

# National Hand Hygiene NHS Campaign

## Compliance with Hand Hygiene - Audit Report Your Questions Answered



## Germs. Wash your hands of them

Prepared for the Scottish Government Health Directorate HAI Task Force  
by Health Protection Scotland

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# The Scottish Hand Hygiene Audit Report

## What was studied for this report?

The hand hygiene practices of healthcare workers throughout NHSScotland were observed to inform this report

## Does the report mean that some staff are better at washing their hands than others?

The report reveals how trained observers recorded healthcare workers' hand hygiene compliance during patient care activities. Hand hygiene performed, using soap and water or by using alcohol hand rub solutions, is a simple task but clearly some staff still need to do it more often. Most hospitals provide easy access to hand hygiene resources and everyone must use these to ensure that the risk of spreading infection is reduced but improving attitudes toward hand hygiene is also important. Many factors influence hand hygiene and there are also historical differences in the amount of emphasis given to the importance of hand hygiene in the training of different groups of healthcare workers. It is necessary to understand any variation in order to target interventions at relevant staff groups to improve compliance with hand hygiene.

## Why has this Scottish audit been carried out?

Studies carried out around the world have shown that those caring for patients do not wash their hands as often as they should. The Scottish Government therefore wanted robust data on how often hands are washed by those caring for patients. Monitoring in this way will help NHSScotland understand what further action is needed to ensure that everyone working in the Health Service in Scotland regularly washes their hands.

## What are the headline figures?

The overall result for hand hygiene compliance in NHSScotland during this 4th Quarter audit period 2009 was 93% (14th to 27th January). Compliance percentages within NHS boards ranged from 89%-98%. Overall results for compliance with hand hygiene opportunities between staff groups ranged from 85%-95%. For full details please see the report.

## How do the results compare to other published audit results?

The results over time, established from the 1st (68%), 2nd (79%), and 3rd (87%), audit periods of 2007, first Quarter (88%) second Quarter (90%), third Quarter (93%) and this latest report for 2009 (93%), suggest that compliance in Scotland compares favourably to rates from hospitals/single areas of 5% to 92% within the published literature.

Results for each NHS board over the 7 audit periods ranged from 50%-94% (1st audit period), 59%-94% (2nd), 75%-97% (3rd), 79%-100% (4th), 85%-98% (5th), 89%-97% (6th) and 89%-98% in this latest audit report, and these compare favourably to the published literature. Further comparisons are hampered by the absence of any other published reports of hand hygiene compliance on a country wide level.

The results featured in this report also indicate that staff have maintained consistent levels of compliance, albeit to concur with evidence found within the published literature, which states that overall certain staff groups are consistently associated with low compliance.

It should be noted however, that any small changes presented, showing either minimal increase or decrease in compliance percentages should be interpreted with caution as these are unlikely to be statistically significant. However one NHS board did increase compliance significantly during this 4th Quarter (2009) audit period.

## **What do the compliance figures actually mean?**

The figures in the report show that NHSScotland has again met the target of at least 90% compliance with hand hygiene opportunities. The figures, however, prove that there is still room for improvement and NHS staff across Scotland are working hard to achieve this.

## **Why do the number of hand washing opportunities audited in each board differ?**

The figure of 300 opportunities was agreed as the minimum amount to be audited in each NHS board, however Boards are welcome to submit additional data if desired. This does not affect the compliance across Boards as this is calculated using a statistical process called 'weighting' which takes account of the number of employees in each health board area. In future reports all NHS boards will be required to submit no more than 300 opportunities in each national audit period.

## **Has NHSScotland met the target of 'at least 90%'?**

Yes. NHSScotland achieved a compliance level of 93% in the 3rd Quarter audit period and maintained it in this 4th Quarter audit period

All NHS boards have again achieved at least 90% compliance with hand hygiene opportunities based on interpretation of confidence interval statistics.

## **Now that the 'at least 90%' target has been met what will happen next?**

To ensure that NHS boards do not become complacent about the importance of hand hygiene, and to ensure good practice becomes embedded in the service, the Cabinet Secretary for Health and Wellbeing announced on the 26 January 2009 that all NHS boards must adopt a zero tolerance approach to non-compliance with hand hygiene. In addition, National Audit Reports will now be published on a bi-monthly basis. The next National Audit Report is due to be published in May 2009.

# General Information

## What is hand hygiene?

Hand hygiene is a term used to describe cleaning hands by using soap and warm water or by using an alcohol hand rub solution.

## Why is hand hygiene important?

Hand hygiene is considered to be the single most important way to stop the spread of germs. If the hands of those caring for a patient, as well as the hands of the patient and their family/visitors, are kept clean then the risk of the patient getting an infection will be far less.

## Why do people need to be told to wash their hands?

From studies that have been done throughout the world it has been shown that people do not always wash their hands as often as they should and Scotland is no exception. It is important that everyone (healthcare workers, patients and visitors) is aware that they need to regularly wash their hands in order to reduce the risk of spreading infection. This is especially important for healthcare workers who care for those of us who are sick and vulnerable.

## How are germs spread?

Germs can live harmlessly on people and in the environment. If spread from person to person by hand contact, however, these germs can sometimes cause infection in the sick and vulnerable.

## What germs cause infections?

Infections are most often caused by bacteria and sometimes viruses that live naturally all around us. Bacteria that can cause infection particularly in healthcare are *Staphylococcus aureus* and the antibiotic resistant strain of *Staphylococcus aureus* (MRSA). There are also viruses that cause tummy bugs, including the winter vomiting virus, and colds and flu.

## Are certain people more likely to pick up infections than others?

Those who are already sick and vulnerable are considered to be most prone to picking up infections, particularly those who have undergone surgery or are receiving drug treatments for serious diseases.

## What is being done to improve hand hygiene?

All healthcare workers are being educated about the importance of hand hygiene and many of the strategies being put into place are aimed at ensuring that there is improvement across all staff groups in NHSScotland. There are a number of other programmes that support NHS staff, including on-going local audits. Many staff are working hard towards trying to achieve the best possible standards to reduce the spread of infections. HPS also support local areas in understanding the correct hand hygiene procedures.

## Will good hand hygiene help to reduce MRSA and *Clostridium difficile* rates in hospitals?

Yes. Good hand hygiene is considered to be one of the most effective measures to stop the spread of germs and help prevent the spread of bacteria such as MRSA or *Clostridium difficile*, alongside other measures that help control these infections.

## **How were the results in the report calculated?**

The results for each NHS board and for Scotland were calculated by entering all of the audit reports compiled from the defined period into a computer database. The method for establishing the Scotland-wide compliance percentage and staff group compliance results involved weighting NHS board compliance results by the total number of staff in each Board, and also by the number of staff they have for the four defined staff groups. The confidence intervals for each NHS board's compliance rate were calculated taking into account the overall number of hand hygiene opportunities observed

By adding 95% confidence intervals around the NHS board results, it was possible to assess the accuracy of the observed results (which are an estimate of the true overall compliance obtained through observation of a sample), as we can be 95% confident that the true compliance figures can be found within these intervals.

Although these ranges and confidence intervals are presented within the report, caution should be taken when attempting to make any comparison between Boards as they can differ in their composition. Audit results are primarily aimed at monitoring within NHS boards. Any small changes presented that show either minimal increase or decrease in compliance percentages within NHS boards should be interpreted with caution as these are unlikely to be statistically significant.

## **Why is there a difference in Boards' compliance rates?**

This is not truly known and a number of factors will influence this. Boards can differ in their composition for example the National Waiting Times Centre is categorised as a Special Board as their circumstances are exceptionally different to other NHS boards (for example there are not multiple sites within this Board).

The overall aim of presenting these results is to give an indication of hand hygiene compliance for NHSScotland as a whole, by NHS board and also by staff group.

Local activities to improve compliance are many and will differ on local assessment of need, the exact combination of these that will have the greatest impact is not currently known. Facilitating the sharing of innovative and proven measures to improve compliance will continue to take place between NHS boards.

## **Are there limitations to the audit results?**

Yes, these have been detailed in the report and include that audit is not as scientific as other types of data collection, for example surveillance, but results still provide valuable information about hand hygiene practices.

# Definitions

## **What does the term 'audit' mean?**

'Audit' is the term used to describe the process that trained healthcare staff (auditors) undertake to check whether hand hygiene is being performed adequately or not, noting the results on a record sheet and then producing a report to show how many staff did or did not perform hand hygiene when required.

## **What do the terms 'monitoring' and 'compliance' mean?**

'Monitoring' means that hand washing practices are observed while staff care for patients. This includes touching patients during care delivery and touching their surroundings such as their bed or any surfaces around the bed e.g. tables. The monitoring allows for scoring against whether they wash their hands or not at defined times. Whether staff wash their hands or not at these times is called 'compliance'. This observation is done by healthcare staff who have been specifically trained to do this (auditors).

## **What does 'Allied Health Professional' mean?**

Allied Health Professionals are healthcare workers, other than doctors or nurses who help to treat and care for patients. Examples include physiotherapists, radiographers and podiatrists (a full list is provided in the report).

## **Who are ancillary staff and others?**

These are support staff such as porters and cleaning staff and other healthcare professionals with patient contact such as cardiac, respiratory and audiology technicians (a full list is provided in the report).

## Further Information

### Where can I get further information about the Scottish Campaign and about hand hygiene?

From the Scottish National Hand Hygiene Campaign website <http://www.washyourhandsofthem.com>, the Health Protection Scotland website <http://www.hps.scot.nhs.uk/haiic/ic/index.aspx> or from your local NHS board. Two information leaflets are available from the Scottish National Hand Hygiene Campaign website – one for members of the public and one for healthcare workers.

### What can visitors do?

The Chief Medical Officer and Chief Nursing Officer have previously issued 'five top tips' for people visiting hospitals, which are widely displayed across NHSScotland. These common-sense tips are:

- Think about keeping patients safe before you visit someone in hospital. If you, or someone you live with has a cold or diarrhoea, or if you feel unwell, try to stay away until you're better.
- Wash and dry your hands before visiting a hospital ward, particularly after going to the toilet. If there is alcohol hand gel provided at the ward door or at the bedside, use it.
- Ask ward staff for advice before you bring in food or drink for someone you are visiting in hospital.
- If you visit someone in hospital, don't sit on their bed and keep the number of visitors to a minimum at any one time. Never touch dressings, drips, or other equipment around the bed.
- If you think NHS premises are not as clean as they should be, let the Sister/Charge Nurse know. If you think a healthcare worker has forgotten to wash their hands, remind them about this.



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