

Key messages:

- In 2013, 77 percent of households surveyed in the Philippines reported unsafe disposal of the feces of their youngest child under age three.
- Even among households with improved toilets or latrines, 73 percent reported unsafe child feces disposal behavior.
- Unsafe child feces disposal is more prevalent among households that defecate in the open, those that are less wealthy, and those with younger children.
- Young children had worse sanitation than the broader Philippine population. Overall, only 16 percent of children under age three in the Philippines defecated into or had their feces deposited into an improved toilet or latrine, compared to 74 percent of the population at large.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 the Philippines 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, 74 percent of the population in the Philippines had access to improved sanitation in 2012.³ This means that 25 million individuals in the Philippines lacked improved sanitation in 2012; of these, 7.5 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

Although 23 percent of households reported safe disposal of their youngest child's feces, only 16 percent of households in the Philippines reported that their children's feces were deposited into an improved sanitation facility (see Figure 1). This low percentage of households reporting improved child feces disposal suggests that children under age three have worse sanitation than the country's broader population, where 74 percent use improved sanitation.



Households practicing open defecation reported the highest level of unsafe child feces disposal, at 95 percent (Figure 2). The Philippines ranked third worst for the proportion of children whose feces are safely disposed of, out of nine countries in East Asia and the Pacific with available comparable Multiple Indicator Cluster Survey (MICS) or Demographic and Health Survey (DHS) data.

Among households with children in their first year of life, 7 percent reported safe disposal, compared to 84 percent of those with children aged four (48 to 59 months) (Figure 3). 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. 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 lowest quintile in the Philippines, 21 percent of households reported safe disposal for their youngest children under age three, compared to 25 percent of households in the wealthiest quintile. In all households with children under three, 74 percent of people

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."

FIGURE 1 In the Philippines in 2013, only 23 percent of households 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, Philippines, 2013.

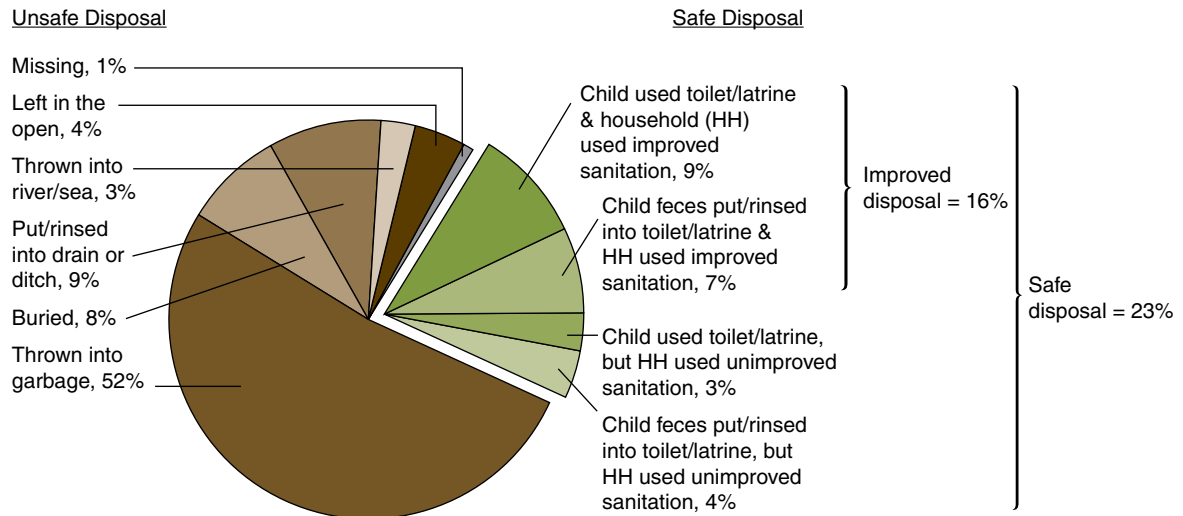


FIGURE 2 Even among households with improved sanitation, 73 percent reported unsafe child feces disposal behaviors. Reported feces disposal practice for households' youngest child under age three, by household sanitation facility type, Philippines, 2013.

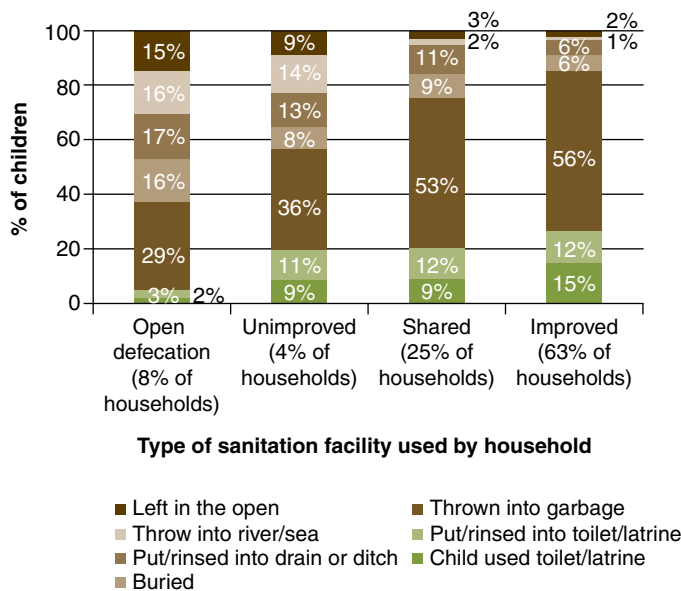
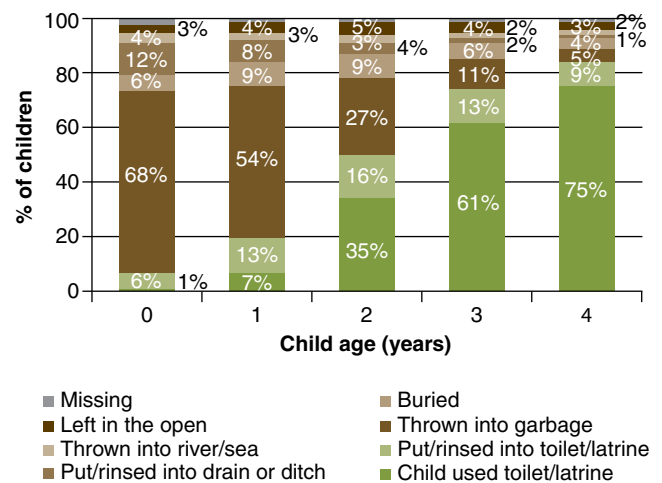


FIGURE 3 Households with younger children were more likely to report unsafe disposal methods. Reported feces disposal practice for children of different ages, Philippines, 2013.



in the lowest quintile used a toilet/latrine of any kind, compared to 100 percent of households in the wealthiest quintile (Figure 4). This is an important factor in child feces disposal: by definition, safe disposal is only possible where there is access to a toilet/latrine. Between 2003 and 2013, reported safe disposal of child feces decreased somewhat in the Philippines, from 31 percent nationally in 2002–2003, to 23 percent in 2013, despite gains in overall household improved sanitation over the same time period from 78 to 84 percent.

Disposal of feces in garbage is considered unsafe as garbage in many countries is not sufficiently contained, but this publication shows that such disposal is much more likely among urban and wealthy households and those using improved sanitation (Figure 5). The classification of it as unsafe reduces the difference we see between urban and rural households, and along other socioeconomic lines.

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 and those that are least wealthy. Although this brief only focuses on one socioeconomic indicator at a time, applying multiple lenses would show even greater extremes of disparity—with the least wealthy

FIGURE 4 Safe disposal differs across wealth quintiles,⁴ with safe disposal somewhat more likely among the wealthiest 60 percent of households than the least wealthy 40 percent. Reported feces disposal practice for households' youngest child under age three, by household wealth quintile, Philippines, 2013.

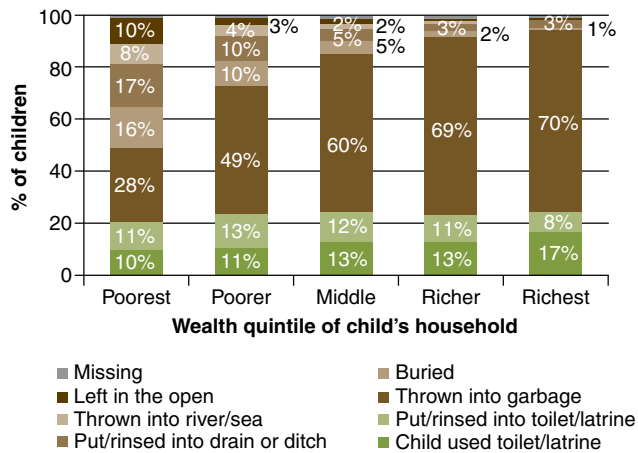
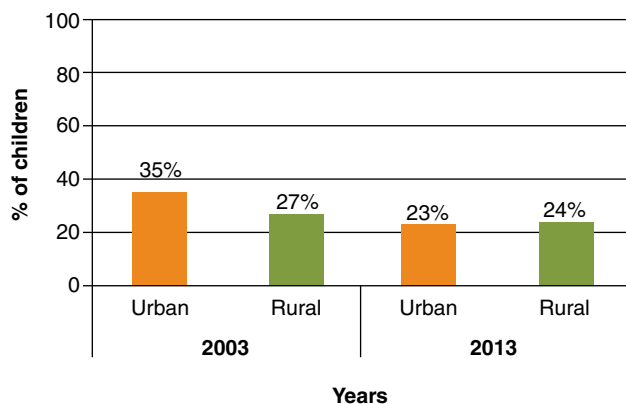


FIGURE 5 Safe disposal has decreased and equalized between rural households and urban households. Percentage of households reporting safe feces disposal for their youngest child under age three, by urban and rural residence, Philippines, 2003 and 2013.⁵



households whose members openly defecate reporting the greatest prevalence of unsafe disposal.

IDEAS FOR CONSIDERATION

UNICEF's regional EAPRO Nutrition Strategy includes "behavior change communication on safe disposal of feces, particularly child feces" as part of the Water and Sanitation Package. UNICEF's rapid assessments for the area affected by Typhoon Yolanda found very low awareness of safe disposal of childhood feces, and more formative research is planned. Apart from this work, there are few other interventions in the Philippines 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 in the Philippines. Given the relatively few programs focusing on children's sanitation in the Philippines and globally, there

What Is the Impact of Unsafe Disposal of Children's 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.⁶ Therefore, children's feces should be treated with the same concern as adults' 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.⁷

Poor sanitation can result in substantial health impacts in children, including a higher prevalence of diarrheal disease, intestinal worms, enteropathy, malnutrition, and death. A 1989 study in Cebu, Philippines, found unsanitary disposal of young infants' stools to be associated with a 34 percent increase in clinically diagnosed diarrheas (OR = 1.34) and a 63 percent increase in pathogen positive diarrheas (OR = 1.63), compared to those who were following sanitary practices.⁸ 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.⁹ 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.¹⁰ 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.¹¹

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. 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, and ensuring that midwives' training, as well as early childhood development materials and preschool programs, include information on safe child feces disposal
- Partnering with the private sector to improve feces management tools, such as potties, diapers, tools for retrofitting latrines for



child use, scoopers, and researching appropriate ways for diaper disposal and cloth diaper cleaning

- Improving the enabling environment for management of children's feces, by including specific child feces related criteria in open defecation free (ODF) verification protocols and in national sanitation policies, strategies, or monitoring mechanisms.

DATA SOURCES

Unless otherwise specified, all analysis in this brief is based on households' self-reported behavior for disposing of child feces, as collected in the 2013 Philippines DHS, which is the latest MICS/DHS available for the Philippines 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.¹² 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 only 9 percent of subjects disposed of child feces into a toilet/specific pit.¹³ Regardless of this issue, self-reports are currently regarded as the most efficient method for gauging safe disposal of children's feces.

REFERENCES

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- 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.
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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 which 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.

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