Child Feces Disposal in UGANDA

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Key messages:

- In 2011, 25 percent of households surveyed in Uganda reported unsafe disposal of the feces of their youngest child under age three.
- Even among households with improved toilets or latrines, 13 percent reported unsafe child feces disposal behavior.
- Unsafe child feces disposal is more prevalent among households that defecate in the open, those in rural areas, those that are poorer, and those with younger children.[1]

OVERVIEW

Safe disposal of children's feces is as essential as the safe disposal of adults' feces. This brief provides an overview of the available data on child feces disposal in Uganda and concludes with ideas to strengthen safe disposal practices, based on emerging good practice.

The Joint Monitoring Programme for Water Supply and Sanitation (JMP) tracks progress toward the Millennium Development Goal 7 target to halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation. The JMP standardized definition for an improved sanitation facility is one that hygienically separates human excreta from human contact.[2]

In the latest JMP report, only 34 percent of Uganda's population had access to improved sanitation in 2012.[3] This means that 24 million individuals in Uganda lacked improved sanitation in 2012; of these, 3 million practice open defecation. However, these estimates are based on the household's primary sanitation facility, and may overlook the sanitation practices of young children. In many cases, children may not be able to use an improved toilet or latrine—because of their age and stage of physical development or the safety concerns of their caregivers—even if their household has access to one.

SUMMARY OF CHILD FECES DISPOSAL DATA

Among the 75 percent of households reporting safe child feces disposal, not all had an improved sanitation facility into which they could easily deposit the feces. Only half (52 percent) of households in Uganda reported that their youngest child's feces were disposed of into an improved sanitation facility (see Figure 1).

In Uganda, households lacking improved sanitation, those in rural areas, and poorer households—as well as households with younger children—have a higher prevalence of unsafe disposal of child feces. Households practicing open defecation reported the highest level of unsafe child feces disposal, at 78 percent. However, 22 percent of households practicing open defecation report using safe child feces disposal (see Figure 2); it is possible, but not probable, that these households who do not use improved sanitation themselves deposit their children's feces into a toilet/latrine (see notes on self-reported data under "Data Sources").

Among households in Uganda with children in their first year of life, 61 percent reported safe disposal, compared to 89 percent of those with children aged four (48 to 59 months). A shift in safe disposal practices is also seen as children grow: children are increasingly likely to use a toilet/latrine themselves, or have their feces put or rinsed into one (see Figure 3). At these young ages, the behavior of the child's caregiver is critical to dispose of their feces safely and shape the child's toilet training.

In the poorest quintile, half of households (53 percent) reported using safe disposal for their youngest children under age three in 2008–2009, compared to three quarters (75 percent) among the richest (see Figure 4). In all households with children under age three, 63 percent people in the poorest quintile used a toilet/latrine of any kind, compared to 100 percent of the richest quintile.

Between 2001 and 2011, reported safe disposal of child feces increased in Uganda, from covering 68 percent of the youngest children per household nationally in 2001, to 75 percent of them a decade later. The prevalence of safe disposal in urban areas seems to have decreased somewhat during that time (see Figure 5).

What Is "Safe Disposal" of a Child's Feces?

The safest way to dispose of a child's feces is to help the child use a toilet or latrine or, for very young children, to put or rinse their feces into a toilet or latrine. For the purposes of this brief, these disposal methods are referred to as "safe," whereas other methods are considered "unsafe." By definition, "safe disposal" is only possible where there is access to a toilet or latrine. When a child's feces is put or rinsed into an "improved" toilet or latrine, this is termed "improved child feces disposal."

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FIGURE 1 In 2011, three-quarters (75 percent) of households in Uganda reported that the feces of their youngest child under age three were safely disposed of. *Percentage of households reporting each feces disposal practice for their youngest child under age three, Uganda, 2011.*

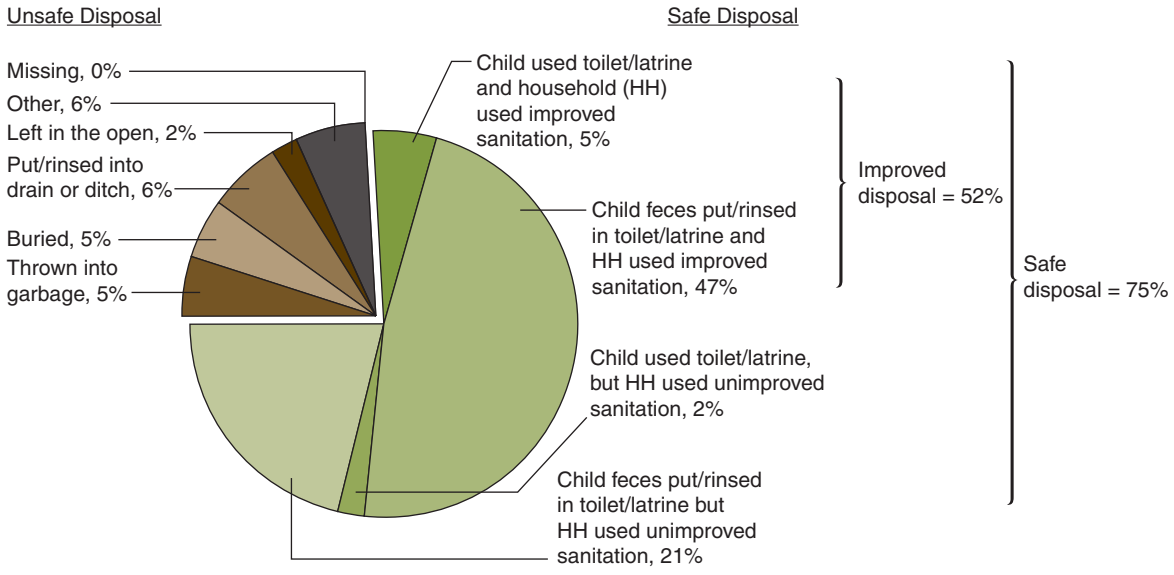


FIGURE 2 Even among households with improved sanitation, 13 percent reported unsafe child feces disposal behaviors. *Reported feces disposal practice for households' youngest child under age three, by household sanitation facility type, Uganda, 2011.*

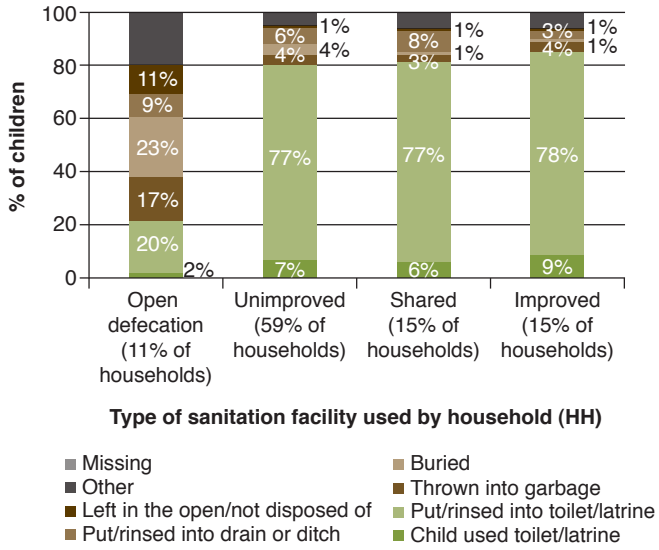
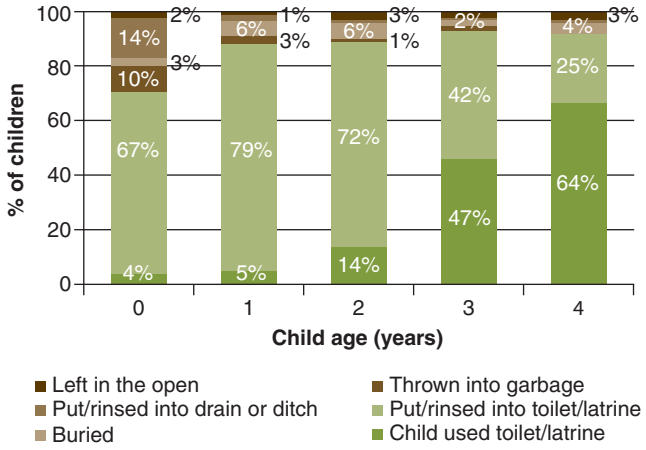


FIGURE 3 Child feces disposal behaviors differ across age groups: households with younger children were generally more likely to report unsafe disposal methods. *Reported feces disposal practice for children of different ages, Uganda, 2011.*



Behind this national-level data, there is wide variation in child feces disposal practices, with a greater prevalence of unsafe practices among households without access to improved sanitation, in rural areas, and those that are poorer. For example, unsafe disposal in rural areas and among the poorest 40 percent of households is worse than among children overall. Although this brief only focuses on one socioeconomic indicator at a time, applying multiple lenses would show even greater extremes of disparity—with the poorest rural households reporting the greatest prevalence of unsafe disposal.

IDEAS FOR CONSIDERATION

In Uganda, the Ministry of Health, supported by the World Bank's Water and Sanitation Program (WSP), UNICEF, and Plan, include that "all households defecate only in latrines and dispose of babies' feces only into latrines" as a vital indicator for a community to achieve open defecation free (ODF) status. Total sanitation is achieved only if all households in a community "wash hands with soap properly before eating, after defecating, after cleaning up babies' excrement, and before touching food" (among other indicators).[6] A USAID/HIP program that integrated water, sanitation, and hygiene improvement

FIGURE 4 Safe disposal differs across the wealth asset quintiles,[4] with the poorest 20 percent of households more likely than richer households to report unsafe child feces disposal. *Reported feces disposal practice for households' youngest child under age three, by household wealth quintile, Uganda, 2011.*

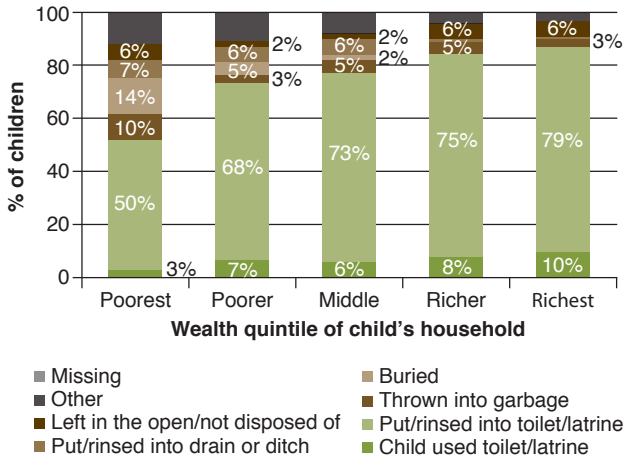
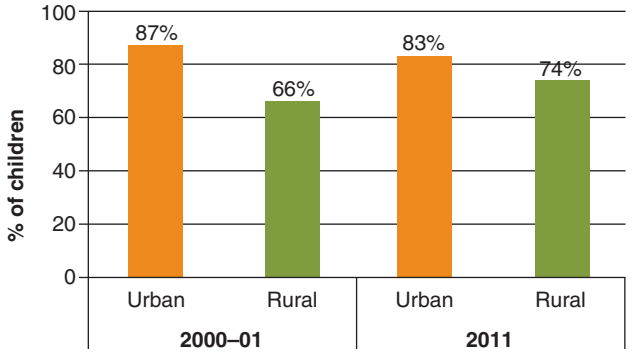


FIGURE 5 Safe disposal remains lower among rural households than among urban households. *Percentage of households reporting safe feces disposal for their youngest child under age three, by urban and rural residence, 2011.[5]*



into HIV/AIDS programs to reduce diarrhea morbidity in Uganda was "encouraging all family members over the age of five to defecate in a hygienic latrine." The program was also "supporting young children (three to five years) to defecate in a hygienic latrine, potty, or fixed place, and training caregivers to dispose of very young children's feces hygienically in a latrine."[7]

Other than these two programs, there are few other interventions in Uganda aimed at the safe disposal of children's feces during the first years of life. In general, sanitation for children under age three has been a neglected area of policy and program intervention. Given the relatively few programs focusing on children's sanitation in Uganda and globally, there is not a strong evidence base of effective strategies for increasing the safe disposal of children's feces. Significant knowledge gaps must be filled before comprehensive, practical evidence-based policy and program guidance will be available.

What Is the Impact of Unsafe Disposal of Child Feces?

There is widespread belief that the feces of infants and young children are not harmful, but this is untrue. In fact, there is evidence that children's feces could be more risky than adult feces, due to a higher prevalence of diarrhea and pathogens–such as hepatitis A, rotavirus, and *E. coli*–in children than in adults.[8] Therefore, children's feces should be treated with the same concern as adult feces, using safe disposal methods that ensure separation from human contact and household contamination.

In particular, the unsafe disposal of children's feces may be an important contaminant in household environments, posing a high risk of exposure to young infants.[9] Poor sanitation can result in substantial health impacts in children, including a higher prevalence of diarrheal disease, intestinal worms, enteropathy, malnutrition, and death. According to the World Health Organization (WHO), most diarrheal deaths in the world (88 percent) are caused by unsafe water, sanitation, or hygiene. More than 99 percent of these deaths are in developing countries, and about eight in every 10 deaths are children.[10] Diarrhea obliges households to spend significant sums on medicine, transportation, health facility fees, and more, and can mean lost work, wages, and productivity among working household members.[11] Stunting and worm infestation can reduce children's intellectual capacity, which affects productivity later in life. The WHO estimates that the average IQ loss per worm infection is around 3.75 points.[12]

Nevertheless, organizations and governments interested in improving the management of children's feces could consider:

- Conducting formative research to understand the behavioral drivers and barriers to safe child feces disposal
- Strengthening efforts to change the behavior of caregivers through programs that encourage cleaning children after defecation, potty training children, and using appropriate methods to transport feces to a toilet/latrine as well as handwashing with soap after fecal contact and before preparing food or feeding a child
- Exploring opportunities to integrate child sanitation into existing interventions that target caregivers of young children, such as including key messages in antenatal/newborn care materials and infant and young child feeding guidance provided to parents, ensuring that midwives' training includes information on safe child feces disposal, and integrating child sanitation information into early childhood development materials and preschool programs
- Partnering with the private sector to improve feces management tools, such as potties, diapers, tools for retrofitting latrines for child use, and scoopers.

DATA SOURCES

Unless otherwise specified, all analysis in this brief is based on households' self-reported behavior for disposing of child, as collected in the 2011 Uganda DHS, which is the latest Multiple Indicator Cluster Survey (MICS) or Demographic and Health Survey (DHS) available for Uganda that records child feces disposal behavior.

The MICS and DHS collect data in a generally harmonized manner and hence are the basis for this country profile series. However, whereas the DHS collects data on the youngest child under age five living with the mother for each household, the MICS collects data on all children under age three who live with the respondent (mother or caretaker). To maximize comparability, we restricted all analysis to children under age three in all figures, except Figure 3.

It is likely that self-reports overestimate safe disposal.[13] In Bangladesh, for example, although 22 percent of children reportedly either used a toilet/latrine or their feces were put or rinsed into the toilet/latrine (according to MICS 2006), a structured observation of behavior conducted under UNICEF's Sanitation, Hygiene Education, and Water Supply in Bangladesh (SHEWA-B) program in 2007 found that only 9 percent of subjects disposed of child feces into a toilet/specific pit.[14] Regardless of this issue, self-reports are currently regarded as the most efficient method for gauging safe disposal of children's feces.

NOTES

We're interested in your thoughts. Have you found different evidence of what works through your own programming? If you have thoughts to share, or know of a program that is encouraging the safe disposal of child feces, please contact WSP at worldbankwater@worldbank.org or UNICEF at WASH@unicef.org so that we can integrate your information into future program guidance.

REFERENCES

1 Uganda Bureau of Statistics (UBOS) and ICF International Inc. 2012. *Uganda Demographic and Health Survey 2011*. Uganda: UBOS and Maryland: ICF International Inc. Please see the "Data Sources" section.

2 The JMP has established a set of standardized definitions to categorize improved sanitation, which are used to track progress toward Millennium Development Goal 7. However, these definitions are not always the same as those used by national governments. See *Progress on Drinking Water and Sanitation: Update 2014*.

3 WHO/UNICEF Joint Monitoring Programme. 2014. *Progress on Drinking Water and Sanitation: Update 2014*. Geneva: World Health Organization.

4 These asset indices used to classify households into wealth quintiles have not been adjusted to remove drinking water or sanitation variables.

5 UBOS and ICF International Inc. 2012. *Uganda Demographic and Health Survey 2011*. Kampala, Uganda: UBOS, and Calverton, Maryland: ICF International Inc.; and UBOS and ORC Macro. 2001. *Uganda Demographic and Health Survey 2000–2001*. Entebbe, Uganda: UBOS, and Calverton, Maryland: ORC Macro.

6 Uganda's Ministry of Health, WSP, Plan. 2011. *Community-Led Total Sanitation: Training of Trainers Manual*. Uganda: Plan, 145.

7 Hygiene Improvement Project and the Academy for Educational Development. n.d. *Programming Guidance For Integrating Water, Sanitation, and Hygiene Improvement into HIV/AIDS Programs to Reduce Diarrhea Morbidity*. Washington, DC: Hygiene Improvement Project and the Academy for Educational Development.

8 Feachem, R., D. Bradley, H. Garelick, et al. 1983. *Sanitation and Disease: Health Aspects of Excreta and Wastewater Management. World Bank Studies in Water Supply and Sanitation 3*. Chichester, UK: John Wiley & Sons.

9 Gil, A., C. Lanata, E. Kleinau, and M. Penny. 2004. *Children's Feces Disposal Practices in Developing Countries and Interventions to Prevent Diarrheal Diseases: A Literature Review*. Strategic Report 11. Peru: Environmental Health Project (EHP).

10 WHO. 2009. *Global Health Risks: Mortality and Burden of Disease Attributable to Selected Major Risks*. Geneva: World Health Organization, 23.

11 Favin, M., Naimoli, G., and Sherburne, L. 2004. *Improving Health Through Behavior Change: A Process Guide on Hygiene Promotion*. Joint Publication 7. Washington, DC: Environmental Health Project.

12 WHO. 2005. *Report of the Third Global Meeting of the Partners for Parasite Control: Deworming for Health and Development*. Geneva: World Health Organization, 15.

13 Stanton, B., J. Clemens, K. Azis and M. Rahamanr "Twenty-four-hour Recall, Knowledge-attitude-practice Questionnaires and Direct Observations of Sanitary Practices: A Comparative Study" in Bulletin of the World Health Organization. (Geneva: World Health Organization, 1987).

14 Akhtaruzzaman, M. N., and S. N. Islam. 2011. *Nutrition, Health and Demographic Survey of Bangladesh—2011: A Preliminary Report*. Bangladesh: University of Dhaka, 19.

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