

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.

There are no credible global estimates for a number of key categories of children in adversity, such as children in street situations or children who are not living with either parent. In other cases, the source(s) on which commonly used estimates were based was found unreliable. 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.

Despite the impressive 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. Comprehensive and reliable data are needed to understand the size of this population 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 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 (DHS, MICS, AIS, income and living standards surveys, education administrative data, and UNHCR data).
- The number or percent is from a database supported by an organization with credible reputation (UN Population Division World Population Prospects database; UNESCO UIS database; EMDAT Emergency Disaster database, supported by WHO and USAID; ILO, SIMPOC, and UCW databases; and Internal Displacement Monitoring Center IDP database).
- The number or percent comes from a UN agency or World Bank official document, and the definition of the indicator is clear in that 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 given in Table 1 is the year for the data in the original source, and not the year of the document publication. For example, for children who have lost one or both parents due to all causes, the year given for the global number and percent in the UNICEF/UNAIDS Children and AIDS Sixth Stocktaking Report is 2012, although the report was published in 2013. The year given for each indicator refers to the most recent year available during the period of study specified in the source document. 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 whose births are not registered” refers to only to the population group 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, the Futures Institute (FI), a public health organization

contracted by USAID to analyze a selection of publically available statistics related to children and population, 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 Futures Institute used the 2010 population estimates of the United Nations Population Division.

The Population Division of the United Nations Secretariat estimates the population of every country, as well as regional, developing country, and global totals. Global population estimates are released only for five-year cohorts (e.g., 0–4, 5–9, etc.), disaggregated by sex. For reference, the 2010 population estimates using five-year age cohorts from The Population Division of the United Nations Secretariat. World Population Prospects 2012 (This will be abbreviated as UNPP. 2012.) Applicable to the table percent or number calculations are:

Total population [global]: 6,916,183,000
Population [female, global excluding China] aged 20-24: 237,509,260
Population [female, less developed regions excluding China] aged 15-19: 205,062,000
Population [male, less developed regions excluding China] aged 15-19: 214,937,000
Child population [global] aged 0–14: 1,842,237,000
Child population [global] aged 0–4: 642,161,000
Child population [global excluding China] aged 0-4: 556,582,100
Child population [West and Central Africa] aged 0-4: 74,936,460

For age groups that do not break down by five-year cohorts (for example, many indicators for children are measured in terms of the population under age 18), Futures Institute needed to splice out those age groups from the 2010 population estimates of the United Nations Population Division. Using the Spectrum model, the Futures Institute interpolated using the Beer's formula to obtain the population of children aged 2, 3, 4, 15, 16, and 17. These numbers were added to or subtracted from the cohorts of children aged 0–4¹, 5–9, and 10–14 to obtain the number of children aged 0–17, 5–17, and 2–14 needed to match the indicator age grouping given by the source in calculating the number of affected children from a percent or vice versa (if only number or percent was given in the source).

Using the methodology above, the child population groupings (not in five-year age cohorts) in 2010 based on UNPP. 2012 were calculated by Futures Institute to be:

Young adult population [female, global] aged 15-24: 595,525,000
Young adult population [male, global] aged 15-24: 627,925,000
Child population [global] aged 0–17: 2,204,031,200
Child population [less developed regions] aged 0-17: 1,956,007,400
Child population [global], excluding West and Central Africa and South Asia aged 0–17: 1,364,946,300
Child population [female, global] aged 0-17: 1,065,150,000
Child population [male, global] aged 0-17: 1,138,881,200

Child population [less developed regions] aged 2–14: 1,403,597,800
Child population [global] aged 5–17: 1,561,870,100

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

Indicator 4: Children who are stunted. The percent was given in the source (UNICEF. State of the World's Children. 2014). You can see 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 2010 global (five-year cohort) population aged 0–4 was taken directly from the World Population Prospects. That population is given above as 635,838,200. Thus, you have: $.25$ (or 25%) * 642,161,000 = 164,800,000.

The Futures Institute used the year 2010 in all cases to make the absolute levels of the indicators approximately comparable. Please note, the first through fourth versions of Table 1 for the PL109-95 Annual Report used a 2005 base year because most of the indicators are reported with a lag, as they are based on surveys that were conducted 1-3 years before publication. In many cases, a 2005 estimate of population was closer in time to the survey data reported for each indicator than 2010. However, the majority of indicators are now closer to 2010 than 2005. Further, the 2010 population numbers are no longer a “future” projection. 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 2010 and the 2010 estimate is now drawn from the 2012 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,c,d) Population

Source: Number for children aged 0-4 [global and less developed regions] from United Nations Population Division (UNPP). 2012. Number for children aged 0-17 [global and less developed regions] calculated by Futures Institute (FI) as described in the methodology above based on the population aged 0–19 from UNPP. 2012. Percent calculated by FI by dividing the number for children [global or less developed regions] aged 0-4 and 0–17 (numerator) by the 2010 estimate of the total population [global or less developed regions] from UNPP. 2012 (denominator). *Basis*²: Modeled estimates using extensive national survey data.

(2) Children living in extreme poverty (less than \$1.25 per day) (aged 0–14)

Source: Percent of total population living on less than \$1.25/day in 2010 from World Bank PovcalNet, downloaded 6_14_14. Percent of children [developing countries] aged 0–14 living on less than \$1.25/day is assumed to be the same as for total population. Futures Institute calculated the number of children [developing countries] aged 0–14 living on less than \$1.25 a day by multiplying the percent of children [developing countries] aged 0–14 living on less than \$1.25 a day by the 2010 estimate of the child population [low and middle income countries] aged 0–14. The 2010 estimate of the child population [low and middle income countries] aged 0–14 was calculated by FI by multiplying the percent of the total population in low and middle income countries that are children (28.9%) from the World Bank Development Indicators (WDI) online by the numeric estimate of the total population in low and middle income countries on PovcalNet. *Basis:* Modeled estimate using extensive national survey data.

Trend and disparities: The percentage of people living in extreme poverty in low and middle income countries (LMIC) declined from 41% in 1993, to 31% in 2002, and to 21% in 2010. South Asia has had the greatest reduction, from 45% of the population in the LMIC countries of South Asia in 1999 to 31% in 2010. Sub-Saharan Africa bears the greatest burden in 2010 with 48% of the population living in extreme poverty, and shows the least decline among regions since 1999, when sub-Saharan Africa had 58% of the population living in extreme poverty (World Bank PovCalNet at <http://iresearch.worldbank.org/PovcalNet/index.htm?1,0>).

The World Bank recommends using the percent of the population living on less than \$1.25 per day as a definition of extreme poverty. The World Bank estimates the percent of the population in developing countries living in extreme poverty using 2005 purchasing power parity constant prices that are based on expenditure surveys and extrapolations to countries where expenditure surveys do not exist. Please note, there are no published reports with updated global poverty data since the 2008 release of the World Development Indicators (WDI) Poverty Supplement.

Futures Institute assumed that the percent of children in extreme poverty is the same as the percent of adults in poverty. This is likely to be an underestimate, since in general poor women have more children than wealthier women in developing countries³. Finally, the percent of the population in LMIC that are children from the World Development Indicators Online was applied to the total population in LMIC from PovcalNet to derive the number of children in LMIC (rather than to the total population in LMIC from the WDI) per the recommendation of the World Bank. This is because when the international development community set up the MDG monitoring in 2000, the classification of the LMIC was different from the classification today used in the WDI. For PovcalNet to monitor progress, they must use the same set of countries at the time when the goal was setup. The estimate of the population in LMIC that are children (28.9%) is based on the same definition as PovcalNet.

(3) Children living in ultra-poverty (less than \$0.50 per day) (aged 0–14)

Source: Number of total population [developing countries] living on less than \$0.50 a day from Ahmed, Akhter U., Ruth Vargas Hill, Lisa C. Smith, Doris M. Wiesmann, and Tim Frankenberger. 2007. *The World's Most Deprived: Characteristics and Causes of Extreme Poverty and Hunger*. 2020 Discussion Paper 43. International Food Policy Research Institute (IFPRI). October 2007. Percent of total population [developing countries] living in ultra-poverty was calculated by FI by dividing the number of total population [developing countries] living on less than \$0.50 a day (numerator) by the 2010 estimate of the total population [low and middle income countries] from the World Bank World Development Indicators online (denominator). Percent of children [developing countries] aged 0–14 living on less than \$0.50/day is assumed to be the same as for total population. Futures Institute calculated the number of children [developing countries] aged 0–14 living on less than \$0.50 a day by multiplying the percent of children [developing countries] aged 0–14 living on less than \$0.50 a day by the 2010 estimate of the child population [low-middle-income countries] aged 0–14 as derived above for extreme poverty. *Basis:* Modeled estimate using limited national survey data.

Trend and disparities: There is no published trend data for ultra-poverty. However, PovcalNet can be utilized to obtain an approximate, by selecting a poverty line of \$15.20 per month ($\$0.50 \times 365 = \15.20×12). The result is a reduction of ultra-poverty in LMIC from 3.8% in 1999 to 2.4% in 2010. In 2010 the proportion of people living in ultra-poverty is greatest in sub-Saharan Africa at approximately 13.9%, while all other regions save Latina America and the Caribbean (2.2%) are below 0.5%.

The number of total population living in ultra-poverty comes from an expenditure analysis by IFPRI using techniques similar to those used in the World Bank analysis above, and based on estimates of the population living on less than \$1.08 per day in 1993 purchasing power parity constant prices.

Please note that because of the different methodology and sources for children in extreme poverty and children in ultra-poverty, the latter indicator cannot be seen to be directly a sub-set of the former.

(4) Children who are developmentally delayed (aged 3-4)

Source: N/A

There is no source yet available that measures developmental delay at a regional or global level. UNICEF has developed an Early Childhood Development Index (ECDI) that has been utilized beginning with the MICS4 surveys. The index has four domains, and children who do not meet the standards for at least three domains are considered to be developmentally delayed. The four domains include literacy-numeracy, physical, social-emotional, and learning⁴. For the 25 countries reporting on the ECD Index through MICS4 surveys, the percentage of children aged 36-59 months that are developmentally on track ranged from approximately 33% in Chad to 96% in Bosnia Herzegovina (Please see “ECD Indicators, Multiple Indicator Cluster Surveys Fourth Round

(MICS4), Global Data Analysis” at http://www.unicef.org/earlychildhood/files/Website_data_presentation_Global_-_11_July_2013.pdf)

(5) Children who are not fulfilling their developmental potential

Source: Percent and number from Grantham-McGregor S, Cheung YB, Cueto S, Glewwe P, Richter L, Strupp B. “Developmental potential in the first 5 years for children in developing countries.” *Lancet* 2007; 369: 60–70. *Basis:* Modeled estimate using extensive national survey data.

The percent or number of children who are highly vulnerable is difficult to ascertain. As there is no overall indicator, or agreed upon combination of indicators, to measure adversity in children, the number of children who are not fulfilling their development potential is one of the most commonly cited measure available. It is based upon an analysis of 156 countries, and measured children under-five years of age that were either stunted or living in extreme poverty. Although the analysis was thorough and very well done, there are several limitations to use as a current and composite measure of children in adversity that must be acknowledged. The measure of stunting was based upon outdated growth standards that were subsequently revised by the WHO in 2006, while the measure of poverty was based upon the outdated 1993 purchasing power parity constant prices. The more current 2005 purchasing power parity constant prices were released after the *Lancet* early childhood development series was published. In addition, regional averages were used where national poverty and stunting data were missing. Finally, the analysis is based upon only two (of many potential) indicators of adversity in children, *and is restricted solely to the 0-4 age group.*

(6) Children whose births are not registered⁵ (aged 0–4)

Source: Percent of children whose births are registered from UNICEF. *Every Child's Birthright: Inequities and Trends in Birth Registration.* 2013. Number calculated by FI by subtracting the percent of children whose births are registered [global, excluding China] aged 0-4 from 100%. This percentage was then multiplied by the 2010 estimate of the child population [global, excluding China] aged 0–4 from UNPP. 2012. *Basis:* Extensive national surveys and administrative data.

Trend and disparities: Between approximately 2000 and 2010, birth registration rose from 58% to 65%. The least developed countries showed the greatest increase over this time period (30%), but progress has been particularly impeded in some sub-Saharan African countries where birth registration has either not improved or has declined (UNICEF. *Every Child's Birthright: Inequities and Trends in Birth Registration.* 2013).

(7) Children who are stunted (aged 0–4)

Source: Percent from UNICEF. *State of the World's Children.* 2014. Number calculated by FI by multiplying the percent of children that are stunted [global] aged 0-4 by the 2010 estimate of the child population [global] aged 0-4 from UNPP.2012. *Basis:* Extensive national survey data.

Trend and disparities: Stunting has declined from 40% of children under the age of 5 in 1990 to 26% in 2011. The largest decline was in East Asia and the Pacific, from 42% in 1990 to 12% in 2011, and was particularly driven by nutritional improvement in China. West and Central Africa have seen the least reduction, with stunting rates of 44% in 1990 and 39% in 2011. However, due to their large populations of children, India alone makes up 38% of the global burden of stunting, and Nigeria, Pakistan, China, and Indonesia cumulatively account for an additional 23%. Stunting is more prevalent in poorer and rural households (UNICEF. Improving Child Nutrition: The Achievable Imperative for Global Progress. 2013).

The UNICEF State of the World's Children 2014 report presents the global percent of children who are stunted⁶ among all children aged 0–4, which is a population-weighted average calculated from DHS and MICS surveys (2008–2012). 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.”

(8) Children who are underweight (aged 0–4)

Source: Percent from UNICEF. State of the World's Children 2014. Number calculated by FI by multiplying the percent of children that are underweight [global] aged 0-4 by the 2010 estimate of the child population [global] aged 0-4 from UNPP.2012. *Basis:* Extensive national survey data.

The UNICEF State of the World's Children 2014 report presents the global percent of children who are underweight⁷ among all children aged 0–4, which is a population-weighted average calculated from DHS and MICS surveys (2008–2012). Please note that underweight according to the WHO Child Growth Standards was used here because it is a more accurate measure of underweight than the previous NCHS standard.

Underweight was previously thought to be a measure principally of acute malnutrition, but is now considered to stem from numerous causes.

(9) Children who are wasted (aged 0–5)

Source: Percent from UNICEF. State of the World's Children 2014. Number calculated by FI by multiplying the percent of children that are wasted [global] aged 0-4 by the 2010 estimate of the child population [global] aged 0-4 from UNPP.2012. *Basis:* Extensive national survey data.

The UNICEF State of the World's Children 2013 report presents the global percent of children who are wasted⁸ among all children aged 0–4, which is a population-weighted average calculated from

DHS and MICS surveys (2008–2012). Wasting is a measure of acute malnutrition, most often due to sudden food scarcity accompanying natural disasters or conflict.

(10) Children who die within the first 28 days of life

Source: Percent and number from UNICEF. Levels and Trends in Child Mortality 2013. *Basis:* Extensive national survey data.

(11) Children who die before age 1

Source: Percent and number from UNICEF. Levels and Trends in Child Mortality 2013. *Basis:* Extensive national survey data.

Please note the methodology change in child mortality estimates, as stated in Levels and Trends in Child Mortality 2011:

“The UN Inter-Agency Group for Child Mortality Estimation recalculated direct estimates from all available Demographic and Health Surveys for calendar year periods, using single calendar years for reference periods shortly before the survey and then gradually increasing the number of years for reference periods further in the past... The Technical Advisory Group suggested this recalculation because the sample sizes of many household surveys have grown in recent years, allowing for shorter reference periods... The recalculated direct estimates with shorter reference periods replace the five-year periods used in previous estimations, thereby increasing the number of data points for more recent years.”

(12) Children 0–4 who die before age 5

Source: Percent and Number from UNICEF. Levels and Trends in Child Mortality 2013. *Basis:* Extensive national survey data.

(13) Children who are disabled⁹ (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 FI by multiplying the percent of children who are disabled [global] aged 0–17 by the FI 2010 estimate of the child population [global] aged 0–17 based on the UNPP. 2012. *Basis:* Limited national surveys.

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 include measurement of disabled children 1999–2007 in the 2009 State of the World’s Children Report, which they define as the percentage of children 2–9 years old with at least one reported disability (i.e., cognitive, motor, seizure, vision, hearing, or speech). However, there is no global percentage and only East Asia and the Pacific has a regional percentage. Child disability is not included in the State of the World’s Children 2011 Annex tables, because the report states that “new, comparable data are unavailable for a significant number of countries”, and is not in the 2014 Annex tables. The disability module has been included in very few surveys since the MICS 3 in 2005-2006, which was the only household surveys looking specifically at disability in children. This is likely 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 is interviewed and not the affected child. The 2010 workplan for the UN Washington City Group on Disability Statistics includes assessment of whether the short set of questions developed by the group¹⁰ to more accurately assess disability across countries is applicable to children, evaluating field test data to determine at what age the results are meaningful, and an attempt to create specific question modules that can survey children directly. Pending the success of these developments, disability modules for children of a broader age group and covering more functional domains may again be more regularly included in MICS, other household surveys, censuses and/or other surveys in the near future.

Further, 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.

(14) (a,b) Children with blood lead levels above 5 µg/dl or 10 µg/dl (aged 0-4)

Source: Percent from the World Health Organization (WHO) at:

http://gamapservr.who.int/gho/interactive_charts/phe/lead_exposure/GHO_phe_lead_exposure.html. Data on the website was confirmed by the department of Evidence and Policy on

Environmental Health at the WHO. Number of children with blood lead levels above 5 µg/dl or 10 µg/dl calculated by FI by multiplying the percent of children with blood lead levels above 5 µg/dl or 10 µg/dl [global] aged 0–4 by the FI 2010 estimate of the child population [global] aged 0–4 based on the UNPP. 2012. *Basis:* Limited scientific surveys.

Trend and disparities: There is no published trend data, however the WHO reports that the proportion of children globally with blood lead levels above 10 µg/dl declined from 20% in 2000 to 16% in 2004, primarily due to the reduction in use of leaded fuels (WHO at: http://www.who.int/gho/phe/chemical_safety/lead_exposure_text/en/).

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.

(15) (a,b) Adolescents living with HIV (aged 10–19)

Source: Numbers from UNICEF. Towards and AIDS Free Generation- Children and AIDS: Sixth Stocktaking Report. 2013. Percents calculated by FI by dividing the number of adolescents by gender living with HIV [global] aged 10-19 (numerator) by the estimate of the adolescent population [global] aged 10-19 from UNPP.2012. *Basis:* Modeled estimate using extensive national survey data.

Trend and disparities: There are not yet estimates of new infections for the 10-19 age group, but new infections in young people aged 15-19 declined from approximately 500,000 per year in 2000 to 300,000 per year in 2012. Approximately two-thirds of these new infections were among girls (UNICEF. Towards and AIDS Free Generation- Children and AIDS: Sixth Stocktaking Report. 2013). However, the trend in treatment for adolescents is not clear, and treatment needs and access to care can change as children age into adolescence. Currently, only 27% of females aged 15-24 in the least developed countries have gotten an HIV test and received the results ((UNICEF. Towards and AIDS Free Generation- Children and AIDS: Sixth Stocktaking Report. 2013). Although there is no published estimate for least developed countries for males, UNICEF has stated in personal communication that the percentage of males aged 15-24 that have gotten an HIV test and received the results is probably much lower because they are not tested through maternal health services. Treatment in children under the age of 15 is very low compared to adults, with approximately 34% of children in need under age of 15 receiving treatment in 2012, as compared to 64% of adults. Modeled projections have recently estimated that approximately one third of those children infected with HIV in infancy will survive to their reproductive years (Mahy M et al. Trends in HIV

Prevalence Among Young People in Generalised Epidemics: Implications for Monitoring the HIV Epidemic. *Sexually Transmitted Infections* 2012, 88: i65-i75.).

The estimation of adolescents living with HIV differs from previous estimates in Table 1 of young adults living with HIV because the age group for adolescents living with HIV is 10-19, while for young adults it is 15-24. This change in the indicator is reflective of the intent to represent the gap in protecting children who acquire HIV through sexual transmission or other behavior means, and is in line with strategic planning by UNICEF and UNAIDS to address the need for effective prevention and treatment programs among younger adolescents.

(16) (a,b) Adolescents who have had an early sexual debut (aged 15–19)

Source: Percent from UNICEF. Opportunity in Crisis: Preventing HIV from Early Adolescence to Young Adulthood. 2011. Number calculated by FI by multiplying the percent of children who have had an early sexual debut [developing countries, excluding China] aged 15–19 [by gender] by the estimate of the child population [less developed regions, excluding China] aged 15–19 [by gender] from UNPP. 2012. *Basis:* Limited national survey data for males, and extensive national survey data for females. .

The Opportunity in Crisis report gives a percentage for females and for males aged 15–19 who say they had sex before age 15 for developing countries, excluding China. However, it should be noted that country data that make up these percentages come principally from sub-Saharan Africa and South Asia.

(17) Children living with HIV (aged 0–14)

Source: Number from UNICEF. Towards and AIDS Free Generation- Children and AIDS: Sixth Stocktaking Report. 2013. UNICEF, New York, 2013. Percent calculated by FI 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. 2012. *Basis:* Modeled estimate using extensive national survey data.

Trend and disparities: Between 2009 and 2012 there was a 35% decline in new HIV infections among children under the age of 15 years, compared with 2009. The estimated number of women living with HIV in low- and middle-income countries declined from a peak of about 1.6 million in 2002 to 1.5 million in 2012 (UNICEF. Towards and AIDS Free Generation- Children and AIDS: Sixth Stocktaking Report. 2013). Coverage of antiretroviral regimens for preventing maternal-to-child transmission during pregnancy reached 62% in 2012, but that coverage declined to 49% during breastfeeding. Additionally, only 58% of eligible pregnant women (as compared to 64% of adults on general) were receiving antiretroviral therapy for their own health in the same year (UNAIDS. Global Report: UNAIDS Report on the Global AIDS Epidemic 2012. 2013).

These estimates include all children under age 15 with HIV infection, whether or not they have developed symptoms of AIDS, for the year 2012. 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). They have been shared with national AIDS programs for review and comments, but are not necessarily the official estimates used by national governments.

Please note, 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. 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.

(18) Children not living with either parent (aged 0–4)

Source: NA

Trend and disparities: N/A

No global estimate is available, although living arrangements are included in some DHS and MICS surveys. The 2012 UNICEF report “Inequities in Early Childhood Development: What the Data Say” shows data from MICS surveys in 40 countries on children living with their biological mother but without their biological father, children living with their biological father but without their biological mother, and children living without both biological parents.

(19) Children in institutional care¹¹ (aged 0–17)

Source: Number from UNICEF. Progress for Children: A Report Card on Child Protection. 2009. Percent calculated by FI by dividing the number of children in institutional care [global, excluding West and Central Africa and South Asia] aged 0–17 (numerator) by the FI 2010 estimate for the child population [global, excluding Western Africa and South Asia] aged 0–17 based on UNPP. 2012 (denominator). *Basis:* Modeled estimate from limited administrative and international organization data, country reports for the Second International Conference on Children and Residential Care, and UNICEF country office estimates.

In an effort to stimulate the collection of this data, the Better Care Network, in partnership with UNICEF, published the Manual for the Measurement of Indicators for Children in Formal Care. This manual assists countries in strengthening their information system around formal care. The Manual introduces a set of 15 global indicators for children in formal care, explains why this

information is valuable, and offers practical guidance on data collection for governments and non-governmental counterparts

Trend and disparities: N/A

Please note that only the countries of Central and Eastern Europe and the Commonwealth of Independent States have been tracked comprehensively, through the TransMONEE database of the UNICEF Innocenti Research Center. For the regions of Latin America and the Caribbean, Middle East and North Africa, Eastern and Southern Africa, and East Asia and the Pacific, country data for the Progress for Children Report was provided by national estimates, UNICEF country offices, or country reports prepared for the Second International Conference on Children and Residential Care. South Asia and West and Central Africa had no data available. The global number should thus be interpreted with caution.

(20) Children in street situations¹² (aged 0–17)

[Possible] Source: Stover, J, et al. Coverage of Selected Services for HIV/AIDS Prevention, Care, and Treatment in Low- and Middle-Income Countries in 2005. 2006. *Basis:* Expert opinion.

Trend and disparities: N/A

This is the only source of survey data on street children that could be found, the estimates coming from a survey of country experts on HIV/AIDS prevention services conducted between 2003 and 2005. However, it appears from the widely varying numbers reported by country that there may have been some respondent reporting bias, difference in interpretation of the definition of street children¹³, and/or unfamiliarity with the specific issue of street children.

Thomas de Benítez (for the Consortium on Street Children) writes in the 2007 State of the World's Street Children: Violence,

“Estimating numbers of ‘street children’ is fraught with difficulties. In 1989, UNICEF estimated 100 million children were growing up on urban streets around the world. 14 years later UNICEF reported: ‘The latest estimates put the numbers of these children as high as 100 million’ (UNICEF, 2002: 37). And even more recently: ‘The exact number of street children is impossible to quantify, but the figure almost certainly runs into tens of millions across the world. It is likely that the numbers are increasing’ (UNICEF, 2005: 40–41). The 100 million figure is still commonly cited, but has no basis in fact (see Ennew and Milne, 1989; Hecht, 1998; Green, 1998). Similarly, it is debatable whether numbers of street children are growing globally or whether it is the awareness of street children within societies which has grown. While there are understandable pressures for policies to be informed by aggregate numbers, estimates of street child populations, even at city levels, are often hotly disputed and can distract rather than inform policy makers.”

In regard to the quote above, State of the World's Children 1989 was found and downloaded. However, no reference to street children can be found in that report. Given that few other

documents from 1989 are available electronically for a keyword search on street children, the 1989 source and origin of the 100 million number is at present a mystery. The reference above to UNICEF 2002 is for State of the World's Children 2003, which in turn cites Serrano, Alfonso F., 'Education Crucial for Street Kids', On the Record for Children, (vol. 3, no. 14, New York, 10 May 2002, p. 7.) as the source. However, we have been unable as yet to obtain the Serrano source to determine how/if the 100 million number was calculated there. In addition, as original sources can't be found, it is further unclear what ages street children cover and the exact indicator definition. The uncertainty of this number negates inclusion in the table.

The recent expert meeting on promoting and protecting the rights of children living and/or working on the street (<http://www.ohchr.org/EN/Issues/Children/Study/Pages/ExpertConsultation.aspx>) brought together a wide group of experts in the field and youth that had spent time living or working on the street. It showed that recognition for the needs and inclusion of children in street situations is growing, and methods of data collection, such as capture-recapture and respondent-driven sampling, are being tested for systematic surveying.

(21) Children left in inadequate care¹⁴ (aged 0–4)

Source: Percent from UNICEF. State of the World's Children. 2014. Number calculated by Futures Institute by multiplying the percent of children who are left in inadequate care [West and Central Africa] aged 0–4 by the 2010 estimate of the child population [West and Middle Africa] aged 0–4 from UNPP. 2012. *Basis:* Limited national survey data.

Trend and disparities: N/A

(22) Children who have drowned¹⁵ (aged 0-17)

Source: UNICEF. Child Drowning: Evidence for a Newly Recognized Cause of Child Mortality in Low-and Middle-Income Countries of Asia. 2012. No number or percent is available.

Trend and disparities: In the Matlab Research area of Bangladesh, the mortality rate due to drowning remained fairly constant between 1983 and 2003, at about 4 deaths per 1000 children aged 1-4. Most children drown before age four, and the median age at drowning in the five countries studied ranged from 2.3-3.9 years. Boys, children in rural areas (who are more exposed to open water), children in larger families that are supervised by siblings, and children not attending pre-school are more likely to drown. In China, children left with their grandparents so that their parents could work were approximately three times more likely to drown compared to children living with their parents.

There is not yet a global analysis of drowning in children. However, a recent report by UNICEF shines a light on drowning as a principal cause of death in young children in five Asian countries (Bangladesh, Thailand, Cambodia, Vietnam, and Jiangxi Province/China). As communicable diseases have become better addressed, the need to reduce the high and relatively unchanged rates of drowning is becoming evident. In the Matlab research area in Bangladesh, where there has been continuous study of child mortality, the proportion of deaths due to drowning has risen from 10%

of all child deaths to 50% in the past twenty-five years. In the countries studied for the UNICEF analysis, drowning was responsible for 23.4% of deaths in children aged 1-4, approximately 27% of deaths in children aged 5-9, 12% of deaths in the 10-14 age group, and 6% of deaths in the full 0-17 age group. The rate of fatal drowning in the country surveys for Bangladesh, Cambodia, and Jiangxi China was approximately 85 deaths per 100,000 children aged 1-4 and 35 deaths per 100,000 children aged 0-17.

Drowning data is not yet well captured at the local and national levels due to weak mortality registration systems, an international classification of diseases (ICD) reporting system with thousands of codes and a focus on recreational activity for the causes of drowning, fear of punishment by families reporting a drowning death, and particularly, the nature of drowning as a very quick occurrence that is often far from a health facility. Because of these factors, UNICEF estimates that in the countries studied, four fifths of drowning deaths are not reported. Because of the difficulty in obtaining accurate drowning information from national registration systems, the Global Burden of Disease estimates for drowning are not utilized here.

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

Source: Number from UNICEF. Toward and AIDS-Free Generation. Children and AIDS: Sixth Stocktaking Report. 2013. Percent calculated by FI by dividing the number of children who have lost one or both parents [global] aged 0–17 (numerator) by the FI 2010 estimate of the child population [global] aged 0–17 based on UNPP. 2012 (denominator). *Basis:* Modeled estimates based upon extensive national survey data.

Trend and disparities: N/A

The orphan numbers in the Sixth Stocktaking Report are updated estimates calculated by UNAIDS using the Spectrum program, based on the latest data from countries on HIV/AIDS and the United Nations Population Division on population size, age, structure, and mortality. They are not comparable to previous estimates because of expanded surveillance data and refined projection methodology, as more reliable surveys are conducted and understanding of HIV transmission, treatment, and survival evolves. For more information on UNAIDS methods and assumptions for estimates, please see: <http://www.unaids.org>

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

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

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

Source: Number from UNICEF. Toward and AIDS-Free Generation. Children and AIDS: Sixth Stocktaking Report. 2013. Percent calculated by FI by dividing the number of children who have lost one or both parents due to AIDS [global] aged 0–17 (numerator) by the 2010 FI estimate of the

child population [global] aged 0–17 based on UNPP. 2012 (denominator). *Basis:* Modeled estimate based upon limited national survey data.

Trend and disparities: N/A

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

Source: This indicator is a summation of children who are refugees or internally displaced. It is calculated as follows:

Children uprooted due to conflict or natural disaster = refugee children + internally displaced children (as a result of conflict or persecution) + internally displaced children (as a result of natural disaster)

Please see below for information specific to the sourcing, calculation, and trends for the component indicators.

(26) Refugee children¹⁶ (aged 0–17)

Source: 1) Total number of refugees registered with the United Nations High Commissioner for Refugees UNHCR. War's Human Cost: UNHCR Global Trends 2013.2014. Futures Institute calculated the number of refugee children of concern to UNHCR by multiplying the total number of persons who are refugees of concern registered with UNHCR [global] by 50% (which is the percent of the total persons who are refugees of concern to UNHCR who are aged 0–17 per UNHCR); 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 31 December 2013, via personal communication from UNRWA; 3) The number of children who are refugees of concern to UNHCR and the number of children who are refugees of concern to UNRWA were summed together by FI to calculate the total number of children who are refugees. Percent of children [global] who are refugees was calculated by FI by dividing the number of children who are refugees [global] aged 0–17 (numerator) by the FI 2010 estimate of the child population [global] aged 0–17 based on UNPP. 2012 (denominator). *Basis:* Extensive administrative and UNHCR/UNRWA country office data.

Trend and disparities: The number of new refugees assisted by UNHCR is the highest since 1994, and for the first time in the past ten years the proportion of refugees that are children has reached 50%. Developing countries hosted 86% of the world's refugees in 2013, in comparison to 70% a decade ago. Pakistan, the Islamic Republic of Iran, Lebanon, Jordan, and Turkey hosted the greatest numbers of refugees. Fifty-three percent of the world's refugees originated in one of three countries: Afghanistan, the Syrian Arab Republic, and Somalia.

(27) Internally displaced children¹⁷ (as a result of conflict or persecution) (aged 0–17)

Source: Total number of internally displaced people as a result of conflict or persecution: Internal Displacement Monitoring Centre (IDMC). Internal Displacement: Global Overview 2013, People Internally Displaced by Conflict or Violence. 2014. Futures Institute calculated the number of

internally displaced children as a result of conflict or persecution [global] aged 0–17 by multiplying the total number of internally displaced people as a result of conflict or persecution [global] by 50%, which is the percent of the total persons who are refugees of concern to UNHCR who are aged 0–17 per UNHCR. Percent calculated by FI by dividing the number of internally displaced children as a result of conflict or persecution [global] aged 0–17 (numerator) by the FI 2010 estimate of the child population [global] aged 0–17 based on UNPP. 2012 (denominator). *Basis:* Extensive administrative, and UN and NGO country office data.

The IDMC report *Internal Displacement: Global Overview 2013, People Internally Displaced by Conflict or Violence* was used because UNHCR only collects data on internally displaced persons *it assists*, and refers those looking for information on total IDPs to the IDMC. The IDMC report does not have demographic information on IDPs. The collection of core data on IDPs is generally considered to be a responsibility of national authorities, and methodologies vary greatly. IDMC is the best and only comprehensive global data on IDPs, but recognizing inherent challenges in IDP data collection, IDMC intentionally does not extrapolate figures for children or sub-sets of the population as they do not feel this would be methodologically sound. The only existing proxies are from the UNHCR 2013 Statistical Yearbook that states that 50% of the total persons who are refugees of concern to UNHCR are aged 0–17 and the UNHCR 2011 Statistical Yearbook, which states that 47% of the UNHCR IDP population is aged 0–17. Because the IDP-specific demographic data is several years old and the percentage of total persons who are refugees of concern that are aged 0-17 has risen since 2011, FI assumes a similar trend for refugee children would prevail for IDP children and has applied this to the available IDMC data.

(28) Children affected¹⁸ by natural disaster¹⁹ (aged 0–17)

Source: Total number of persons affected by natural disaster: Centre for Research on the Epidemiology of Disasters (CRED). *Annual Disaster Statistical Review 2012*. 2013. Futures Institute calculated the percent of total population affected by natural disaster by dividing the total population affected by natural disaster [global] (numerator) by the 2010 estimate of total population [global] from United Nations Population Program. UNPP. 2012. (denominator). The percent of children affected by natural disaster is assumed to be the same as that for total population. The number of children affected by natural disaster was thus calculated by FI by multiplying the percent of children affected by natural disaster [global] aged 0–17 by the FI 2010 estimate of the child population [global] aged 0–17 based on UNPP. 2012. *Basis:* Extensive UN and NGO country office, insurance company, and press data.

Trend and disparities: The number of people affected by natural disaster changes every year according to the type and scope of disasters that occur. In 2012, 357 natural disasters were reported worldwide and recorded in the International Emergency Disasters Database (EM-DAT). According to the *Annual Disaster Statistical Review 2012*, they killed 9,655 persons, affected early 124.5 million others, and caused US\$ 157 billion in economic damages. The number of disasters and persons affected are lower than they have been since 2000. Flooding and drought are principal problems in terms of the numbers of people affected by natural disaster as land is cleared, soil erodes, natural

reservoirs and sources of drainage are eliminated, and people move into areas that are prone to flooding or drought. China had 13 floods in 2012 and 36% of disaster victims, 17.4 million of home were affected by the June 2012 flood alone. In Lesotho, Gambia, Mali, and Niger more than 20% of the populations were affected by disaster (namely drought)(CRED. Annual Disaster Statistical Review 2012. 2013).

The Annual Disaster Statistical Review 2008 edition discusses sourcing as follows,

“The database is compiled from various sources, including UN agencies, non-governmental organizations, insurance companies, research institutes and press agencies. Priority is given to data from UN agencies, followed by OFDA, governments and the International Federation of Red Cross and Red Crescent Societies. This prioritization is not only a reflection of the quality or value of the data, but it also reflects the fact that most reporting sources do not cover all disasters or have political limitations that can affect the figures.”

It is unclear if there is an issue of the same people being affected by more than one disaster (for example an earthquake then resulting tsunami, or extreme weather and resulting drought or flood), and thus being “double-counted.” The Annual Disaster Statistical Review does state that *“The entries [into the EM-DAT database] are constantly reviewed for redundancy, inconsistencies and incompleteness.”*

(29) Internally displaced children (as a result of natural disaster) (aged 0–17)

Source: Total number of persons internally displaced by natural disaster from Internal Displacement Monitoring Centre (IDMC) and the Norwegian Refugee Council. Global Estimates 2012: People displaced by natural hazard-induced disasters. 2013. Futures Institute calculated the percent of total population internally displaced by natural disaster by dividing the total number of persons internally displaced by natural disaster [global] (numerator) by the 2010 estimate of total population [global] from United Nations Population Program. UNPP. 2012 (denominator). Percent of children internally displaced by natural disaster is assumed to be the same as the percent of persons internally displaced by natural disaster. The number of children internally displaced by natural disaster was calculated by FI by multiplying the percent of children internally displaced by natural disaster [global] aged 0–17 by the FI 2010 estimate of the child population [global] aged 0–17 from UNPP. 2012. *Basis:* Extensive administrative, UN, and NGO country office data.

Trend and disparities: The number of people annually displaced by disaster between 2008 and 2012 has varied from 16.5 million (occurring in 2011) to 42.3 million (occurring in 2010). Therefore the 2012 estimate of 32.4 million people is above average. Sixty-nine percent of those internally displaced by disaster were in Asia, particularly China, India, Pakistan, and the Philippines. However, proportional to the population size of a country, the least developed countries and small island developing states can be greatly affected. Haiti has had the highest level of internal displacement due to disaster between 2008 and 2012, with nearly a fifth of its population uprooted due to disasters (Internal Displacement Monitoring Centre (IDMC) and the Norwegian Refugee Council. Global Estimates 2012: People displaced by natural hazard-induced disasters. 2013).

(30) Children who lack adequate shelter²⁰ (aged 0–17)

Source: Number and percent from UNICEF. State of the World's Children. 2005. Percent confirmed by FI, by dividing 640,000,000 children into the FI 2010 estimate of the child population [less developed regions] aged 0–17 based on UNPP. UNPP. 2010. *Basis:* Limited national survey data.

Work was commissioned in 2003 by UNICEF through the University of Bristol and the London School of Economics to assess severe deprivation in children (seven indicators, of which lack of adequate shelter was one), and resulted in the following study: Gordon, David, et al., Child Poverty in the Developing World, The Policy Press, Bristol, UK. 2003. To obtain the 2005 number and percent of children in poverty, UNICEF updated the original Gordon et al. study data using Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS).

(31) Children out of school²¹ (primary aged)

Source: Percent and number from United Nations Educational, Cultural, and Scientific Organization (UNESCO) Institute for Statistics, downloaded 6_30_14. *Basis:* Extensive administrative data and national surveys.

Trend and disparities: Although the proportion of children of primary age that were out-of-school declined from 15% in 2000 to 9% in 2007, no further reduction has been made in that proportion between 2007 and 2012. Asia saw a decline in the proportion of primary aged children out-of-school from 5.6% in 2007 to 5.1% in 2012, while the proportion was reduced in sub-Saharan Africa from 22.5% to 19.8% during that time period (FI calculation based upon UNESCO UIS database, downloaded 6_30_14). However, because of the rapid growth of the primary aged population in sub-Saharan Africa, the region now accounts for more than half of the primary aged children out-of-school. Seventeen countries that had more than 100,000 out-of-school children in 2000 managed to reduce those populations by more than 50%, five of which are in sub-Saharan Africa (Burundi, Mozambique, Ghana, Zambia, and Rwanda). The proportion of girls among out-of-school children of primary age fell from two-thirds in 2000 to less than one-half in 2012 in South and West Asia; in sub-Saharan Africa there was a slight increase from 54% to 56% (UNESCO. Progress in Getting All Children to School Stalls but Some Countries Show the Way Forward. Policy Paper 14/Fact Sheet 28. 2014).

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 as “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 can be somewhat different, due to differences in source data. UNESCO uses administrative data, while UNICEF uses either administrative data or data from household surveys. Their selection of data source by country follows a set of rules concerning data availability, consonance between administrative and household data if both are available, an age of the data source (UNICEF allowing for older data via household surveys than UNESCO).

The 2005 UNESCO/UNICEF Joint Publication “Children Out-of-School: Measuring Exclusion from Primary Education discusses the differences in enrollment and household data as follows:

Enrolment data provide the number of children enrolled or registered in school. This is measured differently across countries. Definitions used for international data collections emphasize that the unit of measurement are pupils enrolled, meaning that children registered more than once should be counted only once and that registration is linked to a pupil. Enrolment data potentially differ from the definition above in three ways. They can:

- *overstate participation by counting registered children who never attend school;*
- *underestimate participation by missing children who attend school without being registered; and*
- *underestimate participation when enrolment is counted at the beginning of the school year while some children register later in the school year.*

Household surveys allow the estimation of school attendance in two ways: current attendance, the most commonly used estimate, and attendance at some point during the school year, which is the estimate used for this methodology. The latter is based on the parents’ or guardians report as to whether the child is currently at school or, if not, whether the child attended school at some time during the school year. If the answer to either question is “yes”, the child is considered to have attended in the reference school year, even if currently absent or out of school.”

In 2010, UNICEF and the UNESCO Institute for Statistics launched the Joint Global Initiative on Out-of-School Children to further progress on the MDG for universal primary education by 2015. 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. A global report is expected in 2013.

Please note also that the estimates in the World Bank EdStats database come from the UNESCO UIS database. The World Bank has added a household survey module to its EdStats database that links the user to household surveys by country with education data; however, the World Bank has not produced independent country or global estimates for out-of-school children

(32) Children out of school²² (lower secondary aged)

Source: Percent and number from United Nations Educational, Cultural, and Scientific Organization (UNESCO) Institute for Statistics, downloaded 6_30_13. *Basis:* Extensive administrative data.

Trend and disparities: The number of out-of-school adolescents declined from 96.9 million in 2000 to 62.9 million in 2012. However, similar to the situation for children of primary age, there has not been a significant reduction in the out-of-school prevalence for children of lower secondary age since 2007, and the out-of-school proportion actually increased between 2007 and 2009 in tandem with the global economic recession. Overall, the prevalence of out-of-school adolescents globally in 2007 was 17.6%, and it fell only slightly to 16.8% in 2012 (FI calculation based upon UNESCO UIS database, downloaded 6_30_13). In 2012 sub-Saharan Africa was home to 33.5% of out-of-school adolescents and South and West Asia was home to 42%. In South and West Asia boys now comprise a slightly higher proportion of out-of-school adolescents (52%) than girls. In sub-Saharan Africa girls remain a greater share of out-of-school adolescents (54%), which is not much changed from the proportion in 2000 (which was 56%)(FI calculation based upon (UNESCO. Progress in Getting All Children to School Stalls but Some Countries Show the Way Forward. Policy Paper 14/Fact Sheet 28. 2014).

Upper secondary and post-secondary currently can't be measured, because the UNESCO 2010 report on "Out-of-School-Adolescents" states:

"Many countries cannot provide consistent enrolment data for upper secondary technical and vocational programmes or post-secondary education. Moreover, many adolescents of upper secondary school age are already enrolled in postsecondary non-tertiary education. As such, a complete picture of out-of-school adolescents of upper secondary education age is currently unattainable"

Some difficulties in evaluating both out-of-school primary and lower secondary children and adolescents include: comparability across countries as to the program duration (i.e. how many years are included in an educational level), the age at which children are in various levels of education (for example a 10 year old counted as primary in one country and lower secondary in another), and how age data is drawn from administrative data (i.e. age cut-off dates, school year entrance, or end of calendar year).

(33) Children who have experienced violent discipline at home²³ (aged 2-14)

Source: Percent from UNICEF. Child Disciplinary Practices at Home. 2010. Numbers calculated by FI by multiplying the percent of children who have experienced violent discipline [developing countries] aged 2–14 by the FI 2010 estimate of the child population [less developed regions] aged 2–14 based on UNPP. 2012. *Basis:* Limited national survey data.

Trend and disparities: No trend data available. In the 2014 State of the World's Children Report there are regional prevalence estimates from surveys between 2005-2102 for West and Central Africa, and the Middle East and North Africa, of 90% and 89% respectively. The majority of individual

countries surveyed outside of these two regions (but for which there is not yet aggregate regional data), are from Central and Eastern Europe and the Commonwealth of Independent States. These surveys show rates of violent discipline between 49%-75% (UNICEF. State of the World's Children. 2014). For those countries surveyed in the Child Disciplinary Practices at Home Report, only 13 of 30 had a statistically significant difference in violent discipline by income status, with those children in the top two income quintiles in those countries experiencing modestly lower rates of violent discipline in comparison to the poorest 60%.

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 "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 "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. Further, the estimates in the Child Disciplinary Practices at Home" report should be interpreted with caution, given the small sample of 33 countries surveyed and associated 10% representation of the child population 2-14 in developing countries. Rates were slightly higher for boys than for girls.

It is important to note that many children who experience violent discipline are subject to more than one form of it. On average, 46% experience both physical punishment and psychological aggression.

(34) Children who have experienced psychological aggression²⁴ at home (aged 2-14)

Source: Percent from UNICEF. Child Disciplinary Practices at Home. 2010. Numbers calculated by FI by multiplying the percent of children who have experienced violent discipline [developing countries] aged 2–14 by the FI 2010 estimate of the child population [less developed regions] aged 2–14 based on UNPP. 2012. *Basis:* Limited national survey data.

(35) Children who have experienced minor physical punishment²⁵ at home (aged 2-14)

Source: Percent from UNICEF. Child Disciplinary Practices at Home. 2010. Numbers calculated by FI by multiplying the percent of children who have experienced violent discipline [developing countries] aged 2–14 by the FI 2010 estimate of the child population [less developed regions] aged 2–14 based on UNPP. 2012. *Basis:* Limited national survey data.

(36) Children who have experienced severe physical punishment²⁶ at home (aged 2–14)

Source: Percent from UNICEF. Child Disciplinary Practices at Home. 2010. Numbers calculated by FI by multiplying the percent of children who have experienced violent discipline [developing countries] aged 2–14 by the FI 2010 estimate of the child population [less developed regions] aged 2–14 based on UNPP. 2012. *Basis:* Limited national survey data.

(37) (a,b) Girls and boys who have experienced sexual abuse (aged 0–17)

Source: Percentages from Stoltenborgh M, et al. A. “Global Perspective on Child Sexual Abuse: Meta-Analysis of Prevalence around the World.” *Child Maltreatment* 2011, 16: 79-101. Numbers calculated by FI by multiplying the percent of children who have experienced sexual abuse [global] aged 0–17 [by gender] by the FI 2010 estimate of the female and male child populations [global] aged 0–17 based on UNPP. 2012. *Basis:* Meta-analysis of 217 publications between 1980 and 2008, which categorized included publications as stricter, broader, or according to the NIS-3 definition²⁷ of childhood sexual abuse.

Trend and disparities: Trend data is not available. The Stoltenborgh study estimated a prevalence of childhood sexual abuse for girls (18%) to be more than twice that for boys (7.6%). Of the *countries studied* in the meta-analysis, the lowest rates for both genders were in Asia, while the highest rates for girls were in Australia and for boys in Africa. [However, the authors note that survey respondents in collectivist cultures such as those in Asia may be less willing to disclose abuse experiences.] An analysis stemming from the Swaziland VACS gives the following as risk factors for sexual violence against girls: age of 17-18 years, girls who had lost one biological parent, poor or no relationship with her biological mother (crude odds ratios of 1.89 and 1.93 respectively as compared to girls with a good relationship with their biological mother), emotional abuse as children (COR 2.04), and not attending school (COR 2.26) (Brieding MJ et al. “Risk Factors Associated with Sexual Violence Towards Girls in Swaziland”. *Bulletin of the World Health Organization* 2011, 89: 203-210. Risk factor results were generally similar in the Tanzania, Kenya, and Zimbabwe VACS.

The UN General Assembly Sixty-First Session report (Promotion and Protection of the Rights of Children A/61/299. 2006) gives slightly lower estimates (for 2002) of 150,000,000 girls and 73,000,000 boys who have experienced sexual abuse²⁸. 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.

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 violence²⁹ 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, Haiti (forthcoming), Malawi (forthcoming), Indonesia (forthcoming), Nigeria (forthcoming), and Cambodia (forthcoming). Using a consistent survey design and questionnaire, those studies that have been released have documented prevalence rates of sexual violence of 30-33% of girls and 9-18% 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.

(38) 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. 2014. Number calculated by FI by multiplying the percent of women who were married or in union before age 18 [global, excluding China] aged 20–24 by the 2010 estimate of the female population [global, excluding China] aged 20–24 from UNPP. 2012. *Basis:* Extensive national survey data.

Trend and disparities: On the basis of 48 countries with trend data, child marriage levels measured on a global scale are largely unchanged, declining from 50% to 48% in rural areas and 24% to 23% in urban areas between approximately 2000 and 2010. Twenty countries showed declines of 10% or more, although in 6 countries that threshold was met only in rural areas, and in 3 of the countries that threshold was met only in urban areas. South Asia (46%) and West and Central Africa (41%) have the highest prevalence in surveys from 2000-2010, with Chad and Niger topping 70%. Prevalence rates are nearly double for rural girls, girls who have only a primary education (vs a secondary education), and the poorest income quintile (vs the fourth of five income quintiles)(UNFPA. *Marrying too Young: End Child Marriage.* 2012). Boys are subject to far lower rates of child marriage, with approximately 5% of boys in South Asia and 1% of boys in West and Central Africa surveyed between 2002-2011 married or in union before the age of 18 (UNICEF at http://www.childinfo.org/marriage_progress.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.

(39) Adolescent births: Women aged 20-24 who gave birth before age 18

Source: Percent from UNICEF. State of the World's Children. 2013. Number calculated by FI by multiplying the percent of women who gave birth before age 18 [global, excluding China] aged 20–24 by the 2010 estimate of the female population [global, excluding China] aged 20–24 from UNPP. 2012. *Basis:* Extensive national survey data.

(40) Child laborers³⁰ (aged 5–17)

Source: Number and percent from International Labour Organization (ILO). Making Progress Against Child Labour: Global Estimates and Trends 2000-2102. 2013. *Basis:* Extensive national surveys and case studies.

Trend and disparities: The percent of children in child labor has fallen from 16% in 2000 to 13.6% in 2008 and 10.6% in 2012. The decline has been most pronounced between 2008 and 2012. The greatest regional reduction in both absolute numbers and proportion was in Asia and the Pacific, with 36 million fewer child laborers in 2008 than in 2012, or a decline of from 13.3% to 9.3%. Sub-Saharan Africa had a nearly equal decline in percentage terms, as the proportion of children in child labor was reduced from 25.3% in 2008 to 21.4% in 2012. Latin America and the Caribbean had a reduction from 10.0% to 8.8%, but regionally had the lowest number of child workers. On a global level, declines were most notable among girls and young children aged 5-11. The proportion of girls in child labor was reduced from 12.2% in 2000 to 8.9% in 2012, in comparison to a decline in boys of only slightly above 1% during that time period. Because boys already made up more of the child labor force, the disparity between boys and girls subject to child labor has grown (boys now comprising 59.4% of child laborers). Although it is encouraging that the proportion of young children aged 5-11 in child labor fell by over a third since 2000, given that they make up 44% of child laborers, the proportion of children aged 15-17 in child labor has followed economic swings and therefore has not consistently decreased during the past twelve years. According to income classification, children in low income countries were much more at risk, with 22% of children in low income countries involved in child labor as compared to 9.0% in lower middle income countries and 6.2% in upper middle income countries respectively.

The 2012 estimates for child laborers (and children in hazardous work below from the same source) are based on data taken from national SIMPOC surveys on child labor; the World Bank's Living Standards Measurement Study (LSMS) surveys; the Multiple Indicator Cluster Surveys (MICS), labor force surveys; the United Nations Population Division, and data provided by the inter-agency Understanding Children's Work (UCW) Project. The 2012 estimate includes 75 datasets that were not yet available for the 2008 estimate, and the analysis of trends between years utilizes a methodology of matched samples for the countries with more than one dataset in a specific year.

(41) Child laborers engaged in domestic work³¹ (aged 5–17)

Source: Number from ILO. Making Progress Against Child Labour: Global Estimates and Trends 2000–2102. 2013. Percent calculated by FI by dividing the number of child laborers engaged in domestic work [global] aged 5–17 (numerator) by the FI 2010 estimate of the child population [global] aged 5–17 based on UNPP. 2012 (denominator). *Basis:* Extensive national surveys and case studies.

Trend and disparities: The number of children in domestic work has risen from 10.6 million in 2008 to 11.5 million in 2012, along with the proportional share of child laborers in the service sector (of which domestic workers are a part) among all sectors (agriculture, industry, and services). However, the ILO notes in the Making Progress Against Child Labor that this may be due to better measurement of children in the services sector, particularly after the passage in 2011 of Convention 189 and Recommendation 201 regarding decent work for domestic workers. Of the 10.6 million child laborers involved in domestic work, 33% are aged 5–11 (3.51 million), 29% are aged 12–14 (3 million), and 38% are aged 15–17 (4.05 million). Girls represent 71.3% (7.5 million) of children in child labor in domestic work. Three quarters (8.1 million) of the children in child labor in domestic work are performing hazardous work.

According to the ILO, there are approximately 15.5 million children engaged in domestic work in the household of a third party, and 10.6 million of these children are considered child laborers because they are below the minimum age for work and/or are working in hazardous conditions. To ascertain estimates of children engaged in domestic work, the ILO focuses upon responses (largely from the same sources utilized in the analysis of child labor) to questions on the categorization of work that the child living in the household does as domestic work, the relationship of the child to the head of the household, and/or the types and frequency of chores assigned to the child.

(42) Children in hazardous work³² (aged 5–17)

Source: Number and percent from ILO. Making Progress Against Child Labour: Global Estimates and Trends 2000–2102. 2013. *Basis:* Extensive national surveys and case studies.

Trend and disparities: The absolute number and proportion of children in hazardous work have both been cut in half. The number of children in hazardous work was reduced from 170.5 million in 2000 to 85.3 million in 2012, and the proportion of children who are in hazardous work has declined from 11.1% to 5.4%. This decline has been most pronounced in sub-Saharan Africa, which saw a reduction from 15.1% in 2008 to 10.4% in 2012, although the absolute number of children in hazardous work was greater in Asia and the Pacific. More boys (6.7%) than girls (4.0%) are involved in hazardous work, although girls could be considered to be underrepresented because hazardous chores are not included in the calculation of child labor.

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).***

(43) Children in forced labor³³ (aged 0–17)

Source: Number from ILO. Global Estimate of Forced Labour. 2012. Percent calculated by FI by dividing the number of children in forced labor [global] aged 0–17 (numerator) by the FI 2010

estimate of the child population [global] aged 0–17 based on UNPP. 2012. (denominator). *Basis:* Modeled estimate from limited pilot surveys and cases identified through internet searches, email, telephone, email, and face-to-face interviews. Sources of information included media reports, government documents, international organization and NGO documents, academic reports, ILO reports, and trade union reports.

Trend and disparities: N/A. According to the ILO Global Estimate of Forced Labour published in 2012, the proportion of forced laborers that are children is 26%. This is a lesser proportion than in 2005, with the caveat that the data from 2005 may have overrepresented children because forced labor of children was better reported than that of adults. Although the overall number of persons in forced labor is higher in the 2012 ILO estimate (20.9 million) than in the 2005 ILO estimate (12.3 million persons), the two estimates are **not comparable** because the methodology was updated and new data sources have become available.

(44) Children in imposed labor through state military, rebel armed groups, or poor prison conditions (aged 0–17)

Source: Number of total persons in imposed labor through state military, rebel armed groups, or poor prison conditions from ILO. Global Estimate of Forced Labour. 2012. Number of children calculated by FI by multiplying the number of total persons in imposed labor through state military, rebel armed groups, or poor prison conditions by the percent of total persons in imposed labor through state military, rebel armed groups, or poor prison conditions that are children (33%) given in the report. Percent calculated by FI by dividing the number of children in imposed labor through state military, rebel armed groups, or poor prison conditions [global] aged 0–17 (numerator) by the FI 2010 estimate of the child population [global] aged 0–17 based on UNPP. 2012 (denominator). *Basis:* Modeled estimate from limited pilot surveys and cases identified through internet searches, email, telephone, email, and face-to-face interviews. Sources of information included media reports, government documents, international organization and NGO documents, academic reports, ILO reports, and trade union reports.

Trend and disparities: There is no trend data available. There is no specific breakdown by gender for children, but of all people in imposed labor through state military, rebel armed groups, or poor prison conditions, 58% are female.

It is estimated that 33% of those in imposed labor through state military, rebel armed groups, or poor prison conditions are children. It should also be noted that imposed labor through state military, rebel armed groups, or poor prison conditions makes up a lower proportion of total forced labor (10%) than in the 2005 ILO estimate, with the caveat that data is the least available for this category of forced labor and thus persons in imposed labor through state military, rebel armed groups, or poor prison conditions may be underrepresented.

Estimates for “child soldiers” are also widely cited in publications concerning child welfare. The most commonly cited estimate of 300,000 children aged 0-17 (global) is from a publication in the

year 2000 by the United Nations General Assembly for the Fifty-fifth Session: Children and Armed Conflict (A/55/163S/2000/712. 2000). This estimate of child soldiers made in the report was made without reference to the method for calculation. It is probable that the supporting documentation comes from Machel, G. for the United Nations. Fifty-first Session: Impact of Armed Conflict on Children. 1996, a report for which a series of 24 case studies was conducted that cover conflicts over the 30 years previous to the report. However, no number of child soldiers is given in the Graca Machel report. The Coalition to Stop the Use of Child Soldiers, which no longer quotes a number for child soldiers, was contacted directly to obtain further information on the difficulties involved in tracking child soldiers and to clarify the terminology for the indicator. Lucia Withers writes:

“The numbers of child soldiers at any given time is virtually impossible to establish. For example, military commanders frequently conceal children or deny access to observers. Armed groups frequently operate in dangerous, inaccessible zones to which observers do not have access and many children perform support roles and are therefore not visible in military operations.

The way in which children are recruited also prevents accurate documentation. Children are recruited both formally and informally. In some situations they stay in their communities and report only when required and often for short periods of time, for example when fighting escalates or to build strength while negotiating a demobilization package. Child soldiers also shift between groups or are released and then recruited by a different group. Many children are killed or die of injuries sustained or illnesses caused by the hardships of military life. Child soldiers often reach the age of 18 while in the ranks and are no longer considered children. The years spent as a child soldier then become invisible.

The term ‘child soldiers’ is widely used, but it is more appropriate to use the term ‘children associated with an armed forces or groups’— this covers all scenarios – i.e. membership of both armed forces and armed groups and forced or voluntary recruitment. It also captures the broader role that children perform in military forces i.e not only as gun-carrying combatants, but as porters, guards, cooks, messengers, spies etc. It might be useful to look at the definition of terms in the Paris Principles on Children Associated with Armed Forces or Armed Groups³⁴ which has been endorsed by some 66 governments to date.”

(45) Children in forced sexual exploitation³⁵ (aged 5–17)

Source: Number from ILO. Making Progress Against Child Labour: Global Estimates and Trends 20000-2102. 2013. Percentage of children calculated by FI by dividing the number of children in forced sexual exploitation [global] aged 0–17 (numerator) by the FI 2010 estimate of the child population [global] aged 0–17 based on UNPP. 2012 (denominator). *Basis:* Modeled estimate from limited pilot surveys and cases identified through internet searches, email, telephone, email, and face-to-face interviews. Sources of information included media reports, government documents, international organization and NGO documents, academic reports, ILO reports, and trade union reports.

Trend and disparities: There is no trend data available. There is no specific breakdown by gender for children, but of all people in forced sexual exploitation, 98% are female. It is thus safe to assume that the large majority of children in forced sexual exploitation are girls.

It is estimated that 20.9% of those in forced sexual exploitation are children.

The 2013 ILO Making Progress on Child Labour report (which draws upon data regarding forced labor from the 2012 ILO Global Estimate on Forced Labour) is the most current source of data on children exploited for sex and is thus used for Table 1, but other references do exist, with the caveat that they may use somewhat varying definitions. The report ILO. A Future Without Child Labor. 2002 states there are 1.8 million children *in prostitution, and the production of pornography or pornographic performance*. The data source is the same as for children in unconditional worst forms of labor. Several other sources also cite statistics for *child prostitution*. End Child Prostitution, Child Pornography, and Trafficking in Children for Sexual Purposes (ECPAT International) is one of the authorities on the issue, and has special consultative status with the Economic and Social Council of the United Nations (ECOSOC). Although ECPAT tracks progress by country via categories of actions to be taken by governments and civil society against commercial child sexual exploitation³⁶, there are no global or country numbers of children in these reports, the annual reports of ECPAT, or the EXPAT. Questions and Answers about the Commercial Sexual Exploitation of Children. 2008. The report ECPAT. Stop Sex Trafficking of Children and Young People. 2009 cites a global figure of 1.2 million children worldwide trafficked for sexual exploitation; however, that number is specific to trafficking and not prostitution and pornography. It is also questionable that this number is truly specific in regard to sex trafficking, since the source is cited as UNICEF. http://www.unicef.org/media/media_40002.html. 2007. That Web site cites children trafficked in general (not sex trafficking alone), and the source traces back through UNICEF. Press Release Day of the African Child. 2007, which cites from <http://www.ilo.org/ipsec/Campaignandadvocacy/WDAACL/2003/lang--en/index.htm> (World Day Against Child Labor 2003), and eventually back to the report ILO. A Future Without Child Labour. 2002.

Obtaining reliable statistics is challenging given the underground nature of the crime, circular reporting, frequent definitional difficulties, and the lack of consistent data collection across countries.

(46) Children in other illicit activities (in particular production and trafficking of drugs)³⁷ (aged 5–17)

Source: Number from ILO. A Future Without Child Labour. 2002. Percent calculated by FI by dividing the number of children in illicit activities [global] aged 5–17 (numerator) by the FI 2010 estimate of the child population [global] aged 5–17 based on UNPP. 2012. *Basis:* Modeled estimate [likely] from limited case studies, administrative data, and expert opinion.

Trend and disparities: N/A

¹ Age ranges such “aged 0–4” includes all children from birth to the last day of their fourth year. “Aged 5–9” would be all children from the first day of their fifth year to the last day of their ninth year.

² “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.

³ Demographic and Health Surveys. 2009. Statcompiler run on total fertility rates disaggregated by wealth status. <http://www.statcompiler.com/> accessed 13 September 2009.

⁴ Literacy-numeracy: Children must be able to do two of the following- identify/name at least ten letters of the alphabet; read at least four simple, popular words; and/or know the name and recognize the symbols of all numbers from 1 to 10; Physical: If the child can pick up a small object with two fingers, like a stick or rock from the ground, and/or the mother/caregiver does not indicate that the child is sometimes too sick to play, then the child is regarded as being developmentally on track in the physical domain; Social-emotional: The child is considered developmentally on track if two of the following are true: the child gets along well with other children; the child does not kick, bite or hit other children; and the child does not get distracted easily. Learning: If the child follows simple directions on how to do something correctly and/or when given something to do, is able to do it independently, then the child is considered to be developmentally on track in the learning domain.

⁵ Children whose birth is registered is defined as children whose birth certificate was seen by the interviewer or whose mother or caretaker says the birth has been registered. In the case of MICS surveys, data refer to children alive at the time of the survey.

⁶ 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.

⁷ Percentage of children aged 0–59 months who are below minus two standard deviations from median weight for age of the WHO Child Growth Standards.

⁸ Percentage of children aged 0–59 months who are below minus two standard deviations from median weight for height of the WHO Child Growth Standards.

⁹ 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.

¹⁰ 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.

¹¹ Browne, K., et al. 2005. A European Survey of the Number and Characteristics of Children Less than Three Years Old in Residential Care at Risk of Harm, Adoption and Fostering defines institutional care as: residential health or social care facilities with 11 or more children, where children stay for more than three months without a primary caregiver. The UNICEF Innocenti TRANSMONEE database for CEE/CIS defines residential care as: children in infant homes, orphanages, boarding homes and schools for children without parental care or poor children, disabled children in boarding schools and homes, family-type homes, SOS villages, etc. (with some exceptions by country, according to national reporting definitions). The 2013 discussion paper by the NGO Working Group on Children Without Parental Care entitled "Identifying Basic Characteristics of Formal Alternative Care Settings for Children" defines institutional care as sub-set of residential care settings where children are looked after in any public or private facility, staffed by salaried carers or volunteers working pre-determined hours/shifts, and based on collective living arrangements with a large capacity. Residential care is then defined as care provided in any nonfamily- based group setting, such as places of safety for emergency care, transit centers in emergency situations, and all other short and long-term residential care facilities, including group homes. Finally, 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.

¹² Children in street situations are defined as children living on the streets, whether occasionally or not, with or without their families, as well as those who work on streets. It is also argued that children with "street connections" who spend a portion of time on the street to escape violence at home, as part of a gang, or for social reasons should be included. For all these children, the street represents a point of reference.

¹³ A widely accepted set of definitions, commonly attributed to UNICEF

(http://www.unicef.org/evaldatabase/files/ZAM_01-009.pdf), divides street children into two main categories:

- Children on the street are those engaged in some kind of economic activity, ranging from begging to vending. Most go home at the end of the day and contribute their earnings to their family. They may be attending school and retain a sense of belonging to a family.
- Children of the street actually live on the street (or outside of a normal family environment). Family ties may exist but are tenuous and are maintained only casually or occasionally.

¹⁴ Percentage of children 0–59 months old left alone or in the care of another child younger than 10 years of age for more than one hour at least once in the past week.

¹⁵ Drowning can be fatal or non-fatal. Non-fatal drowning can result in a range of severity of outcomes, from seeking medical care and/or missing at least one day of school to hospitalization and permanent disability. Because the definition of non-fatal drowning can be variable across surveys, only fatal drowning is considered here.

¹⁶ Refugees include individuals recognized under the 1951 Convention relating to the Status of Refugees; its 1967 Protocol; the 1969 OAU Convention Governing the Specific Aspects of Refugee Problems in Africa; those recognized in accordance with the UNHCR Statute; individuals granted complementary forms of protection; or those enjoying "temporary protection." The refugee population includes people in a refugee-like situation. The refugee population of concern to UNRWA includes those registered and 'other registered persons'. The operational definition of a Palestine refugee is any person whose "normal place of residence was Palestine during the period 1 June 1946 to 15 May 1948 and who lost both home and means of livelihood as a result of the 1948 conflict." Palestine refugees are persons who fulfill the above definition and descendants of fathers fulfilling the definition.

¹⁷ 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. For purposes of UNHCR's statistical tables, this population only includes conflict-generated IDPs to whom the Office extends protection and/or assistance. Therefore, for the UNHCR 2008 Global Trends Report that includes all IDPs, the total IDP number is drawn from: Internal Displacement Monitoring Centre. 2009. *Internal Displacement: Global Overview of Trends and Developments, 2008*. The IDP population includes people in an IDP-like situation

¹⁸ Total affected is defined as the sum of those injured, homeless, and affected. Injured is defined as the number of people suffering from physical injuries, trauma, or an illness requiring immediate medical treatment as a direct result of a disaster. Homeless is defined as the number of people needing immediate assistance for shelter. Affected is defined as the number of people requiring immediate assistance during a period of emergency; this may include displaced or evacuated people.

¹⁹ 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.

²⁰ Adequate shelter is defined as fewer than five people per room and having flooring material (other than mud).

²¹ 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.

²² Secondary out-of-school is defined as children of lower secondary age not enrolled in lower secondary or any other level of education. Lower secondary age is typically ages 10/11 to 14./15 , and the duration of lower secondary education is roughly 3 years.

²³ 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).

²⁴ Psychological abuse includes shouting, yelling, and screaming at the child, and addressing her or him with offensive names.

²⁵ Minor physical punishment includes 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.

²⁶ Severe physical punishment includes hitting the child on the face, head or ears, and beating the child with an implement over and over as hard as one can.

²⁷ 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.

²⁸ 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.

²⁹ Sexual violence is defined 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).

³⁰ Child labour is defined by ILO. 2010. Accelerating Progress Against Child Labour as a subset of children [aged 5-17] in employment. It includes those in the worst forms of child labour and children in employment below the minimum age, excluding children in permissible light work, if applicable. It is therefore a narrower concept than “children in employment”, and excludes all those children who work only a few hours a week in permitted light work and those above the minimum age whose work is not classified as “hazardous work’ or among other worst forms of child labour.

³¹ Child laborers engaged in domestic work are defined under Convention 189 as domestic workers if the children are in an employment relationship working in or for a third party household/s (a person who performs domestic work only occasionally or sporadically and not on an occupational basis is not a domestic worker). The child is considered to be a child laborer if he/she is under the minimum legal working age (which shall not be less than the age of completion of compulsory schooling, and in any case not lower than 15 years), in a slavery-like situation, or is working under hazardous conditions as defined by the International Labour Organization. Hazardous working conditions particular to domestic service include long and tiring working days, use of toxic chemicals, carrying heavy loads, handling dangerous items such as knives and axes, insufficient or inadequate food and accommodation, humiliating or degrading treatment, physical violence, or sexual abuse. The tasks performed by domestic workers can be many, and vary from country to country. Thus, the term domestic worker is not associated with the type of task carried out.

³² 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, 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.

³³ Forced labor of children is not specifically defined, but the ILO considers that the Forced Labour Convention, 1930 (No. 29), Article 2.1, applies to children as any work or service undertaken by a child is considered as forced child labour where some form of coercion or deception is applied by a third party, either directly to the child or to his or her parents, in order to oblige the child to take a job or perform a task, or to prevent him or her from leaving the work. In general there are three principal elements of forced labor (for all ages) as defined by the ILO in the 2012 ILO Global Estimate of Forced Labour: “first, some form of work or service must be provided by the individual concerned to a third party; second, the work is performed under the threat of a penalty, which can take various forms, whether physical, psychological, financial or other; and third, the work is undertaken involuntarily, meaning that the person either became engaged in the activity against their free will or, once engaged, finds that he or she cannot leave the job with a reasonable period of notice, and without forgoing payment or other entitlements. According to the ILO, forced labor estimates can be equated with those for human trafficking, with the exception of trafficking for organ removal and forced marriage or adoption, unless the latter practices result in forced labour. “Severe forms of trafficking” is defined by the U.S. Government under Public Law 106-386, the Trafficking Victims Protection Act of 2000, as ,“a.) sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such an act has not attained 18 years of age; or b.) the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.” This definition is in compliance with the UN Protocol to Prevent, Suppress, and Punish Trafficking in Persons, Especially Women and Children, which provides the following definition:“ Trafficking in persons means the recruitment, transportation, transfer, harboring or receipt of persons: by means of the threat or use

of force or other forms of coercion, of abduction, of fraud, of deception, or the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation. Exploitation shall include, at a minimum, the exploitation of the prostitution of others or other forms of sexual exploitation, forced labour or services, slavery or practices similar to slavery, servitude or the removal of organs.” Note: This is the globally accepted definition of the trafficking phenomenon. To date, 135 countries have ratified the Protocol. The instrument aims inter alia to distinguish the exploitation-based offense of human trafficking from the movement-based crime of alien smuggling.

³⁴ The Paris Principles Definition: “A child associated with an armed force or armed group” refers to any person below 18 years of age who is or who has been recruited or used by an armed force or armed group in any capacity, including but not limited to children, boys, and girls used as fighters, cooks, porters, messengers, spies, or for sexual purposes. It does not only refer to a child who is taking or has taken a direct part in hostilities.

³⁵ Forced sexual exploitation is not specifically defined in the ILO 2012 report, but the ILO website on commercial sexual exploitation of children (<http://www.ilo.org/ipecc/areas/CSEC/lang--en/index.htm>) states that “Commercial sexual exploitation of children is the exploitation by an adult with respect to a child or an adolescent – female or male – under 18 years old; accompanied by a payment in money or in kind to the child or adolescent (male or female) or to one or more third parties.” It can include the use of children in sexual activities remunerated in cash or in kind, trafficking of children for the sex trade, child sex tourism, [production, promotion, and distribution] of pornography involving children, and the use of children in public or private sex shows. The Optional Protocol on the Sale of Children, Child Prostitution, and Child Pornography defines child prostitution as “the use of a child in sexual activities for remuneration or any other form of consideration,” and pornography as “any representation, by whatever means, of a child engaged in real or simulated explicit sexual activities or any representation of the sexual parts of a child for sexual purposes.”

³⁶ ECPAT. 2008. Questions and Answers about the Commercial Sexual Exploitation of Children includes children in prostitution, pornography, trafficking of children for sexual purposes, child-sex tourism, and in some case child marriage is included in that definition. It also states that children can be sexually exploited through domestic servitude and bonded labor.

³⁷ Noguchi, Y. 2008. The Use of Children in Illicit Activities as a Worst Form of Child Labor: A Comment on Article 3(c) of ILO Convention 182 in Nesi, G. et al. 2008. Child Labor in a Globalized World: a Legal Analysis of ILO Action states that the term “illicit” was used over “illegal” because “an activity of drug trafficking not prohibited by national law would fall outside the scope” of “illegal”; and clarifies that: “Recommendation 190, which supplements C.182, in Paragraph 12, refers to another example: ‘or activities which involve the unlawful carrying or use of firearms or other weapons’. Being a Provision of a Recommendation, it does not have binding force, but offers insight into the types of activities – namely activities involving armed violence – in which the use of a child should be stopped immediately.