

WASH HELPS

Water, Sanitation, and Hygiene for Health and Education in Laotian Primary Schools

Photo: Anna Chard, Emory University

policy briefing

WASH in schools can reduce pupil absence and diarrhea in Lao People's Democratic Republic



- **Project:** UNICEF WASH in Schools (WinS) Programme
- **Location:** Saravane Province, Laos
- **Target Population:** Primary schools
- **Implementing Partner:** UNICEF Laos
- **Funders:** Australian Department of Foreign Affairs and Trade (DFAT) and UNICEF

Key Messages

- Water, sanitation, and hygiene (WASH) can improve the health, education, and dignity of children. The impact of a comprehensive WASH in Schools (WinS) intervention on pupils' school absence, diarrhea, and respiratory infections was evaluated in 100 primary schools in rural Laos.
- During the dry season, the odds of diarrhea were 44% lower among pupils attending intervention schools than those comparison schools. Reductions in diarrhea were greater in schools that met and sustained intervention targets. Absence was dependent on whether schools achieved intervention targets. Lower absence was observed among schools meeting many intervention targets; higher absence was observed among schools meeting few intervention targets.
- Fidelity and adherence to school WASH interventions should be emphasized to maximize positive impacts on health and education and avoid adverse impacts.

The Need WinS can improve school attendance by reducing exposure to infectious disease, providing safe environments for girls to manage menstruation at school, and reducing time spent collecting water. WinS also promotes important habits such as handwashing with soap and toilet use that will have lifelong health benefits.

The Study We evaluated a comprehensive school-based WASH intervention delivered to primary schools in Laos. The intervention constructed WASH facilities, including a school water supply, toilets (1 toilet block with 3 pour-flush toilets), and handwashing facilities (2 sinks with taps connected to water supply); delivered water filters and group handwashing facilities; promoted daily group hygiene activities; and conducted WASH facility operation and maintenance training and hygiene training for teachers. Longitudinal surveys were conducted over 3 school years at 50 intervention schools and 50 comparison schools.

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The Findings During the evaluation period following intervention implementation, beneficiary schools met an average of 14.1 of the 20 WinS evaluation criteria versus 1.8 for comparison schools. Impact on pupil health and absence were evaluated.

Diarrhea: During the dry season (November-April), odds of self-reported diarrhea were *44% lower* in intervention versus comparison schools. There was no impact overall or during the rainy season.

Respiratory illness: There was no difference in symptoms of respiratory illness between pupils in the intervention and comparison groups.

Absence: There was no impact of the program on school absence. The most commonly reported reason for school absence was the need to stay home to support the family, followed by illness.

Additional analyses showed that **schools with greater achievement of WinS criteria experienced greater absence and health benefits** (see blue box at right).

Policy Recommendations Comprehensive WinS interventions can reduce absence and diarrhea when **delivered with fidelity and adhered to by beneficiaries**. Rigorous program monitoring and follow-up is important to ensure that benefits are maximized and adverse effects are averted.

Context-specific external factors may limit impacts of WinS interventions. Patterns of school absence were largely influenced largely by external factors, such as crop calendars and the need to stay home to support their family, not due to illness. Implementers should conduct formative work in advance of interventions to understand the driving forces of key outcomes like absence, and tailor their interventions to target those outcomes if absenteeism is indeed the ultimate purpose of WinS interventions. Otherwise, the theory of change and advocacy messages for WinS programming should be revised accordingly.



Partners



Further Readings

WHO. (2009). [WASH standards for schools in low-cost settings](#).

WASH in schools studies in Kenya. Read more about:

Freeman et al. (2013). [Comprehensive WASH and diarrhea](#).

Freeman et al. (2012). [Comprehensive WASH and absenteeism](#).

Caruso et al. (2014). [Latrine cleaning, hygiene, and absenteeism](#).

Intervention Adherence Matters

WinS Evaluation Criteria

Measuring program adherence

Meeting the 20 WinS Criteria

- 85% of intervention schools met all 4 water supply criteria
- 59% met all 5 toilet criteria
- 41% met all 3 handwashing criteria
- 82% met both (2) drinking water filter criteria
- 61% met all 3 group handwashing table criteria
- 15% met all 3 promotion of group hygiene activities criteria
- 3% met *all* 20 WASH criteria
- Adherence to the intervention increased across the evaluation period

Impacts on Pupils

Maximizing impacts with WASH adherence

Effects on school absence

- Odds of absence were *24% lower* among pupils attending intervention schools that met 76-100% of WinS criteria, but *28% higher* among pupils attending intervention schools meeting only 26-50% of WinS criteria.

Effects on diarrhea

- Pupils were *38-39% less likely* to report diarrhea among schools that met 26-50% or 51-75% of WinS criteria.



A pupil leader lines up his classmates for daily group handwashing, an WinS intervention activity used to promote and habitualize handwashing with soap.