



## Water and health information sheet

### Diarrhoea

Worldwide, diarrhoea is the second biggest cause of death in children who are under the age of five. The majority of deaths related to diarrhoea occur in sub-Saharan Africa and South Asia. Poor **sanitation** and **hygiene**, and drinking unsafe water, can all contribute to the spread of microorganisms, such as bacteria, that cause diarrhoea. It is estimated that 69 percent of people in sub-Saharan Africa, and 64 percent of people in South Asia, do not have access to even basic sanitation, and while there have been big improvements, 884 million people worldwide are unable to access safe drinking water.

There are many straightforward ways to fight diseases like diarrhoea. The worst effects of diarrhoea can be treated with a simple solution of essential salts dissolved in clean water. This is called oral rehydration therapy. The main way to avoid waterborne diseases, however, is to use clean water. Protecting water sources from **contamination** and simple actions, like washing hands with soap, can protect against diarrhoea. Other actions, such as breast-feeding, immunising children against measles (which can trigger diarrhoea), using toilets or **latrines**, and keeping food and plates clean, can also help.



An estimated 884 million people worldwide do not have access to safe drinking water.



Covered borehole wells help protect water from contamination, making it safe to drink.

### Malaria

Malaria is an illness caused by a parasite that is spread amongst humans by the bite from a specific type of mosquito. While malaria is not caused by water, the mosquito breeds in pools of **stagnant water**. How many people have the disease is closely associated with how much water is available in the local area, and the characteristics of that water (eg: fresh or still, the plants around and in the water, and so on) – if the environmental conditions are right for the mosquito to breed, then it is likely there will be high numbers of people suffering from malaria nearby.

In 2010, it was estimated that there were 216 million cases of malaria worldwide, and that around 655,000 people had died from the illness. Most of these deaths were amongst young children in Africa. Malaria is most common in sub-Saharan Africa, but it can be found in many places around the world, including South-East Asia and the Eastern Mediterranean region.

There is medication available to help treat malaria, but prevention is the best option. People can protect themselves at night (when mosquitoes are most common) by sleeping under a bed-net. Where possible, people can also make changes to their environment to try to reduce places where the mosquitoes can breed. For example, managing water through use of drainage, and ensuring irrigation doesn't cause pools of water to stagnate on the ground, can help prevent new breeding sites from forming.

## Water and health information sheet

### Water Health Life

Water Health Life is a program run by World Vision with local communities in developing countries. The goal is to find practical solutions to water, sanitation and hygiene problems. Some of the simple, long-term solutions include:

- **protecting water springs.** Using pipes, filters, and barriers helps protect water sources against contamination and reduce the spread of waterborne diseases.
- **drilling boreholes.** A drilling machine bores through the ground to reach water underground, which is then pumped up to the surface. This helps protect water from contamination.
- **creating covered wells.** Many communities get water from wells that are open to the air and to contamination. By covering wells and using a pump the water is kept clean.
- **constructing rainwater tanks.** If spouts with filters are attached at the top of a tank to collect water, and the rest of the tank is covered, clean water can be kept and stored for later use.
- **building toilets.** Some communities use shallow hand-dug pits as toilets. When it rains human waste can be washed into water sources. Digging very deep pits for use as latrines improves sanitation and reduces the spread of disease.
- **providing hygiene education.** Many people living in poverty have not had the opportunity to go to school and learn about things like hygiene. They are often unaware of the health risks from poor hygiene. Learning about good hygiene practices helps them to reduce the spread of disease.

For more information on how communities can address water-related health problems, read page 9 of *Get Connected: Water in the world*, and the case study on Flores, Indonesia on pages 22-23.

### Jargon busters

**Contaminated:** water that has something in it, or added to it, that makes it unclean, impure or harmful.

**Hygiene:** practices, such as those of cleanliness, that help maintain health and prevent disease. For example, washing hands thoroughly with soap after going to the toilet.

**Latrine:** a pit or camp toilet.

**Sanitation:** taking precautions against germs and disease by the disposal of sewage and other waste.

**Stagnant water:** water that remains still and doesn't have a current or flow. As a result the water becomes stale.