

Children and Health

The facts

- Diarrhoea is the largest *preventable killer* of children under five.
- Some 1.7 million young children die each year from diarrhoea associated with inadequate water supplies, sanitation and hygiene.
- Worms infect more than one third of the world's population. Worm infection (helminths) is ranked as the main cause of disease in children aged 5-14 years old. These are spread through unhygienic environments (such as contaminated soil or water) and unhygienic behaviour.
- The global estimated figures are:

Roundworm: 320 millionWhipworm: 233 millionHookworm: 239 million

Other diseases related to inadequate water and sanitation services include skin and eye infections, (trachoma, preventable by hand and face washing),

School Attendance

The facts

- Chronic early childhood diarrhoea can result in decreased blood flow to the brain or failure to absorb sufficient dietary nutrients. Repeated episodes may have permanent effects on brain development. This may have an impact on a child's learning achievement and on their health at school age.
- Children who suffer from severe early childhood diarrhoea enter school later than their classmates, and perform worse in non-verbal intelligence tests.

Why water, sanitation and hygiene?

The facts

- Retention and recruitment of teachers is problematic where schools lack adequate water and sanitation facilities.
- Teachers want to work in good schools. This is often defined by whether they have access to toilets or not.
- Teacher shortages result in large class sizes, which affects the standard of education children receive.
- Water and sanitation-related illnesses mean that teachers are themselves absent from school which causes children to be sent home.

This Briefing Note presents evidence for the impact of water supply, sanitation and improved hygiene on education.

Key references

- Burrows, G. et al (2004) Water and Sanitation: the Education Drain. London. WaterAid
- UNICEF (2004) Monitoring the Situation of Children and Women.
 http://www.childinfo.org/index2.htm
- Nokes, C; Bundy, C. and Donald A. P. (1993), "Compliance and absenteeism in school children: Implications for helminth control", Trans R Soc Trop Med Hyg; 87(2):148-52, Mar.-Apr.

Full details of all the material used in support of this briefing note are available at www.lboro.ac.uk/well

There are six briefing notes in this series:

- 1. The Poverty Millennium Development Goal: What water, sanitation and hygiene can do
- 2. The Education Millennium Development Goal: What water, sanitation and hygiene can do
- 3. The Child Health Millennium Development Goal: What water, sanitation and hygiene can do
- 4. The Gender Millennium Development Goal: What water, sanitation and hygiene can do
- 5. The HIV/AIDS Millennium
 Development Goal: What water,
 sanitation and hygiene can do
- 6. The Environmental Sustainability Millennium Development Goal: What water, sanitation and hygiene can do

DFID Resource Centre in Water, Sanitation & Environmental Health www.lboro.ac.uk/well

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