SCOPING STUDY

Are data available to monitor the SDGs for WASH in schools and health care facilities in the Latin America and Caribbean region?

unicef

World Health Organization

WHO Library Cataloguing-in-Publication Data

Scoping Study: Are data available to monitor the SDGs for WASH in schools and health care facilities in the Latin America and Caribbean region?

Photo credits: Bolivia, © UNICEF/UNI189335/Gilbertson VII Photo
Design and Layout: Nona Reuter

Scoping Study

Are data available to monitor the SDGs for WASH in schools and health care facilities in the Latin America and Caribbean region?

unicef

World Health Organization

Acknowledgements

The WHO/UNICEF Joint Monitoring Programme (JMP) would like to acknowledge the valuable contributions made by the following people who provided data and information throughout this scoping study: Luisa Brumana, Ruth Custode, Diego Fernando Lopez, Xiomara Torres, Herman Torres, Luz Angela Melo, Alejandro Lujan, Teresa Calderon, Irma Peredo, Carlos Rojas, and Ian David Jones.

Special thanks to Alban Nouvellon of the UNICEF Latin America and the Caribbean Regional Office (LACRO) for leading these efforts.

In addition, thanks are extended to the writers and reviewers: Christie Chatterley, Alban Nouvellon, Ruth Custode, Luisa Brumana, Rob Bain, Tom Slaymaker, Arabella Hayter, and Rick Johnston.

Contents

Introduction

With the inclusion of water, sanitation and hygiene (WASH) in non-household settings in the Sustainable Development Goals (SDGs), data will be needed to track progress of national coverage over time. This regional review investigates potential data sources for Latin American and Caribbean countries to report on the SDGs for WASH in institutions, specifically schools and health care facilities. Preliminary coverage estimates of WASH in schools and health care facilities are also provided for seven countries (Bolivia, Colombia, Guatemala, Guyana, Haiti, Honduras, and Peru).

Background

Why WASH in institutions?

Access to WASH beyond the household, particularly in schools and health care facilities, is crucial for maintaining the health and education of children, vulnerable populations, and communities. Children spend a significant portion of their day at school where WASH services can improve educational opportunities and decrease the potential for disease transmission between students[1], in addition to addressing issues around inclusion, accessibility, and dignity, particularly for girls[2]. Achieving and maintaining WASH services in health care facilities is a critical element for a number of health objectives including those linked to quality universal health coverage (UHC), infection prevention and control (IPC), patient safety, and child and maternal health, in particular the time around child delivery. WASH, however, extends beyond infections averted to issues of patient dignity and respect, staff morale, performance and safety, and climate change resilience.

WASH in institutions in the SDGs

WASH in institutions is captured in the SDG framework within three targets: two under Goal 6 and one under Goal 4 (Table 1). The terms "universal" and "for all" in Targets 6.1 and 6.2 highlight the need for expanding WASH monitoring from the household to non-household settings, such as schools and health care facilities (HCFs). Target 4.a includes WASH in the school-setting, specifically, where a "safe, non-violent, inclusive and effective" learning environment is not possible without access to basic WASH. Definitions of the related indicators have been agreed upon by global task teams of WASH professionals from various organizations and regions. They are based on globally recommended norms[3], existing questions from national questionnaires and international surveys,[4,5] and normative human rights criteria[6].

Table 1. *WASH in institutions in SDG targets and indicators with associated definitions*

Targets	Indicators	Definitions
4.a: Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all	Proportion of schools with access to: …(e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities	• Schools with water from an improved[7] drinking water source available at school the day of the survey • Schools with improved[7] sanitation facilities, which are single-sex and usable (accessible, functional, private) • Schools with handwashing facilities which have soap and water available the day of the survey
6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all	Additional indicator: proportion of health care facilities with "basic" water supply	• For health care facilities: • Facilities where the main water source is improved[7], located on premises, with water available at the time of the survey
6.2: By 2030 achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	Additional indicator: proportion of health care facilities with "basic" sanitation Additional indicator: proportion of health care facilities with "basic" hand hygiene Additional indicator: proportion of health care facilities with "basic" health care waste disposal	• Facilities with improved[7] toilets or latrines that are usable at the time of the survey, with at least one designated for women/girls with facilities to manage menstrual hygiene needs, at least one separated for staff, and at least one meeting the needs of people with limited mobility • Facilities with hand hygiene stations including a basin with water and soap, or alcohol-based hand rub, present at critical points of care and within 5m of toilets • Facilities where waste is safely segregated in the consultation area, and infectious and sharps wastes are treated and disposed of safely

To allow for progressive realization of the SDG criteria, the core Joint Monitoring Programme (JMP) service ladders comprise three levels: Basic Service, Limited Service, and No Service (Figures 1 and 2).[8] The multi-level ladders enable countries at different stages of development to track and compare progress in reducing inequalities. National data will therefore not only need to include the SDG criteria but be able to be categorized into one of the three ladder rungs for drinking water, sanitation and hygiene (and health care waste management for HCFs). To support data collection, core questions are recommended that link to the proposed core ladders.[9] For countries where the "basic" service level is not aspirational, a fourth "advanced" service level can be defined at national level based on the globally recommended expanded question set and national priorities.[10] This may be the case for a number of countries in the Latin America and Caribbean region where it may be appropriate to track additional indicators such as facilities for menstrual hygiene management in schools or quantities of water in health care facilities.

Figure 1. *Emerging JMP service ladders for global monitoring of WASH in schools*

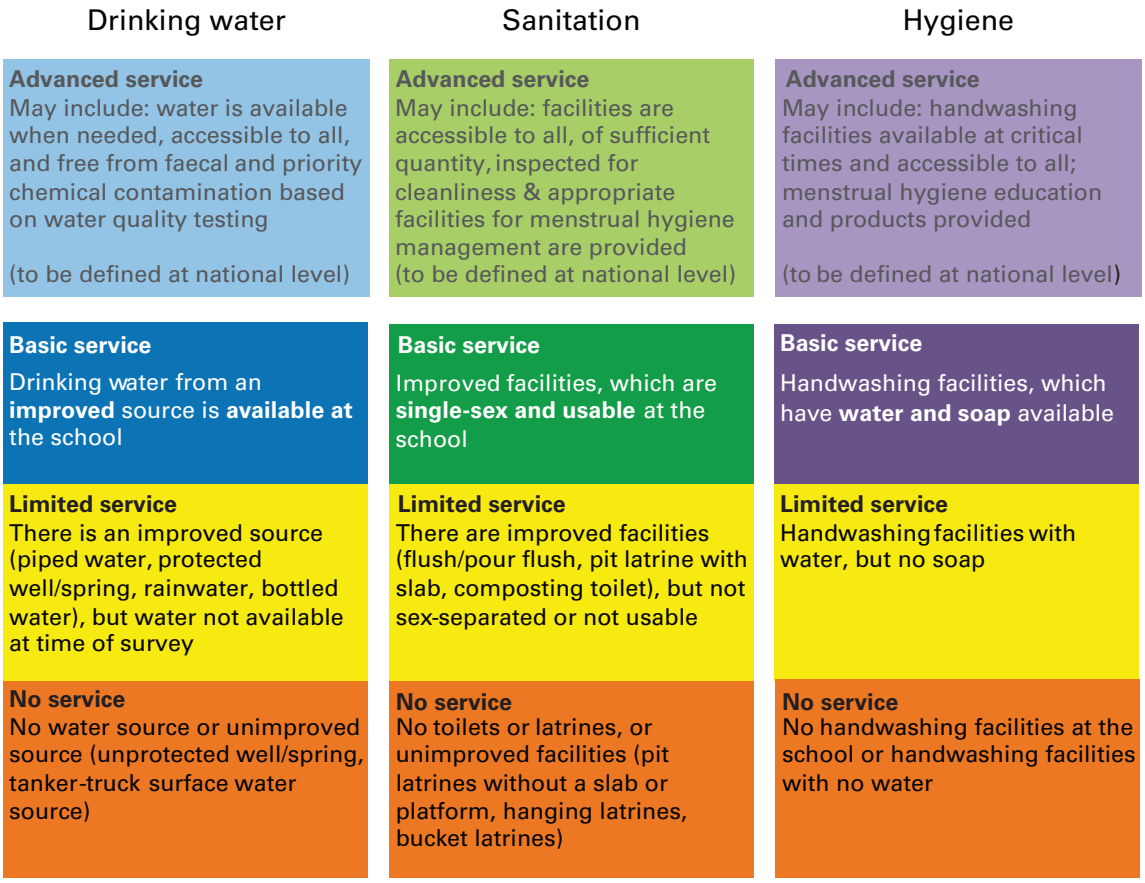
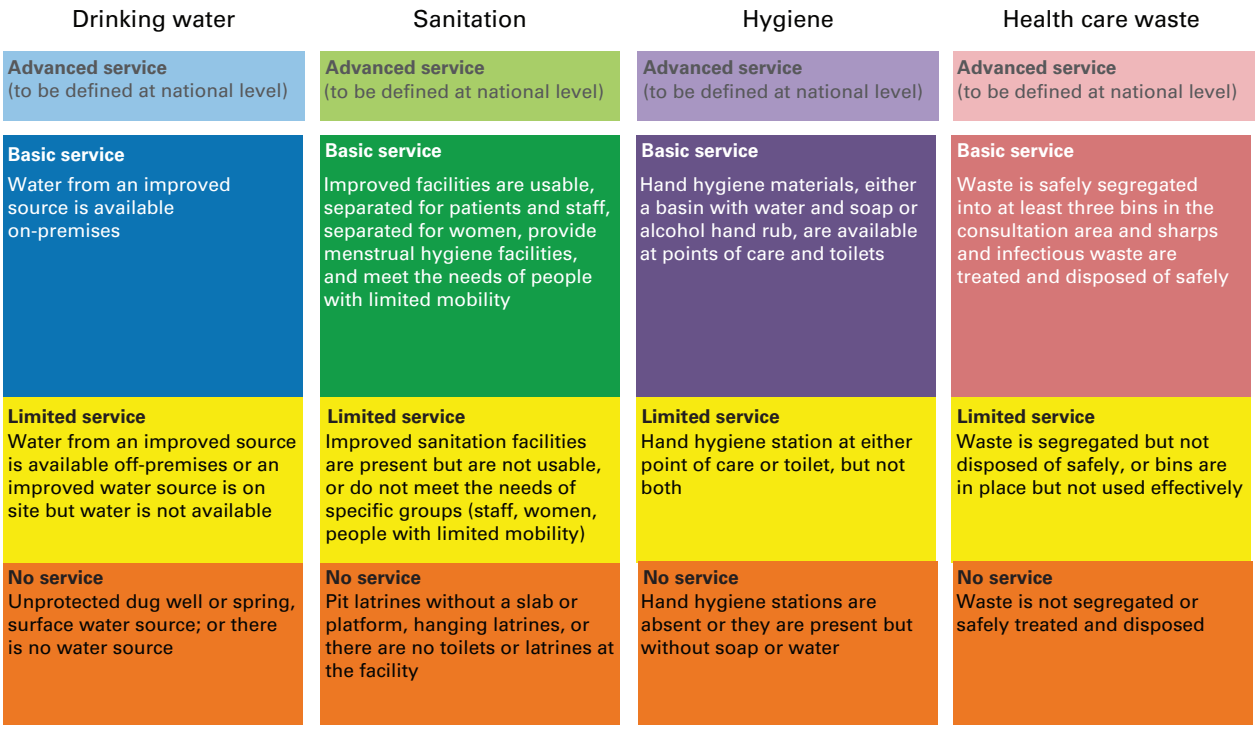


Figure 2. *Emerging JMP service ladders for global monitoring of WASH in health care facilities*



WASH in Schools

National coverage data in the region

In the 2015 UNICEF publication *Advancing WASH in Schools Monitoring,*[11] national coverage for water and sanitation in schools were reported for all 36 countries in the Latin America and Caribbean region[12] (Table 2). Data on handwashing facilities were only available for Costa Rica, where it is estimated that 61% of schools had handwashing facilities in 2013. The reported coverage estimates were based on linear regression of available data from multiple sources. Most of the data were estimates provided by UNICEF Country Office Annual Reports (sometimes referring to data from the national Education Management Information System (EMIS)) or data collected by UNESCO/LLECE and reported in the 2008 SERCE report[13]. Indicator definitions were either unknown or varied

Table 2. *National coverage estimates for water and sanitation in schools with associated indicators*

Country	2013 Water	Indicator	2013 Sanitation	Indicator
Anguilla	100	unknown	100	unknown
Antigua & Barbuda	100	unknown	100	unknown
Argentina	70	unknown	68	unknown
Barbados	100	unknown	100	unknown
Belize	64	improved & functional	21	improved, single-sex & sufficient quantity
Bolivia	87	existence	74	existence
Brazil	93	improved	98	unknown
British Virgin Islands	100	unknown	100	unknown
Chile	90	unknown	90	unknown
Colombia	73	improved	100	unknown
Costa Rica	75	improved	53	functional
Cuba	100	improved	100	existence
Dominica	100	unknown	100	unknown
Dominican Republic	47	unknown	60	unknown
Ecuador	58	improved	54	unknown
El Salvador	100	improved	67	unknown
Grenada	100	unknown	100	unknown
Guatemala	70	unknown	49	unknown
Guyana	68	unknown	68	unknown
Haiti	60	unknown (estimate)	60	unknown (estimate)
Honduras	66	functional	46	functional & single-sex
Jamaica	88	existence	80	unknown
Mexico	95	unknown	68	unknown
Montserrat	100	unknown	100	unknown
Nicaragua	50	unknown	26	unknown
Panama	90	unknown	84	unknown
Paraguay	64	improved	70	unknown
Peru	60	unknown	51	unknown
St. Kitts & Nevis	100	unknown	100	unknown
St. Lucia	100	unknown	100	unknown
St. Vincent & Grenadines	100	unknown	100	unknown
Suriname	80	unknown	65	unknown
Trinidad & Tobago	100	unknown	100	unknown
Turks and Caicos	100	unknown	100	unknown
Uruguay	100	unknown	100	unknown
Venezuela	96	unknown	93	unknown
Weighted Average	**85**		**81**	

between data sources, limiting the potential for cross-country comparison and accurate regional aggregation, which will be critical for SDG monitoring (Table 2). For example, coverage estimates for water in schools in Belize (64 per cent) are based on schools with an improved functional source, while in Bolivia, coverage (87 per cent) includes

schools where any water source exists, regardless of type or functionality. Where the indicator definition was not given, coverage estimates have limited meaning, such as in Colombia, where 100 per cent of schools were reported to have adequate sanitation, but the definition of adequate was unknown and likely below a basic standard given the unexpectedly high coverage. Clear definitions and greater harmonization between data sources is needed for SDG reporting.

Data availability for SDG monitoring

Based on the SDG criteria for "basic" WASH in schools (Table 1, Figure 1), additional analysis of data from seven countries provides preliminary *comparable* national estimates for SDG monitoring of WASH in schools (Figures 3-5). These data are from Ministry of Education reports or databases (e.g. EMIS) and/or the LLECE regional SERCE and TERCE studies.[14,15]

While most countries can provide data on "improved" water and sanitation, very few can provide information on the criteria for "basic" service or for handwashing facilities. For most countries, these estimates are based on public schools only, though in some cases it is unclear if private schools are also included.

In the charts below, improved facilities with insufficient information to assess the criteria for "basic" service have been treated as "limited service". This means that a proportion of the schools with "limited service" may meet the criteria for "basic", but there is insufficient information available to determine the service level beyond the presence of improved facilities. Data on the criteria for "basic" sanitation are particularly scarce, and Peru was the only country that reported data on sex-separated toilets (Figure 4).

Where possible, data refer to the year 2015 based on linear regression of available data using the JMP method. Coverage estimates for Guyana, where only one dataset was available, are from 2010, and the estimates for "basic" coverage for Colombia and Honduras are from 2012 since only one data point was available in each country. Hence, there were insufficient data to produce coverage trends for "basic" service over time, as only one data point was available in most cases.

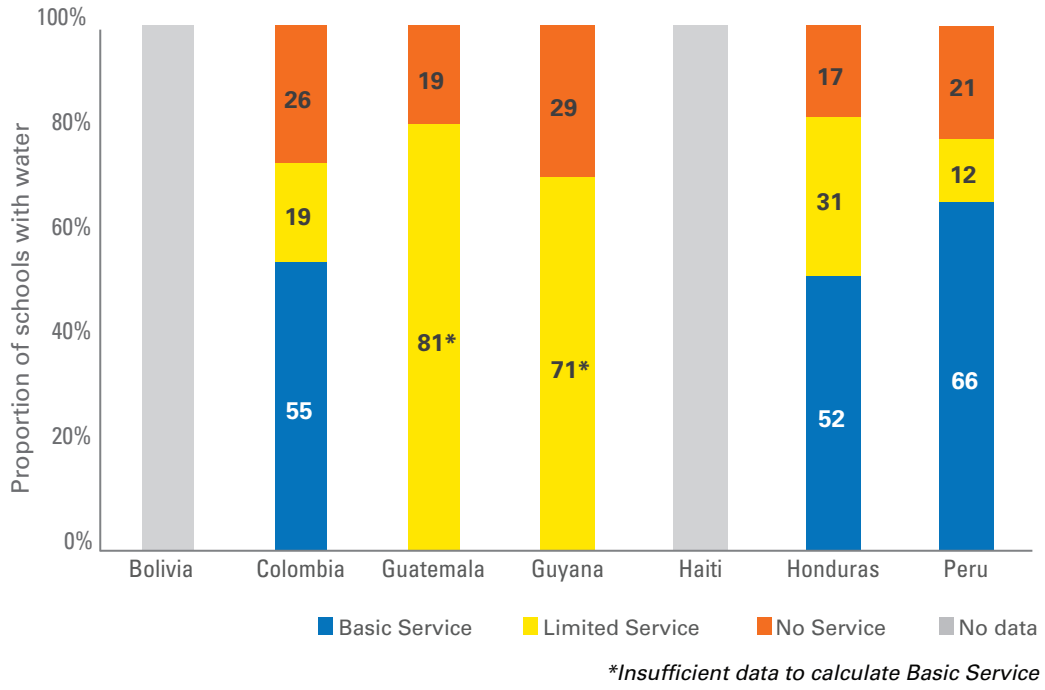


Figure 3. *Preliminary estimates for coverage of "basic" water in schools*

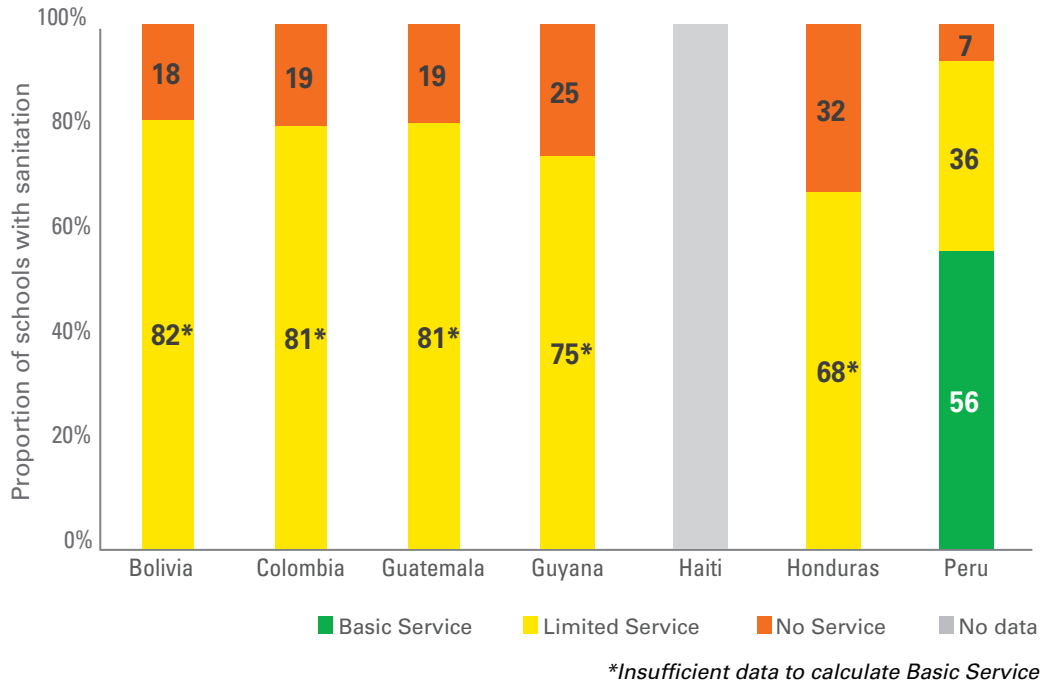


Figure 4. *Preliminary estimates for coverage of "basic" sanitation in schools*

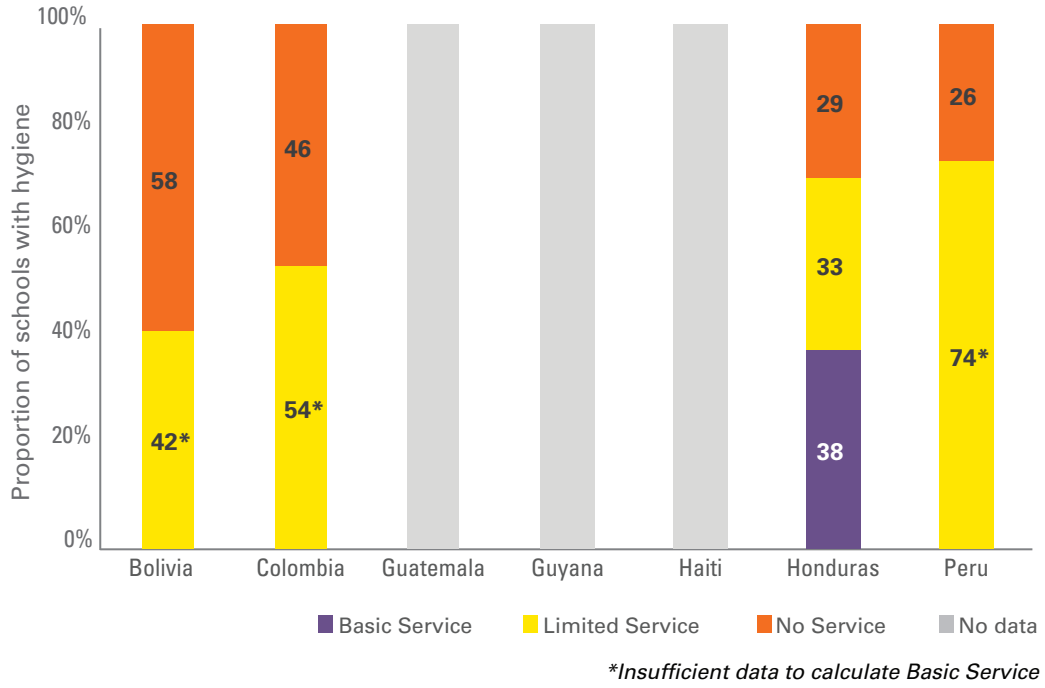


Figure 5. *Preliminary estimates for coverage of "basic" hygiene in schools*

Utilizing and strengthening existing national monitoring systems

A comparison of reported data versus questions asked in national EMIS questionnaires in the region reveals that not all the WASH data collected are analyzed and reported. Some countries may collect more detailed data, including information on the SDG criteria (Box 1). This is a promising sign of the potential for national systems to report on the SDGs for WASH in schools (WinS). It is likely that many data related to the SDG criteria for "basic" WASH services in schools are collected in national questionnaires, but are not reported in national documents. The challenge may lie in accessing unreported data.

Box 1. *Reported versus collected data in Honduras*

In Honduras, school WASH data reported in Ministry of Education Strategic Plans and the government website, allow for reporting of SDG criteria for "basic" water and hygiene in schools, but not sanitation. Data on toilet functionality are available, but not for sex-separated toilets. However, the questionnaire associated with the national database does include information on toilets separated for boys, girls and common use, which would enable calculation of the SDG indicator for "basic" sanitation, if these data were reported.

A review of available EMIS questionnaires from the region in light of the SDG criteria suggests that a small fraction of the countries in the region (two of 14) have comprehensive data in their national database. Half of the reviewed EMIS questionnaires capture data on water availability and usable toilets (Table 3). For many countries, only minor adjustments to the EMIS questionnaire would enable SDG reporting in the future through the existing national system (Box 2). For example, a number of EMIS questionnaires ask about the water source type, but only have one category for wells, which limits the ability to identify schools with an improved water source, since protected covered wells (considered improved) and unprotected wells, such as open dug wells (considered unimproved) are grouped together. Alignment with the SDG criteria would not only support SDG reporting and regional cross-country comparison, but also contribute to strengthening existing national monitoring systems by clarifying information and capturing service quality to support national policy and decision-making.

Table 3. *The inclusion of SDG criteria in national EMIS questionnaires by country (X = included)*

Country	DRINKING WATER		SANITATION			HYGIENE		Total
	Improved	Available	Improved	Sex-separated	Usable	HW facilities	Soap	
Bahamas								0
Barbados								0
Belize	X	X	X	X	X	X	X	7
Bolivia	X	X	X					3
Colombia	X	X	X		X	X		5
Grenada					X	X		2
Guyana		X			X			2
Haiti								0
Honduras	X	X	X	X	X	X	X	7
Jamaica		X	X					2
Peru	X	X	X	X	X	X		6
St. Kitts & Nevis								0
St. Lucia					X			1
St. Vincent & the Grenadines								0
Total	5	7	6	3	7	5	2	
Percentage	36%	50%	43%	21%	50%	36%	14%	

National capacities and interest to align with SDG criteria

There are seven core monitoring questions recommended to enable national reporting on the SDGs for WinS.[9] Of the 14 EMIS questionnaires reviewed, an average of 5 WASH-related questions are included, ranging from zero to 12, suggesting that the number of questions needed to capture SDG criteria are within existing system capacities for many countries. For many countries, only minor changes would be needed, as shown in the example in Box 2.

Box 2. *Minor changes to the EMIS questionnaire in Honduras would support more accurate SDG reporting*
The following example demonstrates how minor changes could align existing EMIS questionnaires with the SDGs. The proposed questions are for illustration purposes only and would need to be reviewed by national government to determine relevance in the Honduran context, localize questions and terminology, and consider additional expanded questions, as applicable.

The existing WASH questions in the Honduras EMIS support monitoring of four of the seven SDG criteria:

1. Wastewater system: ☐ Public sewer connection ☐ Septic tank ☐ None
2. Type of water supply: ☐ Public service ☐ Well ☐ River ☐ None ☐ Other_____
3. Water supply (insert numbers):

	Good	Needs Repair	Bad	Total
Basin ("Pila")				
Tank				
Cistern				

4. Is water storage needed?: ☐ Yes ☐ No
5. Sanitation infrastructure (insert numbers)

	Good				Bad			
	Girls	Boys	Teachers	General	Girls	Boys	Teachers	General
Toilets								
Simple pit latrines								
Washable latrines								
Handwashing facilities								
Pre-school toilets								
Urinals								

6. Number of days per week with water: [ ]
7. Number of hours per day with water: [ ]
8. The water and sanitation facilities are accessible to those with special needs ð Yes ð No; and pre-school children ☐ Yes ☐ No
9. Are there functional handwashing facilities with water? ☐ Yes ☐ No
10. Is there stored water for handwashing? ☐ Yes ☐ No
11. Is there soap or evidence of soap near the handwashing facilities? ☐ Yes ☐ No

Minor changes, based on global recommendations, would allow Honduras to report on all seven SDG criteria:

1. Drinking water supply: ☐ Piped ☐ Covered Well/Spring ☐ Open Well/Spring ☐ Rainwater ☐ Bottled ☐ River ☐ None ☐ Other___
2. Is water from the main source currently available? ☐ Yes ☐ No
3. Sanitation infrastructure (insert numbers)

	Usable (Accessible, Functional & Private)				Not usable (Not Accessible, Functional & Private)			
	Girls only	Boys only	Girls & Boys	Teachers only	Girls only	Boys only	Girls & Boys	Teachers only
Flush / Pour-flush toilets								
Pit latrines with slab								
Pit latrines without slab								
Composting toilets								
Pre-school toilets								
Urinals								

4. *In the previous week, how many days was water available?* [ ]
5. *On average, in the previous week, how many hours per day was water available?* [ ]
6. Are there handwashing facilities at the school? ☐ Yes ☐ No
7. If yes, are both soap and water currently available at the handwashing facilities? ☐ Yes ☐ Water only ☐ Soap only ☐ Neither
8. *Are there covered bins for disposal of menstrual hygiene materials in the girls' toilets?* ☐ *Yes* ☐ *No*
9. *The water and sanitation facilities are accessible to those with special needs* ☐ *Yes* ☐ *No; and pre-school children* ☐ *Yes* ☐ *No*

**Italicized questions are not needed for SDG monitoring of "basic" service but are based on the existing EMIS questionnaire and the globally recommended expanded question set.*

Equity dimensions

With the increased focus on equity in the post-2015 agenda, WinS access needs to be "inclusive" and "for all," as specified in the associated SDG targets (6.1, 6.2, 4.a). The SDG criteria of single-sex toilets as part of the "basic" service level for sanitation aims to support the privacy needs of women and girls. Beyond specific criteria, data disaggregation can support monitoring of equitable services.

In the absence of disaggregated data on basic service for most countries, coverage of improved facilities are presented in the rural and urban estimates provided in Figures 6 and 7. Of the data sources identified in this study, disaggregated coverage data by school level (pre-primary, primary and secondary) were only available in Peru where secondary schools tend to have higher coverage than pre-primary and primary schools. Coverage by sub-national region is often provided in national reports, and the gap between the region (e.g. department, province) with the highest and lowest coverage could be tracked to understand sub-national disparities (see example from Colombia in Figure 8 and Annex A). Tracking these gaps over time can help in understanding how well sub-national disparities are being addressed so that the goal of WinS "for all" can be met (see example from Bolivia in Figure 9).

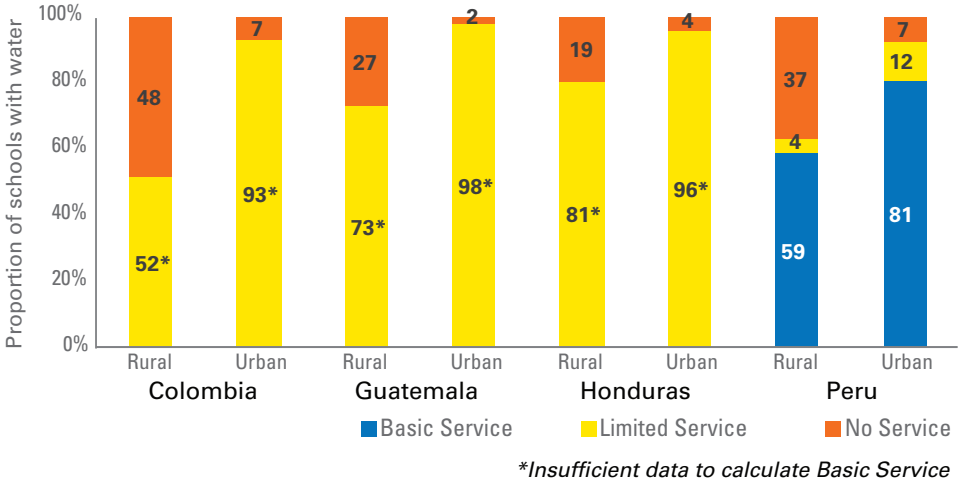


Figure 6. *Preliminary coverage estimates for water in rural schools versus urban schools*

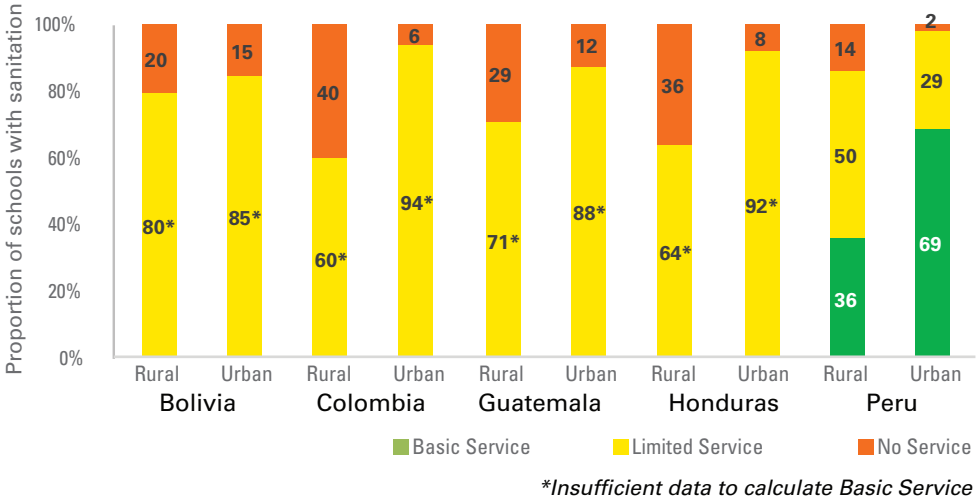


Figure 7. *Preliminary estimates for sanitation in rural schools versus urban schools*

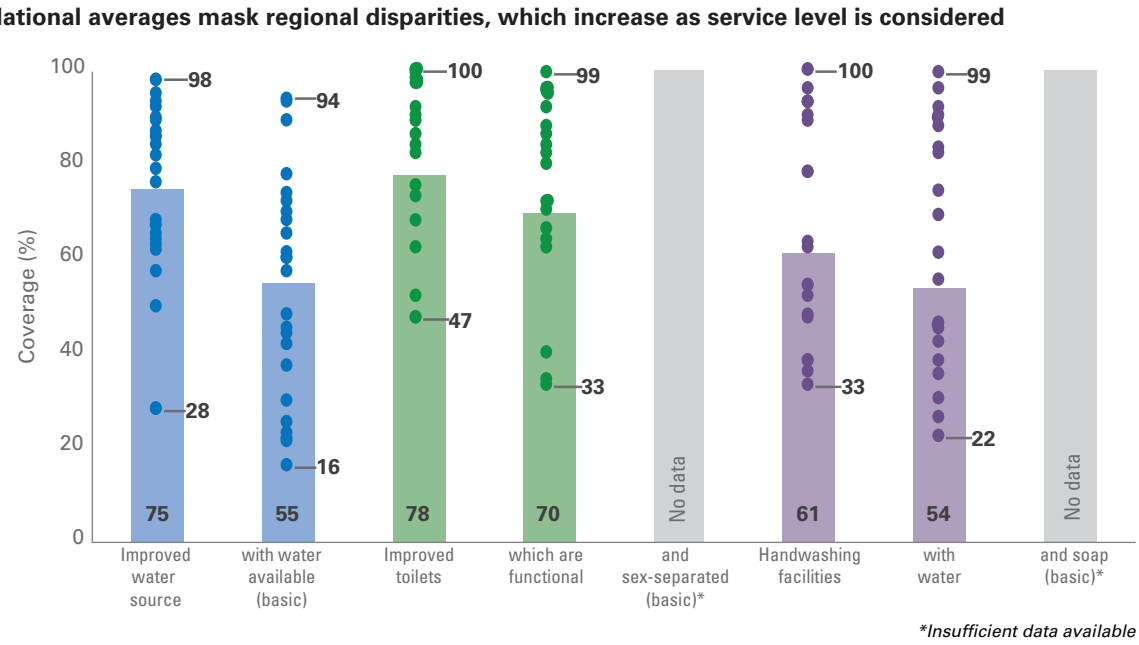


Figure 8. *National and regional estimates for WASH in Colombian schools (2012), where the bars represent national coverage and each dot represents coverage in a region (department) within the country.*

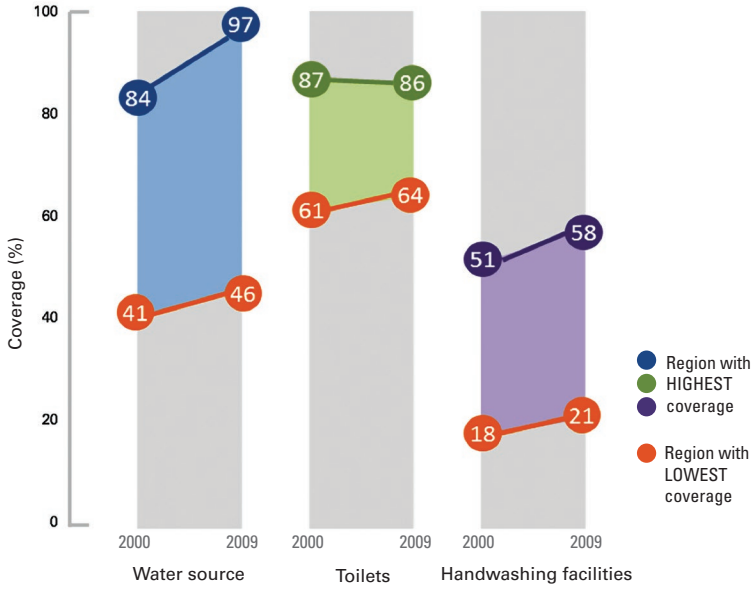
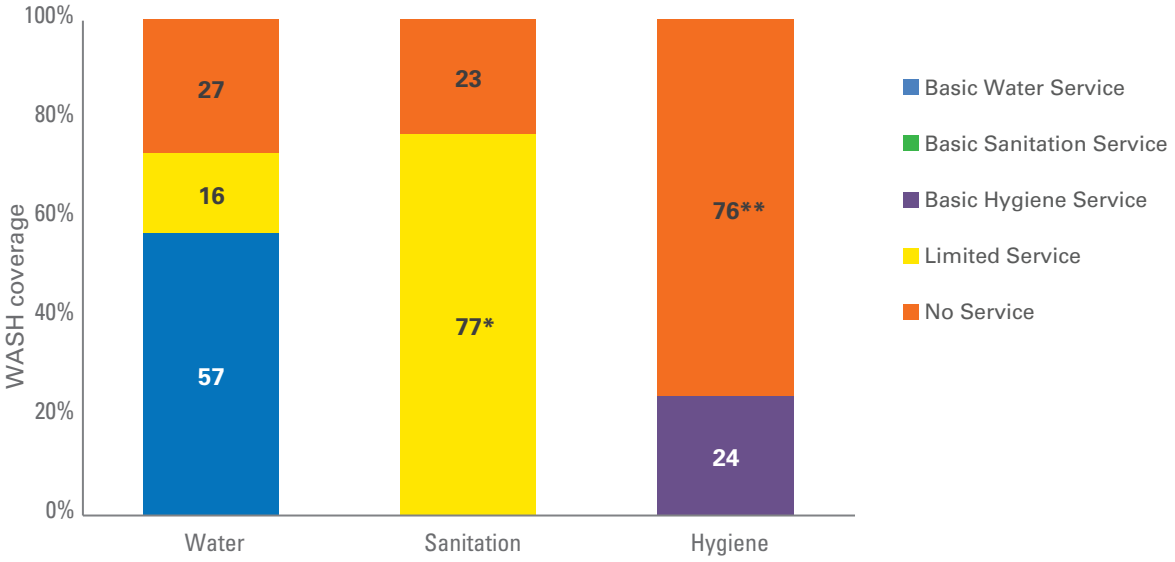


Figure 9. *Tracking sub-national disparities in coverage of WASH in Bolivian schools over time* (Note: these estimates do not reflect the SDG indicators for "basic" service due to insufficient data. They refer to presence of infrastructure regardless of facility type or functionality).

WASH in early childhood development centers

Beyond pre-primary, primary and secondary schools, WASH in Early Childhood Development (ECD) centers is a cross-cutting issue, with relevance to SDG targets 3.2, 4.2, 4.a, 6.1 and 6.2. While pre-primary schools typically focus on the year prior to primary school (e.g. kindergarten), serving children age five, ECD centers tend to focus on even younger children, typically aged 3-5 or younger, which are critical ages for disease vulnerability and building life-long habits. While an important setting for ensuring adequate WASH services are provided, ECD centers are not always registered with the Ministry of Education and therefore not included in regular national monitoring (e.g.

EMIS). Only one nationally-representative study of WASH in ECD centers was identified from the seven countries included in this review. A 2012 national assessment of WASH in 3,664 ECD centers (*"primera infancia"*) from 446 municipalities in Colombia provides an example of monitoring WASH in this setting (Figure 10). Inclusion of ECD centers in national monitoring through the EMIS could support future global monitoring of WASH in these highly influential settings.



**Insufficient data to calculate Basic Service; the Limited Service category may include those with basic service*

***Insufficient data to calculate Limited Service; No Service category may include those with limited service*

Figure 10. *WASH coverage in Early Childhood Development Centers ("primera infancia") in Colombia (2012)*

Key messages

1. Preparing for SDG monitoring can strengthen existing national monitoring mechanisms, including data collection, validation, and reporting.
2. The Ministry of Education monitoring system (e.g. EMIS) is a good entry point for SDG monitoring of WinS in many countries (note: for monitoring of WASH in ECD centers, the Ministry of Social Affairs, Health, or other ministry may provide a more appropriate entry point, depending on the country).
3. Three of the seven countries already report on the criteria for "basic" water, while only one reports on the criteria for "basic" sanitation and hygiene in schools;
4. Many countries collect more information than they report, and more countries may be able to report on the SDG criteria with additional analysis of existing national data. Data are often not easily accessible and advocacy may be needed to encourage additional analysis or data sharing.
5. Capturing equity dimensions, such as sub-national coverage and disparities between pre-primary, primary and secondary schools, is feasible and crucial to SDG monitoring.
6. The inclusion of ECD centers in national monitoring of WASH in schools would support cross-cutting monitoring with relevance in multiple SDG targets.

WASH in Health Care Facilities

National coverage data in the region

A 2015 global study of WASH in health care facilities[16] provides estimates for 16 countries in the Latin America and Caribbean region (Table 4). However, estimates from only three of these are nationally-representative: Guyana and Haiti each conducted a Service Provision Assessment (SPA)[17] survey with USAID support in 2004 and 2014, respectively, and Nicaragua conducted a national survey with MEASURE[18] in 2001. Additionally, indicators are often unclear or vary between sources. More data and harmonized indicators, based on the SDG criteria, are needed. Utilizing harmonized indicators may result in lower coverage estimates in some cases. For example, analysis of the SPA data from Haiti in the WHO/UNICEF 2015 report (Table 4), shows higher coverage values than the result of analyzing the same dataset based on globally harmonized indicators, as presented further in this document.

Table 4. *Existing data on coverage of WASH in health care facilities (data source: WHO/UNICEF 2015[16])*

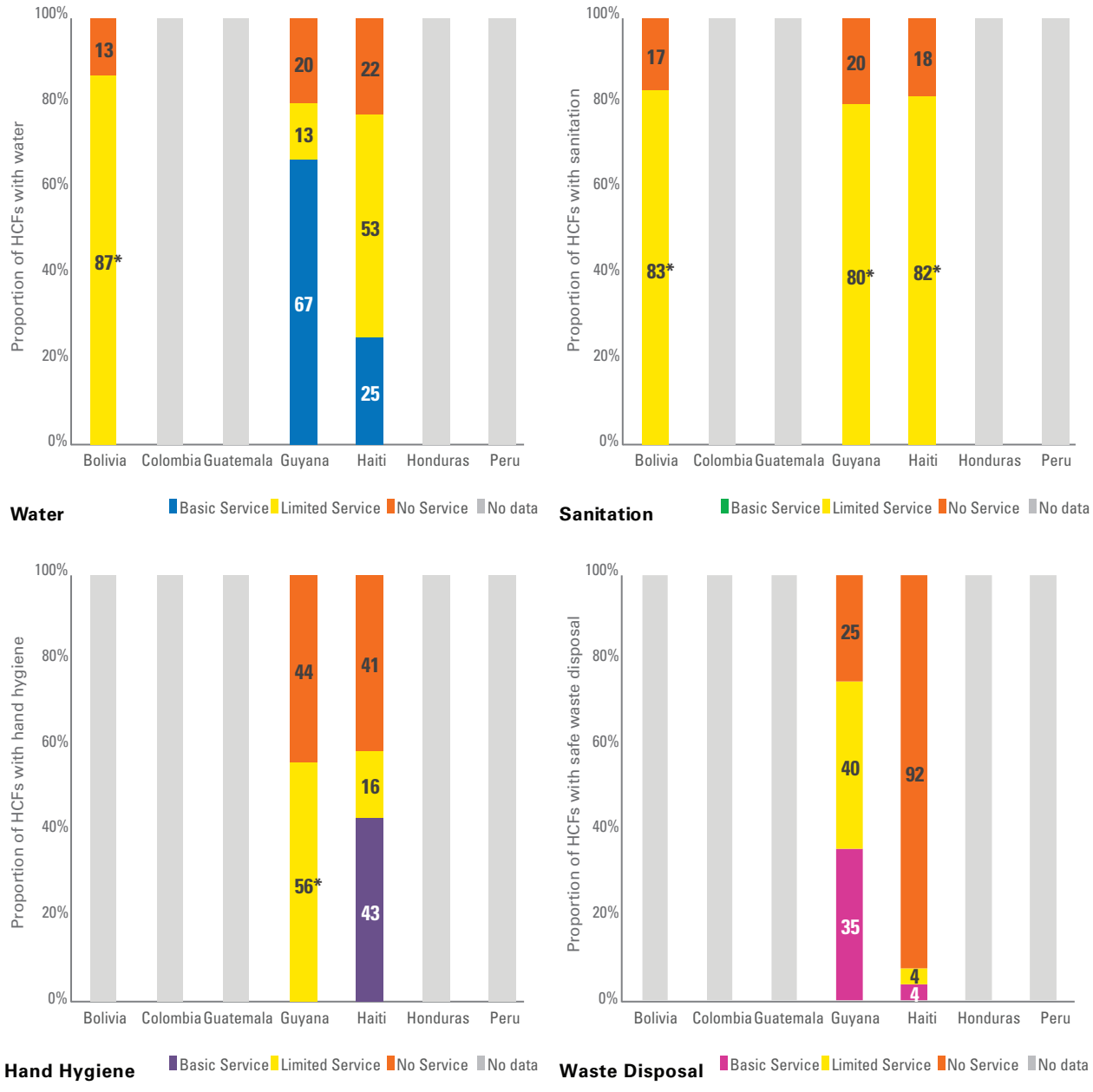
	Water	Sanitation	Hygiene	Year	Source
Antigua & Barbuda	100	100	100	2007	HSPA (sub-national)
Barbados	76	33	76	2007	HSPA (sub-national)
Bolivia	89	-	-	2006	ACQUIRE/ELMS (sub-national)
Dominica	94	38	94	2007	HSPA (sub-national)
Ecuador	100	-	-	1998	QIQ (sub-national)
Grenada	100	100	98	2007	HSPA (sub-national)
Guyana	86	75	92	2004	SPA (national)
Haiti	65	46	50	2014	SPA (census)
Mexico	91	-	-	2010	MEASURE survey (sub-national)
Nicaragua	55	-	-	2001	MEASURE survey (national)
Paraguay	65	-	-	1999	QIQ (sub-national)
St. Kitts & Nevis	96	100	92	2006	HSPA (sub-national)
St. Lucia	92	33	83	2005	HSPA (sub-national)
St. Vincent & Grenadines	100	100	100	2005	HSPA (sub-national)
Suriname	80	100	79	2006	HSPA (sub-national)
Trinidad & Tobago	96	100	84	2006	HSPA (sub-national)

Data availability for SDG monitoring

A closer look at the SPA data from Guyana and Haiti, against the SDG criteria for "basic" service, suggests that data are available to compute baseline estimates for "basic" water and health care waste disposal in both countries, for hand hygiene in Haiti, but not for sanitation in either (Table 5, Figure 11). In addition to the SPA surveys, further inquiry in the case study countries, revealed two more data sources: the Ministry of Health in Bolivia conducted a national assessment of WASH in health care facilities in 2013 and Guyana conducted an Assessment of Emergency Obstetric and Newborn Care (EmONC)[19] in 2012 with support from Columbia University (Table 5). The national survey in Bolivia provides data on improved water and sanitation, but not the criteria for "basic" service (Figure 11). Figure 11 does not include the Guyana EmONC data since more SDG criteria are collected by SPA and reported estimates are similar between the two sources. This review did not identify any WASH data reported from *routine* national surveys, such as government Health Management Information Systems (HMIS) or other regular national monitoring mechanisms.

Table 5. *The inclusion of SDG criteria in existing data sources (X = included)*

SDG criteria		Guyana SPA 2004	Guyana EmONC 2012	Haiti SPA 2014	Bolivia MoH 2013
Water	Improved source	X	X	X	X
	Available	X	X	X	
	On premises	X		X	
Sanitation	Improved			X	X
	Useable (available, functional, private)	X	X	X	
	Sex-separated				
	Menstrual Hygiene Facilities				
	Staff/patient separated				
	Disability accessible				
Hand hygiene	With soap and water (or alcohol rub)	X	(soap)	X	
	At all points of care and toilets			X	
Waste disposal	Bins for waste separation	X	X	X	
	Safely disposed sharps and infectious	X		X	



*Insufficient data to calculate Basic Service

Figure 11. *Preliminary estimates of "basic" WASH coverage in health care facilities*

Equity dimensions

As in the school-setting, WASH in health care facilities needs to be "inclusive" and "for all." The SDG criteria of sex-separated toilets, facilities for menstrual hygiene management and toilets that are accessible to those with limited mobility aim to address WASH equity. Data disaggregation can also support monitoring of equitable services, such as disaggregation by urban/rural, facility type, or by regions. Figure 12 provides an example of disaggregation by urban/rural and facility type based on the Haiti SPA data. Results show that coverage of "basic" service is typically lower in rural areas and smaller facilities. These disparities could be tracked over time to assess how well gaps in coverage are addressed.

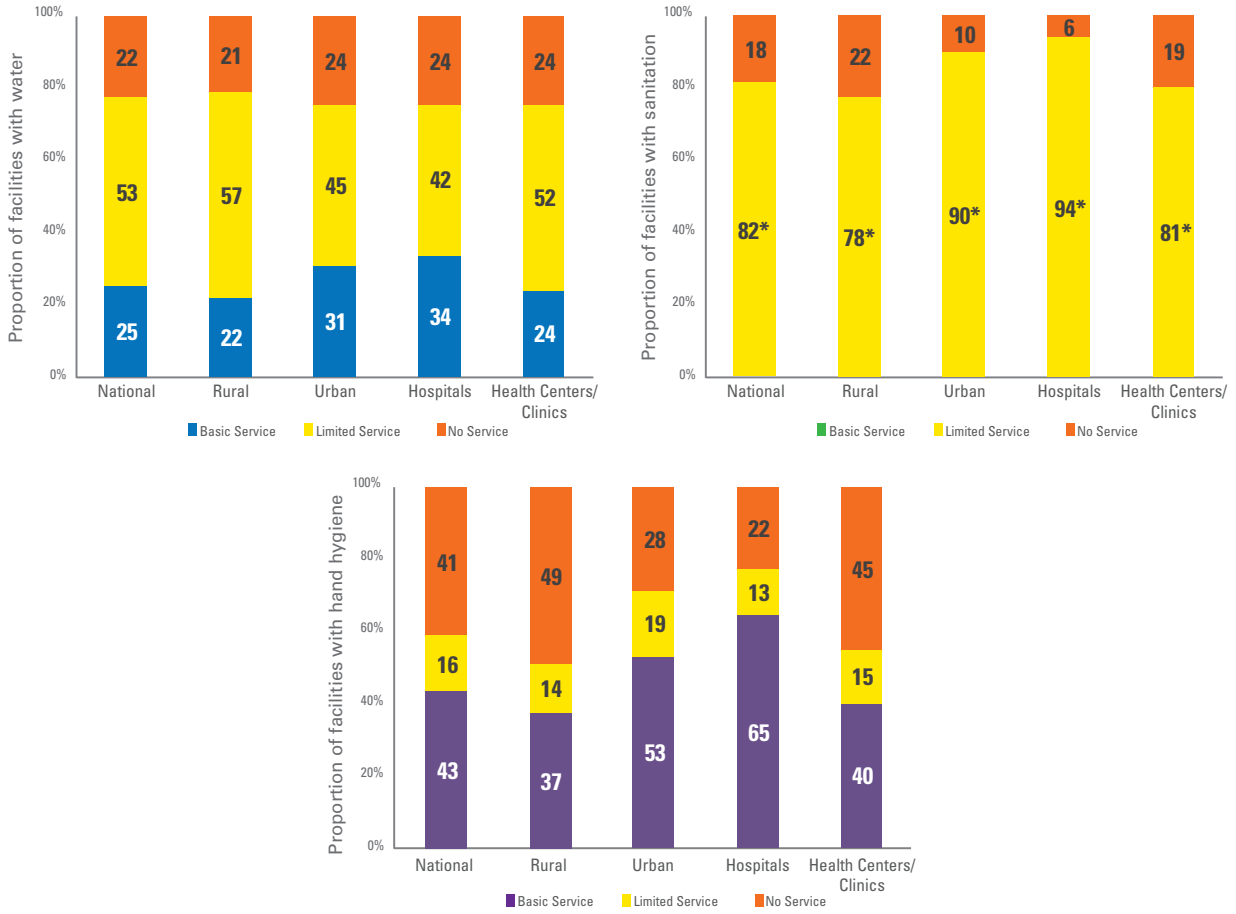


Figure 12. *Sub-national disparities in water (top left), sanitation (top right) and hand hygiene (bottom) coverage in Haitian health care facilities (*insufficient data to calculate "basic" service)*

Key messages

1. The inclusion of WASH in health care facilities in JMP monitoring of SDG targets 6.1 and 6.2 highlights the importance of WASH in this setting.

2. Baseline data for WASH in health care facilities are already available for a few countries in Latin America; however, data are scarce and regular national monitoring mechanisms for WASH in health care facilities were not identified in any of the case study countries.

3. The Bolivia Ministry of Health national assessment of WASH in health care facilities is a promising indication of national interest and capacities to collect WASH data in health care settings.

4. Similar to the school-setting, information on "basic" sanitation in health care facilities is a data gap; none of the case study countries have reported on all the criteria of this indicator.

5. Capturing equity dimensions, such as the gap in coverage between urban and rural facilities and different facility types (e.g. hospitals versus health centers/clinics), is crucial to SDG monitoring and reporting disaggregated coverage estimates would support more equitable progress tracking.

Moving Forward

The recent shift in the region from an historical emphasis on the presence of infrastructure to an emphasis on service quality and meeting human rights criteria is in line with the SDG indicators for WASH in schools and health care facilities. Aligning with the SDGs therefore supports national monitoring system strengthening. Most of the seven countries included in this regional review were able to provide coverage data on water and sanitation in schools. However, few had data relating to the criteria for "basic" service as defined in the SDGs, and even fewer had data on WASH in health care facilities. While there is a good foundation for monitoring WASH in institutions in Latin America and the Caribbean, there are small improvements that would support alignment with the global SDG indicators and result in more effective national monitoring.

Existing Ministry of Education monitoring systems (e.g. EMIS) provide a clear entry point for collection of WASH in schools data in many countries. In some countries, national monitoring systems already collect data on a number of the SDG criteria for "basic" WASH in schools. Further, based on a review of 14 EMIS questionnaires from the region, the number and complexity of the globally recommended questions for SDG monitoring are within existing national capacities for most countries; often, only minor changes would be needed. One of the most pressing challenges is reporting and availability of data. More data are collected than reported; additional analysis and dissemination are needed. Preparing for SDG reporting could help to improve these aspects of national systems.

SDG baselines for WASH in health care facilities are available for some of the aspects of the SDG criteria for a few of the case study countries. Data are mainly from SPA surveys and, in the case of Bolivia, from a Ministry of Health assessment. The fact that Bolivia has already conducted a national assessment through their Ministry of Health suggests that national interest and capacities exist to monitor WASH in the health care setting, and other countries may be encouraged to follow Bolivia's example. While no regular national monitoring of WASH in health care facilities was identified in the seven case study countries, there may be opportunities to include WASH in national monitoring systems (e.g. HMIS), where they exist. Further discussion is needed at the national level to identify the most appropriate data source in each country. Collaborating with international agencies to conduct facility surveys, such as the SPA, could support development of national baselines, and integration of WASH into national monitoring would strengthen national systems and provide regular data to support decision-making and action.

Recommendations

WASH in schools

1. ***Align existing national monitoring systems (e.g. EMIS) with the SDG criteria for WASH in schools, based on global guidance[9] and national priorities.***

Reporting on the new SDG indicators is a commitment made by all the United Nations Member States that approved the 2030 Agenda in September 2015. Utilizing existing national monitoring systems would enable SDG reporting on WinS with very little additional investment in monitoring. An example is provided in Box 2. Monitoring questions should align with the globally recommended questions[9] to support harmonization of data sources and their definitions.

2. ***Analyze, report and disseminate results from all WASH questions included in the national monitoring questionnaire.***

Where data on the SDG criteria for WinS already exist in national databases, this is an opportunity for countries to be able to report baseline coverage for an SDG indicator without additional data collection. The preliminary results presented in this document may provide an opportunity to discuss data gaps and encourage reporting to global monitoring mechanisms (i.e. UNESCO and JMP), as well as to schools and local government.

3. ***Include ECD centers in national monitoring of WASH in schools, where possible.***

Based on the potential of WASH improvements in ECD centers to influence progress towards multiple SDG targets,

namely 3.2, 4.2, 4.a, 6.1 and 6.2, national monitoring of WASH in ECD centers can provide information to inform impactful decisions. Colombia's recent survey serves as an example. This may include additional ministries beyond the Ministry of Education, such as the Ministry of Social Affairs, the Ministry of Health, or other, depending on responsibilities for ECD centers in the particular country.

4. Update national targets and standards, where appropriate, to reflect the new SDG criteria.

Aligning monitoring systems with the SDGs may have little consequence without associated changes to national targets and standards. Ensuring service attributes beyond the presence of infrastructure, as captured by the SDG indicators, provides greater likelihood that facilities will be used by students, and therefore greater likelihood that anticipated educational and health impacts will follow.

WASH in health care facilities

1. Include WASH in existing national monitoring of health care facilities (e.g. Health Management Information Systems (HMIS) and annual facility inventory surveys) based on the global guidance[9] and national priorities.

Reporting on the new SDG indicators is a commitment made by all the United Nations Member States that approved the 2030 Agenda in September 2015. Improvements in WASH coverage in HCFs has the potential to accelerate progress towards multiple SDG targets, including 3.8, 3.9, 6.1 and 6.2. Monitoring WASH in this setting via existing national monitoring systems can therefore provide a cost-effective approach to inform decisions and support progress toward multiple targets.

2. Consider implementation of a facility survey, such as SPA, to conduct a baseline assessment where national monitoring systems do not yet exist.

Experiences from Guyana and Haiti serve as examples to utilize SPA data to create baseline estimates for WASH in HCFs.

3. Analyze and disseminate results from national monitoring to inform national and local decision-making and for inclusion in global reporting of WASH in HCFs.

Conducting a more thorough review of national datasets may reveal additional data on WASH in the health care setting. Analysis of existing data can enable global reporting, as well as feedback to health care centers and local government.

Notes and Citations

1 See the following studies for more details:
- Freeman M. et al. (2013) The Impact of a School-Based Hygiene, Water Quality and Sanitation Intervention on Soil-Transmitted Helminth Reinfection. Am J Trop Med Hyg. 89(5):875-83.
- Patel M.K. et al. (2012) Impact of a Hygiene Curriculum and the Installation of Simple Handwashing and Drinking Water Stations in Rural Kenyan Primary Schools on Student Health and Hygiene Practices. Am J Trop Med Hyg. 87(4):594–601.
- Lopez-Quintero, C. et al. (2009) Hand Washing Among School Children in Bogotá, Colombia. Am J Public Health, 99(1):94-101.
- Blanton E. et al. (2010) Evaluation of the role of school children in the promotion of point-of-use water treatment and handwashing in schools and households-Nyanza province, Western Kenya. Am. J. Trop. Med. Hyg. 82:664–671.
- Njuguna V. et al. (2008) The Sustainability and Impact of School Sanitation, Water and Hygiene Education in Kenya. UNICEF and IRC International Water and Sanitation Centre.
- O'Reilly C.E. et al. (2008) The impact of a school-based safe water and hygiene programme on knowledge and practices of students and their parents: Nyanza Province, western Kenya. Epidemiology and Infection. 136:80-91.
- Freeman M. et al. (2012) Assessing the impact of a school-based water treatment, hygiene and sanitation programme on pupil absence in Nyanza Province, Kenya. Trop Med Int Health. 17(3):380-391.

2 C. Nauges and J. Strand (2011) Water Hauling and Girls' School Attendance: Some new evidence from Ghana. World Bank. p. 25; Pearson and K. McPhedran (2008) A Literature Review of the Non-Health Impacts of Sanitation, Waterlines. 27(1):48–61; UNICEF (2012) WASH in Schools Empowers Girls' Education: Proceedings of the Menstrual Hygiene Management in Schools Virtual Conference. New York: UNICEF.

3 WHO (2009) Water, sanitation and hygiene standards for schools in low-cost settings. Geneva: World Health Organization; WHO (2008) Essential Environmental Health Standards in Health Care. Geneva: World Health Organization.

4 WHO (2011) WASH in Schools Monitoring Package. New York: United Nations Children's Fund.

5 WASH in schools are included in UNESCO UIS (Africa), LLECE (Latin America), World Bank SDI (Africa), and WHO regional surveys (Europe); WASH in health care facilities are included in USAID SPA, WHO SARA, World Bank SDI, and Columbia EmONC surveys.

6 Resolution A/RES/70/169. The human rights to safe drinking water and sanitation. Geneva: United Nations General Assembly, 17 December 2015.

7 Based on JMP definition, "improved" water sources include piped water, closed wells, protected springs, and rainwater, while "unimproved" include open dug wells, unprotected springs, and surface water (lake, river); "Improved" sanitation facilities include flush or pour-flush toilets to sewer system or septic tank, pit latrines with slab or composting toilets, while "unimproved" include pit latrines without a slab, bucket toilets or hanging latrines (over river/lake).

8 The first priority for global monitoring will be to collect information on "basic" service. However, additional indicators for assessing higher service thresholds could be added for national monitoring where applicable

9 WHO/UNICEF (2016) Core questions and indicators for monitoring WASH in Schools in the SDGs. https://www.wssinfo.org/fileadmin/user_upload/resources/Core_questions_and_indicators_for_monitoring_WinS.pdf; WHO/UNICEF (2016) Monitoring WASH in Health Care Facilities: Final core indicators and questions (revised November 25, 2016). https://www.wssinfo.org/fileadmin/user_upload/resources/160825-FINAL-WASH-in-HCF-Core-Questions.pdf

10 For more information on the expanded question set for schools see Annex A in WHO/UNICEF (2016); Expanded questions for WASH in health care facilities are forthcoming.

11 UNICEF (2015) Advancing WASH in Schools Monitoring (working paper). New York, NY: United Nations Children's Fund.

12 Based on UNICEF regional classification

13 UNESCO/LLECE (2008) Los aprendizajes de los estudiantes de América Latina y el Caribe: Segundo estudio regional comparativo y explicativo (SERCE).

14 http://www.unesco.org/new/en/santiago/education/education-assessment-llece/

15 The multi-country rural water and sanitation information system (SIASAR) may also be a data source for WASH in schools and health care facilities in the future. For more information, see: http://www.siasar.org/

16 WHO/UNICEF (2015) Water, sanitation and hygiene in health care facilities: status in low- and middle-income countries and way forward. Geneva and New York: World Health Organization and United Nations Children's Fund.

17 http://dhsprogram.com/What-We-Do/Survey-Types/SPA.cfm

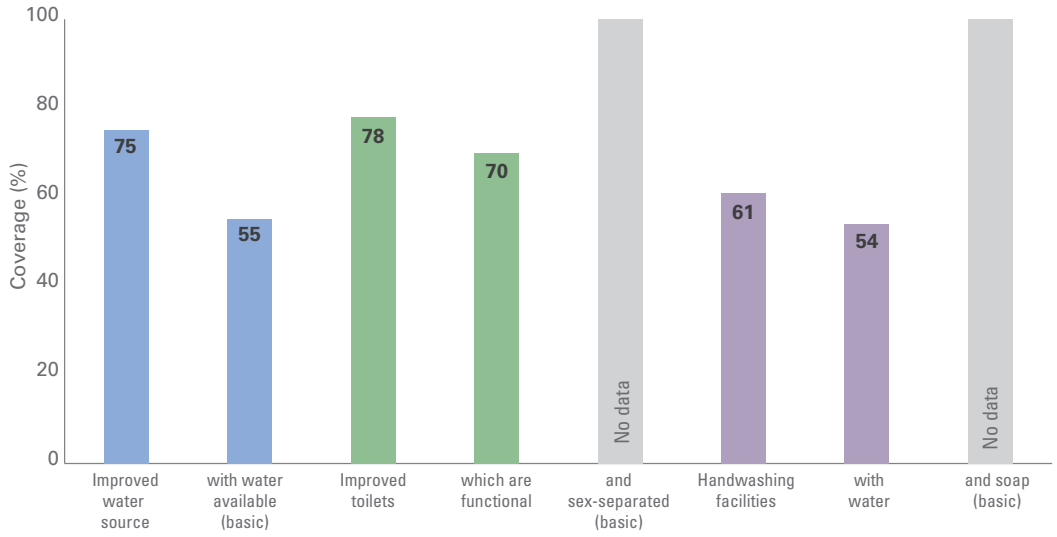
18 http://www.cpc.unc.edu/measure/publications

19 https://www.mailman.columbia.edu/research/averting-maternal-death-and-disability-amdd/emergency-obstetric-and-newborn-care

Annex A. Snapshot of WASH in schools in Colombia

The following presents a review of water, sanitation and hygiene (WASH) coverage in Colombian schools based on the Sustainable Development Goal (SDG) definitions of "basic" service[1] (Target 4.a) and 2012 data from the national monitoring system (EMIS).

Over three-quarters of Colombian schools have water and sanitation and 40% have handwashing facilities, but coverage decreases when service level is considered.

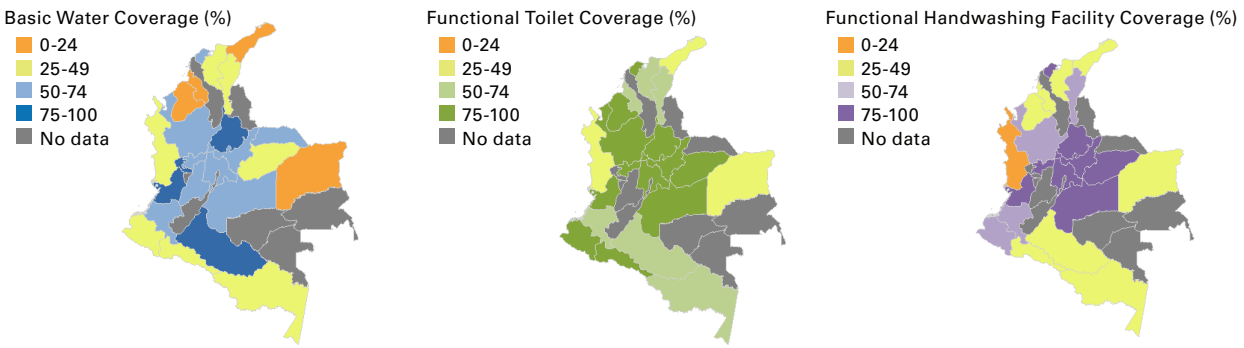


Attributes of "basic" WASH in schools

Regional disparities

National estimates mask regional disparities where coverage varies dramatically between regions (departments). Of the regions with data available, coverage is less than 50% in 11 out of 24 for basic water service, three out of 21 for functional toilets, and nine out of 21 for functional handwashing facilities. On the other end of the spectrum, there are a few regions with over 90% coverage of WASH in schools.

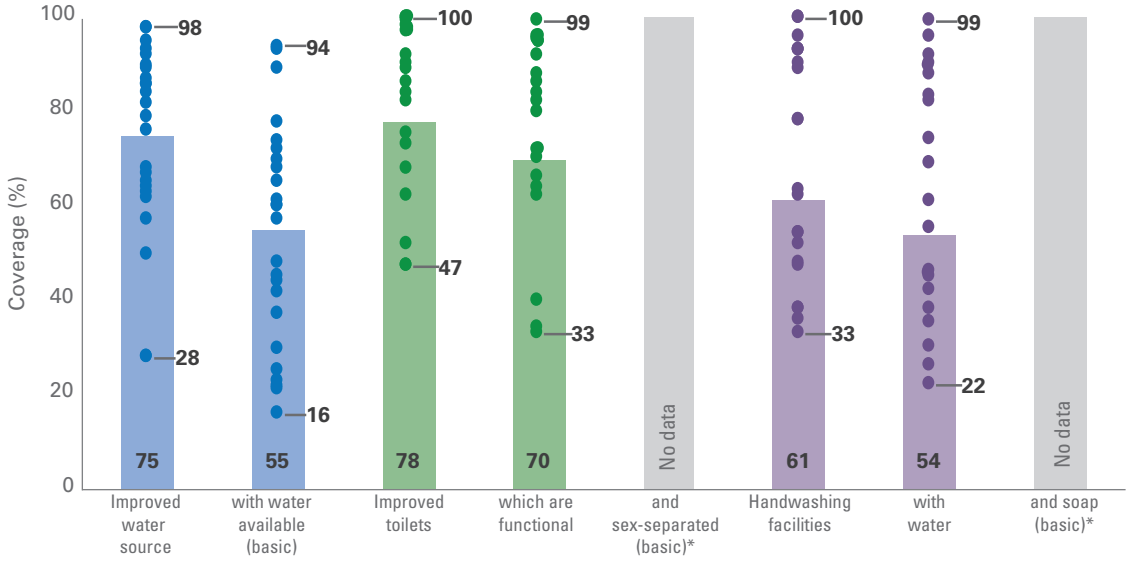
WASH in schools coverage varies greatly by region in Colombia



Regional coverage of WASH in Colombian pre-, primary and secondary schools

1 Colombia is able to report of the majority of the attributes of the SDG definitions for "basic" WASH services in schools; information is missing only on sex-separated toilets and soap at handwashing stations.

National averages mask regional disparities, which increase as service level is considered



**Insufficient data available*

In the chart above, the bars represent national coverage and each dot represents coverage in a region (department) within the country. There are dramatic differences in coverage between the regions with the highest coverage and the lowest coverage, and the gap increases as service attributes (e.g. availability, functionality) are considered. Data on sex-separated toilets and soap, needed to calculate "basic" service coverage, were not available.

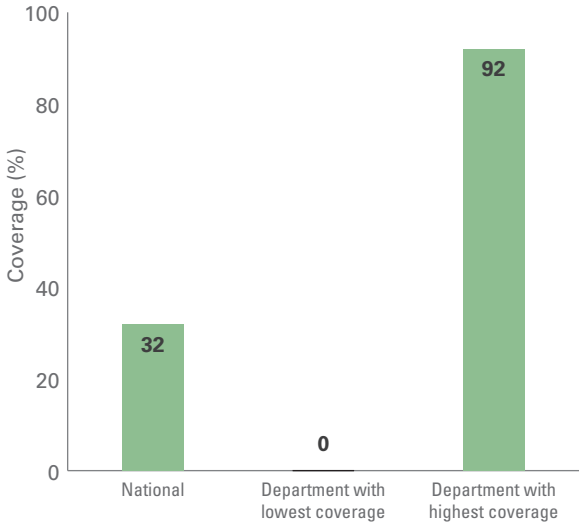
The chart highlights three main findings:

1. Coverage decreases as service attributes (e.g. availability, functionality) are considered
2. National coverages mask dramatic regional disparities
3. Regional disparities increase when service attributes are considered (i.e. the gap in coverage increases as service aspects such as availability or functionality are taken into account).

Accessibility

Although accessibility of school toilets to those with limited mobility is not included in the definition of basic service in the SDGs, it is an important aspect of advanced service for countries where the basic service level is not aspirational. In Colombia, 32 per cent of pre-primary, primary and secondary schools have at least one functional toilet which is accessible to those with limited mobility. Sub-national coverage varies greatly: 92 per cent of schools have toilets accessible to those with limited mobility in the department with the highest coverage (Santander), while none of the schools have accessible toilets" to "toilets accessible to those with limited mobility in the department with the lowest coverage (Arauca)."

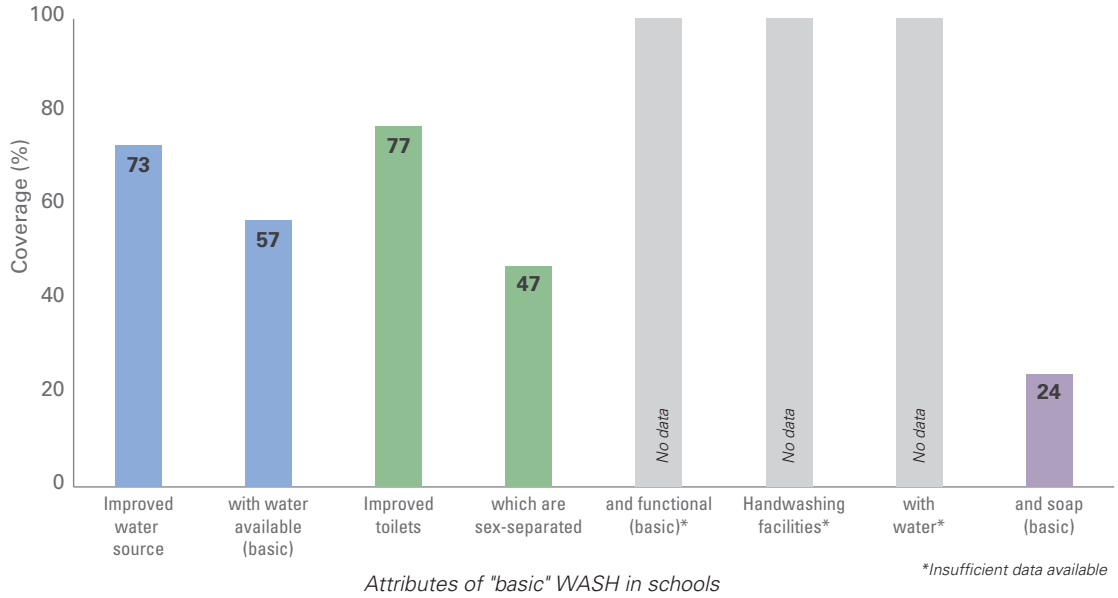
Less than one-third of schools have disability accessible toilets; a service that varies greatly between regions



WASH in Early Childhood Development Centers

A review of national data on WASH in early childhood development (ECD) centers ("*primera infancia*"), which cater to children through age 5, finds that coverage is similar to that in higher schooling levels in Colombia. Data are from a 2012 national study which reported coverage estimates for a number of the SDG criteria for "basic" services.

WASH coverage in early learning centers (≤ age 5) is similar to that in other schooling levels



WASH coverage in ECD centers ("primera infancia", through age 5)

Summary table of WASH in Colombian schools

	Pre-primary, Primary & Secondary Schools				Early Childhood Development Centers
Coverage of WASH service (%)	National	Lowest Department	Highest Department	Gap between Departments	National
Improved water source	75	28	98	70	73
which is available (basic)	55	16	94	78	57
Improved toilets/latrines	78	47	100	53	77
which are functional	70	33	99	66	ND
which are sex-separated	ND	ND	ND	ND	47
which are functional & sex-separated (basic)	ND	ND	ND	ND	ND
which are functional & disability accessible*	32	0	92	92	ND
Handwashing facilities	61	33	100	67	ND
which are functional	54	22	99	77	ND
with water & soap (basic)	ND	ND	ND	ND	24 (soap)

**Not part of the definition of basic service in the SDGs, but an important aspect of advanced service*


unicef


World Health
Organization