

Child Feces Disposal in LAO PDR



Key messages:

- Four-fifths (82 percent) of households surveyed in Lao PDR in 2011–2012 reported that the feces of their children under age three were not deposited into any kind of toilet or latrine—i.e., they were unsafely disposed of.
- Even among households with improved toilets or latrines, almost two-thirds (64 percent) reported unsafe child feces disposal behavior.
- Only 18 percent of children under age three defecated or had their feces deposited into an improved toilet or latrine, compared to 65 percent of the population at large using improved latrines or toilets.

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 Lao PDR¹ 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 65 percent of Lao PDR's population had access to improved sanitation in 2012.³ This means that 2.4 million individuals in Lao PDR lacked improved sanitation in 2012, of which 1.9 million practice open defecation. However, this estimate is 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

A consumer survey conducted by the Water and Sanitation Program (WSP) found that only 11 percent of households in Lao PDR reported that their main way to dispose of their baby's feces was in a latrine. An additional 11 percent of households surveyed mentioned latrine disposal, but also said they use unsafe methods such as tossing feces into the yard, leaving them in the house, throwing them in the bush or forest, or burying them. Respondents who agreed that "most people who dispose of their child's excreta in open/in the river should be punished/fined" and agreed that "latrines are not dangerous for children," were one-and-a-half times more likely to report safe disposal than those respondents that disagreed. Female respondents



were more likely than males to report safely disposing of stools, and the Hmong-Lumien ethnic group was four times more likely than the Mon-Khmer to report safe child feces disposal.⁴

Only 18 percent of households⁵ in Lao PDR reported safe disposal of their children's feces. Slightly less, 17 percent, reported disposal into an improved sanitation facility, according to Lao PDR's MICS/DHS 2011–12 (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 65 percent use improved sanitation.

In Lao PDR, 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 almost universally reported the highest level of unsafe child feces disposal, at 86 percent.

Households with younger children were more likely to report unsafe disposal methods (see Figure 4). Specifically, among households with children in their first year of life, only one in 10 (9 percent) reported safe disposal. The prevalence of safe disposal for children aged two (24–35 months) was more than two-and-a-half times higher (26 percent). A shift in safe disposal practices is seen as children grow: children are increasingly likely to use a toilet/latrine themselves, rather than having 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.

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 Lao PDR in 2011–2012, less than one-fifth (18 percent) of households reported that the feces of their children under age three were safely disposed. Percentage of children under age three with each feces disposal type, Lao PDR, 2011–2012.

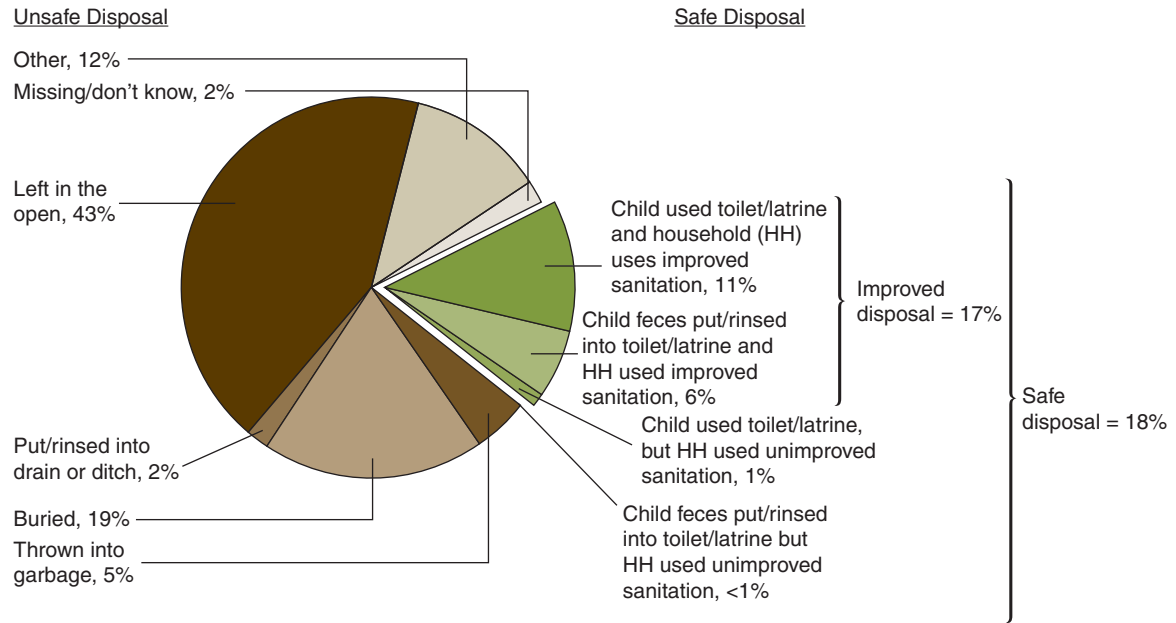
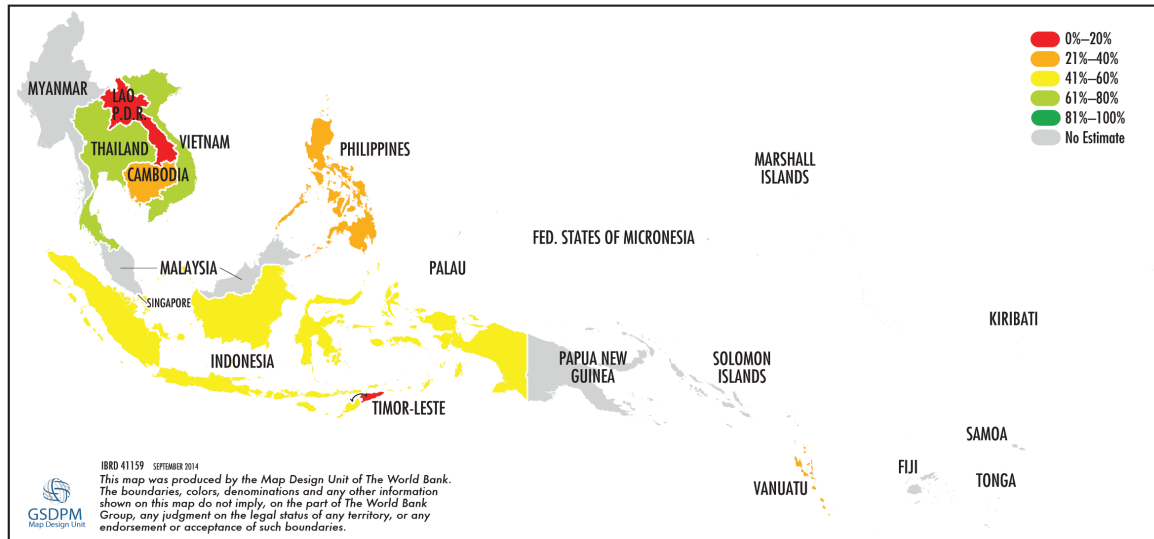


FIGURE 2 Lao PDR ranked worst for the percentage of children whose feces are safely disposed of, out of eight countries in East Asia and the Pacific with available MICS or DHS data. This is especially surprising as Lao PDR has much higher access to improved sanitation, as compared to other low-performers on safe child feces disposal. Percentage of households reporting safe feces disposal for their children under age three, East Asia and the Pacific.⁶



Only 3 percent of the children under three among the poorest quintile had safe disposal, compared to 50 percent of the children under three in the richest quintile. In households with children under three, 10 percent of the poorest used a toilet/latrine (of any kind) compared to 100 percent of the richest quintile. Thus many households with access still choose to dispose of child feces elsewhere.

Although this brief only focuses on one socio-economic 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 Lao PDR, there are few interventions aimed at the safe disposal of child 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 Lao PDR.

FIGURE 3 Even among households with improved sanitation, almost two-thirds (64 percent) reported unsafe child feces disposal behaviors. Reported feces disposal practice for children under age three, by household sanitation facility type, (Lao PDR, 2011–2012).

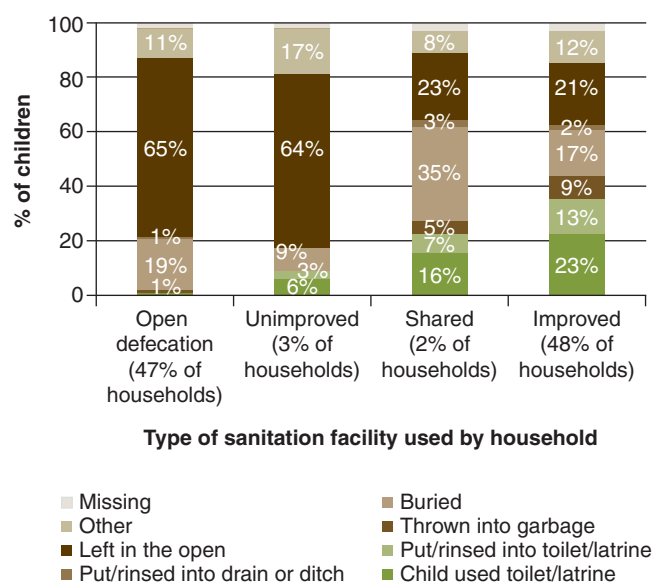
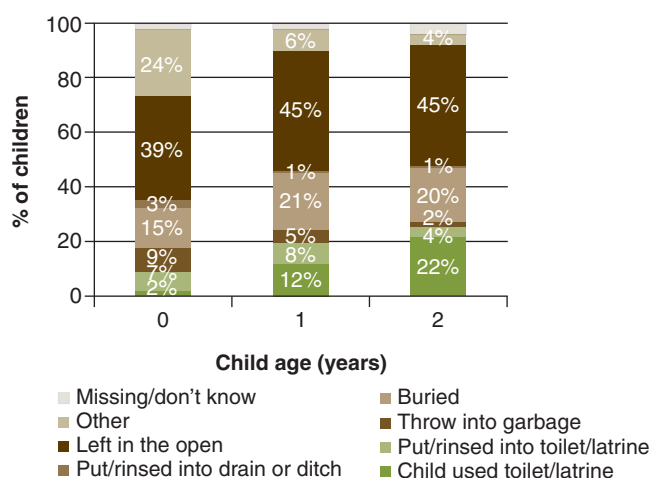


FIGURE 4 Households with younger children were more likely to report unsafe disposal methods. Reported feces disposal practice for children of different ages (Lao PDR, 2011–12).



Given the relatively few programs focusing on children's sanitation in Lao PDR and globally, there is not a strong evidence base of effective strategies for increasing the safe disposal of child 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 to take the following actions:

- Conducting additional formative research to understand the behavioral drivers of 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

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 because of a higher prevalence of diarrhea and pathogens—such as hepatitis A, rotavirus, and *E. coli*—in children than adults.⁷ 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.⁸

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 8 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

- Exploring opportunities to integrate child sanitation into existing interventions that target caregivers of young children, such as including key messages in antenatal and newborn care materials provided to parents or ensuring midwives' training includes information on safe child feces disposal
- Partnering with the private sector to improve feces management tools, such as potties, diapers, and scoopers
- Improving the enabling environment for management of children's feces, by including specific child feces-related criteria in open defecation free verification protocols, national sanitation policies, strategies, or monitoring mechanisms.

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 children's 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.

DATA SOURCES

Unless otherwise specified, all analysis in this brief is based on self-reported child feces disposal behavior collected in the Lao PDR DHS 2011–12, which is the latest MICS/DHS available for Lao PDR that records child feces disposal behaviors.

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

FIGURE 5 Safe disposal differs across the wealth asset quintiles,¹² with safe disposal far more likely to be reported among households in the richest quintiles. Reported feces disposal practice for children under age three, by household wealth quintile (Lao PDR, 2010–11).

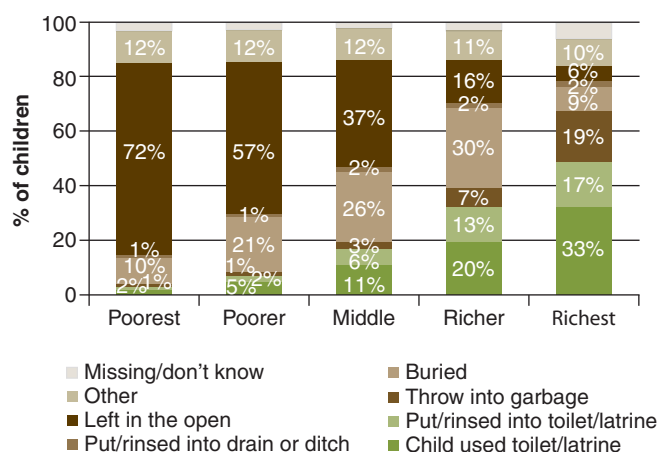
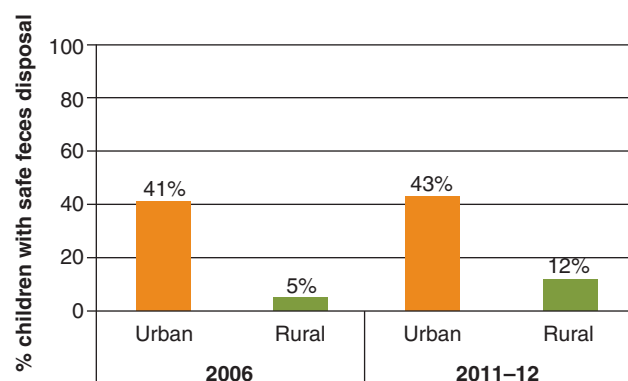


FIGURE 6 Safe disposal remains far lower among rural households than urban households. Percentage of children under age three with safe feces disposal, by urban and rural residence, (Lao PDR, 2011–12).¹³



(mother or caretaker). To maximize comparability, we restricted all analysis to children under age three in all figures.

However, the fact that the MICS data are for all children in the age group and the DHS data are only for the youngest per household, means that some limitations to the comparability of the MICS and DHS data presented in Figure 2 remain. Figure 2 presents MICS data for Lao PDR, Thailand, Vanuatu, and Vietnam, and DHS data for Cambodia, Indonesia, Philippines, and Timor-Leste.

It is likely that self-reports overestimate safe disposal.¹⁴ 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.¹⁵ Regardless of this issue, self-reports are currently regarded as the most efficient method for gauging safe disposal of children's feces.

MICS and DHS data available at http://www.unicef.org/statistics/index_24302.html and <http://dhsprogram.com/Data/>, respectively.

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Demographic and Health Survey). Vientiane, Lao PDR: Ministry of Health. 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*.
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- ⁶ The latest available MICS/DHS survey with data for each country, as of March 2014. Survey years range from 2006–2012. Please see the data notes at the end of the brief.
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- ¹² The asset indices used to classify households into wealth quintiles have not been adjusted to remove drinking water or sanitation variables.
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