

Hand hygiene

- ▶ some micro-organisms can stay alive on hands for hours
- ▶ the number of microbes on fingertips can double after using the toilet
- ▶ colds & 'flu are spread by touch, just as much as coughs and sneezes

Food poisoning

Harmful microbes in and on our food are usually killed or controlled by cooking or chilling. But sometimes they can spread, contaminating other foods, and potentially leading to food poisoning.

About 5.5 million people a year are thought to suffer from food poisoning. This costs the economy, including employers and the National Health Service (NHS), at least £350 million per year.

Common causes are the following bacteria:

- ▶ *Campylobacter*
- ▶ *Salmonella*
- ▶ *Staphylococcus aureus* (*S. aureus*)
- ▶ *Escherichia coli* O157 (*E. coli* O157).

Healthcare-associated infections

Healthcare-associated infections (HCAI) affect 8 % of hospital admissions. At least 5,000 deaths every year are probably due to hospital-acquired infections. 300,000 or more patients have non-fatal infections, which can prolong their stay in hospital. In England alone, this can lead to the loss of 3.6 million NHS bed days, and an estimated cost of £1 billion a year.

Common infections in healthcare settings include:

- ▶ *Clostridium difficile* (*C. diff*)
- ▶ methicillin-resistant *S. aureus* (MRSA)
- ▶ glycopeptide-resistant enterococci (GRE).

Why wash your hands?

Not all infections can be avoided, but one of the easiest methods of prevention is hand washing, in the home as well as in the hospital. It is believed that hand washing could reduce HCAI by 15 - 30 %. And in the kitchen, good hand hygiene is vital to help control food poisoning.

How to wash your hands

During hand washing some areas are frequently missed and this can lead to the spread of microbes.

To do it properly you should remember to:

- ▶ rinse hands under warm water before applying soap (to prevent irritation)
- ▶ rub hands together for 15 seconds; including backs of hands, between fingers and under nails
- ▶ rinse with clean water
- ▶ dry thoroughly with a clean towel or air dryer (microbes spread more easily from wet skin).

Healthcare workers are being urged to wash their hands with soap and water to remove the hardy spores of *C. difficile*, then to use alcohol gels to combat MRSA.

When should you wash your hands?

- ▶ Before:
 - ▷ preparing food
 - ▷ eating
 - ▷ caring for the sick
 - ▷ looking after babies and the elderly
 - ▷ putting in contact lenses.
- ▶ After:
 - ▷ handling raw foods, especially meat
 - ▷ eating
 - ▷ going to the toilet
 - ▷ touching rubbish or waste bins
 - ▷ changing nappies
 - ▷ caring for the sick
 - ▷ coughing or sneezing
 - ▷ touching pets and other animals
 - ▷ gardening.



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MAC

The Society for General Microbiology (SGM) Microbiology Awareness Campaign (MAC) aims to highlight the important issues relating to microbiology. Through its many members, the SGM can offer impartial and expert information on all microbiological topics. Enquiries are welcome. Contact SGM, Marlborough House, Basingstoke Road, Spencers Wood, Reading RG7 1AG (t 0118 988 1830; f 0118 988 5656; e pa@sgm.ac.uk).

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