Royal Victoria Eye & Ear Hospital

Infection Control Annual Report

2011

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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 (HCAI's), set by the HSE, were all met with the results being less than the targets set. The excellent results were attributed to:

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

Water quality and legionella prevention is being managed and includes environmental monitoring. There was no positive bacteriological result for legionella in 2011.

Risks were identified through internal risk management processes as a result of an external audit by HIQA, internal audits and a self-assessment process. Action is needed to manage the risks. The major risks are as follows:

	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.	Patient	15	Moderate
4.	Non-compliance with Infection Control policies due to lack of en-suite isolation rooms	Patient	15	High

2.0 Introduction

This is the seventh annual 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 and Control indicators;
- The resources made available to prevent and control HCAIs

An 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 twice 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 Quality, Risk, Health & safety committee, the Sterivigilance committee and the Hygiene committee.

The Infection Control Committee is chaired by Mr D Dunne, Chief Executive. See Appendix 2 for membership and attendance in 2011. 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

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

3.1 RVEE Hospital Acquired Infections - Key Performance Indicators

Table 1: Targets / Key Performance Indicator Results for RVEEH

		RVEEH 2011
*HCAI Key Performance Indicators (KPI)	Targets	Result
Rate of post-operative endophthalmitis (elective		
cataract surgery)	≤0.1%	0.05%
Number of RVEEH acquired MRSA colonization	≤4	1
Number of RVEEH acquired MRSA infection	≤2	1
Number of MRSA blood stream infections	≤1	1
Vancomycin resistant enterococcus blood stream		
infections	≤1	0
Clostridium difficile Infections	≤2	0
Norovirus Outbreaks	≤1	0

HCAI is defined as any infection that was not present or incubating on admission

3.2 MRSA

MRSA screening is requested prior to admission on all patients in the at risk category

The MRSA profile for 2011 was as follows:

Table 2: MRSA Profile for 2011

Number of positive results	62
Number of known carriers	10
Number where MRSA was hospital acquired	1
MRSA decolonisation carried out prior to surgery	41

There was one RVEEH acquired MRSA blood stream infection. This patient had acquired MRSA in another healthcare institution. He developed an MRSA blood stream infection more than 48 hours following admission to RVEEH. The blood stream infection was secondary to infection at a distant site and was not secondary to a device related infection.

3.3 Carbapenem Resistant Enterobacteriaceae (CRE)

A new Infection Control policy for CRE was approved at the beginning of 2011. The IPCT keep up to date on the "at risk patients" from the HPSC website and inform all staff accordingly. Patients deemed to be "at-risk" were isolated, screened and all precautions adhered to. There was no positive/confirmed case in 2011.

3.4 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 in the first half of 2011. Date from the second half of 2011 is not yet published.

Table 3: Results of Antimicrobial Data Au	dit 2007 – 2011
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Hospital Name	Measure	2011 (Q1-2)	2010	2009	2008	2007
RVEEH	DDD*/100BDU**	48.2	55.6	74.1	56.1	75.6

*DDD – Daily Defined Doses BDU – Bed Days Used

3.5 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 was only 1 significant blood stream infection in 2011 in RVEEH (MRSA – see section 3.2)

3.6 Incidence of Common Transmissible Organisms

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

Infection Numbers	2011	2010	2009	2008	2007	2006
Adenovirus	87	18	14	29	44	11
Acanthamoeba culture	2	3	2	2	2	1
Campylobacter	0	0	1	1	0	1
Chlamydia	7	8	11	14	13	10
C. difficile	0	1	0	2	0	1
Gonorrhoea	4	1	1	0	2	1
Gp A Strep	8	8	12	15	8	9
Hepatitis B	0	0	1	0	0	1
Hepatitis C	0	1	1	0	0	1
MRSA (non-invasive)	62	50	77	91	94	75
MRSA (invasive)	1	0	1	0	0	0
Mumps	0	1	4	3	1	4
Norovirus	0	1	0	0	1	0
Syphilis	0	1	3	0	0	0
Toxoplasmosis	1	0	2	0	0	0
TB Pulmonary	0	0	0	0	0	2
TB Non-pulmonary	0	0	4	0	0	1
VRE	0	0	0	0	0	0
Total	172	89	134	154	165	115

^RVEEH associated infection

An increase in *Gonorrhoeae* was noted in 2011. This corresponded with the introduction of PCR testing in the National Virus Reference Laboratory (NVRL), in addition to culture in our on-site laboratory. Three patients were detected by culture and/or PCR and one was PCR positive alone.

A significant increase in adenovirus was also noted, from 18 cases in 2010 to 87 cases in 2011. Adenovirus testing using PCR was introduced in the NVRL which may explain some of the increase. Nonetheless, many cases were seen in the A+E department and most cases were community acquired. The IPCT investigated 4 staff cases of infection; it was determined that the 4 cases among staff were not linked epidemiologically, although 2 cases may possibly have occurred due to occupational exposure and/or poor hand hygiene. All staff were informed of the increase in community acquired cases and educated on the importance of hand hygiene in the prevention of spread of communicable diseases.

3.7 Surgical Site Infection / Patient Device Infection

In 2011 there were no reports of surgical site infection

- There were 2 cases of peripheral Intravenous (IV) device related infections;
- No other medical device related infections.

Surgery Type	2009			2010			2011			
EYE SURGERY	Total	Infected	%	Total	Infected	%	Total	Infected	%	
Cataract Surgery	1448	0	0%	1887	1	0.05%	2012	1	0.05%	
Other Eye Surgery	2759	1	0.03%	4127	0	0%	2665	0	0%	
Total Eye Surgery										
	4207	1	0.02%	6014	1	0.01%	4667	1	0.02%	
ENT SURGERY										
Thyroidectomy	27	0	0%	37	0	0%	34	0	0%	
Parotectomy	15	0	0%		0	0%	17	0	0%	
Neck Dissection	3	1	33%	5	0	0%	8	0	0%	
Laryngectomy	1	0	0%	0	0	0%	0	0	0%	
Mastoid Exploration	65	0	0%	48	0	0%	61	0	0%	
Septoplasty	45	0	0%	13	0	0%	20	0	0%	
Tympanoplasty	26	0	0%	51	1	1.9%	50	0	0%	
Submandibular gland excision				14	0	0%	10	0	0%	
Other ENT surgery	1547	0	0%	1531	0	0%	1618	0	0%	
Total ENT Surgery	1756	1	.06%	1699	0	0%	1,818	0	0%	

Table 5: Total Surgeries indicating number of infections

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 Audits

The Hygiene Service Committee carries out 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 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 intranet. The following areas are audited:

- Waste management;
- Linen;
- Sharps management;
- Training effectiveness;

4.1.1 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 June and October 2011 using the tool newly developed by the Health protection Surveillance Centre (HPSC). The results are fed back to HPSC and published nationally. For 2011 the HPSC has set a target of 75% compliance, increasing to 85% for 2012 and 90% compliance for 2013. Where the result falls below 75% a re-audit is required following evaluation of hand hygiene facilities and hand hygiene education. The RVEEH achieved a score of 75% and 78% compliance with hand hygiene for June and October 2011. Nursing staff's compliance was 89% while medical staff achieved compliance of 65%

Quality Improvement was carried as follows by the IPCT:

- A hand hygiene awareness day was held in May 2011;
- An ultraviolet light cabinet was used to demonstrate hand hygiene technique to staff of all disciplines;
- Approximately fifty 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.

4.2 Self-Assessment

A self-assessment was completed in relation to the HIQA standards for the Prevention and Control of Healthcare Associated Infections. The results were reported back to the HSE in April 2011. A Quality Improvement Plan (QIP) was established to develop and track changes made with the current status:

• Currently 49 of the criteria have been completed with eight actions still to be completed. The majority of the outstanding items are in areas that require structural work or resources.

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. The results for 2011 were as follows:

- 316 Litres were used by RVEEH in 2011. New alcohol gel units were placed throughout the hospital in November: 80 litres accounts for the replacement of the old dispenser's with the new alcohol dispenser's
- This represented an increase of 85 litres on the figure for 2010 although this is not a true increase when the replacement of dispensers is taken into account. The hospital's alcohol gel consumption compares favourably with other hospitals in the network.

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 August 2011 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
- > Install bait points in the storage tank areas
- Up-date water drawings
- Quarterly external and weekly internal, water temperature monitoring is carried in the hospital with temperatures out of the accepted range acted on where possible.
- All water tanks are cleaned bi-annually
- Quarterly quality testing for indicator organisms (legionella) and total viable counts. All tests returned negative for legionella in 2011.
- Monthly chlorination occurs 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 2011

Central Decontamination Unit (CDU)

- The Hospital Management Group received approval from the HSE to convert 2 existing rooms (staff changing room and the theatre store room) adjacent to the operating theatres to a dedicated CDU. This unit comprises of 3 separate interconnecting rooms designed specifically for that purpose. The CDU officially opened on December 19th. The removal of decontamination from the operating theatres greatly improves the hospital's compliance to the HIQA Decontamination Standards. It also allows for the previous decontamination dedicated areas in theatre to be used as clean preparation areas for the purpose of opening sterile surgical packs. The IPCT would like to acknowledge the HMG's achievement and also Carol Gaskin for all her hard work in overseeing this project and accomplishing the successful completion of this arduous task.
- An instrument traceability system was installed into the Operating Theatres in December 2010 and went live in January 2011. All sets and surgical instruments have unique bar code identification.

Eye OPD

- New impervious, easily cleanable flooring was laid in the waiting area, clinic 4 and the main check in area.
- > Painting works is on-going in many departments.
- > The eye OPD library was converted into two separate oncology clinics.

6.0 Policies, Procedures and Guidelines updated in 2011

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, procedures and guidelines were updated in 2011

- 1. Antimicrobial Guidelines- Annual update
- 2. Policy on Standard and Transmission Based Precautions and Isolation
- 3. Transmissible Spongiform Encephalopathy (TSE)-Management Policy
- 4. Urinary Catheter Management Policy
- 5. Vancomycin Resistant Enterococci Management Policy
- 6. Policy on Single Use Surgical Instruments
- 7. Management of Scabies Policy
- 8. Prevention of Intravascular Catheter Infection policy
- 9. Management of an Outbreak policy
- 10. Occupational Health Blood/Body Fluid Exposures Policy
- 11. Policy on the management of Norovirus
- 12. Prevention of Methicillin-resistant Staphylococcus Aureus Infection Policy
- 13. Pandemic Influenza management guidelines
- 14. Diabetic Blood Monitoring
- 15. Policy on the Development, Maintenance and Review of Infection Control Policies
- 16. Cleaning and Decontamination of Equipment Policy
- 17. Policy on Management of Carbapenem Resistant Enterobacteriaceae (CRE)
- 18. Avian Influenza; Policy for management
- 19. Prevention of Invasive Aspergillosis Policy
- 20. Infection Control Audit Policy
- 21. Reusable Invasive Medical Devices Policy
- 22. Waste Management Policy

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 Hospital Management Group (HMG) and the Medical Board 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.

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. This issue has been brought many times to the HMG.

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. Ward managers are reminded to complete an incident form when a patient requiring isolation for infection purposes does not have an en-suite facility.



<u>Appendix 1</u>

Infection Control Programme 2012

Each hospital needs to develop a programme for the implementation of good infection control practices and to ensure the well-being of both patients and staff by preventing and controlling HAI.

Objectives of the Infection Prevention and Control Programme

The goal of the RVEEH's infection prevention and control program is to identify and reduce the risk of acquiring and transmitting infections among patients, staff, health care professionals, contract workers, volunteers, students, and visitors.

This is achieved by:

- Monitoring/surveillance of hospital-associated infections;
- Education and training of staff in prevention and control of HAI;
- Investigation of outbreaks;
- Controlling the outbreak by rectification of technical lapses, if any;
- Monitoring of staff health to prevent staff to patient and patient to staff spread of infection;
- Advice on isolation procedures and infection control measures;
- Infection control audit including inspection of waste disposal, laundry and kitchen
- Monitoring and advice on the safe use of antibiotics.

Responsibility of hospital administrator/head of health care facility

The hospital administrator/head of hospital should:

- Provide the funds and resources for infection control programme;
- Ensure a safe and clean environment for all patients and staff
- Ensure the availability of safe food and potable water/water;
- Ensure the availability of sterile supplies and material, and

• Establish an infection control committee and team.

Infection control organizations in a hospital

Infection control organizations are essential features of an infection control programme. These organizations are:

Infection Prevention and Control Committee (IPCC)

Representatives of medical, nursing, engineering, administration, pharmacy, CDU and microbiology departments are members. The committee formulates the policies for the prevention and control of infection. The Chief Executive chairs the Infection Prevention & Control Committee. The committee meets regularly and not less than four times a year.

Infection Prevention and Control Team (IPCT)

Members of this team undertake the day to day measures for the control management of infection in the hospital.

Infection Control Doctor/ Microbiologist

The Infection Control Doctor is usually a medical microbiologist or any other physician with an interest in hospital associated infections.

Functions of the Microbiologist

- Consultant member of IPCC and leader of IPCT.
- Identification and reporting of pathogens and their antibiotic sensitivity.
- Regular analysis and dissemination of antibiotic resistance data, emerging pathogens and unusual laboratory findings.
- Initiating surveillance of hospital infections and detection of outbreaks.
- Investigation of outbreaks, and management of them.
- Reporting all notifiable diseases to the relevant national organisations.
- Training and education in infection control procedures and practice.
- Participates in National and European surveillance data programmes.

• Provides educational seminars to medical staff

Infection Prevention & Control Nurse (IPCN)

A senior staff nurse with appropriate Infection Control qualifications should be appointed full-time for this position.

Functions of the IPCN

- 1. To liaise between microbiology department and clinical departments for detection and control of HAI.
- 2. To collaborate with the ICD on surveillance of infection and detection of outbreaks.
- 3. To collect specimens; the ICNs should be trained in basic microbiology.
- 4. Training and education under the supervision of ICD.
- 5. To increase awareness among patients and visitors about infection control.
- 6. To develop and update all hospital infection control policies based on relevant research, best practice and current legislation.
- 7. Regular analysis and dissemination of antibiotic resistance data, emerging pathogens and unusual laboratory findings.
- 8. To audit compliance with infection control policies.
- 9. Participate in national audits and prevalence surveys.

Infection Control Manual (ICM)

It is recommended that each hospital develops its own infection control manual based upon existing documents and research but modified and tailored, for local circumstances and risks. An online copy of all hospital guidelines is available on a shared drive within the hospital.

Role of the microbiology laboratory and the IPCT

The microbiology laboratory has a pivotal role in the control of hospital associated infections. The microbiologist is usually the Infection Control Doctor. The role of the department in the HAI control programme includes:

> Identification of pathogens - the laboratory should be capable of identifying the

common bacteria to the species level.

- > Provision of advice on antimicrobial therapy.
- > Provision of advice on specimen collection and transport.
- Provision of information on antimicrobial susceptibility of common pathogens, and periodic reporting of hospital infection data and antimicrobial resistance pattern. The periodic reporting of such data is an important service provided by the microbiology department. The frequency of this should be as determined by the IPCC.
- Identification of sources and mode of transmission of infection Culture of carriers, environment for identifying the source of the organism causing infection (outbreak organism).
- Epidemiological typing of the isolates from cases, carriers and environment during a suspected outbreak or for organisms of important public health interest.
- Microbiological testing of hospital personnel or environment. As a part of the infection control programme, the microbiology laboratory at times may need to culture potential environmental and personnel sources of nosocomial infections. Usually this is limited to an outbreak situation. Routine microbiological sampling and testing is not recommended;
- Provide facilities for microbiological testing of hospital materials when considered necessary.
- Provide training for personnel involved in infection control. This forms an important part of the Infection Control Programme. The Infection Control Nurse plays a major part in training and education. Training should be preceded by a needs assessment survey. The training programme should include the following:
- 1. Basic concepts of infection.
- 2. Hazards associated with their particular category of work. Acceptance of their personal responsibility and role in the control of hospital infection.
- 3. Methods to prevent the transmission of infection in the hospital.
- 4. Safe work practice.

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	 Participate in IV Study Days Mandatory Infection Control lecture- all Staff Hand Hygiene lectures Induction for all new staff Provide advice and updates on matters relating to IPC. 	SF, MMcC	
Develop and review infection control policies, procedures and guidelines in accordance with legislation, national guidelines, evidence- based practice and best practice.	Policies/ Guidelines for update in 2012 Antimicrobial Prescribing Clostridium difficile Endoscopy Reprocessing Enteral Tube Feeding Hand Hygiene Laundry Management Legionellosis Mgmt of patients requiring transmission based precautions Medical Induction Theatre Policy TPN- IV management Tracheostomy Care Management of Tuberculosis	SF, MMcC, & SK.	
Infection Control Audits of practice and facilities	On-going programme of audit HST audits of facilities (See audit schedule for 2012) Develop QIP to bridge the gaps identified. Distribute results and feedback of the audits to all relevant CNMs and Heads of Departments. Observational hand hygiene audits and send results to HSE, re-audit where necessary	SF, MMcC, pharmacy	
Monitor and report rates of infection, healthcare associated infections, notifiable diseases antimicrobial resistance, antimicrobial consumption and alcohol gel usage.	 Daily ward based and laboratory surveillance Collect, analyse and report post- operative endophthalmitis infection rates. Collect, analyse and report data on infections and antibiotic 	SF, MMcC, SK SF, MMcC, SK SF, MMcC, SK,	
	 4. Collect and report data on statutory notifiable diseases 5. Collect and report data to the European Antimicrobial Resistance Surveillance Network (EARS-Net) 6. Collect and report data on alcohol gel use. 7. Collect and report data on antibiotic consumption. 	SK M Matheson Pharmacy, SF, MMcC Pharmacy	

	 8. Distribute quarterly surveillance reports to Infection Control Committee 9. Distribute quarterly or as required surveillance reports to all relevant clinical staff. 	SF, MMcC 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 Antimicrobial utilisation and antimicrobial resistance Decontamination Facilities and engineering, including new facilities, renovation, ventilation and water Catering services Household service Laundry service Waste management 	SF, MMcC, SK	
Attend regular meetings and educational seminars relevant to infection prevention and control	 Infection Control Committee Infection Control Team meetings Hygiene Committee Sterivigilance Committee Quality, H&S and Risk Antimicrobial stewardship /Drugs & Therapeutics Committee Environmental monitoring committee (IPCC) Policies and Procedures committee IPS Conference HPSC Study Day Other relevant conferences 	SF, MMcC, SK SF, MMcC, SK SF, MMcC, SK SF, MMcC, SK SF, MMcC, SK, SF, MMcC, SK SF, MMcC SF, MMcC SF, MMcC SF, MMcC SK	
plan and annual report	IPC annual report 2011	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 Meetings)	Attendance	in	2011	(4
Chief Executive Officer Danny Dunne (Chair)		4		
Consultant Microbiologist Dr Susan Knowles		4		
Director of Nursing Marie Tighe		2		
Assistant DON Mary Casey		3		
Infection Control Nurse Sinead Fitzgerald		4		
Infection Control Nurse Margie McCarthy		4		
Risk Manager Sarah McCarthy		2		
Theatre Manager Ann Prunty (or representative)		4		
Hospital Pharmacist		1		
CDU Manager Carol Gaskin		4		
Catering Supervisor Ann Gillick		3		
Infection control link nurse Mary McAree		4		
Quality Officer Aoife Duggan		3		
Facilities Manger Michelle Kelleher (resigned June 2011)		2		

Appendix 3

Royal Victoria Eye & Ear Hospital

Infection Control Committee

Terms of reference

- To support and monitor the implementation of national policies and guidelines
- 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

Appendix 4

Antibiotic Consumption Results for 2011 (first half)

Hospital Group	Antibiotic type	National Median	Defined Daily Dose per 100 Bed Days Used	Decile
RVEEH	Antibiotic	84.44	48.24 DDD/100BDU	2
	Antifungal	1.49	0.14 DDD/100BDU	2
	Anti-Gram-Pos-			
RVEEH	Agents eg penicillin	2.36	0.31 DDD/100BDU	1
	Generation 2			
	Cephalosporins			
RVEEH	eg cefuroxime	2.04	0.27 DDD/100BDU	2
	Gen 3 Cephs			
RVEEH	eg ceftazidime	1.41	1.79 DDD/100BDU	7
RVEEH	Floroquinolones eg ciprofloxacin	5.45	10.31 DDD/100BDU	10 **
	Broad Spectrum			
	penicillin			
RVEEH	eg Augmentin	26.26	12.63 DDD/100BDU	2
	Carbapens			
RVEEH	eg meropenem			
RVEEH	Clindamycin	0.46	0.09 DDD/100BDU	2

Systemic antimicrobial consumption in Defined daily Doses (DDD) per 100 beds used (BDU) is calculated for each hospital and reported national.

**A decile score of 1 is the lowest consumption of antibiotics while a decile score of 10 is the highest.



Hosp						2011	
Group	Antibiotic type	2007	2008	2009	2010	Q1 & Q2	Difference
	Anti-Gram Pos-Agents	0.65	1.22	0.76	0.57	0.31	-45%
RVEEH	Gen 2 Cephalosporins	1.78	0.82	1.57	1.41	0.27	-81%
	Gen 3 Cephs	0.90	1.10	2.01	1.40	1.79	28%
	flouroquinolones	12.93	9.09	17.70	11.70	10.31	-12%
	Broad-Spec-Pens	27.10	19.60	18.41	11.01	12.63	15%
RVEEH	Carbapens		0.37		0.17		-100%
	Clindamycin	0.18	0.38	2.49	1.73	0.09	-95%

	Previous	years			
	2007	2008	2009	2010	2011 Q1&Q2
No. of participating hospitals	50	50	50	43	
Bed Days used (BDU's)	8,824	8,950	7,135	6,466	3,506
Total vol hand rub used	311	181	164	230	121
RVEEH consumption rate	35.3	16.5	22.9	35.6	34.6
National consumption rate vol/1000BDU's	17.7	20.6	25	21.7	21.9
Decile score	1	7	4	1	2

<u>Appendix 5</u> Alcohol Hand Rub Consumption in the RVEEH

1. The alcohol gel consumption rate is the volume of alcohol hand rub

2. consumed in the defined time period (in litres) per 1,000 bed days used (BDUs)

3. The RVEEH consumption rate for the first 2 quarters in 2011 compared favorably with the national average.

4. The 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 decile score of 10 have the lowest alcohol gel consumption and 1 have the highest alcohol gel consumption rates.





<u>Appendix 6</u>

Audit Summary									
Table for	1.12.11								
		-					_		
	DCU	In- patient	HLW	ENT OPD	A&E	E&E OPD	R Room	CU	от
Waste Handling and									
Disposal Audit	85%	88%	90%	86%	88%	88%	95%	89%	89%
Linen Audit	73%	77%	77%	n/a	n/a	n/a	73%	80%	60%
Handling and Disposal of Sharps Audit	92%	94%	94%	93%	91%	91%	96%	92%	92%
Hand Hygiene facilities & Audit	87%	80%	91%	80%	86%	80%	94%	88%	92%
Use of Personal Protective Equipment Audit	90%	90%	93%	90%	90%	91%	94%	90%	93%
Management of Patient Equipment Audit	97%	95%	99%	93%	88%	95%	90%	98%	95%
Care of Peripheral Intravenous Lines Audit	94%	96%	96%	100%	94%	100%	100%	100%	100%
Average % Compliance	88%	89%	91%	91%	89%	91%	92%	91%	89%

March 2011 Audits

		In-		ENT		E&E	R		
	DCU	patient	HLW	OPD	A&E	OPD	Room	CU	ОТ
Waste Handling and									
Disposal Audit	83%	88%	90%	89%	88%	88%	91%	81%	90%
Linen Audit	73%	91%	91%	n/a	n/a	n/a	73%	80%	70%
Handling and Disposal of Sharps Audit	92%	96%	94%	91%	91%	91%	91%	92%	96%
Hand Hygiene facilities & Audit	88%	80%	92%	70%	84%	77%	93%	91%	93%
Use of Personal Protective Equipment Audit	87%	90%	87%	90%	90%	97%	100%	90%	90%(no water proof gown)
Management of Patient Equipment Audit	97%	93%	92%	91%	98%	96%	94%	98%	98%
Care of Peripheral Intravenous Lines Audit	100%	83%	83%	100%	100%	100%	100%	83%	100%
Average % Compliance	89%	89%	90%	88%	92%	91%	92%	88%	90%

<u>Appendix 7</u>	Operating Theatre Bacterial Counts
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Acceptable Levels= 5- 68 CFU	23/02/2011				
Theatre	CFU				
	Trolley	Ledge	Attendees	yellow= air con on	
ENT 1	47	50	5		
ENT 2	42	39	2		
EYE 1	13	18	1		
EYE 2	10	11	4		
EYE 3	7	13	2		
			MEAN 25		

28.

Acceptable Levels= 5- 68 CFU	21.6.11				
Theatre	CFU				
	AnaesTray	Shelf	Attendees	yellow=air con on	
EYE 1	50	26	3		
EYE 2	65.7	55	4		
EYE 3	45	58	2		
ENT 1	34	40	3		
ENT 2	37	29	3		
20	1	1	1	1	1

29.

Acceptable Levels= 5- 68 CFU	28.9.11				
Theatre	CFU				
	AnaesTray	Shelf	Attendees		yellow=air con on
EYE 1	31	40	3		
EYE 2	10	10	4		
EYE 3	42	18	3		
ENT 1	89	76	7		
ENT 2	42	18	3		
				Mean 37	
Acceptable Levels= 5- 68 CFU	02/12/2011				
Theatre	CFU				
	AnaesTray	Shelf	Attendees		yellow=air con on
EYE 1	24	18	4		
EYE 2	5	3	0		
EYE 3	21	52	4		
		200	5		
ENT 1	21	20	5		

30.

38.