

**ITEM: 09/026**  
**DOC: 5**

**Meeting:** Trust Board  
**Date:** 18 February 2009

**Title:** Infection Prevention and Control update

**Executive Summary:** This report contains a summary of recent performance against the key infection control indicators.

Performance against the two national targets for reducing MRSA bacteraemia and *Clostridium difficile* infections is attached. We have now had 20 MRSA bacteraemia episodes in the Trust since April 1<sup>st</sup> 2008.

The focus for preventing further MRSA bacteraemia cases remains on best practice around peripheral and central line management and MRSA suppression. Audit results in all three of these areas are summarised. Mandatory blood culture technique training will be delivered to all relevant staff (700) by end of March 2009. MRSA practical assessments have been recently delivered by visible leadership team to 60 staff.

*Clostridium difficile* figures are still low taking us to total of 49 cases against the target to date of 102 by the end of January. Our new *C. difficile* target for 2009/10 is more challenging as we have seen a 46% reduction in cases this year.

Hand hygiene compliance demonstrated a drop in January to 90% (from 96% in December). Results from the cleaning audit from January showed most clinical areas were over 90% compliant. Refresher hand hygiene training is being delivered to all staff in the trust during February and March.

Surgical site infection surveillance of colorectal and vascular cases commenced on 1<sup>st</sup> October for three months and Caesarian section wound infection surveillance is due to commence April 1<sup>st</sup> 2009. Orthopaedic wound surveillance is being repeated between January and March 2009

MRSA screening of elective surgical patients is running at 96% compliance and emergency admission patient screening is 79% compliant and occurring in ED. MRSA screening of high risk obstetric patients, those having elective Caesarean section, and DTC patients commenced in January 2009.

High bed occupancy figures have resulted in bays on surgical wards increasing to 6 from 4, reversing the previous reductions that were achieved.

<b>Action:</b>	For information and support
<b>Report from:</b>	Dr Julie Andrews, Director of Infection Prevention and Control Deborah Wheeler, Director of Nursing & Clinical Development
<b>Financial Validation</b> Lead: Director of Finance	Not applicable
<b>Compliance with statute, directions, policy, guidance</b> Lead: All directors	<b>Reference:</b> Saving Lives National MRSA & <i>Clostridium difficile</i> target reduction Health Act 2006 Hygiene Code
<b>Compliance with Healthcare Commission Core/Developmental Standards</b> Lead: Director of Nursing & Clinical Development	<b>Reference:</b> C4a, C21
<b>Compliance with Auditors' Local Evaluation standards (ALE)</b> Lead: Director of Finance	<b>Reference:</b>
<b>Evidence for self-certification under the Monitor compliance regime</b> Lead: All directors	<b>Compliance framework reference:</b> Risk rating for quality

## Infection Prevention and Control report for February 2009 Trust Board

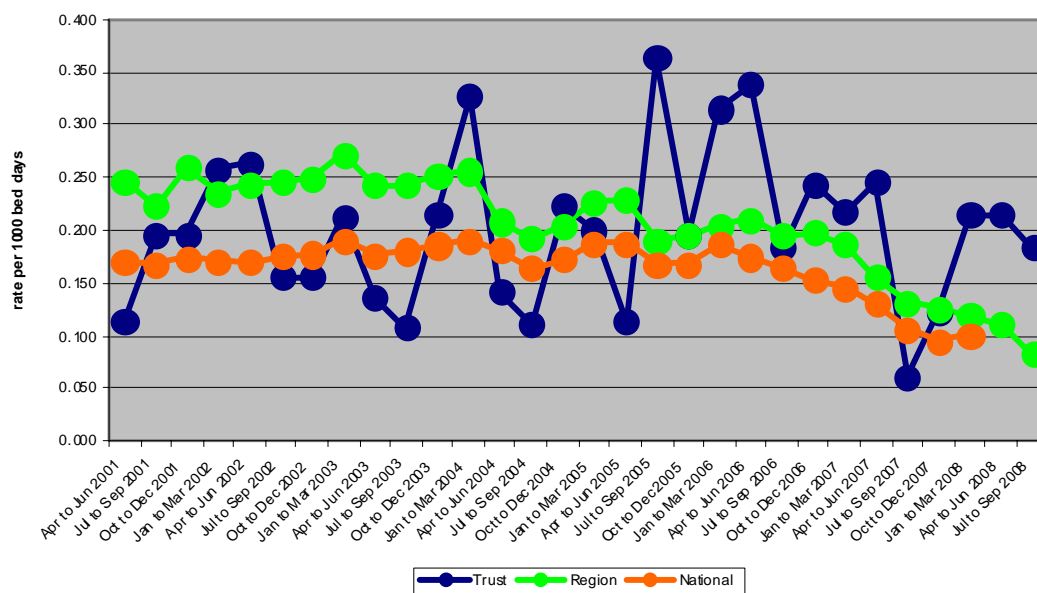
### 1. Infection control targets

Attached is the summary report data on MRSA bacteraemia and *Clostridium difficile* infections, as of 6th February 2009 (Appendix A, Infection control flash report).

We have had 1 further MRSA bacteraemia episode since last Trust Board, which was a pre-48 hours case. We are on **20** MRSA bacteraemia episodes in the Trust since April 1<sup>st</sup> 2008 and therefore we have exceeded our target of 15 bacteraemia episodes for the year, with 2 months still to go. Board members should also note that our total number of cases in 2007/8 was 21, and there is therefore a risk that we could have a higher number of cases this year than the previous year.

To summarise the current position, we have now had 11 post 48-hour cases and 9 pre 48 hours cases. 19 cases have been in medical patients and 1 case in a surgical patient. The rates per 1000 bed days for the Trust compared to the national and London SHA rates are presented below.

Figure 7: Comparison with national and regional trends for MRSA bacteraemia rate



The focus for preventing further avoidable MRSA bacteraemia cases remains centred on best practice around peripheral and central line management and MRSA screening and suppression. Ongoing work to decrease risks of transmission of MRSA between inpatients is occurring, particularly on wards with a higher MRSA prevalence such as JKU.

The Trustwide central line audit has recently been completed and results are encouraging showing a reduction in the total number of central lines inserted throughout the Trust and 90% compliance with insertion care bundle, which is

the DH best practice guidance. A business case has been granted for funding for specific central line insertion packs.

15 F1 doctors in collaboration with the DIPC have recently completed a Trustwide peripheral line audit, and there was 98% compliance with lines staying in no longer than 72 hours. Results of compliance with insertion and maintenance policy are high. The audit also demonstrated use of varying brands of cannulae and attachments within the Trust. The audit has been presented in full to the Infection Control Committee and Clinical governance committee.

Trials of non-ported peripheral cannulae (known to be associated with reduced bloodstream infection rates) are due to finish at the end of this month in theatres, ED, paediatrics, chemotherapy and Montuschi. A business case has been submitted for investment in improved peripheral line equipment.

A practical based MRSA assessment scenario was delivered by the DIPC and visible leadership team on 26<sup>th</sup> January 2009 to 60 members of staff and was received well, so plans are being made to redeliver this.

As blood culture technique has been highlighted as an issue in the last two MRSA bacteraemia, refresher and competency training has been arranged for all relevant medical and nursing staff based on local blood culture taking policy. This will be delivered in the next 2 months.

*Clostridium difficile* figures are still low with 10 further cases in January, taking us to total of 49 cases against the target of 102 cases to the end of January. This is a 46% reduction in *C. difficile* cases compared to last year. Focus is still on effective environmental decontamination, hand hygiene with soap and water, isolation and prudent antimicrobial prescribing. The excellent reduction in *C. difficile* figures this year means that we face a more challenging target next year, 2009/10, of 92 cases (8-9 cases per month). No graphs are available from the HPA to show our performance related to national and region because of the recent changes in way *C. difficile* performance is measured.

## **2. Hand hygiene and environmental cleaning.**

Hand hygiene compliance measured by the visible leadership team audits demonstrated a decline in January to 90% (97% in September, 88% in October, 85% in November, 96% in December). Results were lowest (67%) in "others" category which includes FSA and non-clinical staff. These results have been feedback directly to the wards concerned.

The visible leadership, infection control, and practice development teams are to redeliver hand hygiene refresher sessions for all staff over the next 10 weeks based on the success of last year's programme. The domestic staff are also receiving extra teaching on dress policy and the use of Acticlolor plus.

The monthly environment cleaning audits continue to show most wards maintaining the minimum standard of 90%. A tea party, hosted by the Chief Executive, was held on 29<sup>th</sup> January to thank the domestic staff who work on the wards that had consistently achieved 90% over the last six months. This was well received by staff, and we plan to repeat this every six months.

### **3. Antimicrobial use**

Compliance against Trustwide antimicrobial policies re-audit occurred on 27<sup>th</sup> November 2008 and results were presented to infection control committee and clinical governance committee in January 2009. In summary, compliance with the three main policies had improved since the 2007 audit and the percentage of patients on antimicrobials had decreased.

Further targeted antimicrobial audits with feedback are occurring in urology, respiratory medicine, orthopaedics and trustwide, focusing on the use of piperacillin-tazobactam, a specialist antibiotic.

### **4. Surgical site infection surveillance (SSIS)**

Surgical site infection surveillance of colorectal and vascular cases by the Surgical department commenced on 1<sup>st</sup> October 2009 and the results are currently being entered onto the Health Protection Agency (HPA) database.

On discussion with the obstetric department, NHS Islington and HPA, the Trust is delaying Caesarean section surveillance until April 1<sup>st</sup> 2009, when a national scheme will be available. Training for this is occurring on 5<sup>th</sup> March 2009.

Orthopaedic surgical site surveillance of patients undergoing NOF surgery and hips and knee implants is therefore being repeated between January and March 2009, prospectively performed by the ICN's with support from the orthopaedic department.

### **5. MRSA screening**

MRSA screening of elective surgical patients is running at 96% compliance. Emergency admission patient MRSA screening compliance has improved to 79%. The responsibility for initiating MRSA screening has been returned to ED, but admitting wards need to check and respond if ED MRSA swab has not occurred. This information has been discussed at ward manager level and wards are given individual compliance measurement

MRSA screening of higher risk obstetric patients and day treatment centre pre-assessed patients commenced 1<sup>st</sup> January 2009 in line with Department of Health guidance. Compliance figures will be available during February.

MRSA suppression protocol is recommended by clinician-to-clinician conversation for all inpatients who are MRSA positive (in the past or on screening) and a sticker is added to the medical notes. Recent audit has shown that compliance rates with suppression protocol are 70% for elective patients who are MRSA positive, 67% for critical care, and 55% for emergency patients. These results will be discussed with ward managers and an email sent to all consultants to aim to improve compliance. A further audit is planned for early February.

## **6. Bed occupancy, cohort bays and isolation**

High bed occupancy figures due to winter bed pressures have increased our bed base in ward bays from 4 back up to 6 on the surgical wards. This situation needs urgent re-assessment once pressures on beds have lessened. A paper has been agreed by the executive team that six bed bays should be reduced to four beds when running a cohort bay for infection control reasons.

Our ability to isolate all patients subject to transmission precautions in side rooms on JKU is estimated to be between 15-40%. The visible leadership team have undertaken a further isolation point prevalence audit at the beginning of February. The data from the three audits carried out since September 2008 will be collated for the next infection control committee in March, to begin to give an indication of the demand and capacity for isolation of patients