PERIODIC OVERVIEW OF HANDWASHING LITERATURE:

Practical guidance for implementers based on selected peer-reviewed and grey literature published July-December 2012

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Purpose/Context

- PPPHW aims to publish overviews of handwashing literature twice a year that provide practical guidance for implementers.
- We compiled 29 peer-reviewed and grey literature publications (including e-publications and ahead-of-time publications) between July and December 2012. From these, we selected relevant articles which allowed for practical guidance for implementation. We excluded publications from high income and/or medical facility based settings. This document summarizes the takeaway points for implementers. A separate pdf document includes additional details and context from the selected publications.

Authors note

- No single study is universally applicable. We strongly recommend considering the context of the study when interpreting results.
## Summary of research
(July – December 2012)

| What we learned about diarrhea and risk factors | • New estimates indicate that the burden of diarrheal disease among children is still unacceptably high in low and middle income countries even though it has decreased since 1990 (Fischer Walker et al. 2012).

• Hands are an important vector of diarrheal pathogens (Mattioli et al. 2012). |
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| What we learned about health outcomes related to handwashing | • Handwashing promotion to mothers of young children may improve child development, and thereby increase a child’s well-being and societal productivity (Bowen et al. 2012).

• Hygiene promotion alone can have significant reductions in gastrointestinal and respiratory illness among young children but provision of hygiene products in addition to hygiene education can have greater reductions (Cole et al. 2012).

• Promotion of handwashing in primary schools improves knowledge about handwashing among students and can reduce the risk of respiratory illness among these students (Patel et al. 2012).

• In child care centers where water is limited, promotion of hand sanitizer use and provision of sanitizer can reduce acute diarrhea and respiratory illness in children 1-5 years old that attend these facilities (Correa et al, 2012). In kindergarten classrooms, hourly use of hand sanitizer was a more optimal time interval for preventing respiratory illness in children (Pandejpong et al. 2012). |
# Summary of research

(July – December 2012)

<table>
<thead>
<tr>
<th>What we learned about factors that affect hand washing behavior</th>
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<tr>
<td>• Understanding barriers to handwashing with soap that are <em>specific</em> to critical times of interest (such as feeding, food preparation, or clean/safe delivery) can help the implementer design a more relevant behavior change approach (Alive and Thrive, 2012, Moyer et al. 2012).</td>
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<td>• Family or community members who have influence over birthing practices could be important barriers to behavior change and therefore important to consider when designing such a program (Moyer et al. 2012).</td>
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<td>• The HACCP approach, which includes handwashing with soap at critical junctions, seems effective in decreasing fecal contamination of food that can occur during food preparation and feeding at home (Toure et al. 2012, Islam et al. 2012). Long term behavior change, health outcomes and the extent to which this method is feasible at larger scale is unclear.</td>
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<td>• In 3 different refugee camps, the practice of handwashing was low and resource constraints (and therefore decisions about prioritization of soap use) were reported as a barrier to ensuring good handwashing practice (Biran et al, 2012). Overall, very little published in peer-reviewed journals on motivators and barriers to, and the impact of good handwashing behavior in emergency settings.</td>
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<td>• Understanding determinants of good handwashing behavior is important to identify triggers of that behavior which could be incorporated into a handwashing promotion program (See Hernandez et al. WSP technical paper (2012) for steps to measuring good handwashing behavior).</td>
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<td>• Measuring determinants of good handwashing behavior requires at minimum resources to support piloting, adequate sample size, and appropriate statistical skills for analysis of the data. (Hernandez et al. WSP Technical Paper, 2012).</td>
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Citations:


