It is one of the first things a child is taught to do by a parent teaching good hygiene.

But many healthcare workers are not washing their hands to the required standard at a time when almost one in 10 Scots patients will pick up a hospital acquired infection (HAI), which include MRSA and C difficile.

The Scottish Government has launched a campaign to wipe clean the country's dismal HAI rate with a three-year package worth £54m. It includes specific training in hand hygiene, as set out by the World Health Organisation.

A report has found that just six health boards across the country have met the required standard of at least 80% of staff following correct procedures. Next year's target is 90%.

Dr Alistair Leonard, of the Scottish Infection Research Network, said that handwashing was the "single most important" act in infection control.

"It is the one which we invest all the time and effort in to impress upon staff that if they do nothing else on infection control, do hand hygiene."

Barriers to hand hygiene include lack of the right equipment and time pressure. Dr Leonard said more needed to be done to work out why some health workers choose not to comply with instructions on handwashing.

Dr Leonard added: "In studies where the compliance rates are very low, we don't really understand why that is. There is a big question of behaviour which some psychologists are starting to get very interested in.

"We need to work out why it is that when we tell people we want them to do something at a certain time, sometimes people would manage not to do it correctly or appropriately.

"A lot of the future work in this field will start using the psychology of advertisers and marketing people to get the message across and use the tricks they have used for the past 20 to 30 years.

"What we want to know more about is the barriers to hand hygiene. Some of them are to do with the time nurses have to get around a ward, but there is more to it than that."

All hospitals across the country are now stocked with alcohol-based hand gels which speed up handwashing and remove the need for a basin as the liquid evaporates in the hand.

However, while the gels destroy the MRSA bacterium, they have no effect on C difficile which is resistant to alcohol.

Dr Leonard said that ideally staff have hands washed in soap to remove any dirt, blood or tissue and then cover with a gel to protect from all eventualities, but that a shortage of staff time may prevent this approach.

He added: "There have been some pieces of work which show that if a healthcare worker was washing their hands at every piece of contact with a patient, they could spend up to two to three hours a shift doing nothing but decontamination.

"Obviously handing someone a cup of tea doesn't carry the same risk as dressing an open wound. It's about sensible risk assessment."
Anne Thomson, acting deputy director of the Royal College of Nursing Scotland, said: "We all know that hand hygiene is one of the most important factors in combating hospital acquired infections.

"RCN Scotland welcomes the publication of this audit report, which shows that hand hygiene compliance has increased in 2007 and that nurses have the highest compliance rate among all staff groups.

"However, Scotland is only partially compliant at 79% overall. While we applaud the improvement - particularly in those health boards which have achieved compliance over the period - we still have some way to go."

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