

illions of germs – bacteria and viruses – lurk everywhere.

WATER

These germs can be found in the bathroom, in the kitchen, in the garden, on our pets, even at work and at school. Germs can cause many different illnesses, such as colds and flu, eye and mouth infections and diarrhoea or even cholera and typhoid. Germs are transmitted in several different ways, especially by touching dirty hands or changing dirty nappies.

Other ways include through contaminated water and food, through droplets when someone coughs or sneezes, through contaminated surfaces and through a sick person's bodily fluids. If people pick up germs from one of these sources, they can unknowingly become infected simply by touching their eyes, nose or mouth.

The simple act of washing hands with soap and water is one of the best ways to keep ourselves and our families healthy. Research has shown that hand washing can significantly reduce the two leading causes of child deaths in the world – diarrhoeal disease and acute respitary infection (such as pneumonia). This makes hand washing more effective than any single vaccine or hygiene behaviour.

Unfortunately, many people in the country do not wash their hand regularly. An international hygiene survey conducted among a number of countries, including South Africa, found that nearly 70% of the country's people are at risk of transmitting dangerous infections because they do not wash their hands regularly. Almost half of the 1 000 people surveyed in the country believed that disinfecting surfaces, avoiding close contact with others and not letting animals in the house were more effective in preventing disease than hand washing. This is not true – hand washing remains the best way of preventing the spread of disease.

HOW DO YOU WASH YOUR HANDS PROPERLY?

Step 1:

Wash you hands in warm water. **Step 2**:

Use soap (it does not need to be anti-bacterial soap) and lather up for 10 to 15 seconds (about as long as it takes for you to sing Happy Birthday). Make sure you get in-between the fingers and under the nails where uninvited germs like to hang out. Do not forget to wash your wrists! **Step 3**:

Rinse and dry well with a clean towel.

You need to wash your hands: before eating and cooking; after using the toilet; after cleaning around the house; after touching your pets; before and after visiting or taking care of sick relatives or friends; after blowing your nose, coughing or sneezing; and after changing the baby's nappy.

DID YOU KNOW?

According to the Water Supply & Sanitation Collaborative Council, one gram of faeces can contain 10 million viruses, a million bacteria, a thousand parasite cysts and a hundred worm eggs.

HOW GERMS ARE SPREAD

Nose, mouth, or eyes to hands to others: Germs can spread to the hands by sneezing, coughing or rubbing the eyes and then can be transferred to other people. Simply washing your hands can help prevent such illnesses as the common cold or eye infections.

Hands to food: Usually germs are transmitted from unclean hands to food by an infected food preparer who didn't wash his or her hands after using the toilet. The germs are then passed to those who eat the food. That is why it is important to always wash your hands after using the toilet and before preparing food.

Food to hands to food: Germs are transmitted from raw foods, such as

chicken, to hands while preparing a meal. The germs on the hands are then transferred to other uncooked foods, such as salad. Cooking the raw food kills the initial germs, but the salad remains contaminated.

Animals to people: Animals, such as dogs and cats, also carry germs. It is important to wash your hands after petting animals or touching any surfaces they come into contact with, such as their bedding.

Infected child to hands to other

people: Germs are passed from a child with diarrhoea to the hands of the parent during nappy changing. If the parent doesn't immediately wash his or her hands, the germs that cause the diarrhoea are then passed on to others.

DIARRHOEA: WORLD KILLER

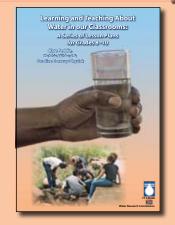
Diarrhoea remains a significant world health problem, with more than three million episodes occurring each year. Many people die from diarrhoea, and children under the age of five are particularly vulnerable.

Persistent diarrhoea can also contribute to malnutrition, reduced resistance to infections, and sometimes impaired growth and development. The organisms causing diarrhoea can be transmitted from infected faeces to people through food and water, person-to-person contact, or direct contact.

Hand washing after going to the toilet, and before preparing and eating food can reduce the risk of diarrhoea.



It is important that we wash our hands before preparing food.



WATER

WATER LEARNING PLANS FOR EDUCATORS

The Water Research Commission has published a series of lesson plans on water for grades R to 10. The lesson plans, developed with Share-Net, are linked to the South African Curriculum. Each lesson pack contains five lessons, with each lesson focusing on a different learning area – these can be used as they are, or adapted to suited the local context. Each lesson is concluded with a rubric of criteria to assess the learners. Learning Outcomes and Assessments Standards covered during each lesson are given in the summary at the beginning of the pack.

The lesson plans are available free of charge. Contact Publications at Tel: (012) 330-0340 or Fax: (012) 331-2565 or E-mail: <u>orders@wrc.</u> <u>org.za</u>. The lesson plans can also be downloaded from <u>www.wrc.org.</u> <u>za/publications education.htm</u>

