care. While there was data from 140 countries for residential care between 2006-2017, representing 84% of the global child population, there were only 88 countries with data points for foster care, representing 25% of the global child population. To create the population estimates for the regions with ‘rate applied’ estimates for foster care, child population (age 0-17) totals were drawn from each country in the World Population Prospects database that was included in UNICEF’s regional groupings for CEE/CIS and MENA. The child population for industrialized countries was drawn from the “high-income countries” grouping in the World Population Prospects.

(10) Children out of school⁷ (primary aged)

Source: Percent (rate of out-of-school children) and number from United Nations Educational, Cultural, and Scientific Organization (UNESCO) Institute for Statistics, downloaded 4_8_18. *Basis*: Extensive administrative data and national surveys. *Trends and disparities available* in the 2018 UNESCO Fact Sheet “One in Five Children, Adolescents, and Youth is Out of School” at: <http://uis.unesco.org/sites/default/files/documents/fs48-one-five-children-adolescents-youth-out-school-2018-en.pdf>.

Please note that in the UNESCO Institute for Statistics database, the percent of primary aged children out of school DOES NOT equal 100-net enrollment rate (NER) because “out-of-school” does not include those children of primary age enrolled in secondary school as being out-of-school. UNESCO bases “out-of-school” on the age-specific enrollment ratio or adjusted net enrolment ratio of primary aged children. Out-of-school children of primary age can be divided into those who have left school, those who are likely to enter school in the future, and those who are unlikely to ever attend school. These proportions vary by geographic area and underlying causes.

The out-of-school numbers given by UNESCO and UNICEF are now aligned, as the administrative data based on enrollment that has been traditionally used by UNESCO has been complemented by data from household surveys. The household surveys allow for both a method of tracking children who are enrolled but not attending school (at any time during the reference school year), and a way to better understand the characteristics of out-of-school children. While administrative data is only disaggregated by gender, household data gives information on such topics as wealth, living arrangements, and in some cases, working children. In 2010, UNICEF and the UNESCO Institute for Statistics launched the Joint Global Initiative on Out-of-School Children (OOSCI) to further progress universal primary education. A primary component of this initiative is to review harmonization on out-of-school data analysis methodology, and to improve the depth of information about out-of-school children by detailing the complex and multiple disparities faced by out-of-school children in an effort to better target programs to enroll and sustain school participation for those who are most vulnerable.

(11) Children uprooted due to conflict or natural disaster (aged 0–17)

Source a: 1) Total number of refugees registered with the United Nations High Commissioner for Refugees UNHCR. Statistical Yearbook 2016. 2017. The number of refugee children of concern to UNHCR was calculated by multiplying the total number of persons who are refugees (including people in refugee like-situations and asylees) registered with UNHCR [global] by 51% (which is the percent of the total persons who are refugees under the UNHCR mandate aged 0–17); 2) Total number of refugees registered with United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) is from UNRWA as of the third quarter of 2017, via the UNRWA Statistical Bulletin for the Third Quarter of 2017; 3) The number of children who are refugees (including those in refugee-like situations and asylees) to UNHCR and the number of children who are refugees of concern to UNRWA were summed together to calculate the total number of children who are refugees. Percent of children [global] who are refugees was calculated by dividing the number of children who are refugees [global] aged 0–17 (numerator) by the 2015 estimate of the child population [global] aged 0–17 based on UNPP. 2017 (denominator). *Basis:* Extensive administrative and UNHCR/UNRWA country office data.

Source b: 1) Total number of internally displaced people⁸ as a result of conflict or persecution: IDMC. New Displacements by Conflicts and Disasters in 2016. 2017. The number of internally displaced children as a result of conflict or persecution [global] aged 0–17 was calculated by multiplying the total number of internally displaced people as a result of conflict or persecution [global] by 41.4%, which is the percent of children aged 0-17 displaced by conflict calculated by Avenir Health from the UNICEF 2017 report “Uprooted: The Growing Crisis for Refugee and Migrant Children” (the report states that 41 million people were internally displaced due to conflict, 17 million of which were children). Percent calculated by dividing the number of internally displaced children as a result of conflict or persecution [global] aged 0–17 (numerator) by the 2015 estimate of the child population [global] aged 0–17 based on UNPP. 2015 (denominator). 2) Total number of internally displaced people as a result of disaster⁹: IDMC. New Displacements by Conflicts and Disasters in 2016. 2017. The number of internally displaced children as a result of disaster [global] aged 0–17 was

calculated by multiplying the total number of internally displaced people as a result of disaster [global] by 41.4%, which is the percent of children aged 0-17 displaced by conflict calculated by Avenir Health from the UNICEF 2017 report “Uprooted; The Growing Crisis for Refugee and Migrant Children” (the report states that 41 million people were internally displaced due to conflict, 17 million of which were children). Percent calculated by dividing the number of internally displaced children as a result of disaster [global] aged 0–17 (numerator) by the 2015 estimate of the child population [global] aged 0–17 based on UNPP, 2015 (denominator). *Basis:* Extensive administrative, and UN and NGO country office data.

Sources a and b were added together to obtain the estimate of children uprooted by conflict or disaster. *Trends and disparities (although using a source with slightly different groups included- see * below) available in the 2017 UNICEF report “Uprooted: The Growing Crisis for Refugee and Migrant Children” at: https://www.unicef.org/publications/index_92710.html.*

**Please note, the estimate of children uprooted by conflict or disaster in Table 1 DOES include children displaced by disaster (while the UNICEF estimate of children “Uprooted” DOES NOT include them in their estimate of children uprooted). In addition, the estimate of children uprooted by conflict or disaster in Table 1 DOES NOT include child migrants as uprooted due to conflict or disaster (while the UNICEF estimate of children “Uprooted” DOES include them in their estimate of children uprooted.).*

This indicator is a summation of children who are refugees (including those in refugee-like situations and asylees) or internally displaced. It is calculated as follows:

Children uprooted due to conflict or natural disaster = refugee children (including those in refugee-like situations and asylees) + internally displaced children (as a result of conflict or persecution) + internally displaced children (as a result of natural disaster)

UNHCR only collects data on internally displaced persons *it assists* and refers those looking for information on *total* IDPs to the IDMC. IDMC reports do not have global demographic information on IDPs by age. The collection of core data on IDPs is generally considered to be a responsibility of national authorities, and methodologies vary greatly. The 2017 Global Trends Report states that 11 of 56 reporting countries had data disaggregated by age. Therefore, although there is some individual country data (largely for the higher income countries) that gives the proportion of IDPs that are children, there is no accurate assessment by region or globally. The proxy used for the calculation in Table 1 is from the 2017 “Uprooted” report, as described above in the sourcing. Also, please note, IDMC is only able to report on the global number of NEW displacements due to disaster and is not able to obtain the number of all people displaced by disaster (i.e. new displacements plus those that remain displaced from disasters in prior years).

(12) Children who have experienced violent discipline at home¹⁰ (aged 1-14)

Source: Percent from UNICEF. A familiar face. Violence in the Lives of Children and Adolescents. 2017. Number calculated by multiplying the percent of children who have experienced violent discipline [developing countries] aged 1-14 by the 2015 estimate of the child population [less

developed regions] aged 1-14 based on UNPP. 2017. *Basis:* Limited national survey data, from Multiple Indicator Cluster Surveys (MICS), Demographic and Health Surveys (DHS), and Global School-Based Health Surveys (GSHS). *Trends and disparities available* in the source 2017 UNICEF report on “Violence in the Lives of Children and Adolescents” at: https://www.unicef.org/publications/files/Violence_in_the_lives_of_children_and_adolescents.pdf.

The MICS3-5 surveys include a child discipline module, which questions the respondent on violent discipline in the past month by any primary caregiver (and not just the behavior of the respondent). The module is based upon the Parent-Child Conflict Tactics Scale (CTSPC), which was selected from among numerous survey instruments due to its demonstrated reliability and validity across cultures, and applicability to an age range from young children to adolescents.

Since January of 2010, UNICEF has updated the MICS sampling methodology concerning children who have experienced violent discipline at home to use child-based sampling weights rather than the previously used household-based weights. The analysis of previous surveys utilized for the UNICEF “Child Disciplinary Practices at Home” Report was analyzed accordingly. Research has shown that households with larger numbers of children and overcrowding have higher levels of violent discipline, and thus it is more accurate to include weighting on a child level. The comparison of the child-based weights to the household-based weights in the UNICEF “Child Disciplinary Practices at Home” report shows that using child-based weights increases the estimate of violent discipline by 1-3% for most countries.

These indicators only refer to violent discipline “at home.” Global numbers could not be found for an inclusive measure of psychological or physical abuse that children encounter at home, in school, in the workplace, or in other settings outside the home. It is important to note that many children who experience violent discipline are subject to more than one form of it.

(13) Adolescent girls who have experienced forced sex¹¹ (aged 15-19)

Source: Number from UNICEF. A familiar face. Violence in the Lives of Children and Adolescents. 2017. Percent calculated by dividing the number of adolescent girls aged 15-19 who have experienced forced sex in their lifetime [global] by the 2015 estimate of the adolescent populations [female] [global] aged 15-19 based on UNPP. 2017. *Basis:* Limited national survey data, primarily from Demographic and Health Surveys (DHS). *Trends and disparities available* in the 2017 UNICEF report on “Violence in the Lives of Children and Adolescents” at: https://www.unicef.org/publications/files/Violence_in_the_lives_of_children_and_adolescents.pdf.

The UNICEF Report on “Violence in the Lives of Children” does not report a global estimate on sexual abuse, as has been reported in Table 1 in the past. or report a statistic on forced sex for boys. It does report a statistic that 15 million adolescent girls [global] aged 15-19 experienced forced sex in their lifetime (global statistics on boys are unavailable). The calculation of the percent of adolescent

girls who have experienced forced sex in their lifetime as calculated by dividing the 15,000,000 estimate from UNICEF by the female population in that age group from WPP (287,000,000) comes out to 5.2%, which is 2% points lower than the estimate that was recently reported in Know Violence in Childhood Global Learning Initiative Global Report 2017 on Ending Violence in Childhood. The Know Violence report gave an estimate of 7% of adolescent girls aged 15-17 having experienced “sexual violence” in their lifetime, although it should be noted that the Know Violence report draws on the same DHS data for forced sex as the UNICEF estimate so it seems that the Know Violence estimate is actually for forced sex. Finally, in the DHS questionnaire for the question on forced sex it is asked if the respondent experienced “sexual intercourse or any other sexual acts that were forced, physically or in any other way”. The people asking the questions are instructed not to pry as to what the respondent means by “any other sexual acts” or “any other way”, and therefore, while one reading the indicator may initially assume it is limited to rape, there may actually be a number of forms of sexual violence implicit in the answer, depending upon the interpretation of the question by the respondent.

The UN General Assembly Sixty-First Session report (Promotion and Protection of the Rights of Children A/61/299. 2006) gives estimates (for 2002) of 150,000,000 girls and 73,000,000 boys who have experienced sexual abuse according to the UN definition¹². For more information, please see the Global Estimates of Health Consequences due to Violence against Children, based on estimates by G. Andrews et al., Child Sexual Abuse, Chapter 23 in M. Ezzati et al. Comparative Quantification of Health Risks: Global and Regional Burden of Disease Attributable to Selected Major Risk Factors Geneva, World Health Organization, vol. 2, pp. 1851-1940. 2004. Stoltenborgh M, et al. give estimates of 18% of girls aged 0-17 and 7.6% of boys aged 0-17 having experienced sexual abuse in “Global Perspective on Child Sexual Abuse: Meta-Analysis of Prevalence around the World.” *Child Maltreatment* 2011, 16: 79-101. The Stoltenborgh estimate was derived from a meta-analysis of 217 publications between 1980 and 2008, which categorized included publications as stricter, broader, or according to the NIS-3 definition¹³ of childhood sexual abuse. Although the differing total global child population estimates and mix of study methodologies encompassed for the Stoltenborgh and UN meta-analyses do not result in markedly different prevalence rates, both analyses share the same principal limitation. Out of necessity, the analyses are based upon available study samples that are largely drawn from upper-income countries, and often from clinical or school-based settings (which only subsets of children attend).

To better understand the extent and underpinnings of childhood sexual abuse in lower and middle-income countries, a global partnership to end sexual violence¹⁴ called “Together for Girls” was launched in 2009 at the annual meeting of the Clinton Global Initiative. Since that time, the US Centers for Disease Control (CDC) has spearheaded comprehensive [household] Violence Against Children Studies (VACS) on sexual violence in Swaziland, Tanzania, Kenya, Zimbabwe, Cambodia, Haiti, Malawi, Nigeria, and Indonesia (data forthcoming). Using a consistent survey design and questionnaire, those studies that have been released have documented prevalence rates of sexual violence of 22%-38% of girls (with the exception of Cambodia with 4%) and 6%-21% of boys having experienced sexual violence before age 18. Risk factor results in the Tanzania, Kenya, and

Zimbabwe VACS were generally similar to those described in the Swaziland study (above). As with the studies done on child discipline, the VACS studies are demonstrating that children are often exposed to more than one form of violence. It was reported in the Kenya VACS study that only 5.5% of females and 0.9% of males experienced sexual violence in childhood without also experiencing physical or emotional violence at some time in their childhood.

(14) Child marriage: Women aged 20–24 who were married or in union before age 18

Sources: Percent from UNICEF. State of the World’s Children. 2017. Number calculated by multiplying the percent of women who were married or in union before age 18 [global, excluding China] aged 20–24 by the 2015 estimate of the female population [global, excluding China] aged 20–24 from UNPP. 2017. *Basis:* Extensive national survey data. *Trends and disparities available* in the 2017 UNICEF report on the “state of the World’s Children” at: https://www.unicef.org/publications/index_101992.html.

Please note, women 20-24 who were first married or in union before the age of 18 is used here rather than an indicator for the percentage of girls 15-19 that are married or in union. This is because the latter indicator captures 18 and 19-year-olds that are no longer children, and also because, if for example a 15-year old girl is surveyed, she may not be married at the time of the survey but may still be subject child marriage before age 18.

(15) Children in hazardous work¹⁵ (aged 5–17)

Source: Number from International Labour Organization (ILO). Global Estimates of Child Labour: Results and Trends 2012-2016. 2017. Percent calculated by dividing the number of children in hazardous work [global] aged 5–17 (numerator) by the 2015 estimate for the child population [global] aged 5-17 based on UNPP. 2017 (denominator). *Basis:* Extensive national surveys and case studies. *Trends and disparities available* in the 2017 ILO source report on “Global Estimates of Child Labour: Results and Trends 2012-2016 at: http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/publication/wcms_575499.pdf and in the 2017 ILO report on “Ending Child Labour by 2025” at: http://ilo.org/ipecc/Informationresources/WCMS_IPEC_PUB_29875/lang--en/index.htm.

At times, statistics for “worst forms of labor,” “unconditional worst forms of labor”, and “hazardous work” seem to be cited interchangeably by the media and some organizations outside of the ILO. Care must therefore be taken when looking at sources outside of the ILO that cite global numbers on these topics, even if those citations include references to ILO literature. For clarity, the 2010 ILO Publication Accelerating Progress Against Child Labour states:

A distinction can be drawn between two categories of the worst forms of child labour:

- *those that this report terms the “unconditional” **worst forms of child labour**, referred to in Article 3(a) - (c) above of Convention No. 182, that are so fundamentally at odds with children’s basic human rights that they are absolutely prohibited for all persons under the age of 18;*

- ***hazardous work*** (referred to below as (d)), as defined by national legislation, that may be conducted in legitimate sectors of economic activity but that is nonetheless damaging to the child worker.”

Please note, children in unconditional worst forms of labor is no longer included in Table 1. As the Accelerating Action against Child Labor publications states:

“Hazardous work by children is often treated as a proxy category of the worst forms of child labor. This is for two reasons. First, reliable national data on the worst forms other than hazardous work, such as children in bonded and forced labor or in commercial sexual exploitation, are still difficult to come by. Second, children in hazardous work account for the overwhelming majority of those in the worst forms (at least 90 per cent).”

The 2002 ILO publication A Future without Child Labor elucidates well the distinctions in these categories made by the ILO.

“The adoption of Convention No. 182 helped to focus the spotlight on the urgency of action to eliminate, as a priority, the worst forms of child labour, which it defines as:

- (a) all forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom and forced or compulsory labour, including forced or compulsory recruitment of children for use in armed conflict;
 - (b) the use, procuring or offering of a child for prostitution, for the production of pornography or for pornographic performances;
 - (c) the use, procuring or offering of a child for illicit activities, in particular for the production and trafficking of drugs as defined in the relevant international treaties;
- (d) work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children (Article 3).***

In general, the formula for children in hazardous work is:

Children in designated hazardous industries (such as mining, quarrying, and construction) + children in hazardous occupations + children with long hours of work (over 43 hours in the reference week) + children working in other hazardous conditions = total children in hazardous work.

Hazardous work is a sub-set of child labor, which also adds:

Children aged 5-11 in any form of employment+ children aged 12-14 working 14 or more hours per week. Together with children in hazardous work, these estimates total to all child laborers.

¹ “Basis” refers to the percent or number given in the source, and not the calculations used to generate the corresponding number (if a percent was given in the source) or percent (if a number was given in the source). “Extensive” indicates that the source used data from 50 or more countries. “Limited” indicates that the source used fewer than 50 countries. The data quality for a global indicator is only as good as the national survey(s), administrative data, expert estimate, or other sources available for each country. It is not appropriate to document here all issues with the comprehensiveness and accuracy of various national survey instruments, or the limitations of each survey at the country level by indicator. Further specificity in that regard can be found from the sources given for each indicator and associated published literature. For the indicators that are not commonly reported (such as children in forced labor as a result of trafficking), the text of the notes provides further description of data limitations.

² Percentage of children aged 0–59 months who are below minus two standard deviations from median height for age of the WHO Child Growth Standards.

³ Disability has often been defined as a physical, mental, or psychological condition that limits a person’s activities. However, work is now being conducted through the UN Washington City Group on Disability Statistics to better define disability according to interaction of a person’s functional status with the physical, cultural, and policy environments (and thus disability is defined not just by the person but also by the environment). In addition, work is continuing on trying to 1) establish more than one disability prevalence (for example, disabled and severely disabled), which would more clearly account for the vast differences in the extent of disability; 2) address the special methodological considerations in regard to children (two major factors being that disability can evolve through childhood and adolescence, and assessing if incidence of disability may be higher in children due to risk of accidents, drugs, and other risk-taking behavior); and 3) field test surveys that can be administered to those with mental handicaps and/or children.

⁴ The UN Washington City Group on Disability Statistics set of questions for measuring disability include: 1) Do you have difficulty seeing, even when wearing glasses? 2) Do you have difficulty hearing, even when using a hearing aid? 3) DO you have difficulty walking or climbing steps? 4) Do you have difficulty remembering or concentrating? 5) Do you have difficulty with self-care, such as washing all over or dressing? And 6) Using your local (customary) language, do you have difficulty communicating (for example, understanding, or being understood, by others? Each question has four levels of difficulty the respondent can report: no difficulty, some difficulty, a lot of difficulty, unable to do it at all.

⁵ Residential care is a sub-set of formal care, which is defined by the 2009 [UN] Guidelines on the Alternative Care of Children as “all care provided in a family environment which has been ordered by a competent administrative body or judicial authority, and all care provided in a residential environment, including in private facilities, whether or not as a result of administrative or judicial measures”. Formal care can include formal kinship care, foster care, cluster-foster care, other forms of family-based or family-like care with selected and remunerated carers, and residential care. According to Petrowski et al. (2017),

“Residential care’ is “care provided in any non-family-based group setting, such as places of safety for emergency care, transit centres in emergency situations, and all other short- and long-term residential care facilities, including group homes” [United Nations General Assembly, 2009, para 29 (c) (iv)]. Thus, this definition encompasses a wide range of care settings, from small group homes to large residential facilities such as orphanages or institutions. In these types of arrangements, caretakers are typically paid personnel, working in a shift pattern, who normally do not reside in the facility or institution.”

⁶ Foster care is a sub-set of formal care, which is defined by the 2009 [UN] Guidelines on the Alternative Care of Children as “all care provided in a family environment which has been ordered by a competent administrative body or judicial authority, and all care provided in a residential environment, including in private facilities, whether or not as a result of administrative or judicial measures”. Formal care can include formal kinship care, foster care, cluster-foster care, other forms of family-based or family-like care with selected and remunerated carers, and residential care. According to Petrowski et al. (2017),

“The two main forms of ‘family-based’ care are kinship care and foster care, while recognizing that other forms do exist. ‘Kinship care’ has been defined as “family-based care within the child’s extended family or with close friends of the family known to the child, whether formal or informal in nature” [United Nations General Assembly, 2009, para 29(c) (i)] whereas ‘foster care’ comprises “situations where children are placed by a competent authority for the purpose of alternative care in the domestic environment of a family other than the

children's own family that has been selected, qualified, approved and supervised for providing such care" [United Nations General Assembly, 2009, para 29 (c) (ii)]. While generally the 'competent authority' represents the State at either the national, regional or local level, in some situations it may also be an NGO, particularly in countries where the formal child protection system is not well developed."

⁷ Primary out-of-school is defined as: primary aged children not enrolled at all, derived from the age-specific enrolment ratio or adjusted net enrolment ratio (ANER) of primary school age children, which measures the proportion of those who are enrolled either in primary or in secondary schools. Primary age is typically ages 5/6 to 10/11.

⁸ Internally displaced persons are people or groups of individuals who have been forced to leave their homes or places of habitual residence, in particular as a result of, or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural- or human-made disasters, and who have not crossed an international border.

⁹ The Center for Research on the Epidemiology of Disasters defines a disaster as: a situation or event which overwhelms local capacity, necessitating a request to a national or international level for external assistance; an unforeseen and often sudden event that causes great damage, destruction and human suffering. Disasters can include earthquakes, volcanoes, mass movements (wet or dry), storms, floods, extreme temperatures, droughts, wildfires, epidemics, insect infestations, and stampedes.

¹⁰ Violent discipline includes psychological abuse (shouting, yelling, and screaming at the child, and addressing her or him with offensive names), minor physical punishment (shaking the child, spanking or hitting the child on the bottom with a bare hand, and slapping the child on the hand, arm or leg), and severe physical punishment (hitting the child on the face, head or ears, and beating the child with an implement over and over as hard as one can).

¹¹ Forced sex is defined by UNICEF as sexual intercourse or any other sexual acts that were forced, physically or in any other way.

¹² Sexual abuse is defined in the document as forced sexual intercourse or other forms of sexual violence. Further clarity on these definitions is found in UNICEF/IASC. 2002. Report of the Inter-Agency Standing Committee Task Force on Protection from Sexual Exploitation and Abuse in Humanitarian Crises. "Sexual abuse" is defined as actual or threatened physical intrusion of a sexual nature, including inappropriate touching, by force, or under unequal or coercive conditions; "sexual exploitation" is defined as any abuse of a position of vulnerability, differential power, or trust for sexual purposes; this includes profiting monetarily, socially, or politically from the sexual exploitation of another.

¹³ The NIS-3 definition of childhood sexual abuse includes penile intrusion, intrusion by a finger or object, molestation with genital contact, and other or unknown sexual abuse (sexual assault or exploitation where acts did not involve actual intrusion or genital contact (e.g., exposure, inappropriate kissing, hugging, fondling of breasts, buttocks, or other non-genital areas, etc.); and sexual assault or molestation where acts were of unknown or unspecified nature (i.e., no specific indication that intrusion or genital contact had occurred). The definition does not include attempted, threatened, or potential sexual assault or exploitation if no actual sexual contact was indicated to have occurred.

¹⁴ Sexual violence is defined by the CDC Violence Against Children studies as any act that is perpetrated against someone's will and encompasses a range of offenses, including a completed non-consensual act (i.e. rape), attempted non-consensual acts, abusive sexual contact (i.e. unwanted touching), and non-contact sexual abuse (e.g., threatened sexual violence, exhibitionism, verbal sexual harassment).

¹⁵ Children in hazardous work is defined by ILO. 2010. Accelerating Progress Against Child labour as any activity or occupation that, by its nature or type, has or leads to adverse affects on the child's safety, health and moral development, In general, hazardous work conditions include night work and long hours of work (defined as 43 or more hours of work during the reference week), exposure to physical, psychological or sexual abuse; work underground, underwater, at dangerous altitudes, or in confined spaces; work with dangerous machinery, equipment, or tools, or involves the manual

handling or transport of heavy loads; and work in an unhealthy environment which may, for example, expose children to hazardous substances, agents, or processes, or to temperatures, noise levels, or vibrations damaging to their health.