# Royal Victoria Eye & Ear Hospital

# Infection Control Annual Report

# 2012


Compiled by:

| | |
|---|---|
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| Margie McCarthy | Infection Control Nurse |


Approved by: ----------

Date:

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## 1.0 Summary

The Infection, Prevention and Control Team strive to provide services in an efficient and cost-effective manner in an environment of on-going budgetary constraints.

Surveillance indicated low rates of infection. The Key Performance Indicators (KPI's) for Healthcare Associated Infections (HCAIs), set by the HSE and the Infection prevention & Control Committee (IPCC) in the RVEEH, were all met. The excellent results were attributed to:

- Constant monitoring of services, consulting with patients, visitors and staff.
- Good working relationships across clinical services and between directorates.
- Service modification based on feedback, internal and external audits, regulations, standards, scientific studies and guidelines.

Environmental monitoring in the RVEEH includes water quality testing and legionella prevention management. There was no positive bacteriological result for legionella in 2012.

Risks were identified documented and evaluated through the Hospital's "Integrated Risk, Quality & Safety" (IRQS) Committee, which meets monthly and is chaired by the Hospital's Medical Director. All departments are responsible for completing a risk assessment in their area and recording all risk possibilities into a risk register. The major risks are as follows

**Table 1**

| Risk | Risk to Whom | Risk Rating | Risk Category |
|---|---|---|---|
| 1.Inadequate air changes due to no conventional ventilation in theatres | Patient | 12 | Moderate |
| 2.Most clinical hand wash sinks in hospital are not compliant with recommended HTM64 standard | Patient / Staff | 8 | Moderate |
| 3. Procedure for reprocessing of endoscopes does not meet recommended standard. Automatic endoscope reprocessor required. An automatic endoscope reprocessor has been purchased and a suitable location for the washing and processing of all endoscopes has been found. A quote for the building works is under review. | Patient | 15 | High |
| 4 Non-compliance with Infection Control policies due to lack of en-suite isolation rooms. | Patient | 15 | High |

## 2.0 Introduction

This annual document will report on the infection prevention and control service, including data from surveillance of infection in RVEEH. This report includes information on:

- Progress and achievements against the annual programme to prevent and control HCAIs;
- Specific targets relating to the prevention and control of HCAIs;
- Performance indicators, including the HSE Infection Control indicators;
- The resources made available to prevent and control HCAIs

The Infection Prevention and Control Team (IPCT) is comprised of a consultant microbiologist (10 hours per week) and two infection control nurses who share a 1WTE position. The surveillance scientist, based in the National Maternity Hospital, also contributes to the surveillance service in RVEEH. A work plan and programme, see Appendix 1, is developed annually and the team meets weekly to discuss all matters relating to infection prevention and control. The team has representation on the Drugs and Therapeutics committee which is responsible for *inter alia* antimicrobial stewardship. The team also has representation on the Integrated, Risk, Quality & Safety committee, the Sterivigilance committee and the Hygiene & Decontamination Committee.

The Infection Control Committee is chaired by Mr D Dunne, Chief Executive. See Appendix 2 for membership and attendance in 2012. It is a multidisciplinary committee which is responsible for the development and review of the service to prevent and control HCAIs, see Appendix 3 for Terms of Reference. The annual work plan and programme are signed off by this committee.

## 3.0 Surveillance

**Standard 11:** Healthcare associated infections and antimicrobial resistance are monitored, audited and reported through a systematic surveillance programme

### 3.1 RVEEH key performance indicators (KPI's)

| HCAI Key Performance Indicators | Target | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|
| Rate of post-operative endophthalmitis (post op elective cataract surgery) | 0.1% | 0% | 0.06% | 0.05% | **0.08%** |
| Endophthalmitis post intravitreal injections | | 0.07% | 0% | 0.03% | **0.02%** |
| Keratitis post corneal collagen cross linking | | Surgery not done | Surgery not done | 0% | **3.38%** |
| Other Eye Infections* | | 0.03% | 0% | 0% | **0.01%** |
| Post op ENT Infections^ | | 0.06% | 0% | 0% | **0.05%^** |
| Number of RVEEH acquired MRSA colonization | **≤4** | 1 | 1 | 1 | **0** |
| Number of RVEEH acquired MRSA infection | **≤2** | 0 | 0 | 0 | **1** |
| Number of MRSA blood stream infections | **≤1** | 1 | 0 | 1 | **0** |
| Device related infections (Peripheral IV catheter infection) | **≤5** | | 2 | 2 | **3** |
| *Clostridium difficile* Infections | **≤2** | 0 | 1 | 0 | **0** |

***Eye infection post evisceration.**

**^Septal flap post-op infection**

Surveillance involves a range of procedures including scientific, technical, communication, information/computer and data management, and quality control. The Health Service Executive (HSE) healthcare associated infection (HCAI) governance group has set the following goals and objectives: to reduce HCAI by 20%, to reduce MRSA infections by 30%

and to reduce antibiotic consumption by 20%. Surveillance in the RVEEH includes the following:

- RVEE Hospital acquired infections
- Antimicrobial resistance
- Surgical site infections
- Patient device related infections
- Notifiable infectious diseases

### 3.2 MRSA

MRSA screening is requested prior to admission on all patients in the at-risk category The MRSA profile for 2012 was as follows:

**Table 2: MRSA Profile for 2012** **2012**

| | |
|---|---|
| *Number of positive results* | *49* |
| Number of Blood stream infections | 0 |
| Number of known carriers | 15 |
| Number where MRSA was hospital acquired | *1 |
| MRSA decolonisation carried out prior to surgery | 23 |

*There was one RVEEH acquired MRSA post nasal surgery infection.

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### 3.3 Antimicrobial Consumption

Hospital data is reported to the HPSC by the Pharmacy Department. This data is discussed at the Drugs & Therapeutics committee. There is a downward trend in antibiotic consumption in RVEEH since 2007. However, in the first half of 2012 there would appear to be a slight increase. Data from the second half of 2012 is not yet published.

**Table 3: Results of Antimicrobial Data Audit 2010 – Q1 & Q2 2012**

| | **Acute Inpatient Antibiotic Consumption Rate (*DDD per 100 *BDU)** | | | **Proportion of Specific IV antibiotics** | | |
|---|---|---|---|---|---|---|
| Royal Victoria Eye & Ear Hospital Dublin | 2010 | 2011 | First half 2012 | 2010 | 2011 | First half 2012 |
| | **55.6%** | **46.0%** | **65.88%** | **16.3%** | **12.3%** | **13.0%** |

*__DDD –__ Daily Defined Doses *__BDU__ – Bed Days Used

**Table 4: Median antibiotic consumption rate in DDD per 100 BDU for public acute hospitals by hospital category and the number of hospitals (n) 2007 to Q2 2012**

| | 2007 | | 2008 | | 2009 | | 2010 | | 2011 | | First half 2012 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Hospital Category** | **Rate** | **n** | **Rate** | **n** | **Rate** | **n** | **Rate** | **n** | **Rate** | **n** | Rate | n |
| General | 80.8 | 21 | 80.3 | 25 | 78.2 | 26 | 81.5 | 25 | 90.4 | 24 | 89 | 23 |
| Regional/Tertiary | 78.5 | 5 | 80.4 | 8 | 78.0 | 9 | 81.3 | 9 | 82.9 | 9 | 83 | 9 |
| Specialist | 45.2 | 8 | 34.2 | 9 | 34.4 | 9 | 33.9 | 9 | 29.0 | 9 | 51 | 9 |
| **All Hospitals** | **78.0** | **34** | **76.4** | **42** | **76.0** | **44** | **79.3** | **43** | **82.6** | **42** | 85 | 41 |

*Please refer to appendix 4 for further information on RVEEH antibiotic consumption*

### 3.4 European Antimicrobial Resistance Surveillance Network (EARS-Net)

The Surveillance Scientist in the National Maternity Hospital contributes RVEEH blood stream infection data to the European Antimicrobial Resistance Surveillance Network (EARS-Net). There were no blood stream infections in 2012 in RVEEH

### 3.5 Incidence of Common Transmissible Organisms in RVEEH Patients

Most of these organisms were present or incubating on attendance to RVEEH, unless indicated.

**Table 5: Number of Common Transmissible Organisms in RVEEH 2006 – 2012**

| | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
|---|---|---|---|---|---|---|---|
| Acanthamoeba | 8 | 2 | 3 | 2 | 2 | 2 | 1 |
| Adenovirus | 61 | 87 | 18 | 14 | 29 | 44 | 11 |
| Campylobacter | 0 | 0 | 0 | 1 | 1 | 0 | 1 |
| Chlamydia | 9 | 7 | 8 | 11 | 14 | 13 | 10 |
| C. difficile | 0 | 0 | 1 | 0 | 2 | 0 | 1 |
| Gonorrhoea | 2 | 4 | 1 | 1 | 0 | 2 | 1 |
| Group A Strep | 13 | 8 | 8 | 12 | 15 | 8 | 9 |
| Hepatitis B | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Hepatitis C | 0 | 0 | 1 | 1 | 0 | 0 | 1 |
| MRSA (Blood stream infection) | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| MRSA (healthcare acquired colonisation) | 0 | 0 | 2 | 1 | 1 | 2 | 2 |
| MRSA (HCAI acquired infection | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mumps | 0 | 0 | 1 | 4 | 3 | 1 | 4 |
| Norovirus | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Syphilis | 4 | 0 | 1 | 3 | 3 corrected 2014 | 0 | 0 |
| Toxoplasmosis | 0 | 1 | 0 | 2 | 0 | 0 | 0 |
| TB Pulmonary | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| TB Non-pulmonary | 1 | 0 | 0 | 4 | 0 | 0 | 1 |
| VRE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **148** | **172** | **89** | **134** | **154** | **165** | **115** |

### 3.5 Surgical Site Infection / Patient Devise Infection (Table 6)

**Table 7: Total Surgeries indicating number of infections**

| Surgery Type | 2010 | | | 2011 | | | 2012 | | |
|---|---|---|---|---|---|---|---|---|---|
| **EYE SURGERY** | **Total** | **Infected** | **%** | **Total** | **Infected** | **%** | **Total** | **Infected** | **%** |
| Cataract Surgery | 1,887 | 1 | 0.05% | **2,012** | **1** | **0.05%** | **2,472** | **2** | **0.08%** |
| Other Eye Surgery including keratitis post (cccl) | 4,127 | 0 | 0% | **2,665** | **0** | **0%** | | **4** | |
| Total Intravitreal Injections | 1,787 | 0 | 0% | **2,714** | **1** | **0.03%** | **3,500** | **1** | **0.02%** |
| **Total Eye Surgery** | **6,014** | **1** | **0.01%** | **4,667** | **1** | **0.02%** | **6,972** | **1** | **0.019%** |
| **ENT SURGERY** | | | | | | | | | |
| Thyroidectomy (total) | 37 | 0 | 0% | **34** | **0** | **0%** | **38** | **0** | **0%** |
| Parotidectomy | | 0 | 0% | **17** | **0** | **0%** | **23** | **0** | **0%** |
| Neck Dissection + laser | 5 | 0 | 0% | **8** | **0** | **0%** | **6** | **0** | **0%** |
| Laryngectomy | 0 | 0 | 0% | **0** | **0** | **0%** | **3** | **0** | **0%** |
| Mastoid Exploration | 48 | 0 | 0% | **61** | **0** | **0%** | **40** | | **0%** |
| Septoplasty | 13 | 0 | 0% | **20** | **0** | **0%** | **37** | **1** | **2.7%** |
| Tympanoplasty | 51 | 1 | 1.9% | **50** | **0** | **0%** | **32** | **0** | **0%** |
| Submandibular gland excision | 14 | 0 | 0% | **10** | **0** | **0%** | **7** | **0** | **0%** |
| Other ENT surgery | 1,531 | 0 | 0% | **1,618** | **0** | **0%** | | **0** | **0%** |
| **Total ENT Surgery** | **1,699** | **0** | **0%** | **1,818** | **0** | **0%** | **1798** | **1** | **0.05%** |

**2012: Eye Surgery:** Two patients had post op infection following cccl. One patient had post op infection post avastin injection. Two patients developed endophthalmitis post cataract surgery and one patient developed infection post enviseration.

## 4.0 Monitoring

**Standard 1:** Structures, systems and processes are in place to effectively manage and implement the programme to prevent and control Healthcare Associated Infections

**Internal and External Audits**

### 4.1 Hygiene Audits

The Hygiene Service Committee carries out internal hygiene audits every two months. There are 10 teams and each team is made up of two members from different disciplines. The results of these audits and a Quality Improvement Plan are fed back to the committee and evaluated at the monthly meetings. Where possible, any hygiene problems are acted on and corrected at the time of audit or as soon as possible. Completed audits are available on the shared intranet for all to access. The following are audited:

- Waste management; Facilities;
- Linen management; Environmental Cleaning;
- Sharps management; Hand Hygiene;
- Training effectiveness; Patient equipment management;

### 4.2 Hand Hygiene

**Standard 6:** Hand hygiene practices that prevent, control and reduce the risk of the spread of Healthcare Associated Infections are in place

Observational hand hygiene audits were carried out in May and Oct/November 2012 using the tool newly developed by the Health Protection Surveillance Centre (HPSC). The results are fed back to HPSC and published nationally. For 2012 the HSE set a target of ≥85% compliance, increasing to ≥90% for 2013. Where the result falls below this a re-audit is required following evaluation of hand hygiene facilities and hand hygiene education. The RVEEH achieved a score of 85% and 86% compliance with hand hygiene for May and October 2012. Nursing staff's compliance was 91% while medical staff achieved compliance of 78%

A Quality Improvement Plan was carried as follows by the IPCT:

- A hand hygiene awareness day was held in May 2012;

- An ultraviolet light cabinet was used to demonstrate hand hygiene technique to staff of all disciplines;
- Approximately fifty to sixty staff took part;
- Questionnaires were distributed and feedback was requested;
- Hand hygiene badges were distributed encouraging service users to ask health care workers if their hands were clean.
- All areas that had a compliance of below 85% were re-audited following education.
- *84% of RVEEH staff received Hand Hygiene education and training in 2012*.

### 4.3 Alcohol Hand Gel Consumption

The HPSC audits the usage of alcohol hand gel in all hospitals quarterly. This is used as an indication of compliance with hand hygiene and usage is compared with other hospitals by use of a decile score (a score of 10 meaning very low consumption of alcohol gel and a score of 1 meaning a very high consumption). The RVEEH for the first 3Q's had a score of 3.

- 193 Litres of alcohol gel was used by RVEEH in 2012. New alcohol gel units were placed throughout the hospital in December:
- The hospital's alcohol gel consumption compares favourably with other hospitals and specialist hospitals in the network. See appendix 5

### 4.5 ECDC Point Prevalence Survey of Healthcare Associated Infections and Antimicrobial Use

**During May 2012 RVEEH participated in a European wide point prevalence survey (PPS) of HCAI and antimicrobial use.**
**The RVEEH was also independently audited, which confirmed the internal auditors results.**
**The following is a summary of the National and RVEEH PPS results.**

| RVEEH Results | Irish National Results |
|---|---|
| ➢ **20 patients were audited in in-patient wards only.** | **9,030 patients audited in Ireland** |
| ➢ **HCAI prevalence was 5%** | **HCAI prevalence: 5.2%** |
| ➢ **Antibiotic prevalence was 35%** | **Antibiotic prevalence: 34%** |
| ➢ **50% of antibiotic use was parenteral; 50% was oral** | **63% of antibiotic use was parenteral; 36% was oral** |
| ➢ **The reason for the antibiotic was documented in 70%** ➢ **of medical records** | **Reason for antibiotic documented: 83%** |
| ➢ **20% of antibiotics were compliant with local policy** | **73% compliant with local policy** |
| ○ **20% were non compliant** | |
| ○ **60% was not assessable** | |
| ➢ **4 patients had received surgical prophylaxis within** ➢ **24 hours of the audit** | |
| ○ **1 (25%) received a single dose** | **27% Nationally** |
| ○ **2 (50%) received > 1 dose ≤ 1 day** | **26%** |
| ○ **1 (25%) received > 1 day prophylaxis** | **47%** |

| | |
|---|---|
| | |

Action plan agreed at Drugs and Therapeutics Committee

### 4.6 Hand Hygiene Complaints

The risk, health and safety department received two hand hygiene related complaints this year. One was from a patient who had attended OPD and one from A&E. In both instances the complainants mentioned specific members of staff. The IPCT followed up both complaints in conjunction with the risk manager. Staff members involved were notified in writing of the incident and additional hand hygiene education was provided.

## 5.0 Facilities

**Standard 3:** The physical environment, facilities and resources are developed and managed to minimise the risk of service users, staff and visitors acquiring a healthcare Associated Infection

### 5.1 Environmental Monitoring

**Water Quality & Legionella Prevention**

Environmental monitoring is carried out quarterly.

A full Legionella risk assessment was carried out in October 2012 with the following recommendations:

- Ensure all tanks are correctly sealed
- The chlorine levels in the main storage tanks are not adequate to eliminate in-house acquired threats. They recommended chlorine concentrations to be increased. Chlorine concentration was increased.
- Up to date water drawings and mapping should be carried out. It was noted that water mapping in an old building would be extremely difficult.

**Controls in place:**

- Quarterly external and weekly internal water temperature monitoring is carried in the hospital with temperatures out of the accepted range acted.
- All water tanks are cleaned bi-annually
- Flushing of water outlets and shower head cleaning is as per policy. All documentation is held with the cleaning supervisor.
- Quarterly quality testing for indicator organisms (legionella) and total viable counts is carried out. All tests returned negative for legionella in 2012.
- Monthly chlorination occurs with the addition of precept tablets put into all tanks. Concentration strength as per recommendation comes from the risk assessor.

*Environmental monitoring is an agenda item for the quarterly infection control committee meeting.*

**5.2 Upgrading work was carried out in many areas of the hospital in 2012**

- The pharmacy was damp proofed and refurbished in December.
- Painting works were carried out in ENT OT.
- The sitting room on the West Wing was refurbished to accommodate a discharge unit.
- The pharmacy store room was treated for damp and repainted.
- Plans were put in place to refurbish an area on the ground floor to accommodate the automated endoscope reprocessing unit.
- The doctor's residence was refurbished.

## 6.0 Policies, Procedures and Guidelines updated in 2012

**Standard 1:** Structures, systems and processes are in place to effectively manage and implement the programme to prevent and control Healthcare Associated Infections

The following policies were updated in 2012

| | |
|---|---|
| 1. Antimicrobial Guidelines | SK and D&T committee |
| 2. Endoscope Reprocessing Policy | SF & MMcC |
| 3. Enteral tube feeding guidelines | SF & MMcC |
| 4. Hand Hygiene Policy | SF & MMcC |
| 5. Laundry Management | SF & MMcC |
| 6. Legionellosis Control Policy | SF & MMcC |
| 7. Management of patients requiring transmission based precautions | SF & MMcC<br>SF & MMcC |
| 8. Medical Induction | SF & MMcC |
| 9. SARS-Outbreak management policy | SF & MMcC |
| 10. OT Policy | SF& MMcC |
| 11. Policy for Aseptic non-touch technique | SF & MMcC |
| 12. Tracheostomy Care | SF & MMcC |
| 13. Environmental Monitoring of Theatres | SF & MMcC |
| 14. Policy for Cleaning & Decontamination of Hospital equipment & Environment | SF & MMcC<br>SF & MMcC |

## 7.0 Major Risks Identified by IPCT

### 7.1 Ventilation in OT

The ventilation system in the operating theatres does not meet internationally recognised standards for operating theatres. This increases the risk of post-operative infection. The situation has been highlighted to the HSE, the Hospital Management Group (HMG), the Medical Board and the Council numerous times in the past. No funding has been made available. The IPCT recommends that all Operating Theatres should have appropriate ventilation with a minimum of 20-25 air changes per hour. The instrument set-up area should be dedicated for use, have 35 air changes per hour. There should be appropriate pressure differentials between adjacent rooms in the theatre department.

### 7.2 Hand Hygiene Facilities

Many areas in the hospital do not have the appropriate number of hand hygiene sinks as recommended by the Strategy for Control of Antimicrobial Resistance in Ireland (SARI) Guidelines for Hand Hygiene in the Irish Health Care Setting (2007). Furthermore, a lot of existing sinks do not conform to an appropriate design standard for sinks in healthcare settings. Funding has been requested from the HSE for a sink upgrade project. The IPCT recommends the use of alcohol hand gel in areas where there are insufficient hand washing sinks. Additional HTM64 compliant sinks were sanctioned by the HMG in December. The agreed prioritised areas were the A&E and ward 27.

### 7.3 Endoscope Reprocessing

The IPCT would once again like to point out that the decontamination of endoscopes is not being carried out in accordance with international best practice guidelines. Decontamination of used endoscopes should be carried out in a centralised, dedicated area in the hospital, separate from patient treatment areas. All endoscopes should be reprocessed using an automated endoscope reprocessor (AER) and should be stored in appropriate drying units after decontamination. Current facilities and practices are of concern and should be addressed as a matter of urgency. The hospital purchased an automated endoscope washer in Dec 2012. A suitable location for the decontamination of all hospital scopes has been identified and work is to commence early 2013.

### 7.4 Isolation room

The RVEEH does not have a single room with en-suite facilities or with negative pressure to use for airborne isolation purposes. A suitable location has been identified and 3 quotes have been obtained. Funding has been requested and the matter has been brought to the attention of HMG. The IPCT reiterates the importance of proper isolation facilities in preventing the spread of infection in the hospital environment. Currently a bathroom is dedicated for the patient when isolation is required.

## 2012 Completed IC work plan

**Infection Prevention & Control (IPC) Plan for 2012**

**Royal Victoria Eye & Ear Hospital**

| Target | Action | Action by | Date Complete |
|---|---|---|---|
| To provide infection prevention and control education for staff and students in the Hospital | 1.Participate in IV Study Days<br>2. Mandatory Infection Control lecture- all Staff<br>3. Hand Hygiene lectures<br>4. Induction for all new staff<br>5. Provide advice and updates on matters relating to IPC. | MMCC & SF | |
| Develop and review infection control policies, procedures and guidelines in accordance with legislation, national guidelines, evidence-based practice and best practice. | Policies/ Guidelines updated in 2012<br>Antimicrobial Prescribing<br>Clostridium difficile<br>Enteral Tube Feeding<br>Hand Hygiene<br>Laundry Management<br>Legionellosis Prevention Policy<br>Mgmt of patients requiring transmission based precautions<br>Medical Induction<br>Theatre Policy<br>TPN- IV management<br>Tracheostomy Care<br>Cleaning & Decontamination of Hospital equipment & Environment<br>Environmental Monitoring of Theatres<br>Tracheostomy Care | <br>SK & J O'C<br>SF & MMCC<br>SF & MMCC<br>SF & MMCC<br>SF & MMCC<br>SF & MMCC<br>SF & MMCC<br>SF & MMCC<br>SF & MMCC<br>SF & MMCC<br>SF &MMCC<br>SF & MMCC<br>SF & MMCC<br>SF & MMCC<br><br>SF MMCC<br><br>SF MMCC | <br>July 2012<br>March 2012<br>Aug 2012<br>Sept 2012 |
| Infection Control Audits of practice and facilities | On-going programme of audit<br>HST audits of facilities<br>(See audit schedule for 2012)<br>Develop QIP to bridge the gaps identified.<br>Distribute results and feedback of the audits to all relevant CNMs and Heads of Departments.<br>Observational hand hygiene audits and send results to HSE, re-audit where necessary | MMcC, SF Pharmacy | |
| Monitor and report rates of infection, healthcare associated infections, notifiable diseases antimicrobial resistance, antimicrobial consumption and alcohol gel usage. | 1. Daily ward based and laboratory surveillance<br>2. Collect, analyses and report post-operative endophthalmitis infection rates.<br>3. Collect, analyses and report data on infections and antibiotic resistant organisms<br>4. Collect and report data on | SF, MMcC, SK<br><br>SF, MMcC, SK<br><br>SF, MMcC, SK,<br><br>SK | |

| | | | |
|---|---|---|---|
| | statutory notifiable diseases<br>5. Collect and report data to the European Antimicrobial Resistance Surveillance Network (EARS-Net)<br>6. Collect and report data on alcohol gel use.<br>7. Collect and report data on antibiotic consumption.<br>8. Distribute quarterly surveillance reports to Infection Control Committee<br>9. Distribute quarterly or as required surveillance reports to all relevant clinical staff. | M Matheson Pharmacy, SF, MMcC<br>Pharmacy<br>SF, MMcC<br>SF, MMcC, SK | |
| Investigate and lead on outbreak management | Monitor, investigate and control outbreaks in a timely manner. Provide information to staff and patients as required. | SF, MMcC, SK, others as required | |
| Identify infection risks and advise on appropriate action to prevent or minimize these risks | Liaise with patients, GPs and medical teams regarding patients colonized and infected with transmissible diseases or organisms. Analyse Infection Control related incidents and follow up to prevent these risks recurring in the future. | SF, MMcC, SK | |
| Provide advice and support regarding infection prevention and control policy and related issues | • Patient isolation<br>• Antimicrobial utilisation and antimicrobial resistance<br>• Decontamination<br>• Facilities and engineering, including new facilities, renovation, ventilation and water<br>• Catering services<br>• Household service<br>• Laundry service<br>• Waste management | SF, MMcC, SK | |
| Attend regular meetings and educational seminars relevant to infection prevention and control | • Infection Control Committee<br>• Infection Control Team meetings<br>• Hygiene Committee<br>• Sterivigilance Committee<br>• Quality, H&S and Risk<br>• Antimicrobial stewardship /Drugs & Therapeutics Committee<br>• Environmental monitoring committee (IPCC)<br>• Policies and Procedures committee<br>• IPS Conference<br>• HPSC Study Day<br>• Other relevant conferences | SF, MMcC, SK<br>SF, MMcC, SK<br>SF, MMcC<br>SF, MMcC, SK<br>SF, MMcC<br>SF, MMcC, SK,<br>SF, MMcC, SK<br>SF, MMcC<br>SF, MMcC<br>SF,MMcC SK | |
| Produce an annual work plan and annual report | IPC Work Plan 2012<br>IPC annual report 2011 | SF, MMcC, SK<br>SF, MMcC, SK | |

SF = Sinead Fitzgerald, Infection Control Nurse; MMcC = Margie McCarthy, Infection Control Nurse, SK = Susan Knowles, Consultant Microbiologist,

**Signed**_____ **Date**_____

***Appendix 2***

| **Membership of Infection Control Committee** | **Attendance in 2012 (4 Meetings)** |
|---|---|
| Chief Executive Officer Danny Dunne (Chair) | 4 |
| Consultant Microbiologist Dr Susan Knowles | 4 |
| Assistant DON Elspeth Finlay | 3 |
| Infection Control Nurse Sinead Fitzgerald | 3 |
| Infection Control Nurse Margie McCarthy | 4 |
| Risk Manager Sarah McCarthy | 3 |
| Theatre Manager Mary Doherty | 3 |
| Pharmacist | 0 |
| CDU Manager Carol Gaskin | 3 |
| Catering Supervisor Ann Gillick | 3 |
| Infection control link nurse Mary McAree | 0 |
| Quality Officer Aoife Duggan | 1 |

**Royal Victoria Eye and Ear Hospital**

**Infection Control Committee**

**Terms of Reference**

**Creation Date:** March 2013

**Chairperson:** Mr Danny Dunne CEO

**Committee Members:**
CEO (Chair)
Consultant Microbiologist
CNS Infection Control
Nursing Administration
Theatre Manager
CDU Manager
Risk Health and Safety Department
Pharmacist
Quality Officer
IC Link Nurse
Catering Manager

**Committee Reports To:**
Integrated Risk Quality & Safety Committee

**Frequency of Meetings:**
Four times per year

**Quorum for Meeting:**
50% of membership plus one. Meetings cannot be held in the absence of a quorum.

**Schedule of Meetings:**
Quarterly

**Distribution of Agenda and Minutes:**

- *Agenda is to take the form of matters arising from the previous minutes with a few added items at the commencement of the meeting.*
- *The agenda and any relevant supporting documents will be circulated in advance of the meeting.*
- *Minutes shall be taken of the proceedings & presented at the next meeting of the Committee for approval.*
- *A summary report will be prepared for submission to the Integrated Risk, Quality & Safety Committee*

**Role & Objectives of the Committee:**

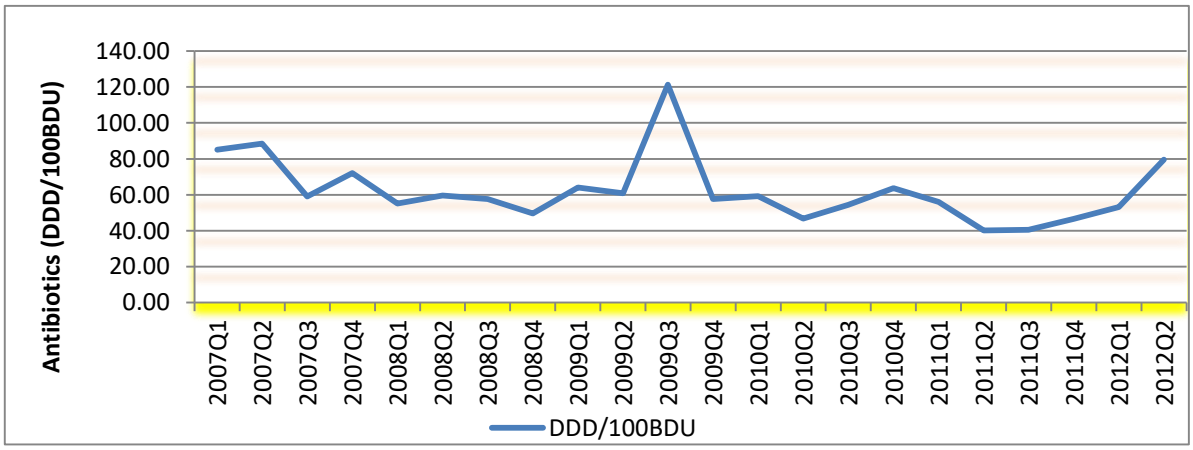
- Review and approve the annual infection prevention and control programme
- Advise and support the Infection Prevention and Control Team (IPCT) in the implementation of the programme
- Advise on resource requirements for the Infection Prevention & Control Programme
- To produce an annual report on Infection Prevention & Control
- To produce and review Infection Prevention & Control policies and guidelines regularly
- To audit the implementation of Infection Control Policies and Guidelines
- To promote and facilitate the education of all grades of hospital staff in Infection Prevention and Control
- To participate in national healthcare associated infection surveillance schemes, in addition to locally agreed surveillance programs including alert organism surveillance
- To provide advice and support during outbreaks and review outcomes
- To review and approve all infection prevention and control aspects of decontamination policies
- To provide relevant reports to Quality, Risk, Health & Safety
- To comply with legislative requirements i.e. Safety, health, Welfare at work Act 2005.
- To support and monitor the implementation of national standards policies and guidelines.

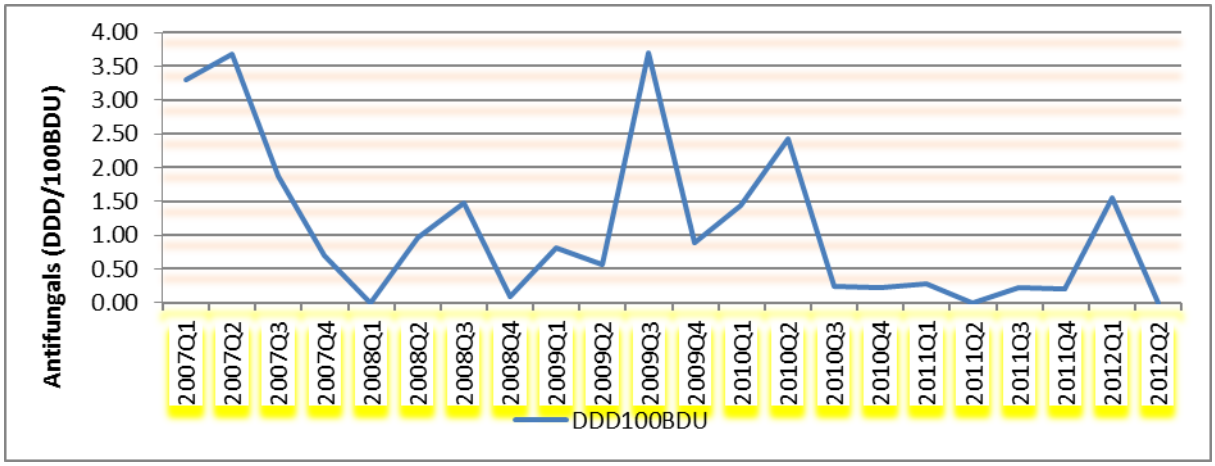
**Appendix 4** RVEEH Antibiotic Consumption (2012 Q1 & Q2)

Systemic antimicrobial consumption in Defined daily doses (DDD) per 100 beds is calculated for each hospital and reported nationally.

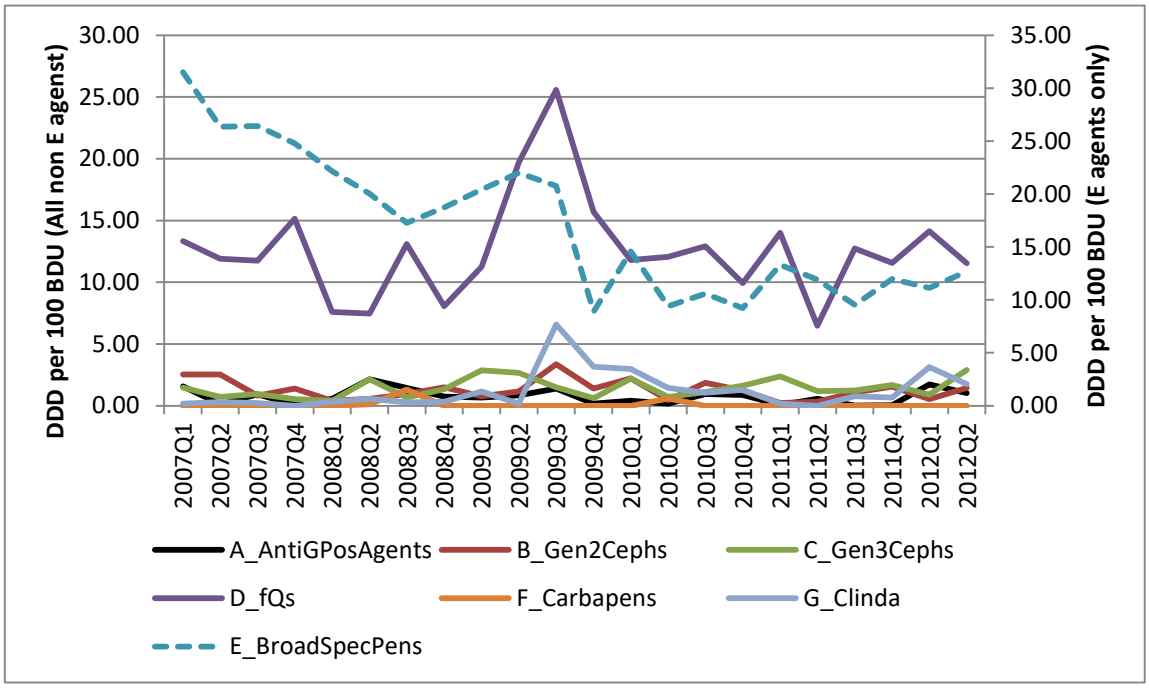
**Results for 2012 first half**

| HospGroup | Category | National median | RVEEH daily dose per 100 Bed days Used | Decile |
|---|---|---|---|---|
| RVEEH | Antibiotic | 85.02 | 65.88DDD/100BDU | 2 |
| | Antifungal | 1.45 | 0.81DDD/100BDU | 4 |
| RVEEH | Anti-G-Pos-Agents | 2.63 | 1.39DDD/100BDU | 3 |
| | Gen 2 Cephs | 2.26 | 0.96DDD/100BDU | 3 |
| | Gen 3 Cephs | 1.46 | 1.87DDD/100BDU | 8 |
| | Fluoroquinolones | 5.46 | 12.88DDD/100BDU | 10 |
| | Broad Spec Pens | 25.50 | 11.87DDD/100BDU | 2 |
| | Carbapenems | 1.49 | 0.00DDD/100BDU | 1 |
| | Clindamycin | 0.71 | 2.48DDD/100BDU | 10 |





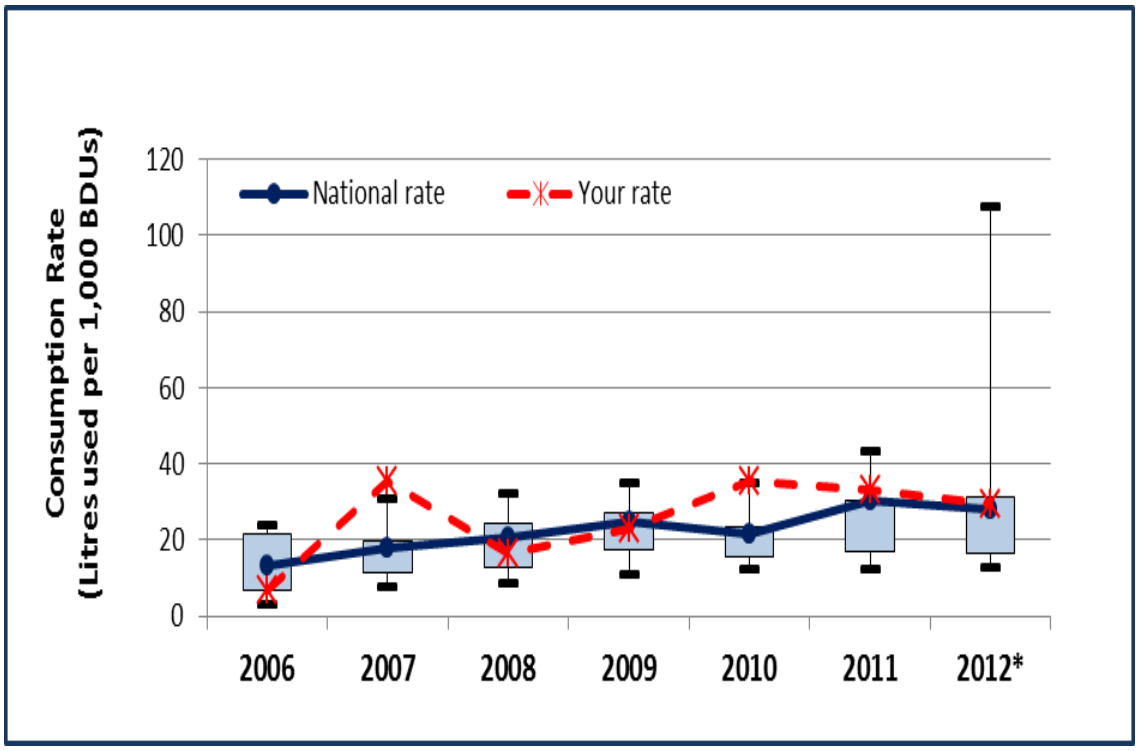

| HospGroup | Antibiotic type | 2008 | 2009 | 2010 | 2011 | 2012(Q1 &Q2) | Difference |
|---|---|---|---|---|---|---|---|
| | AntiGram Pos Agents | 1.22 | 0.76 | 0.57 | 0.18 | 1.39 | 686% |
| | Gen 2 Cephalosporins | 0.82 | 1.57 | 1.41 | 0.76 | 0.96 | 27% |
| RVEEH | Gen 3 Cephalosporins | 1.10 | 2.01 | 1.40 | 1.63 | 1.87 | 15% |
| | Flouroquinolones | 9.09 | 17.70 | 11.70 | 11.18 | 12.88 | 15% |
| | Broad Spec Pens | 19.60 | 18.41 | 11.01 | 11.72 | 11.87 | 1% |
| | Carbapens | 0.37 | 0.00 | 0.17 | 0.00 | 0.00 | |
| | Clindamycin | 0.38 | 2.49 | 1.73 | 0.38 | 2.48 | 546% |

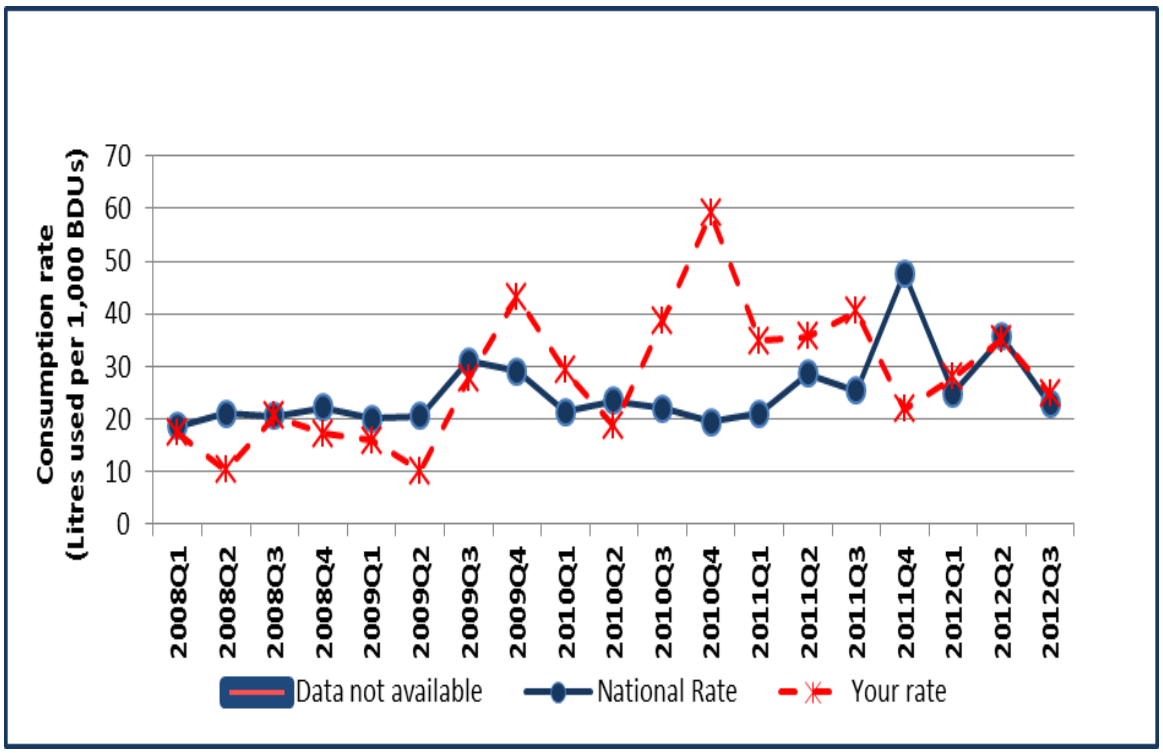



***Appendix 5*** **Alcohol Hand Rub Consumption in the RVEEH**

| | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|
| **No. of participating hospitals** | **50** | **50** | **43** | | **43** |
| **Bed Days used (BDU's)** | **8,950** | **7,135** | **6,466** | **6,582** | **5,869** |
| **Total vol hand rub used** | **181** | **164** | **230** | **218** | **193** |
| **RVEEH consumption rate** | **16.5** | **22.9** | **35.6** | **33** | **32.8** |
| **National consumption rate vol/1000BDU's** | **20.6** | **25** | **21.7** | **30.2** | **28.2** |
| **Decile score** | **7** | **4** | **1** | **3** | **3** |

1. The alcohol gel consumption rate is the volume of alcohol hand rub consumed (in litres) during the defined time period per 1,000 bed days used (BDUs)
2. The RVEEH consumption rate for the first 2 quarters in 2012 compared favorably with the national average.
3. To get the decile score, the total number of hospitals are sorted by their quarterly rate and then divided into 10 groupings. Hospitals with a decile score of 10 have the lowest alcohol gel consumption and 1 have the highest alcohol gel consumption rates.


Consumption Rate
(Litres used per 1,000 BDUs)
120
100
80
60
40
20
0
National rate
Your rate
2006
2007
2008
2009
2010
2011
2012*


Consumption rate
(Litres used per 1,000 BDUs)
70
60
50
40
30
20
10
0
2008Q1
2008Q2
2008Q3
2008Q4
2009Q1
2009Q2
2009Q3
2009Q4
2010Q1
2010Q2
2010Q3
2010Q4
2011Q1
2011Q2
2011Q3
2011Q4
2012Q1
2012Q2
2012Q3
Data not available
National Rate
Your rate

***Appendix 6 March 2012***

| Audit Summary Table for | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **DCU** | **In-patient** | **HLW** | **ENT OPD** | **A&E** | **EYE OPD** | **CU** | **OT** |
| **Waste Handling and Disposal Audit** | 84% | 83% | 89% | 80% | 82% | 84% | 93% | 84% |
| **Linen Audit** | 55% | 86% | 82% | n/a | n/a | n/a | 75% | 60% |
| **Handling and Disposal of Sharps Audit** | 95% | 96% | 96% | 96% | 92% | 100% | 92% | 96% |
| **Hand Hygiene facilities & Audit** | 83% | 79% | 88% | | 84% | 77% | 80% | 86% |
| **Use of Personal Protective Equipment Audit** | 84% | 94% | 94% | 94% | 94% | 94% | 94% | 94% |
| **Management of Patient Equipment Audit** | 97% | 94% | 94% | 94% | 83% | 100% | 95% | 96% |
| **Care of Peripheral Intravenous Lines Audit** | 91% | 92% | 96% | n/a | 100% | 100% | 95% | 100% |

Linen trolleys purchased for 3 areas. There are no separate hand wash facilities in DCU sluice where used/soiled linen is stored

**August 2012 Audits**

| | DCU | In-patient | HLW | ENT OPD | A&E | EYE OPD | CU | OT | PACU |
|---|---|---|---|---|---|---|---|---|---|
| **Waste Handling and Disposal Audit** | 85% | 89% | 91% | 89% | 91% | 95% | 88% | 93% | 95% |
| **Linen Audit** | 77% | 86% | 86% | n/a | n/a | n/a | 65% | 70% | 86% |
| **Handling and Disposal of Sharps Audit** | 90% | 96% | 98% | 94% | 91% | 94% | 92% | 100% | 92% |
| **Hand Hygiene facilities & Audit** | 94% | 78% | 93% | 88% | 84% | 84% | 83% | 90% | 93% |
| **Use of Personal Protective Equipment Audit** | 97% | 90% | 100% | 90% | 90% | 90% | 93% | 100% | 93% |
| **Management of Patient Equipment Audit** | 92% | 97% | 99% | 96% | 98% | 96% | 90% | 95% | 95% |
| **Care of Peripheral Intravenous Lines Audit** | 100% | 95% | 95% | 100% | 100% | 100% | 100% | 100% | 91% |

On the day of audit in the Childrens' unit used linen was not tied or stored properly.

## *Appendix 7* Operating Theatre Bacterial Counts

2012 Bacterial counts 05/04/2012

| **Acceptable Levels= 5-68 CFU** | | | | | |
|---|---|---|---|---|---|
| **Theatre** | **CFU** | | | | |
| | Trolley | Ledge | Attendees | | yellow= air con on |
| ENT 1 | 47.37 | 23.68 | 5 | | |
| ENT 2 | 23.68 | 18.72 | 1 | | |
| EYE 1 | 18.42 | 34.21 | 2 | | |
| EYE 2 | 57.89 | 13.16 | 4 | | |
| EYE 3 | 23.68 | 15.79 | 3 | | |
| CDU | 15.79 | 23.68 | 2 | | |
| | | | MEAN 52 | | |

2012 Bacterial counts 19/07/2012

| **Acceptable Levels= 5-68 CFU** | | | | | |
|---|---|---|---|---|---|
| | **CFU** | | | | |
| | Trolley | Ledge | Attendees | | yellow= air con on |
| ENT 1 | 24 | 15 | 5 | | |
| ENT 2 | 17 | 15 | 1 | | |
| EYE 1 | 2 | 14 | 2 | | |
| EYE 2 | 12 | 10 | 4 | | |
| EYE 3 | 12 | 4 | 3 | | |
| CDU | 26 | 22 | 2 | | |
| MPR 1 | 10 | 0 | 0 | 16/08/2012 | |
| MPR 2 | 1 | 1 | 0 | 16/08/2012 | |

**September 12** 08/09/2012

| **Acceptable levels 0-20cfu** | | | | | |
|---|---|---|---|---|---|
| | Trolley | Ledge | Attendees | | yellow= air con on |
| ENT 1 | 5 | 6 | 3 | | |
| ENT 2 | 5 | 9 | 2 | | |
| EYE 1 | 8 | 7 | 3 | | |
| EYE 2 | 3 | 5 | 4 | | |
| EYE 3 | 4 | 5 | 2 | | |
| | | | | | |

**December 12** 20/12/2012

| **Acceptable levels 0-20cfu** | | | | | |
|---|---|---|---|---|---|
| | Trolley | Ledge | Attendees | | yellow= air con on |
| ENT 1 | 5 | 1 | | | |
| ENT 2 | Being cleaned at time of audit | | | | |
| EYE 1 | 3 | 2 | | | |
| EYE 2 | 5 | 4 | | | |
| EYE 3 | | | | | |
| | | | | | |