

## Period 26 (October-December 2023) National Observational Hand Hygiene Compliance Audit Results

April 2024

### KEY POINTS

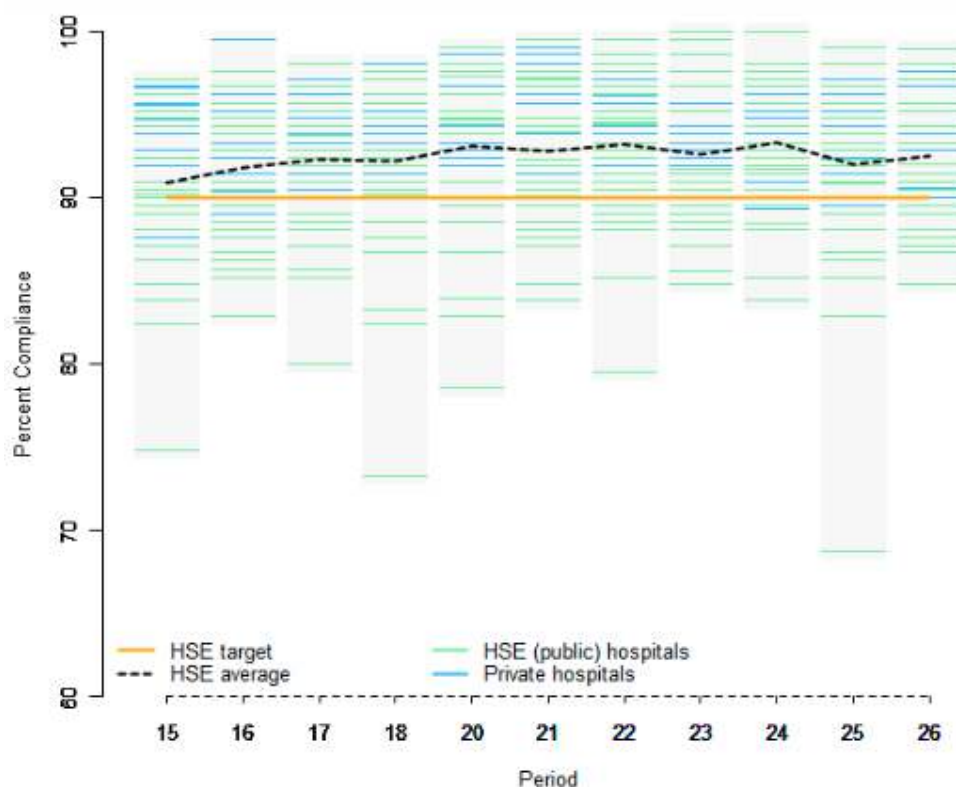
- Of the HSE hospitals/directorates, 45 (of 47) submitted data for the national audit on 9,589 observations, which took place from Oct to Dec 2023.  
One new directorate (UL Group Urgent Emergency Care) commenced in Period 26.
- For the HSE (public) hospitals, hand hygiene compliance **increased** from 92.0% in Period 25 to 92.5% in Period 26. The compliance was above the 90% HSE target.
- Eight private hospitals reported compliance data for Period 26.  
One new private hospital (UPMC Santry Sports Surgery) commenced in Period 26.

**Please see General Notes at the end of this document for methods and limitations**

**Table 1. National hand hygiene average percentage compliance by period (HSE hospitals)**

Period	HSE Average	LCI	UCI	N	HSE Target	Time of Year
15	90.9	90.3	91.5	44	90	May/June 2018
16	91.8	91.2	92.3	44	90	Oct/Dec 2018
17	92.3	91.7	92.8	44	90	May/June 2019
18	92.2	91.6	92.7	43	90	Oct/Dec 2019
20	93.1	92.5	93.6	36	90	Oct/Dec 2020
21	92.8	92.2	93.3	40	90	May/July 2021
22	93.2	92.6	93.7	42	90	Oct/Dec 2021
23	92.6	92.0	93.1	45	90	May/June 2022
24	93.3	92.7	93.8	43	90	Oct/Dec 2022
25	92.0	91.4	92.5	45	90	May/June 2023
26	92.5	92.0	93.1	46	90	Oct/Dec 2023

N: Number of HSE Hospitals; LCI/UCI: lower and upper 95% confidence intervals



**Figure 1. Hand hygiene compliance by HSE (green) and private (blue) hospital by period**

**Table 2a. Data by hospital groups**

Hospital Group	P15	P16	P17	P18	P20	P21	P22	P23	P24	P25	P26
Ireland East	91.4	90.9	91.7	92.4	92.7	91.1	92.2	91.8	91.5	91	91.7
Dublin Midlands	90.2	90.9	92.9	93.1	93.2	93.4	92.9	91.8	93.8	88	92.4
RCSI Hospitals, Dublin North East	89	92	89.8	88.8	90.2	92.9	92.3	93	93.4	93.5	93.2
University of Limerick, Midwest	90.8	91.7	91.4	92.9	95	96.5	97.1	93.6	95.1	93.7	94.1
South/South West	91.3	91.4	94.2	94.1	96	95	94.4	92.8	93.8	93	92.5
Saolta University, West/North West	90.6	93.1	91.6	90.1	92.2	91.1	89.8	91	92.1	91	90.6
Children's Hospitals	95.2	96.4	96.9	94.8	96.2	91.4	96.9	95.7	96.2	96.4	94.8
Other Hospitals								99.5	98.1	98.1	97.1
Private Hospitals	93.9	93.1	93.5	94.3	94.5	96.1	95.4	93.4	94	93.5	94

Note that results for private hospitals are combined so that compliance can be compared between private hospitals collectively and HSE Hospital Groups. However, this does not imply that private hospitals are governed as a single group.

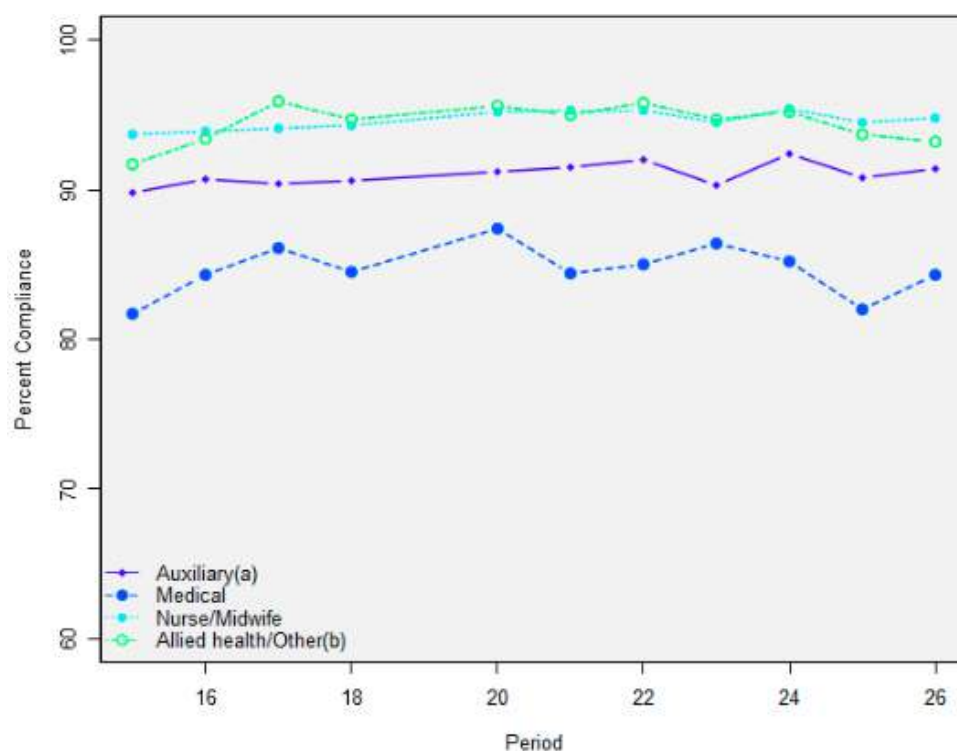
{Table 2b. by named hospital, not supplied here although the data will be available on the HPSC website when the results have been finalised}

**Table 3. Percentage hand hygiene compliance by staff category by period (HSE hospitals)**

Period	Auxiliary(a)	Medical	Nurse/Midwife	Allied health/Other(b)
15	89.8	81.7	93.7	91.7
16	90.7	84.3	93.9	93.4
17	90.4	86.1	94.1	95.9
18	90.6	84.5	94.3	94.7
20	91.2	87.4	95.2	95.6
21	91.5	84.4	95.3	95
22	92	85	95.3	95.8
23	90.3	86.4	94.5	94.7
24	92.4	85.2	95.4	95.2
25	90.8	82	94.5	93.7
26	91.4	84.3	94.8	93.2

<sup>a</sup> Auxiliary: Healthcare assistants, porters, catering and household services

<sup>b</sup> Allied health/Other: Physiotherapists, radiologists, dieticians, social workers and pharmacists



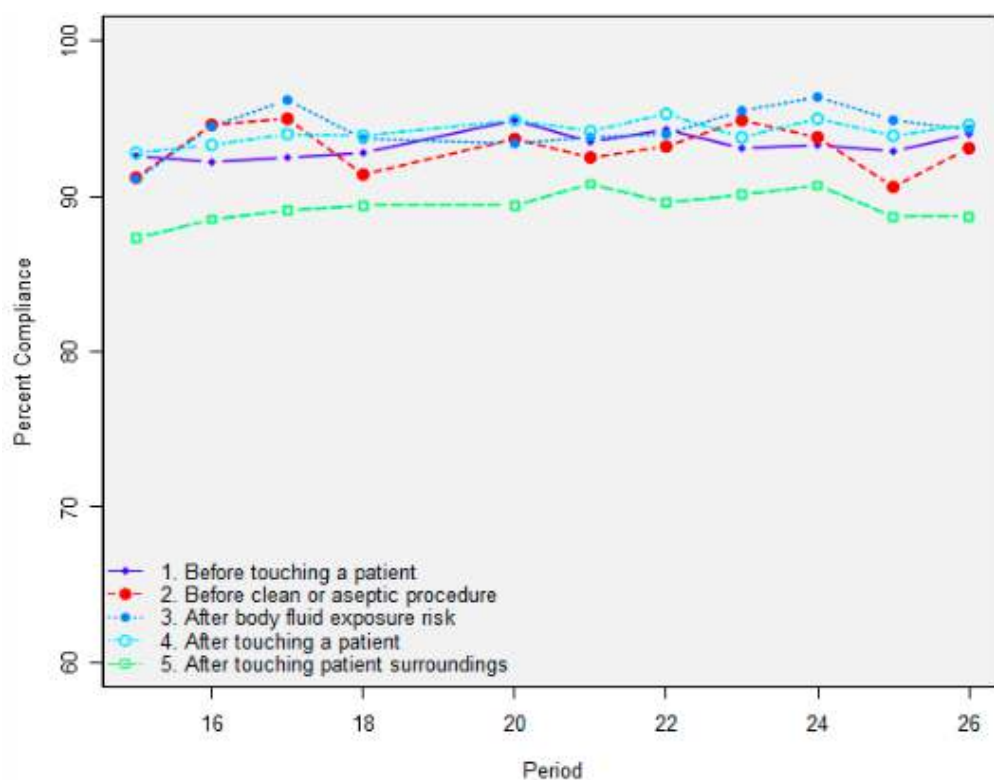
<sup>a</sup> Auxiliary: Healthcare assistants, porters, catering and household services

<sup>b</sup> Allied health/Other: Physiotherapists, radiologists, dieticians, social workers and pharmacists

**Figure 2. Hand hygiene compliance by staff category by period**

**Table 4: Compliance with 5 moments for hand hygiene by period (HSE hospitals)**

Period	1. Before touching a patient	2. Before clean or aseptic procedure	3. After body fluid exposure risk	4. After touching a patient	5. After touching patient surroundings
15	92.6	91.2	91.1	92.8	87.3
16	92.2	94.6	94.5	93.3	88.5
17	92.5	95	96.2	94	89.1
18	92.8	91.4	93.7	93.9	89.4
20	94.9	93.7	93.4	94.9	89.4
21	93.5	92.5	93.8	94.2	90.8
22	94.3	93.2	94	95.3	89.6
23	93.1	94.9	95.5	93.8	90.1
24	93.3	93.8	96.4	95	90.7
25	92.9	90.6	94.9	93.9	88.7
26	94	93.1	94.3	94.6	88.7

**Figure 3: Compliance with the 5 moments of hand hygiene by period**

## General Notes

### **Background**

Measuring hand hygiene compliance by direct observation is described as the gold standard by the World Health Organisation (WHO). The national hand hygiene standard operating procedure (SOP) was published in 2011 by the national hand hygiene steering group. The SOP outlines the methodology for undertaking hand hygiene observational audits, which was adopted from the WHO. Acute hospitals are required to measure healthcare worker compliance against 30 hand hygiene opportunities for each of the seven randomly selected wards in their facility, resulting in a total of 210 opportunities per hospital. For facilities that submitted more than the required 210 opportunities, the first 30 opportunities per ward were used for the analysis. Facilities that submitted less than 180 opportunities were not included in the analysis. Binomial exact 95% confidence intervals are presented. National workshops for training lead auditors are held biannually and the inter-rater reliability of each auditor is assessed using the Kappa statistic.

Please note that the overall analyses and the national average are based on HSE (public) hospitals only. In the SUMMARY BY HOSPITAL GROUPS page (on the HPSC website), the results are presented by HSE Hospital Groups. Note that results for private hospitals are combined (in table 2) so that compliance can be compared between private hospitals collectively and HSE Hospital Groups, however, this does not imply that private hospitals are governed as a group.

### **Measure Presented**

Number of opportunities taken over total number of directly observed opportunities, in accordance with the five WHO moments, expressed as a percentage.

### **Limitations**

The results as presented may not be reflective of healthcare worker compliance at all times. Compliance with hand hygiene is measured by trained, validated auditors observing healthcare workers undertaking patient care. It is well recognised that workers will change their behaviour if aware that they are being observed (Hawthorne effect). However, it is also known that this effect diminishes over time and that healthcare workers under observation may not be aware (due to the many competing demands on their attention) of the presence of the auditor. In addition, the purpose of auditing is to improve practice, therefore any action that improves compliance increases patient safety. Auditors are requested to give immediate feedback to ward staff following an audit, thereby increasing awareness and knowledge of hand hygiene.

While standardised hand hygiene auditor training and validation (with inter-rater reliability testing) should ensure that measurement of hand hygiene should be comparable, the results presented in this report have not been validated by external auditors. It is therefore possible that hand hygiene auditing may not have been performed in a comparable fashion in all hospitals.

All auditors measured compliance in the facility in which they work; therefore, there may be an element of bias in the results. This risk of bias should be balanced by the benefits of increasing local staff knowledge and awareness of hand hygiene.

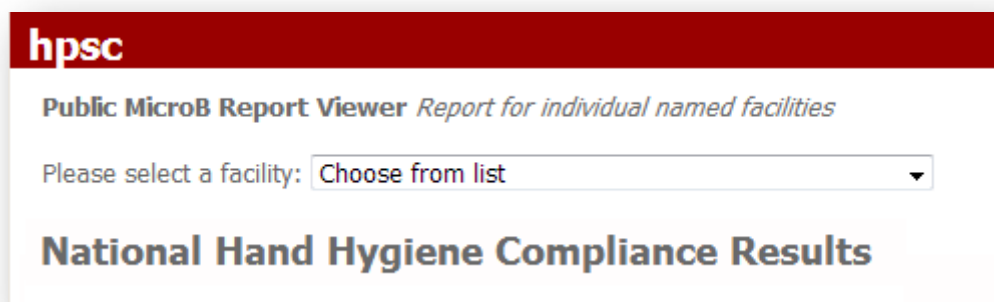
The sample size per hospital (210 opportunities) has a margin of error of nearly 7%. A larger sample size would provide proportions with a narrower margin of error especially at ward level. However, hand hygiene auditing is very labour intensive and without dedicated auditors, the time allocated must be balanced against other service needs.

The duration of, and the technique for hand hygiene, which are important elements of good practice were not measured as a mandatory component of this audit in line with the WHO protocol.

### Acknowledgement

Many thanks to all the data providers

### Links



### [National audits of hand hygiene compliance in hospitals in Ireland](http://www.hpsc.ie/hpsc/A-Z/MicrobiologyAntimicrobialResistance/EuropeanSurveillanceofAntimicrobialConsumptionESAC/PublicMicroB/HHA/Report1.html)

<http://www.hpsc.ie/hpsc/A-Z/MicrobiologyAntimicrobialResistance/EuropeanSurveillanceofAntimicrobialConsumptionESAC/PublicMicroB/HHA/Report1.html>