

WASH AS A KEY INTERVENTION TO ENHANCE NEWBORN HEALTH

Overview

Newborns account for 44 percent of the 18,000 children under five dying each day.¹ While the exact percentage of newborn deaths caused by inadequate water, sanitation, and hygiene (WASH) has not been studied, it is certainly a significant factor. Globally, lack of access to WASH is responsible for at least 20 percent of all child deaths. WASH is a proven intervention with significant lifesaving potential and a **critical component to achieving Millennium Development Goal 4.**² This document outlines WASH and newborn health linkages and solutions.

Linkages

- In 2012, 2.9 million babies died before they reached 28 days.³ A significant number of those deaths – over 500,000 in a 2008 study – are due to **infection caused by unhygienic birth conditions and umbilical cord cuttings.**⁴ Bathing newborns in contaminated water further increases the risk of infection.⁵
- Water quality suffers when sanitation is poor, contributing to diseases like **diarrhea.** Globally, two million children under five die each year; 75 percent of these deaths are due to diarrheal disease.⁶
- **Under five mortality is nearly seven times higher** in countries with poor sanitation coverage than in countries with improved access to sanitation.⁷
- **Handwashing with soap** is one of the most cost-effective health interventions. A study in Nepal showed handwashing by birth attendants and mothers helped reduce neonatal mortality by 41 percent.⁸
- **Successful breastfeeding** can reduce WASH-related disease in newborns. Breastfeeding protects infants by decreasing exposure to food- and waterborne pathogens and by improving resistance to infections.⁹ Infants without piped water or toilets and not breastfed are five times more likely to die after one week than those who were breastfed.¹⁰

¹ Healthy Newborn Network (2013). [Levels and Trends in Child Mortality: Report 2013.](#)

² Cheng, J.J. et al (2012). [An ecological quantification of the relationships between water, sanitation and infant, child, and maternal mortality.](#)

³ Healthy Newborn Network (2013). [Levels and Trends in Child Mortality: Report 2013.](#)

⁴ Black, R. et al (2010). [Global, regional and national causes of child mortality in 2008: a systematic analysis.](#)

⁵ Mullany et al (2006). [Risk factors for umbilical cord infection among newborns of Southern Nepal.](#)

⁶ WHO/UNICEF (2009). [Diarrhoea: Why children are still dying and what can be done.](#)

⁷ Cheng, J.J. et al (2012). [An ecological quantification of the relationships between water, sanitation and infant, child, and maternal mortality.](#)

⁸ Rhee, V. et al (2009). [Impact of Maternal and Birth Attendant Hand-washing on Neonatal Mortality in Southern Nepal.](#)

⁹ VanDerslice, J. et al (1994). [Drinking-water quality, sanitation, and breast-feeding: their interactive effects on infant health.](#)

¹⁰ Habicht, J. et al (1988). [Mother's milk and sewage: their interactive effects on infant mortality.](#)

Recommendations

- Of the ten recommended actions to save and improve the lives of children in the *A Promise Renewed* report, **three** are related to WASH:¹¹
 - Have children drink water from a safe source, including water that has been purified and kept clean and covered, away from fecal material.
 - Have all children wash their hands with soap and water especially before touching food, after going to the latrine or toilet and after dealing with refuse.
 - Have all children use a toilet or latrine, and safely dispose of children's feces; prevent children from defecating in the open.
- **Clean delivery procedures** are critical to preventing neonatal deaths (and to protect the health of the mother). Health clinics and hospitals must have running water, clean toilets, safe refuse disposal, and clean delivery tables. Handwashing with soap and other hygiene interventions should be consistent.¹² Application of unclean substances to the umbilical cord – customary practice in some areas – should be discouraged. Topical antiseptics such as chlorhexidine are also helpful in reducing infection.¹³
- The World Health Organization's Partnership for Maternal, Newborn & Child Health also highlights the importance of **engaging across sectors**, including water and sanitation.¹⁴
- Progress in newborn health also can be achieved by **integrating WASH into existing newborn health programs**. WASH integration has been shown to make efforts more successful initially and more sustainable over the long term.
- **Exclusive breastfeeding** should also be encouraged. Formula mixed with unsafe drinking water can cause bouts of diarrhea, which can lead to stunting, wasting, undernutrition, and even death. Mothers who do not wash their hands at appropriate times can pass harmful bacteria to infants during breastfeeding.

Additional Resources

- [Integrating WASH across Development Sectors](#)
- [WASH: Strengthening Maternal, Newborn, and Child Health](#)
- [WASHplus Weekly: Focus on Child Survival](#)
- [WASH as a Strategy to Advance MNCH](#) (presented at Global Maternal Health Conference)

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¹¹ UNICEF (2013). [Committing to Child Survival: A Promise Renewed](#).

¹² Simavi (2011). [Getting it right: improving maternal health through water, sanitation, and hygiene](#).

¹³ Mullany et al(2006). [Risk factors for umbilical cord infection among newborns of Southern Nepal](#).

¹⁴ The Partnership for Maternal, Newborn & Child Health (2010). [Knowledge Summary #11: Engaging Across Sectors](#).